Item No		Quantity	Rate	Amount	
	SECTION 1				
	BILL NO. 1				
	PRELIMINARIES				
	BUILDING AGREEMENT AND PRELIMINARIES				
	The <b>JBCC</b> Principal Building Agreement (Edition 6.2 - May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described				
	The <b>JBCC</b> Principal Building Agreement <b>contract data</b> form an integral part of this <b>agreement</b>				
	The <b>JBCC</b> General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the <b>JBCC</b> Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these <b>bills of quantities</b> , amended as hereinafter described				
	The <b>contractor</b> is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause				
	The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only				
	Where any item is not relevant to this <b>agreement</b> such item is marked N/A signifying "not applicable"				
	Where standard clauses or alternatives are not entirely applicable to this <b>agreement</b> such amendments, modifications, corrections or supplements as will apply are given under each relevant clause heading and such amendments, modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the abovementioned documents				
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	PRELIMINARIES				

PREAMBLES FOR TRADES		
The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these <b>bills of quantities</b> and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained		
Supplementary preambles and/or specifications are incorporated in these <b>bills of quantities</b> to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles		
The <b>contractor's</b> prices for all items throughout these <b>bills of quantities</b> shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications		
STRUCTURE OF THIS PRELIMINARIES BILL		
Section A : A recital of the headings of the individual clauses in the aforementioned <b>JBCC</b> Principal Building Agreement		
Section B : A recital of the headings of the individual clauses in the aforementioned <b>JBCC</b> General Preliminaries		
Section C : Any special clauses to meet the particular circumstances of the project		
PRICING OF PRELIMINARIES		
Should the <b>contractor</b> select Option A in the <b>contract data</b> for the adjustment of <b>preliminaries</b> , the amounts entered against the relevant items in these <b>preliminaries</b> are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)		
SECTION A: PRINCIPAL BUILDING AGREEMENT		
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	Interpretation (A1-A7)		
1/1/1	Clause 1.0 - Definitions and interpretation		
	Pricing of bills of quantities		
	The <b>contractor</b> is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this <b>agreement</b> . Value Added Tax (VAT) is to be separately stated on the summary page of these <b>bills of quantities</b>		
	Items left unpriced will be deemed to be covered in prices against other items throughout these <b>bills of quantities</b> and no claim for any extras arising out of the <b>contractor's</b> omission to price any item will be entertained		
	Prices for all <b>construction equipment</b> , temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary		
	Abbreviated descriptions		
	The items in these <b>bills of quantities</b> utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the <b>contractor</b> shall, before submission of his tender, call for a written directive from the <b>principal agent</b> , failing which it shall be assumed that the <b>contractor</b> has allowed in his pricing for materials and workmanship in terms of international best practice		
	Legal status of contractor		
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If the <b>contractor</b> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then:		
These persons are deemed to be jointly and severally liable to the <b>employer</b> for the performance of this <b>agreement</b>		
These persons shall notify the <b>employer</b> of their leader who has assigned authority to bind the <b>contractor</b> and each of these persons		
The <b>contractor</b> shall not alter its composition or legal status without the prior written consent of the <b>employer</b>		
Clause 1.1:		
Replace the following definitions in <b>DEFINITIONS AND</b>		
INTERPRETATIONS with the following wording:		
AGREEMENT means the agreement arising from the		
signing of the Form of Offer and Acceptance by the		
parties.		
BILLS OF QUANTITIES means the document drawn up		
in accordance with the Pricing Instructions contained in the Pricing Data.		
CONSTRUCTION PERIOD means the period		
commencing on the date of site hand over and ending		
on the date of practical completion.		
CONTRACT DOCUMENTS means the Agreement and		
all documents referenced therein.		
CONTRACT DRAWINGS means the drawings listed in		
the Scope of Work.		
CONTRACT SUM means the total of prices in the Form		
of Offer and Acceptance.  SCHEDULE means the variables listed in the Contract		
Data.		
CORRUPT PRACTICE means the offering, giving,		
receiving and soliciting of anything of value to		
influence the action of a public official in the		
procurement process or in contract execution.		
FRAUDULENT PRACTICE means a mispresentation of		
facts in order to influence a procurement process or the		
execution of a contract to the detriment of any tenderer,		
and includes collusive practice among tenderers (prior to or after the tender submission) designed to establish		
to or after the terruer submission) designed to establish		
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ı	tender prices at artificial non-competitive levels and to			1	l
	tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open				
	competition.				
	INTEREST means the interest rates applicable to this				
	contract, whether specifically indicated in the relevant				
	clauses or not, will be the rate as determined by the				
	Minister of Finance, from time to time, in terms of				
	section 80(1)(b) of the Public Finance Management Act,				
	1999 (Act No. 1 of 1999).				
	SECURITY means the form of security provided by the				
	employer or contractor, as stated in the schedule,				
	from which the <b>contractor or employer</b> may recover				
	expense or loss.				
	Clause 1.1 Definition of "Commencement Date" is				
	added:				
	"COMMENCEMENT DATE" means the date that the				
	agreement, made in terms of the Form of Offer and				
	Acceptance, comes into effect.				
	Clause 1.1 Definition of "Guarantee for Construction" is				
	amended by replacing it with the following:				
	"GUARANTEE FOR CONSTRUCTION" means a				
	guarantee at call obtained by the contractor from an				
	institution approved by the employer in terms of the				
	employer's construction guarantee form as selected in				
	the schedule.				
	Clause 1.1 Definition of "Principal Agent" is amended by				
	replacing it with the following:				
	"PRINCIPAL AGENT" means the person or entity				
	appointed by the employer and named in the schedule.  In the event of a principal agent not being appointed,				
	then all the duties and obligations of a principal agent as				
	detailed in the agreement shall be fulfilled by a				
	representative of the employer as named in the				
	schedule.				
	F:V:	14			
	T:	Item			
1/1/2	Clause 2.0 - Law, regulations and notices				
17 172	Clause 2.0 - Law, regulations and notices				
	F:V:				
	T:	Item			
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1/1/3	Clause 3.0 - Offer and acceptance			
	F:V:			
	T:	Item		
1/1/4	Clause 4.0 - Cession and assignment			
	F: T:	Item		
1/1/5	Clause 5.0 - Documents			
	Value Added Tax			
	Provision is made in the summary page of these <b>bills of quantities</b> for the inclusion of Value Added Tax (VAT)			
	Clause 5.0 is amended by the addition of the following sub-clause 5.7:			
	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.			
	F: T:	Item		
1/1/6	Clause 6.0 - Employer's agents			
	Delegated authority			
	The authority of the <b>principal agent</b> to issue <b>contract instructions</b> [17.1] and perform duties for specific aspects of the <b>works</b> is delegated to <b>agents</b> as follows [6.2]. This does not preclude the <b>principal agent</b> from issuing such <b>contract instructions</b> : <b>To be confirmed on appointment</b> .			
	1. Architect			
	1.1 Duties [6.2] :			
	The architect is responsible for the architectural design, functional design and quality inspection of the <b>works</b>			
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2. Quantity surveyor		
2.1 Duties [6.2] :		
The quantity surveyor is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works		
3. Civil and structural engineer		
3.1 Duties [6.2] :		
The civil and structural engineer is responsible for all aspects of civil and structural engineering design and quality inspection of the <b>works</b>		
4. Mechanical engineer		
4.1 Duties [6.2] :		
The mechanical engineer is responsible for all aspects of mechanical engineering design and quality inspection of the <b>works</b> and, where appointed by the <b>employer</b> for quantity surveying services in respect of the mechanical installations, for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions		
5. <u>Electrical engineer</u>		
5.1 Duties [6.2] :		
The electrical engineer is responsible for all aspects of electrical engineering design and quality inspection of the <b>works</b> and, where appointed by the <b>employer</b> for quantity surveying services in respect of the electrical installations, for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions		
8. <u>Health and safety consultant</u>		
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	8.1 Duties [6.2] :			
	The health and safety consultant is responsible for all aspects of health and safety of the <b>works</b> . Without derogating from the generality thereof, the health and safety consultant will perform the following specific functions and duties in respect of the health and safety aspects of the <b>works</b> . He shall:			
	8.1.1 Act as the <b>employer's agent</b> in terms of the Construction Regulations issued in terms of the Occupational Health and Safety Act,1993 as amended			
	8.1.2 Prepare and update the health and safety specification for the <b>works</b>			
	8.1.3 Agree with the <b>contractor</b> the health and safety plan for the <b>works</b>			
	8.1.4 Carry out regular audits to ensure adherence to the safety plan and compliance with the act and regulations			
	8.1.5 Stop the execution of the <b>works</b> where the agreed specification or plan is not adhered to.			
	F: T:	Item		
1/1/7	Clause 7.0 - Design responsibility			
	Clause 7.0 is deemed to be amended by adding the following new sub-clause 7.4: The Contractor shall promptly inform the Principal Agent of any patent defects or errors in any design. In identifying any patent defects or errors the Contractor shall use its best endeavours.			
	F: V: T:	Item		
	Insurances and securities (A8-A11)			
1/1/8	Clause 8.0 - Works risk			
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	Clause 8.0 is deemed to be amended by the addition of the new clause 8.8 and 8.9: 8.8 Unless specifically stated to the contrary, where trade names have been used in the tender documents to specify materials and goods, this has been done with the sole purpose of indicating the standard and quality required by the principal agent. The contractor shall be free to supply those of other manufacturers or suppliers provided that they match the standard and quality required. The onus shall be on the contractor to prove that the materials and goods supplied by him are of similar standard and quality to those specified.  8.9 The risks for loss or damage to the works resulting from such materials and goods and for latent defects in such materials and goods as specified or otherwise are supplied. Where it is specifically stated that no other trade name will be acceptable then the above-mentioned risks will remain with the employer.  F:	ltem		
1/1/9	Clause 9.0 - Indemnities			
	F: V: T:	Item		
/1/10	Clause 10.0 - Insurances			
	Clause 10.0 is amended by the addition of the following clauses:  10.11 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,			
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replace and/or repair the works.  (c) 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 clause 25.0 hereof  10.12 Injury to Persons or loss of or damage to Properties  (a) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the works unless due to any act or negligence of any person for whose actions the employer is legally liable  (b) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person, arising out of or in the course of or by reason of the execution of the works unless due to any act or negligence of any person for whose actions the employer is legally liable  (c) The contractor shall, upon receiving a contract instruction from the principal agent, cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the employer shall be entitled to cause it to be made good and to recover the cost thereof from the contractor or to deduct the same from amounts due to the contractor  (d) The contractor shall be responsible for the protection and safety of such portions of the premises placed under his control by the employer for the purpose of executing the works until the issue of the explicitor of the protection and safety of such portions of the profession of the execution of the contractor of the contractor of the execution of the employer for the purpose of executing		
and safety of such portions of the premises placed		
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	or insured to the specific limit stated in the contract against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the works has been completed  (f) The contractor shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the works			
	10.13 It is the responsibility of the contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.11 and 10.12. 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			
	F: T:	Item		
/1/11	Clause 11.0 - Securities			
	Extension of waiver of lien			
	The <b>contractor</b> shall ensure that a waiver of lien is included in all subcontracts and that the <b>works</b> executed on the <b>site</b> are kept free of all liens and other encumbrances at all times [11.10]			
	Clause 11.5 is amended by replacing it with the following: No clause			
	F: V: T:	Item		
	Execution (A12 - A17)			
/1/12	Clause 12.0 - Obligations of the <b>parties</b>			
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Office accommodation			
The <b>contractor</b> shall provide, maintain and remove on <b>practical completion</b> air conditioned office accommodation with suitable tables and chairs for meetings to be held on the <b>site</b> . Such offices shall be kept clean and fit for use at all times [12.2.18]			
Notice board			
The <b>contractor</b> shall erect in a position approved by the <b>principal agent</b> , maintain and remove on <b>practical completion</b> a notice board recommended by the South African Institute of Architects and as approved by the <b>principal agent</b> listing the names and logos of the <b>employer</b> , the <b>contractor</b> and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the <b>principal agent</b> for such notice boards to be erected [12.2.18]			
Statutory and other notices			
The <b>contractor</b> shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the <b>works</b> by the <b>contractor</b> . The <b>contractor</b> shall pay all deposits or fees in this regard			
It is, however, specifically recorded that the <b>employer</b> shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto			
Clause 12.1.1 is amended by replacing it with the following: No clause			
Clause 12.2.2 is amended by replacing it with the following: No clause			
F: T:	Item		
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1/1/13	Clause 13.0 - Setting out			
	F: T:	Item		
1/1/14	Clause 14.0 - Nominated <b>subcontractors</b>			
	Clause 14.1.5 is amended by replacing it with the following: No clause			
	F: V: T:	Item		
1/1/15	Clause 15.0 - Selected subcontractors			
	F: V: T:	Item		
1/1/16	Clause 16.0 - Direct contractors			
	Not Applicable			
	F: T:	Item		
1/1/17	Clause 17.0 - Contract instructions			
	Site instructions			
	Instructions issued on <b>site</b> are to be recorded in a site instruction book (triplicate book) which is to be supplied and maintained on <b>site</b> by the <b>contractor</b> .			
	F: T:	Item		
	Completion (A18 - A24)			
1/1/18	Clause 18.0 - Interim completion			
	Not Applicable	N/A		
1/1/19	Clause 19.0 - Practical completion			
	F: T:	Item		
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1/1/20	Clause 20.0 - Completion in <b>sections</b>			
	Not Applicable			
	F: T:	Item		
1/1/21	Clause 21.0 - <b>Defects</b> liability period and <b>final</b> completion			
	F: T:	Item		
1/1/22	Clause 22.0 - Latent defects liability period			
	F: T:	Item		
1/1/23	Clause 23.0 - Revision of the date for <b>practical completion</b>			
	Substitution of materials and goods			
	The removal or substitution of any <b>materials and goods</b> which do not conform to the specification or the <b>contract drawings</b> shall not constitute grounds for the extension of the <b>construction period</b> nor for the adjustment of the <b>contract value</b> [17.1.8; 23.1 & 2]			
	Clause 23.1.1 is amended by adding the following "It shall be deemed that the programme includes an allowance of twenty (20) working days for inclement and exceptionally inclement weather and an extension of time shall only be considered for inclement weather beyond the twenty (20) working day period."			
	<u>F</u> :V:			
	T:	Item		
1/1/24	Clause 24.0 - <b>Penalty</b> for late or non-completion  The penalty amount per calendar day is 1.75 cents per R100.00 of the contract value.			
	F: T:	Item		
	Carried to Collection		R	
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**Payment (A25 - A27)** 1/1/25 Clause 25.0 - Payment **Prices submitted** Where prices are submitted by the **contractor** or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing Clause 25.10 is amended to Thirty (30) Calendar days instead of Fourteen (14) Calendar days F:..... V:..... Item T:.... 1/1/26 Clause 26.0 - Adjustment of the contract value and final account Fluctuations in costs All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [26.9.5] Cost of claims All costs incurred by the **contractor** in the preparation of claims shall be borne by the contractor. This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this agreement [30.6 & 7] from making a determination on costs Claims from subcontractors The **contractor** shall review, assess and adjudicate any claims received by him from any subcontractor and thereafter submit same to the principal agent with a recommendation in order to assist the principal agent in adjudicating the claim [26.6] **Carried to Collection** R Bill No. 1 **PRELIMINARIES** 

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1/1/29	Clause 29.0 - Termination			
	Clause 28.1.1 is amended by replacing it with the following:  No clause  F:	Item		
1/1/28	Suspension and termination (A28 - A29)  Clause 28.0 - Suspension by the contractor			
1/1/27	Clause 27.0 - Recovery of expense and/or loss  F:	Item		
4.14.107	F: V:	Item		

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	The required information of the <b>parties</b> and the amount of the <b>contract sum</b> shall be inserted in the <b>agreement</b> for signature of the <b>agreement</b> by the <b>parties</b>			
1/1/31	Agreement			
1/1/30	Clause 30.0 - Dispute resolution  F:  T:	Item		
1/1/30	Dispute resolution (A30)			
	F: T:	Item		
	TERMINATION BY THE CONTRACTOR Clause 29.14.1 is deleted and is amended by the addition of the following clause: No clause Clause 29.0 is amended by the addition of the following clause: 29.29 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.			
	29.1.4 refuses or neglects to comply strictly with any of the conditions of contract. 29.1.5 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa. 29.1.6 in the judgement of the employer, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.			
	TERMINATION BY THE EMPLOYER Clause 29.1 is amended by the addition of the following clauses:			

1/1/32	Contract data			
	Tenderer's selections			
	Before submission of his tender the <b>contractor</b> is to complete the tenderer's selections in the <b>contract data</b>			
	F: T:	Item		
	SECTION B: GENERAL PRELIMINARIES			
	Definitions and interpretation (B1)			
1/1/33	Clause 1.1 - Definitions			
	F: T:	Item		
1/1/34	Clause 1.2 - Interpretation			
	F: T:	Item		
	Documents (B2)			
1/1/35	Clause 2.1 - Checking of documents			
	F: T:	Item		
1/1/36	Clause 2.2 - Provisional bills of quantities			
	No			
	F: T:	Item		
1/1/37	Clause 2.3 - Availability of construction information			
	Yes			
	F: T:	Item		
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1/1/38	Clause 2.4 - Ordering of materials and goods			
	F: T:	Item		
	Previous work and adjoining properties (B3)			
1/1/39	Clause 3.1 - Previous work - dimensional accuracy			
	Not Applicable			
	F: T:	Item		
1/1/40	Clause 3.2 - Previous work - <b>defects</b>			
	Not Applicable			
	F: T:	Item		
1/1/41	Clause 3.3 - Inspection of adjoining properties			
	Neighbouring properties.			
	F: T:	Item		
	The site (B4)			
1/1/42	Clause 4.1 - Handover of <b>site</b> in stages			
	Not Applicable			
	F: T:	Item		
1/1/43	Clause 4.2 - Enclosure of the works	Item		
	F: T:			
1/1/44	Clause 4.3 - Geotechnical and other investigations			
	F: T:	Item		
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1/1/45	Clause 4.4 - Encroachments			
	F: V: T:	Item		
1/1/46	Clause 4.5 - Existing premises occupied			
	Not Applicable			
	F: T:	Item		
1/1/47	Clause 4.6 - Services - known			
	F: T:	Item		
	Management of contract (B5)			
1/1/48	Clause 5.1 - Management of the <b>works</b>			
	F: T:	Item		
1/1/49	Clause 5.2 - Progress meetings			
	F: T:	Item		
1/1/50	Clause 5.3 - Technical meetings			
	F: T:	Item		
	Samples, shop drawings and manufacturer's instructions (B6)			
1/1/51	Clause 6.1 - Samples of materials			
	F: T:	Item		
1/1/52	Clause 6.2 - Workmanship samples			
	F: T:	Item		
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1/1/53	Clause 6.3 - Shop drawings			
	F: V: T:	Item		
1/1/54	Clause 6.4 - Compliance with manufacturer's instructions			
	F: V: T:	Item		
	Deposits and fees (B7)			
1/1/55	Clause 7.1 - Deposits and fees			
	F: V: T:	Item		
	Temporary services (B8)			
1/1/56	Clause 8.1 - Water			
	By the Contractor			
	F: T:	Item		
1/1/57	Clause 8.2 - Electricity			
	By the Contractor			
	F: T:	Item		
1/1/58	Clause 8.3 - Ablution and welfare facilities			
	By the Contractor			
	F: T:	Item		
1/1/59	Clause 8.4 - Communication facilities			
	F: T:	Item		
	Prime cost amounts (B9)			
1/1/60	Clause 9.1 - Responsibility for <b>prime cost amounts</b>			
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	F:V:V			
	T:	Item		
	Attendance on subcontractors (B10)			
1/1/61	Clause 10.1 - General attendance			
	F: T:	Item		
1/1/62	Clause 10.2 - Special attendance			
	F: T:	Item		
	General (B11)			
1/1/63	Clause 11.1 - Protection of the <b>works</b>			
	F: T:	Item		
1/1/64	Clause 11.2 - Protection/isolation of existing works and works occupied in sections			
	Not Applicable			
	F: T:	Item		
1/1/65	Clause 11.3 - Security of the <b>works</b>			
	F: T:	Item		
1/1/66	Clause 11.4 - Notice before covering work			
	F: T:	Item		
1/1/67	Clause 11.5 - Disturbance			
	Carried to Collection		R	
	Bill No. 1			
	PRELIMINARIES			

	Disturbance			
	All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the <b>construction period</b> or <b>contract value</b> whatsoever			
	F:T:	Item		
1/1/68	Clause 11.6 - Environmental disturbance			
	Controlling all forms of pollution			
	The <b>contractor</b> shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the <b>site</b> during the <b>construction period</b> due inter alia to noise, artificial light, wind-blown sand, dust, deposits of mud, etc			
	The <b>contractor</b> is to ensure that all roads which border the <b>site</b> and are used by the <b>contractor</b> during the execution of the <b>works</b> are kept clean and free of any dirt or debris caused by the execution of the <b>works</b>			
	Environmental management plan			
	The <b>employer</b> has prepared an environmental management plan (EMP) (refer to Annexures for a copy of the relevant plan). The <b>contractor</b> shall price opposite this item for compliance with all the requirements of such EMP			
	F:T:	Item		
1/1/69	Clause 11.7 - Works cleaning and clearing			
	F: T:	Item		
	Carried to Collection		R	
	Bill No. 1 PRELIMINARIES			

1/1/70	Clause 11.8 - Vermin			
	F: T:	Item		
1/1/71	Clause 11.9 - Overhand work			
	F: V: T:	Item		
1/1/72	Clause 11.10 - Tenant installations			
	Not Applicable			
	F: T:	Item		
1/1/73	Clause 11.11 - Advertising			
	F: T:	Item		
	SECTION C: SPECIFIC PRELIMINARIES			
1/1/74	Warranties for materials and workmanship			
	Where warranties for materials and/or workmanship are called for, the <b>contractor</b> shall obtain a written warranty, addressed to the <b>employer</b> , from the entity supplying the materials and/or executing the work and shall deliver same to the <b>principal agent</b> on <b>final completion</b> of the contract			
	The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of <b>practical completion</b> and that any <b>defects</b> that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written <b>notice</b> to do so			
	The warranty will not be enforced if the work is damaged by <b>defects</b> in the execution of the <b>works</b> , in which case the responsibility for replacement shall rest entirely with the <b>contractor</b>			
	F: T:	Item		
	Carried to Collection		R	
	Bill No. 1 PRELIMINARIES			

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1/1/75	Overtime			
	Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the <b>contractor</b> unless the <b>principal agent</b> has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the <b>employer</b>			
	F:T:	Item		
1/1/76	Cooperation of the <b>contractor</b> for cost management			
	It is specifically agreed that the <b>contractor</b> accepts the obligation of assisting the <b>principal agent</b> in implementing proper cost management. The <b>contractor</b> will be advised by the <b>principal agent</b> of all cost management procedures which will be implemented to ensure that the <b>contract value</b> does not exceed the budget			
	F:T:	Item		
1/1/77	Overloading			
	The <b>contractor</b> shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the <b>works</b> or temporary works eg scaffolding, etc.  The <b>contractor</b> shall submit details of his proposed loading, storage, plant erection, etc to the <b>principal agent</b> for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the <b>principal agent's</b> requirements in connection with the provision of temporary support work, etc. Any damage caused to the <b>works</b> by overloading shall be made good by the <b>contractor</b> at his sole expense			
	F:T:	Item		
	Carried to Collection Bill No. 1		R	
	PRELIMINARIES			

1/1/78	Propping of floors below			
	The <b>contractor</b> 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 <b>materials and goods</b> and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the <b>principal agent</b> and the cost thereof shall be borne by the <b>contractor</b>			
	F:T:	Item		
1/1/79	Testing of flat roof waterproofing for watertightness			
	Flat roof waterproof areas shall be flooded and kept "ponded" for at least forty eight (48) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing			
	F:T:	Item		
1/1/80	Health and safety			
	Health and safety			
	Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended. It is specifically stated that the employer shall prepare a documented health and safety specification for the works (refer to Annexures for a copy of the relevant specification) and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the provisions of the aforementioned health and safety specification [2.1]			
	Carried to Collection		R	
	Bill No. 1			
	PRELIMINARIES			

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	The contractor shall:			
	<ol> <li>Comply with the health and safety specification for the works</li> </ol>			
	<ol><li>Prepare and agree with the health and safety consultant the health and safety plan for the works</li></ol>			
	3. Cooperate with the health and safety consultant in all respects			
	<ol> <li>Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification</li> </ol>			
	<ol> <li>Conform to the conditions contained in the employer's health and safety specification</li> </ol>			
	<ol><li>Appoint a suitably qualified person to ensure health &amp; safety regulations are met</li></ol>			
	F: V: T:	Item		
1/1/81	Broad based black economic empowerment (BBBEE)			
	Tenders submitted will be evaluated taking into account their empowerment rating			
	The <b>employer</b> will be monitoring the broad based black economic empowerment (BBBEE) status of the <b>contractor</b> throughout the execution of the <b>works</b>			
	The <b>contractor</b> is to submit to the <b>principal agent</b> on an annual basis a schedule of spend, split into vendors engaged as <b>subcontractors</b> and suppliers indicating their BBBEE rating including proof of the said rating			
	F:T:	Item		
	Carried to Collection		R	
	Bill No. 1 PRELIMINARIES			
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1/1/82	Advertising rights			
	The <b>employer</b> may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The <b>contractor</b> shall not prevent such an arrangement and will assist in the facilitation of same. The position and type of advertising structure to be agreed with the <b>principal agent</b> so as not to hinder the <b>contractor</b> in meeting his obligations under this <b>agreement</b>			
	F:T:	Item		
1/1/83	Confidentiality			
	The <b>contractor</b> undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all <b>subcontractors</b> and suppliers. Such information shall not be used in any way except in connection with the execution of the <b>works</b>			
	No information regarding this project shall be published or disclosed without the prior written consent of the employer			
	F:T:	Item		
1/1/84	Media releases			
	All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the <b>employer</b>			
	The <b>contractor</b> together with his <b>subcontractors</b> shall not, without the prior written consent of the <b>employer</b> , cause any statement or advertisement connected with this project to be printed, screened or aired by the media			
	F:T:	Item		
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	Bill No. 1 PRELIMINARIES			

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Bill No. 1	Category : Time	R		
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Bill No. 1 PRELIMINARIES				

Item No		Quantity	Rate	Amount	
	SECTION 2				
	BILL NO. 1				
	EARTHWORKS (PROVISIONAL)				
	PREAMBLES				
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured				
	Carting away of excavated material				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
	<u>Filling</u>				
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material				
	Carried to Collection Bill No. 1		R		<u> </u>
	EARTHWORKS				

	Excavations in conditions other than earth				
	Should the contractor consider that the excavation at any point are in "soft rock" or "hard rock", he must notify the Representative / Agent immediately in order that an inspection may be made and a decision arrived at by the Representative / Agent as to the category of such excavation. Should the contractor fail to give such notification, the excavation shall be deemed to be in earth and shall be valued accordingly				
	Subterranean water				
	The information on subterranean water is included in the soils investigation report and can be viewed at the Engineer's offices.				
	EXCAVATION, FILLING, ETC				
	Excavation in earth or compacted filling not exceeding 2m deep				
2/1/1	Trenches	m3	276		
2/1/2	Holes	m3	30		
	Extra over excavations in earth for exacavation in:				
2/1/3	Soft rock	m3	29		
2/1/4	Hard rock	m3	20		
	Extra over all excavations for carting away				
2/1/5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	163		
	Risk of collapse of excavations				
2/1/6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	1 186		
	Keeping excavations free of water				
2/1/7	Keeping excavations free of water		Item		
	FILLING, ETC				
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	Carried to Collection Bill No. 1			R	<del> </del>
	EARTHWORKS				

	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 100% Mod AASHTO density				
2/1/8	Backfilling to trenches, holes, etc	m3	136		
	Earth filling of G5 material supplied by the contractor compacted in 150mm layers compacted to 98% Mod AASHTO to density				
2/1/9	Under floors, steps, pavings, etc	m3	239		
	Compaction of surfaces				
2/1/10	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	536		
	Prescribed density tests on filling				
2/1/11	"Modified AASHTO Density" test	No	10		
	SOIL POISONING AND PROTECTION AGAINST TERMITES				
	Soil insecticide under a 10 year guarantee by a firm of specialist				
2/1/12	Under floors, etc including forming and poisoning shallow furrows etc and filling in furrows and ramming	m2	262		
2/1/13	To bottoms and sides of trenches, etc	m2	1 469		
	Carried to Collection Bill No. 1			R	
	EARTHWORKS				

Bill No. 1				
EARTHWORKS				
COLLECTION				
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EARTHWORKS				

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			
	PREAMBLES			
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	Cost of tests:			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 'Tests' of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately).			
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES			
	15MPa /19mm Concrete in			
2/2/1	Surface blinding under footings and bases n	13 1		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES			
	30 MPa/19mm Concrete in			
2/2/2	Foundations	13 6		
2/2/3	Bases	13 9		
	Carried to Collection Bill No. 2		R	
	CONCRETE, FORMWORK & REINFORCEMENT			

2/2/4	Raft foundation on waterproofing	m3	206		
2/2/5	Apron slabs 75mm thick	m3	26		
	REINFORCED CONCRETE				
	30 MPa/19mm Concrete in				
2/2/6	Slabs including beams and inverted beams	m3	2		
2/2/7	Walls	m3	6		
	TEST BLOCKS				
	Test blocks:				
2/2/8	Making and testing set of three 150 x 150 x 150mm concrete strength test cubes.	Sets	36.0		
	FINISHING TOP SURFACE OF CONCRETE				
	Finishing top surfaces of concrete smooth with a steel trowel:				
2/2/9	Apron slabs	m2	258		
2/2/10	Surface beds, slabs, etc.	m2	790		
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Rough Formwork to Sides:				
2/2/11	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	226		
	SMOOTH FORMWORK (DEGREE OF ACCURACY 1)				
	Smooth formwork to soffits				
2/2/12	Slabs propped up exceeding 3,5m and not exceeding 5m high	m2	11		
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	Carried to Collection Bill No. 2			R	_
	CONCRETE, FORMWORK & REINFORCEMENT				

	Smooth formwork to sides				
2/2/13	Columns	m2	59		
2/2/14	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	18		
	MOVEMENT JOINTS, ETC				
	Saw cut joints				
2/2/15	3 x 30mm Saw cuts in top of concrete	m	376		
	Construction joints				
2/2/16	3 x 60mm construction joints in top of concrete	m	13		
	REINFORCEMENT				
	High tensile steel reinforcement to structural concrete work				
2/2/17	10mm Diameter bars	t	0.26		
2/2/18	12mm Diameter bars	t	0.16		
	DOWEL BARS				
2/2/19	10mm Diameter x 400mm long mild steel dowel bars at 400 centers coated with bitumen	No	176		
	Fabric reinforcement				
2/2/20	Type 245 fabric reinforcement in concrete surface beds, apron slabs, etc.	m2	1 036		
2/2/21	Type 617 fabric reinforcement in concrete surface beds, apron slabs, etc.	m2	402		
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	Carried to Collection Bill No. 2			R	+
	CONCRETE, FORMWORK & REINFORCEMENT				

Bill No. 2				
CONCRETE, FORMWORK & REINFORCEMENT				
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Bill No. 2 CONCRETE, FORMWORK & REINFORCEMENT				

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO. 3			
	MASONRY			
	PREAMBLES			
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	BRICKWORK			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	Face bricks			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<u>Samples</u>			
	Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site			
	FOUNDATIONS (PROVISIONAL)			
	Carried to Collection  Bill No. 3  MASONRY		R	

	Brickwork of NFX bricks (14 MPA nominal compressive strength) in class I mortar				
2/3/1	Piers	m3	3		
2/3/2	One brick walls	m2	475		
	SUPERSTRUCTURE				
	Brickwork in NFP clay bricks (7 Mpa nominal compressive strength) in Class II mortar				
2/3/3	Piers	m3	9		
2/3/4	Half brick walls	m2	396		
2/3/5	Half brick walls in beamfilling	m2	89		
2/3/6	One brick walls	m2	740		
	SUNDRIES				
	Brickwork reinforcement				
2/3/7	75mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net)	m	1 743		
2/3/8	150mm Wide reinforcement built in horizontally	m	4 816		
	Concrete prestressed fabricated lintels				
2/3/9	110 x 75mm Lintels in lengths not exceeding 3m	m	156		
2/3/10	110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4.5m long	m	26		
2/3/11	150 x 75mm Lintels in lengths not exceeding 3m	m	24		
	Turning pieces				
2/3/12	220mm Wide turning piece to lintels etc	m	62		
	Carried to Collection			R	<u> </u>
	Bill No. 3 MASONRY				

	Galvanised hoop iron cramps, ties, etc				
2/3/13	38 x 1,6mm Galvanised hoop iron roof tie with one end built six courses deep into top of brickwork and other end wrapped around and nailed to trusses (Provisional)	No	268		
	Air bricks				
2/3/14	229x152mm Terracotta air bricks	No	10		
	FACE BRICKWORK				
	Facebricks laid in stretcher bond manufactured in accordance with SANS 227:2007, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints				
2/3/15	Extra over brickwork for face brickwork	m2	574		
2/3/16	Extra over brickwork for face brickwork in beamfilling	m2	89		
2/3/17	Extra over brickwork for face brickwork in foundations (Provisional)	m2	101		
2/3/18	Extra over brickwork for 300 x 300mm Piers pointed all sides	m2	105		
2/3/19	One brick wall faced both sides	m2	63		
2/3/20	Fair raking cutting	m	95		
2/3/21	Fair splay cutting	m	95		
2/3/22	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	9		
2/3/23	Fair cutting and fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	9		
	Brick-on-edge header course copings, sills, etc approved face bricks pointed with recessed joints on all exposed faces				
2/3/24	Coping on top of one brick wall	m	120		
	Carried to Collection Bill No. 3 MASONRY			R	

2/3/25	220mm Wide double bullnosed edge coping on top of one brick wall	m	11		
2/3/26	Coping on raking top of one brick wall	m	30		
2/3/27	Cut face brick-on-edge external window cill, 180mm wide, set sloping and slightly projecting in cement mortar and pointed on top, front edge and projecting soffit including all necessary fair raking cutting to facings under and fair and fitted ends	m	69		
2/3/28	Brick-on-edge header course lintel pointed on both face and 220mm wide soffit	m	236		
2/3/29	Construct a sample panel 2000mm long x 1500mm high of one brick wall in cement mortar faced and pointed on both sides in stretcher bond and with brick-on-edge coping to top including pointing to top and both sides and with and including necessary excavations for and including 15MPa/38mm mass concrete strip footing in a position as directed by the Representative/Agent and including demolishing and removal after completion of all brickwork	No	1		
	FIBRE CEMENT WINDOW CILLS				
	15mm Thick natural grey cills in single length bedded in 4:1 sand cement mortar including metal lugs, etc:				
2/3/30	140mm Wide cills set flat and slightly projecting.	m	69		
	Carried to Collection			R	
	Bill No. 3 MASONRY				

MASONRY  COLLECTION  Page Amount	
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Bill No. 3 MASONRY	=

Item No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO. 4				
	WATERPROOFING				
	PREAMBLES				
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.				
	SUPPLEMENTARY PREAMBLES				
	Waterproofing				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer approved 375 micron embossed black polyethylene damp proof course				
2/4/1	In walls	n2	107		
2/4/2	Under window cills	n2	36		
	One layer 250 micron green polyethylene waterproof sheeting complying with SABS 952 Type C in widest practicable widths with all joints lapped and sealed with pressure sensitive tape all in strict accordance with the manufacturer's requirements				
2/4/3	Under surface beds	n2	790		
	JOINT SEALANTS, ETC				
	Bill No. 4 WATERPROOFING			R	

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Bill No. 4				
WATERPROOFING				
COLLECTION				
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Bill No. 4 WATERPROOFING				

Item No			Quantity	Rate	Amount
	SECTION 2				
	BILL NO. 5				
	ROOF COVERINGS, ETC				
	PREAMBLES				
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.				
	SUPPLEMENTARY PREAMBLES				
	Descriptions of all roof coverings are deemed to include for all straight cutting				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,60mm Thick Colomate prepainted IBR profile metal roof sheeting with zinc galvanised coating in single lengths fixed to timber purlins or rails.  (Colour to match existing building)				
	<b>Note</b> : The Contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied complies with the required thickness specified				
2/5/1	Roof covering with pitch not exceeding 25 degrees	m2	1 049		
2/5/2	Ridge capping 370mm girth	m	81		
2/5/3	Valley flashing 375mm girth	m	14		
	Carried Forward to Summary of Section No. 2			R	
	Bill No. 5 ROOF COVERINGS				

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO. 6			
	CARPENTRY & JOINERY			
	PREAMBLES			
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	Prefabricated trusses shall be fabricated in a factory by a truss fabricator who has been awarded a Certificate of Competence by the Institute of Timber Construction and is approved by the Principal Agent.			
	All trusses shall be designed by a registered Professional Engineer in accordance with SABS Code of Practice for Design of Timber Structures.			
	The complete structure shall be inspected by the truss designer to ensure that the manufacture and erection details have been complied with.			
	PREFABRICATED ROOF TRUSSES, ETC.			
	Sawn softwood:			
	Prefabricated timber roof construction complete including rafters, runners, bracing hips, valleys, cleats, purlins, etc., treated with creosote, supplied and fixed complete:			
2/6/1	Trusses for rectangular shaped building including purlins, size overall 3.44 x 3.14m on plan (Guard house)	No 1		
2/6/2	Trusses for rectangular shaped building including purlins, size overall 38.43 x 10.12m on plan (3 Classrooms).	No 1		
	Carried to Collection  Bill No. 6  CARPENTRY & JOINERY		R	

2/6/3	Trusses for rectangular shaped building including				1
	purlins, size overall 31.24 x 12.1m on plan with two gable roof intersections (Administration Block)	No	1		
	Sawn softwood:				
2/6/4	114 x 38mm Wall plates.	m	155		
	EAVES, VERGES, ETC.				
	Pre painted aluminium fascia and barge boards				
2/6/5	12 x 225mm Fascia and barge boards, including galvanised steel H-profile joiners, etc.	m	217		
	SKIRTINGS				
	Wrought meranti:				
2/6/6	19 x 76mm Skirtings including 19mm quadrant bead, nailed.	m	503		
2/6/7	16 x 150mm dado rail.	m	102		
	FRAMED DOORS, ETC.				
	Wrought meranti doors hung to steel frames:				
2/6/8	40mm Framed batten door 813 x 2032mm high of top rail and stiles, middle ledge and braces and bottom rail filled in with V-jointed one side boarding.	No	7		
	SOLID LAMINATED FLUSH DOORS				
	40mm solid laminated flush doors with hardwood veneer and two concealed edges hung to steel frames:				
2/6/9	40mm Door 813 x 2032mm high.	No	34		
2/6/10	40mm Door 936 x 2032mm high.	No	4		
2/6/11	40mm Door 1600 x 2032mm high.	No	1		
	THE FOLLOWING IN WORKTOPS IN ADMINBLOCK				
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	CARPENTRY & JOINERY				

2/6/12	Timber counter units with 32mm thick decorative laminated worktops with 1.2mm thick "Formica" finish, complete with ironmongery, finishes, silicone sealant at joints with walls, etc  600mm Wide counter complete with and including 32mm Formica worktop on metalwork angle brackets  THE FOLLOWING IN SHELVING TO STORE ROOMS, PRINT ROOM AND STRONG ROOM	m	14		
2/6/13	Wrought laminated Saligna fixed to steel brackets  3740mm long x 430mm wide shelving complete with and including bullnose edge on one side, fixed to steel supports (elsewhere) with screws countersunk and				
2/6/14	7200mm long x 430mm wide Shelving forming L shape along perimeter of wall complete with and including bullnose edge on one side, fixed to steel supports	No	3		
	(elsewhere) with screws countersunk and holes pelleted	No	3		
	THE FOLLOWING IN BENCH SEAT IN ENTRANCE HALL				
2/6/15	526mm wide Bench seat formed of 44 x 32mm Planed Meranti wood slats screwed to steel supports (elsewhere) with screws countersunk and holes pelleted	m	3		
2/6/16	Rounded edge to bench seat	m	3		
	JOINERY FITTINGS ETC				
	WORKTOPS, CUPBOARDS AND COUNTERS, ETC.				
	Carried to Collection Bill No. 6 CARPENTRY & JOINERY			R	

	Timber cupboard and counter units with 18mm thick water resistant melamine faced particleboard shelving, doors, dividers, etc and 32mm thick decorative laminated worktops with 1.2mm thick "Formica" finish, complete with ironmongery, finishes, silicone sealant at joints with walls, etc				
2/6/17	Sink cupboard size 920 x 600 x 900mm high with melamine finish and 32mm thick post formica worktop	No	3		
2/6/18	Sink cupboard size 1470 x 600 x 900mm high with melamine finish and 32mm thick post formica worktop	No	1		
2/6/19	Floor cupboard size 1700 x 600 x 900mm high with formica top	No	4		
		NO	4		
	Carried to Collection			R	
	Bill No. 6 CARPENTRY & JOINERY				

Bill No. 6	
CARPENTRY & JOINERY	
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Item No		Quantity	Rate	Amount
١	SECTION 2			
	BILL NO. 7			
	CEILINGS, PARTITIONS AND ACCESS FLOORING			
	PREAMBLES			
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	<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 are measured elsewhere			
	Proprietary suspended ceilings			
	Electric light fittings, diffusers, panels, etc generally are "lay in" units of the same dimensions as the suspension grid described and allowance shall be made accordingly for their support, inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing shall take cognisance thereof)			
	INSULATION, ETC			
	<u>Fibreglass insulation</u>			
2/7/1	100mm Non-combustible lightweight fibreglass insulation blanket closely fitted between tie beams and laid loose on top of brandering, etc, all as per manufacturers instructions	594		
	Carried to Collection		R	
	Bill No. 7 CEILINGS & BULKHEADS			

	NAILED UP CEILINGS				
	9mm Gypsum Plasterboard ceilings finished smooth with gypsum skim plaster				
2/7/2	Horizontal ceiling formed of 9mm thick x 1200mm wide boards with and including H-type pressed steel jointing strips over joints, 38 x 50mm sawn softwood brandering at 400mm centres in one direction and around edges where required for fixing cornices, brandering spiked to roof timber				
		m2	517		
2/7/3	Extra over ceiling for hinged pressed metal trap door size 600 x 600mm including all necessary ironmongery	No	5		
	6mm Fibre-cement plain ceiling boards with H- profile galvanised steel jointing strips:				
2/7/4	Ceilings including 38 x 38mm sawn softwood brandering at 450mm centres with cross brandering at 450mm centres and at joints, ends of sheets and at light fittings, etc.	m2	77		
2/7/5	Extra over ceiling for 600 x 600mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all	No	0		
	around.	No	3		
2/7/6	<u>Cornices</u>	<b></b>	503		
21110	76mm Gypsum coved trim cornice	m	303		
	Carried to Collection			R	
	Bill No. 7 CEILINGS & BULKHEADS				

Bill No. 7	•			
CEILINGS & BULKHEADS				
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Bill No. 7 CEILINGS & BULKHEADS				

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	SECTION 2				
	BILL NO. 8				
	FLOOR COVERINGS, WALL LININGS, ETC				
	PREAMBLES				
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.				
	SUPPLEMENTARY PREAMBLES				
	NOTE: All materials shall be in colours to be selected by the Representative/Agent and, where applicable, laid to approved patterns				
	FLOOR COVERINGS				
	300 x 300 x 2,5mm "Marley Travertine" fully flexible vinyl tiles or similar approved				
2/8/1	On floors	m2	591		
	POLISH, SEALERS, ETC				
	Sweep, clean with detergent complying with SABS 825, rinse and apply three coats of water emulsion polish complying with SABS 1042, including buffing after application of each coat of polish				
2/8/2	On vinyl flooring	m2	591		
	Carried Forward to Summary of Section No. 2			R	
	Bill No. 8 FLOOR COVERINGS & WALL LINNINGS				

SECTION 2			
BILL NO. 9			
PREAMBLES			
The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
HINGES, BOLTS, ETC			
100mm Brass barrel bolt with keep let into concrete No	14		
IRONMONGERY FIXED TO DOORS, ETC.			
LOCKS:			
75mm Four lever security lockset with satin chrome furniture with striking plate fixed to metal No.	38		
75mm Four lever rebated lockset with satin chrome furniture with striking plate fixed to metal No.	1		
DOOR CLOSERS			
Dorma:			
TS 68 door closer with parallel arm, bracket fixed to metal.	4		
NUMERAL AND NAMEPLATES, ETC.			
Clear perspex name plate reverse engraved and enamelled in white lettering 25mm high to suit, twice countersunk holed for and tapscrewed to steel door frames or gate framing with chromium plated domeheaded selftapping screws:			
3mm Thick x 32mm high plate with letters "KITCHEN".	5		
Ditto, but with letters "STAFFROOM".	2		
Carried to Collection Bill No. 9 IRONMONGERY		R	
	BILL NO. 9  PREAMBLES  The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.  HINGES, BOLTS, ETC  100mm Brass barrel bolt with keep let into concrete No IRONMONGERY FIXED TO DOORS, ETC.  LOCKS:  75mm Four lever security lockset with satin chrome furniture with striking plate fixed to metal No 75mm Four lever rebated lockset with satin chrome furniture with striking plate fixed to metal No DOOR CLOSERS  Dorma:  TS 68 door closer with parallel arm, bracket fixed to metal. No NUMERAL AND NAMEPLATES, ETC.  Clear perspex name plate reverse engraved and enamelled in white lettering 25mm high to suit, twice countersunk holed for and tapscrewed to steel door frames or gate framing with chromium plated domeheaded selftapping screws:  3mm Thick x 32mm high plate with letters "KITCHEN". No Ditto, but with letters "STAFFROOM". No	BILL NO. 9 PREAMBLES The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.  HINGES, BOLTS, ETC  100mm Brass barrel bolt with keep let into concrete No 14 IRONMONGERY FIXED TO DOORS, ETC. LOCKS: 75mm Four lever security lockset with satin chrome furniture with striking plate fixed to metal No 18 75mm Four lever rebated lockset with satin chrome furniture with striking plate fixed to metal No 1 DOOR CLOSERS  Dorma: TS 68 door closer with parallel arm, bracket fixed to metal. No 4 NUMERAL AND NAMEPLATES, ETC. Clear perspex name plate reverse engraved and enamelled in white lettering 25mm high to suit, twice countersunk holed for and tapscrewed to steel door frames or gate framing with chromium plated domeheaded selftapping screws: 3mm Thick x 32mm high plate with letters "KITCHEN". No 5 Ditto, but with letters "STAFFROOM". No 2	BILL NO. 9  PREAMBLES  The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.  HINGES, BOLTS, ETC  100mm Brass barrel bolt with keep let into concrete No 14  IRONMONGERY FIXED TO DOORS, ETC.  LOCKS:  75mm Four lever security lockset with satin chrome furniture with striking plate fixed to metal No 15  DOOR CLOSERS  Dorma:  TS 68 door closer with parallel arm, bracket fixed to metal. No 4  NUMERAL AND NAMEPLATES, ETC.  Clear perspex name plate reverse engraved and enamelled in white lettering 25mm high to suit, twice countersunk holed for and tapscrewed to steel door frames or gate framing with chromium plated domeheaded selftapping screws:  3mm Thick x 32mm high plate with letters "KITCHEN". No 5  Ditto, but with letters "STAFFROOM". R

2/9/7	Ditto, but with letters "PRINTROOM".	No	2		
2/9/8	Ditto, but with letters "STORE ROOM".	No	5		
2/9/9	Ditto, but with letters "PASTORAL CARE".	No	2		
2/9/10	Ditto, but with letters "SICKROOM".	No	4		
2/9/11	Ditto, but with letters "RECEPTION".	No	2		
2/9/12	Ditto, but with letters "PRINCIPAL".	No	2		
2/9/13	Ditto, but with letters "DEPUTY PRINCIPAL".	No	2		
2/9/14	Ditto, but with letters "CLASSROOMS".	No	7		
2/9/15	Indicator plates countersunk holed for and screwed to door or brickwork with chromium plated domeheaded screws:  190 x 190 x 3mm Thick white perspex international FB2				
	sign plate with red fire extinguisher symbol plugged to brickwork.	No	5		
2/9/16	190 x 190 x 3mm Thick white perspex international FB2 sign plate with red fire hose reel symbol plugged to brickwork.	No	2		
2/9/17	75 x 150mm High aluminium toilet sign with MALE and/or FEMALE figure screwed to door.	No	15		
	PELMET AND CURTAIN TRACKS				
2/9/18	Double curtain track for soffit fixing including 14 rollers per metre, brackets, stopped ends, etc plugged to brickwork.	m	33		
	SUNDRIES				
2/9/19	Rubber tipped coathook.	No	15		
2/9/20	38mm Rubber stop plugged and srewed to wall or floor.	No	11		
2/9/21	Nickel plated steel leaf spring door holder with rubber door stop plugged or screwed to floor.	No	11		
	Carried to Collection Bill No. 9 IRONMONGERY			R	

Aluminium automatic weather seal 813mm fixed to doors	No	7			
19mm Stainless steel chromium plated towel rail, 600mm long, with end brackets plugged to plastered or tiled wall.	No	19			
3 x 30mm Brass dividing strip between different floor finishes.	m	10			
BATHROOM FITTINGS					
Chairman Industries or similar approved brushed stainless steel grab rails:					
300 x 300 x 300 x 32mm Stainless steel dog leg side grab rail fixed in position	No	4			
750 long x 200mm Projecting stainless steel straight grab rail fixed in position	No	4			
Toilet roll holders					
Lockable Stainless steel toilet roll holder plugged to wall.	No	19			
Soap dispensers					
1Litre Wall mounted refillable soap dispenser plugged.	No	19			
PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.					
Carpet pinning boards in aluminium frame with round plastic corners, pen tray and fixing component all fixed according to manufacturer's instruction.					
Pinning board size 2400 x 1200mm high plugged.	No	7			
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Bill No. 9 IRONMONGERY					
	doors  19mm Stainless steel chromium plated towel rail, 600mm long, with end brackets plugged to plastered or tiled wall.  3 x 30mm Brass dividing strip between different floor finishes.  BATHROOM FITTINGS  Chairman Industries or similar approved brushed stainless steel grab rails:  300 x 300 x 300 x 32mm Stainless steel dog leg side grab rail fixed in position  750 long x 200mm Projecting stainless steel straight grab rail fixed in position  Toilet roll holders  Lockable Stainless steel toilet roll holder plugged to wall.  Soap dispensers  1Litre Wall mounted refillable soap dispenser plugged.  PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.  Carpet pinning boards in aluminium frame with round plastic corners, pen tray and fixing component all fixed according to manufacturer's instruction.  Pinning board size 2400 x 1200mm high plugged.  Carried to Collection  Bill No. 9	doors  19mm Stainless steel chromium plated towel rail, 600mm long, with end brackets plugged to plastered or tiled wall.  3 x 30mm Brass dividing strip between different floor finishes.  BATHROOM FITTINGS  Chairman Industries or similar approved brushed stainless steel grab rails:  300 x 300 x 300 x 32mm Stainless steel dog leg side grab rail fixed in position  750 long x 200mm Projecting stainless steel straight grab rail fixed in position  No  Toilet roll holders  Lockable Stainless steel toilet roll holder plugged to wall.  No  Soap dispensers  1Litre Wall mounted refillable soap dispenser plugged.  No  PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.  Carpet pinning boards in aluminium frame with round plastic corners, pen tray and fixing component all fixed according to manufacturer's instruction.  Pinning board size 2400 x 1200mm high plugged.  No  Carried to Collection  Bill No. 9	doors  19mm Stainless steel chromium plated towel rail, 600mm long, with end brackets plugged to plastered or tiled wall.  3 x 30mm Brass dividing strip between different floor finishes.  BATHROOM FITTINGS  Chairman Industries or similar approved brushed stainless steel grab rails:  300 x 300 x 300 x 32mm Stainless steel dog leg side grab rail fixed in position  No  4  750 long x 200mm Projecting stainless steel straight grab rail fixed in position  No  4  Toilet roll holders  Lockable Stainless steel toilet roll holder plugged to wall.  No  19  Soap dispensers  1Litre Wall mounted refillable soap dispenser plugged.  No  19  PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.  Carpet pinning boards in aluminium frame with round plastic corners, pen tray and fixing component all fixed according to manufacturer's instruction.  Pinning board size 2400 x 1200mm high plugged.  No  7  Carried to Collection  Bill No. 9	doors No 7  19mm Stainless steel chromium plated towel rail, 600mm long, with end brackets plugged to plastered or tiled wall. No 19  3 x 30mm Brass dividing strip between different floor finishes. m 10  BATHROOM FITTINGS  Chairman Industries or similar approved brushed stainless steel grab rails: 300 x 300 x 300 x 32mm Stainless steel dog leg side grab rail fixed in position No 4  750 long x 200mm Projecting stainless steel straight grab rail fixed in position No 4  Toilet roll holders  Lockable Stainless steel toilet roll holder plugged to wall. No 19  Soap dispensers  1Litre Wall mounted refillable soap dispenser plugged. No 19  PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.  Carpet pinning boards in aluminium frame with round plastic corners, pen tray and fixing component all fixed according to manufacturer's instruction.  Pinning board size 2400 x 1200mm high plugged. No 7	doors No 7  19mm Stainless steel chromium plated towel rail, 600mm long, with end brackets plugged to plastered or tiled wall. No 19  3 x 30mm Brass dividing strip between different floor finishes. m 10  BATHROOM FITTINGS  Chairman Industries or similar approved brushed stainless steel grab rails: 300 x 300 x 300 x 32mm Stainless steel dog leg side grab rail fixed in position No 4  750 long x 200mm Projecting stainless steel straight grab rail fixed in position No 4  Toilet roll holders  Lockable Stainless steel toilet roll holder plugged to wall. No 19  Soap dispensers  1Litre Wall mounted refillable soap dispenser plugged. No 19  PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.  Carpet pinning boards in aluminium frame with round plastic corners, pen tray and fixing component all fixed according to manufacturer's instruction.  Pinning board size 2400 x 1200mm high plugged. No 7

Swing type green chalkboard to comply with CKS-36-1980 or equivalent code of practice, complete with chalk rail as one unit fixed to wall strictly according to manufacturers instruction: 2/9/30 Chalk board size overall 1140mm high x 3600mm wide consisting of 1 x chalkboard 1800mm wide, 2 x chalkboard 900mm wide, 2 x swing type chalkboard 900mm wide. No 3 White board marker board surface wall mounted complete with integrated pen tray according to manufacturers instruction: 2/9/31 No 3 White board size 2 x 2400 x 1140mm high. Standard wall mounted white built in type medicine cabinet complete with mirrors on doors, shelves, etc., all as approved and to manufacturer's instruction: 2/9/32 7 Medicine cabinet size 380mm wide x 610mm high. No **Carried to Collection** R Bill No. 9 **IRONMONGERY** 

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	SECTION 2					
	BILL NO. 10					
	<u>METALWORK</u>					
	PREAMBLES					
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.					
	SUPPLEMENTARY PREAMBLES					
	<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.					
	SECURITY MESH ABOVE CEILING					
	The following in security mesh above ceiling including all necessary mild steel supports					
2/10/1	Expanded metal fixed to bottom of trusses with 40 x 0.5 hat channels at 400mm centres with 12 x 20 tech screws.	n2	11			
2/10/2	50 x 50 x 3mm Thick angle section frame	kg	51			
2/10/3	10mm Expansion bolt, 75mm long, including mortice in brickwork or concrete	No	20			
	STEEL GATES, SCREENS, ETC					
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	Bill No. 10 METALWORK			R		<del>-</del>

	The following in framed and welded mild steel security grille gates including fixing in position complete				
2/10/4	Single gate and frame size 880 x 2082mm high overall formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles, filled with 10 x 10mm mild steel bars at 100mm centres at 45degree angle with ends welded to framing including hinges, locking devices, etc.	No	2		
2/10/5	Single gate and frame size 925 x 2082mm high overall formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles, filled with 10 x 10mm mild steel bars at 100mm centres at 45degree angle with ends welded to framing including hinges, locking devices, etc.	No	7		
2/10/6	Double gate and frame size 1870 x 2083mm high overall formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles, with double swing doors formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles made of filled with 10 x 10mm mild steel bars at 100mm centres at 45degree angle with ends welded to framing including hinges, locking devices, etc.				
	devices, etc.	No	2		
2/10/7	Double gate and frame size 2230 x 2083mm high overall formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles, with double swing doors size 1520 x 2083mm high overall formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles made of filled with 10 x 10mm mild steel bars at 100mm centres at 45degree angle with ends welded to framing including hinges, locking devices, etc.				
	miciaaling rimigee, reciking devices, etc.	No	1		
	Carried to Collection			R	
	Bill No. 10 METALWORK				

2/10/8 Double gate and frame size 3440 x 2083mm high overall formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles, with double swing doors size 1750 x 2083mm high overall formed of 50 x 50 x 2mm rectangular hollow section framing all round mitred and welded at angles made of filled with 10 x 10mm mild steel bars at 100mm centres at 45degree angle with ends welded to framing including hinges, locking devices, etc. No 1 PRESSED STEEL DOOR FRAMES 1, 2mm Double rebated frames suitable for half brick walls with two 100mm steel butt hinges per leaf 2/10/9 No 38 Frame for door size, 813x 2032mm high 1,2mm Double rebated frames suitable for one brick walls with two 100mm steel butt hinges per leaf 2/10/10 No 7 Frame for door size, 813x 2032mm high 2/10/11 Frame for double door size, 1600 x 2032mm high No **STEEL CUPBOARDS** 2/10/12 Double door steel cupboard bolted to wall 1400 x 3 No 1700mm high STRONGROOM, RECORD ROOM DOORS, **VENTILATORS, ETC** NOTE The rates for strongroom doors, wall safes and ventilators shall include for fixing in position complete 2/10/13 Category 2 heavy duty anti-explosive strongroom door and frame for wall opening size 944 x 2032mm high overall, with a mass of 590kg, 20mm outer plate, two seven lever locks, etc. and fixed in position in opening in No 220mm brick wall 1 **Carried to Collection** R Bill No. 10 **METALWORK** 

2/10/14	Double ended steel telescopic ventilator for wall opening size 185 x 185mm suitable for and built into 150mm thick wall, complete with face plates on both sides, drop shutter mechanism operating from fuseable metal plug, wire gauze and baffle plates	No	2		
	HOT-DIPPED GALVANISED STEEL ROLLER SHUTTER DOORS FIXED COMPLETE TO BRICKWORK				
2/10/15	Push-up type roller shutter door suitable for opening size 1510 x 990mm with 46mm interlocking slatted curtain, channel guide rails, roller drum complete with face mounted shutter box, push-up mechanism, two handles, security lock bolt and locking rod lockable from inside complete with two keys. Manufacturer standard paint finish	No	1		
	STEEL WINDOWS, DOORS, ETC				
	<u>Doors</u>				
2/10/16	1511 x 2032mm Standard steel cottage pane french double door with and including rolled steel section frame and hinges (including 6mm clear float safety glass).	No	2		
	Cottage type steel windows with 20 x 5mm steel flat burglar bars to fixed and opening sections including standard brass fittings				
2/10/17	Window type E1, 533 x 654mm high	No	11		
2/10/18	Window type 4BH BHOI, 889 x 457mm high	No	4		
2/10/19	Window type 14-BH BHOI, 889 x 854mm high	No	3		
2/10/20	Window type 14BH over 9-F/LT, 889 x 1248mm high	No	30		
2/10/21	Window type E2, 1022 x 654mm high	No	6		
2/10/22	Window type C2F, 1022 x 949mm high	No	4		
2/10/23	Window type D2F, 1002 x 1245mm high	No	20		
	SUNDRY STEELWORK				
	Carried to Collection			R	
	Bill No. 10 METALWORK				

The following in framed and welded mild steel supports for seating in entrance hall					
50 x 50 x 3mm Hollow tube members of support, welded to form 500 x 500mm frame with mitred joints, fixed to floor with 50mm long 10mm diameter rawl bolts	No	5			
Extra for splay cut end	No	10			
Extra for mitred and welded angle	No	20			
Hole through 3mm steel for 10mm diameter bolt (elsewhere)	No	20			
M10 x 50mm Expansion bolt	No	20			
The following in framed and welded mild steel supports for worktops					
50 x 50 x 3mm Angle section supports	kg	60			
Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts	No	30			
50 x 50 x 3mm Hollow tube vertical members of support, welded to frame, with plastic plug at the bottom	No	30			
Extra for mitred and welded angle intersection	No	40			
Hole through 3mm thick steel for 8mm diameter bolt (elesewhere)	No	60			
M8 x 70mm Expansion bolt	No	60			
The following in framed and welded mild steel supports for shelves					
50 x 50 x 3mm Angle section supports	kg	39			
Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts	No	45			
Extra for mitred and welded angle intersection	No	45			
Carried to Collection Bill No. 10 METALWORK			R		
	supports for seating in entrance hall  50 x 50 x 3mm Hollow tube members of support, welded to form 500 x 500mm frame with mitred joints, fixed to floor with 50mm long 10mm diameter rawl bolts  Extra for splay cut end  Extra for mitred and welded angle  Hole through 3mm steel for 10mm diameter bolt (elsewhere)  M10 x 50mm Expansion bolt  The following in framed and welded mild steel supports for worktops  50 x 50 x 3mm Angle section supports  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts  50 x 50 x 3mm Hollow tube vertical members of support, welded to frame, with plastic plug at the bottom  Extra for mitred and welded angle intersection  Hole through 3mm thick steel for 8mm diameter bolt (elesewhere)  M8 x 70mm Expansion bolt  The following in framed and welded mild steel supports for shelves  50 x 50 x 3mm Angle section supports  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts  Extra for mitred and welded angle intersection  Carried to Collection  Bill No. 10	supports for seating in entrance hall  50 x 50 x 3mm Hollow tube members of support, welded to form 500 x 500mm frame with mittred joints, fixed to floor with 50mm long 10mm diameter rawl bolts  Extra for splay cut end  Extra for mitred and welded angle  Hole through 3mm steel for 10mm diameter bolt (elsewhere)  M10 x 50mm Expansion bolt  The following in framed and welded mild steel supports for worktops  50 x 50 x 3mm Angle section supports  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of support, fixed into brick wall with10mm dia bolts  No  50 x 50 x 3mm Hollow tube vertical members of support, welded to frame, with plastic plug at the bottom  Extra for mitred and welded angle intersection  No  Hole through 3mm thick steel for 8mm diameter bolt (elesewhere)  No  M8 x 70mm Expansion bolt  The following in framed and welded mild steel supports for shelves  50 x 50 x 3mm Angle section supports  kg  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts  No  Extra for mitred and welded angle intersection  No  Extra for shelves  50 x 50 x 3mm Angle section supports  kg  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts  No  Extra for mitred and welded angle intersection  No  Extra for mitred and welded angle intersection  No	supports for seating in entrance hall         50 x 50 x 3mm Hollow tube members of support, welded to form 500 x 500mm frame with mitred joints, fixed to floor with 50mm long 10mm diameter rawl bolts       No       5         Extra for splay cut end       No       10         Extra for mitred and welded angle       No       20         Hole through 3mm steel for 10mm diameter bolt (elsewhere)       No       20         M10 x 50mm Expansion bolt       No       20         The following in framed and welded mild steel supports for worktops         50 x 50 x 3mm Angle section supports       kg       60         Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts       No       30         50 x 50 x 3mm Hollow tube vertical members of support, welded to frame, with plastic plug at the bottom       No       30         Extra for mitred and welded angle intersection       No       40         Hole through 3mm thick steel for 8mm diameter bolt (elesewhere)       No       60         M8 x 70mm Expansion bolt       No       60         The following in framed and welded mild steel supports for shelves       supports for shelves         50 x 50 x 3mm Angle section supports       kg       39         Triangular shaped bracket formed of welded 25 x 25 x 3	supports for seating in entrance hall         50 x 50 x 3mm Hollow tube members of support, welded to form 500 x 500mm frame with mittred joints, fixed to floor with 50mm long 10mm diameter rawl bolts       No       5         Extra for splay cut end       No       10         Extra for mitred and welded angle       No       20         Hole through 3mm steel for 10mm diameter bolt (elsewhere)       No       20         M10 x 50mm Expansion bolt       No       20         The following in framed and welded mild steel supports for worktops       kg       60         50 x 50 x 3mm Angle section supports       kg       60         Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts       No       30         50 x 50 x 3mm Hollow tube vertical members of supports, welded to frame, with plastic plug at the bottom       No       30         Extra for mitred and welded angle intersection       No       40         Hole through 3mm thick steel for 8mm diameter bolt (elsewhere)       No       60         M8 x 70mm Expansion bolt       No       60         The following in framed and welded mild steel supports for shelves       so x 50 x 3mm Angle section supports       kg       39         Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of suppor	Supports for seating in entrance hall  50 x 50 x 3mm Hollow tube members of support, welded to form 500 x 500mm frame with mitred joints, fixed to floor with 50mm long 10mm diameter rawl bolts  Extra for splay cut end  No  Extra for splay cut end  No  Extra for mitred and welded angle  Hole through 3mm steel for 10mm diameter bolt (elsewhere)  No  20  M10 x 50mm Expansion bolt  No  20  The following in framed and welded mild steel supports for worktops  50 x 50 x 3mm Angle section supports  Kg  60  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with 10mm dia bolts  50 x 50 x 3mm Hollow tube vertical members of supports, welded to frame, with plastic plug at the bottom  No  Extra for mitred and welded angle intersection  No  Hole through 3mm thick steel for 8mm diameter bolt (elesewhere)  No  60  M8 x 70mm Expansion bolt  No  60  The following in framed and welded mild steel supports for shelves  50 x 50 x 3mm Angle section supports  Kg  39  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports for shelves  50 x 50 x 3mm Angle section supports  Kg  39  Triangular shaped bracket formed of welded 25 x 25 x 3mm Flat sections, welded to vertical members of supports, fixed into brick wall with10mm dia bolts  No  45  Extra for mitred and welded angle intersection  No  45  Carried to Collection

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2/10/38	Hole through 3mm thick steel for 8mm diameter bolt (elesewhere)	No	60			
2/10/39	M8 x 70mm Expansion bolt	No	60			
	ALUMINIUM DOORS, WINDOWS, ETC					
	Aluminium sliding transaction windows manual open, self close operation glazed with Clear tempered glass, plugged to brickwork or concrete					
2/10/40	Window size 1520 x 1000mm high	No	1			
2/10/41	Window size 1530 x 1000mm high	No	1			
	Carried to Collection	on		R		
	Bill No. 10 METALWORK					
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Bill No. 10				
METALWORK				
COLLECTION				
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Bill No. 10 METALWORK				Г
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Item No			Quantity	Rate	Amount	
	SECTION 2					
	BILL NO. 11					
	PLASTERING					
	PREAMBLES					
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.					
	SUPPLEMENTARY PREAMBLES					
	Plaster on concrete					
	Plaster described as "on brickwork" shall be deemed to include for small portions of plaster on concrete flush with brickwork and prices should include for all the necessary preparatory work					
	SCREEDS					
	1:3 Screeds wood trowelled on concrete					
2/11/1	30mm Thick on floors and landings	m2	591			
	GRANOLITHIC					
	Untinted granolithic on concrete (degree of accuracy grade III)					
2/11/2	30mm Thick on floors and landings	m2	331			
	INTERNAL PLASTER					
	1:4 Cement plaster on brickwork finished smooth with wood float					
2/11/3	On walls	m2	1 209			
2/11/4	On narrow widths	m2	34			
	Carried Forward to Summary of Section No. 2 Bill No. 11 PLASTERING			R		_

Item No			Quantity	Rate	Amount	
	SECTION 2					
	BILL NO. 12					
	TILING					
	PREAMBLES					
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.					
	WALL TILING					
	200 x 200mm "College Shiny White" Porcelain wall tiles fixed with adhesive to plastered wall and flush pointed with tinted waterproof jointing compound, dove grey grout					
2/12/1	On walls	12	104			
2/12/2	On isolated panels, splashbacks, etc to walls not exceeding1m2	12	9			
2/12/3	Fair exposed cutting and fitting around pipe exceeding 50 and not exceeding 100mm internal diameter (Provisional)	10	15			
2/12/4	Fair exposed cutting and fitting around pipe exceeding 100mm and not exceeding 200mm internal diameter (Provisional)	10	5			
	300 x 300mm "White Matt" Porcelain Mosaic wall tiles fixed with adhesive to plastered wall and flush pointed with tinted waterproof jointing compound, dove grey grout					
2/12/5	On walls	12	13			
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	Carried Forward to Summary of Section No. 2			R		
	Bill No. 12 TILING					

Item No		Quantity	Rate	Amount
	SECTION 2			
	BILL NO. 13			
	PLUMBING & DRAINAGE (PROVISIONAL)			
	PREAMBLES			
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	uPVC pipes and fittings:			
	Soil, waste and vent pipes and fittings shall be solvent weld jointed			
	Copper pipes:			
	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			
	Fixing of pipes			
	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			
	Lead pipes and fittings			
	All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel			
	Carried to Collection  Bill No. 13 PLUMBING & DRAINAGE		R	

Reducing fittings				
Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained				
Excavations				
No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling				
"Soft rock" and "hard rock" shall be as defined in "Earthworks"				
Laying, backfilling, bedding, etc. of pipes				
Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions				
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				
Stainless steelbasins, sinks, wash troughs, urinals, etc.				
Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable				
Carried to Collection		R		
Bill No. 13 PLUMBING & DRAINAGE				
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	Waste unions				
	Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings				
	<u>User note:</u>				
	Please note the rate for butt weldings is deemed to be included in all fittings				
	RAIN WATER GOODS				
	Pre-Painted Seamless Aluminium Ogee Gutters (or similar approved), Rainwater Pipes And Accessories In Long Lengths				
2/13/1	100 x 125mm Industrial ogee eaves gutter fixed to fibre cement fascia.	m	155		
	Extra for				
2/13/2	Stopped end.	No	16		
2/13/3	External angle.	No	16		
2/13/4	Outlet with nozzle for 100 x 75mm rainwater pipe.	No	22		
	(End Of Extra For)				
2/13/5	100 x 75 x 2mm Rainwater pipe plugged to wall.	m	58		
	Extra For				
2/13/6	Shoe.	No	22		
2/13/7	Bend.	No	22		
2/13/8	Swanneck bend.	No	22		
	SANITARY FITTINGS AND GEYSERS				
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	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	<u></u>

	Supply and fix the following sanitary fittings, geysers and equipment together with loose ancillary fittings supplied therewith, including unloading, storing, unpacking, hoisting or lowering as required, fixing and building into position, cutting all mortices and chases as required for fixing and building in position, cutting, brackets, clamps, etc., and connecting up pipework and handing over in perfect working order at completion:  'Vitreous clay':				
2/13/9	White vitreous china wall hung basin, size 510 x 405mm, with stopper to one tap hole and fixed to wall.	No	23		
2/13/10	WC suite comprising a 90° outlet white vitreous china pan with trap, matching 9 litre white vitreous china cistern, complete with heavy duty plastic flap seat and lid, fitments fixed to wall.	No	5		
2/13/11	Mini WC suite comprising a 45° outlet white vitreous china pan with trap, matching 5 litre white vitreous china cistern, complete with heavy duty plastic flap seat and lid, fitments fixed to wall.	No	6		
2/13/12	Wall hung Paraplegic WC suite comprising a white vitreous china pan with trap, matching 9 litre white cistern, complete with lid, fitments, purpose made chromium plated side flush lever and white matching seat fixed to wall.	No	4		
2/13/13	610mm x 385mm Back inlet white vitreous china wall mounted urinal including 38mm chrome plated domical grating and chromium plated top inlet spreader fixed on and including two hanger brackets, Including Chrome plated flushipe, 4,5litre cistern with back inlet and PC push button	No	2		
	Grade 304 (18/10) polished stainless steel:				
2/13/14	Drop-in single end bowl sink, size 500 x 1000mm, fixed to cupboard (cupboard by others) with securing clips and sealed with sillicone adhesive along edges.	No	4		
	TAPS, VALVES, ETC.				
	Carried to Collection			R	
	Bill No. 13 PLUMBING & DRAINAGE				

	Taps, valves, etc			
2/13/15	Kitchen range (SS-970) 15mm chrome single lever sink mixer with tubular swivel outlet, adjustable wall flanges	No	4	
2/13/16	15mm 'Star 111-CP' raised nose pillartap.	No	19	
2/13/17	15mm Type '505-21 CP' elbow action pillartap.	No	4	
2/13/18	15mm Type 'P-832 CP' angle regulating valve.	No	48	
2/13/19	15mm Type '350F CP' flexible connection.	No	46	
	WASTE UNIONS, TRAPS, ETC.			
	Traps, etc.			
2/13/20	32 x 40mm 'Flexitrap' butyl rubber deep seal 'P' or 'S' trap jointed to waste outlet fitting and to PVC pipe including coupling clamps, etc.	No	23	
2/13/21	40 x 40mm 'Flexitrap' butyl rubber deep seal 'P' or 'S' trap jointed to waste outlet fitting and to PVC pipe including coupling clamps, etc.	No	2	
2/13/22	Ditto, but combination trap.	No	4	
	Waste unions			
2/13/23	40mm Chromium plated '316CP' sink waste union complete with plug and chain.	No	2	
2/13/24	32mm Chromium plated '303-CP' slotted basin waste union complete with plug only.	No	23	
	FIRE APPLIANCES, ETC.			
	Fire extinguishers, hose reels, etc.:			
2/13/25	4,5kg Dry chemical powder fire extinguisher fixed to wall with meranti backboard, size 520 x 100 x 22mm thick, plugged and screwed to wall complete with hook.	No	5	
2/13/26	Fire hose reel	No	2	
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R

	HOT & COLD WATER RETICULATION INSTALLATION - ADMINISTRATION  All rates supplied in this Bill of Quantities will be deemed to include scaffolding to any height and fixing of cold and hot water pipes up to and including roof height. All pipes suspended from concrete slabs, roof, ceiling, etc. shall be deemed to include in the rates, all necessary hanger brackets, threaded rod (irrespective of the suspension length), nuts, washers, anchors and drilling of holes in the concrete slab. For the complete supply, delivery and installation of supply piping, as specified, piping to include piping between geysers on roof. All cold and hot water pipes are to be chased into walls except where pipes are to be surface-mounted on wall face or run in ceiling voids or inside ducts, and fixed with standard type pipe saddlers and brackets at 1000mm maximum.  HOT & COLD WATER PIPING  Supply and install Pex-Al-Pex multilayer pipes				
2/13/27	32mm pipe	m	5		
2/13/28	Ø20mm pipe	m	10		
2/13/29	Ø16mm pipe	m	80		
	<u>FITTINGS</u>				
	Supply and install Pex-Al-Pex multilayer pipes Fittings				
2/13/30	Ø32mm Equal T-piece	No	2		
2/13/31	Ø32mm Ø16mm Ø32mm Un-Equal T-piece	No	5		
2/13/32	Ø32mm Ø20mm Ø32mm Un-Equal T-piece	No	5		
2/13/33	Ø20mm Ø16mm Ø20mm Un-Equal T-piece	No	10		
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	

2/13/34	Ø16mm Ø16mm Equal T-piece	Na	20		
0/40/05	The 1 000 m 51 m 00°	No	20		
2/13/35	Threaded Ø32mm Elbow: 90°	No	10		
2/13/36	Threaded Ø20mm Elbow: 90°	No	15		
2/13/37	Threaded Ø16mm Elbow: 90°	No	30		
2/13/38	Reducer: Ø32mm x Ø20mm	No	5		
2/13/39	Reducer: Ø20mm x Ø16mm	No	5		
2/13/40	Pipe clamps and hangers			SUM	
	THREADED VALVES				
2/13/41	Supply and Install Ø32mm isolating gate valve on cold water main pipes	No	1		
2/13/42	Supply and Install Ø25mm isolating gate valve on cold water main pipes				
	water main pipes	No	2		
2/13/43	Supply and Install Ø20mm isolating ball valve with lever on cold and hot water main pipes	No	2		
2/13/44	Supply and Install Ø15mm isolating ball valve with lever				
	on cold and hot water main pipes	No	15		
2/13/45	Flexible connector to sanitary fittings	No	15		
2/13/46	Supply and Install 15mm diameter stopcock/angle valve on cold and hot water pipe to sanitary appliance or sink	No	15		
	Carried to Collection Bill No. 13			R	
	PLUMBING & DRAINAGE				

0/40/47	ELECTRIC WATER GEYSER & PRE-HEATER SOLAR GEYSER				
2/13/47	Supply ans install a Pre-heater solar geyser to comply with the SANS 1307,mounted on the roof complete with copper piping,pressure valves,draincock,vaccum breakers,thermostat,expansion relief valve,strainers,lever ball valves,drip tray,hot water pipe insulation,mixing valve,and all accessories and fittings,solar absorption unit must be flat panels and tank heat exchangers should be of jacket type electric backup.Capacity: 150 litres.Element Rating: 3 kW	No	1		
		140	'		
	HOT & COLD WATER RETICULATION INSTALLATION - GUARD HOUSE BLOCK				
	All rates supplied in this Bill of Quantities will				
	be deemed to include scaffolding to any height and fixing of cold and hot water pipes up to and				
	including roof height. All pipes suspended from concrete slabs, roof, ceiling, etc. shall be				
	deemed to include in the rates, all necessary hanger brackets, threaded rod (irrespective of				
	the suspension length), nuts, washers, anchors and drilling of holes in the concrete slab. For				
	the complete supply, delivery and installation of				
	supply piping, as specified, piping to include piping between geysers on roof. All cold and				
	hot water pipes are to be chased into walls except where pipes are to be surface-mounted				
	on wall face or run in ceiling voids or inside ducts, and fixed with standard type pipe				
	saddlers and brackets at 1000mm maximum.				
	HOT & COLD WATER PIPING				
	Supply and install Pex-Al-Pex multilayer pipes				
2/13/48	32mm pipe	m	3		
2/13/49	Ø20mm pipe	m	1		
2/13/50	Ø16mm pipe	m	1		
	<u>FITTINGS</u>				
	Carried to Collection			R	
	Bill No. 13				Ħ
	PLUMBING & DRAINAGE				

	Supply and install Pex-Al-Pex multilayer pipes Fittings				
2/13/51	Ø20mm Ø16mm Ø20mm Un-Equal T-piece	No	1		
2/13/52	Threaded Ø32mm Elbow: 90°	No	1		
2/13/53	Threaded Ø20mm Elbow: 90°	No	1		
2/13/54	Threaded Ø16mm Elbow: 90°	No	4		
2/13/55	Reducer: Ø32mm x Ø20mm	No	1		
2/13/56	Reducer: Ø20mm x Ø16mm	No	1		
2/13/57	Pipe clamps and hangers			SUM	
	THREADED VALVES				
2/13/58	Supply and Install Ø32mm isolating gate valve on cold water main pipes	No	1		
2/13/59	Supply and Install Ø15mm isolating ball valve with lever on cold and hot water main pipes	No	2		
2/13/60	Flexible connector to sanitary fittings	No	2		
2/13/61	Supply and Install 15mm diameter stopcock/angle valve on cold and hot water pipe to sanitary appliance or sink	No	2		
	HOT & COLD WATER RETICULATION INSTALLATION -GRADE R-CLASS ROOM BLOCK				
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	

	All rates supplied in this Bill of Quantities will be deemed to include scaffolding to any height and fixing of cold and hot water pipes up to and including roof height. All pipes suspended from concrete slabs, roof, ceiling, etc. shall be deemed to include in the rates, all necessary hanger brackets, threaded rod (irrespective of the suspension length), nuts, washers, anchors and drilling of holes in the concrete slab. For the complete supply, delivery and installation of supply piping, as specified, piping to include piping between geysers on roof. All cold and hot water pipes are to be chased into walls except where pipes are to be surface-mounted on wall face or run in ceiling voids or inside ducts, and fixed with standard type pipe saddlers and brackets at 1000mm maximum.  HOT & COLD WATER PIPING  Supply and install Pex-Al-Pex multilayer pipes				
2/13/62	32mm pipe	m	15		
2/13/63	Ø20mm pipe	m	60		
2/13/64	Ø16mm pipe	m	150		
	<u>FITTINGS</u>				
	Supply and install Pex-Al-Pex multilayer pipes Fittings				
2/13/65	Ø32mm Ø20mm Ø32mm Un-Equal T-piece	No	3		
2/13/66	Ø20mm Ø16mm Ø20mm Un-Equal T-piece	No	6		
2/13/67	Ø16mm Ø16mm Ø16mm Equal T-piece	No	6		
2/13/68	Threaded Ø32mm Elbow: 90°	No	3		
2/13/69	Threaded Ø20mm Elbow: 90°	No	15		
2/13/70	Threaded Ø16mm Elbow: 90°	No	60		
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	_

2/13/71	Reducer: Ø32mm x Ø20mm	No	3		
2/13/72	Reducer: Ø20mm x Ø16mm	No	6		
2/13/73	Pipe clamps and hangers			SUM	
	THREADED VALVES				
2/13/74	Supply and Install Ø32mm isolating gate valve on cold water main pipes	No	3		
2/13/75	Supply and Install Ø20mm isolating gate valve on cold water main pipes	No	6		
2/13/76	Supply and Install Ø15mm isolating ball valve with lever on cold and hot water main pipes	No	18		
2/13/77	Flexible connector to sanitary fittings	No	36		
2/13/78	Supply and Install 15mm diameter stopcock/angle valve on cold and hot water pipe to sanitary appliance or sink	No	36		
	SANITARY DRAINAGE INSTALLATION - ADMINISTRATION				
	These bills of quantities form part of and must be read in conjunction with the Technical Specifications and Drawings, which contain the full descriptions of the work to be done and material and equipment to be used. Unless otherwise described in these bills of quantities, reference should be made to the Technical Specifications for the full meaning of descriptions of work to be done and materials and equipment to be used in this service. All materials, equipment, fixings, brackets, etc, are to be supplied by the Contractor unless otherwise stated.  SANITARY DRAINAGE PIPING  Polyvinyl Chloride (PVC) pipe, as 'Marley Pipe Systems' or equal approved, including couplers in the running length, installed in accordance with SANS 10400 and SANS 10252-2:2004				
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	
	PLONDING & DRAINAGE				

	PIPING				
2/13/79	Ø50mm uPVC pipe	m	20		
2/13/80	Ø110mm uPVC pipe	m	60		
	PIPE FITTINGS				
2/13/81	Ø50mm fitting; 90°elbow	No	12		
2/13/82	Ø110mm fitting; 45°elbow	No	36		
2/13/83	Ø110mm fitting; 95°elbow, with Ø50mm vent horn inspection	No	5		
2/13/84	Ø110mm fitting; 95°elbow, plain long bend	No	18		
2/13/85	Ø50mm x Ø50mm x Ø50mm fitting; 90° swept entry, lateral branch junction	No	5		
2/13/86	Ø110mm x Ø110mm x Ø50mm fitting; 87.5° swept entry, lateral branch junction	No	3		
2/13/87	Ø110mm x Ø110mm x Ø110mm fitting; 87.5° swept entry, lateral branch junction	No	12		
2/13/88	Ø110mm x Ø50mm fitting; concentric reducer	No	12		
2/13/89	Ø110mm straight pan collars/connector	No	12		
2/13/90	Ø100mm vent 2way valve	No	9		
	WASTE TRAPS				
2/13/91	40mm 'Dutton' flexi rubber "P" trap complete with coupling clamps.	No	1		
2/13/92	Supply and install chromium plated 'Cobra' Bottle Trap with 40mm female inlet x 50mm outlet for PVC tube connection	No	9		
2/13/93	110mm Floor Drain complete a trap.	No	3		
	SANITARY DRAINAGE INSTALLATION - GUARD HOUSE BLOCK				
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	

	These bills of quantities form part of and must be read in conjunction with the Technical Specifications and Drawings, which contain the full descriptions of the work to be done and material and equipment to be used. Unless otherwise described in these bills of quantities, reference should be made to the Technical Specifications for the full meaning of descriptions of work to be done and materials and equipment to be used in this service. All materials, equipment, fixings, brackets, etc, are to be supplied by the Contractor unless otherwise stated.  SANITARY DRAINAGE PIPING  Polyvinyl Chloride (PVC) pipe, as 'Marley Pipe Systems' or equal approved, including couplers in the running length, installed in accordance with SANS 10400 and SANS 10252-2:2004				
2/13/94	Ø50mm uPVC pipe	m	3		
2/13/95	Ø110mm uPVC pipe	m	3		
	PIPE FITTINGS				
2/13/96	Ø50mm fitting; 90°elbow	No	4		
2/13/97	Ø110mm fitting; 45°elbow	No	1		
2/13/98	Ø110mm fitting; 95°elbow, with Ø50mm vent horn inspection	No	1		
2/13/99	Ø110mm fitting; 95°elbow, plain long bend	No	1		
2/13/100	Ø110mm x Ø110mm x Ø110mm fitting; 87.5° swept entry, lateral branch junction	No	1		
2/13/101	Ø110mm straight pan collars/connector	No	1		
2/13/102	Ø50mm vent one way valve	No	1		
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	

2/13/103	WASTE TRAPS  Supply and install chromium plated 'Cobra' Bottle Trap with 40mm female inlet x 50mm outlet for PVC tube connection	No	1		
	SANITARY DRAINAGE INSTALLATION - CLASSROOM BLOCK				
	These bills of quantities form part of and must be read in conjunction with the Technical Specifications and Drawings, which contain the full descriptions of the work to be done and material and equipment to be used. Unless otherwise described in these bills of quantities, reference should be made to the Technical Specifications for the full meaning of descriptions of work to be done and materials and equipment to be used in this service. All materials, equipment, fixings, brackets, etc, are to be supplied by the Contractor unless otherwise stated.				
	SANITARY DRAINAGE PIPING				
	Polyvinyl Chloride (PVC) pipe, as 'Marley Pipe Systems' or equal approved, including couplers in the running length, installed in accordance with SANS 10400 and SANS 10252-2:2004				
	<u>PIPING</u>				
2/13/104	Ø50mm uPVC pipe	m	45		
2/13/105	Ø110mm uPVC pipe	m	90		
	PIPE FITTINGS				
2/13/106	Ø50mm fitting; 90°elbow	No	18		
2/13/107	Ø110mm fitting; 45°elbow	No	18		
2/13/108	Ø110mm fitting; 95°elbow, with Ø50mm vent horn inspection	No	9		
2/13/109	Ø110mm fitting; 95°elbow, plain long bend	No	18		
	Carried to Collection Bill No. 13 PLUMBING & DRAINAGE			R	

2/13/110	Ø110mm x Ø110mm x Ø50mm fitting; 87.5° swept entry, lateral branch junction	No	3		
2/13/111	Ø110mm x Ø110mm x Ø110mm fitting; 87.5° swept entry, lateral branch junction	No	9		
2/13/112	Ø110mm x Ø50mm fitting; concentric reducer	No	9		
2/13/113	Ø110mm straight pan collars/connector	No	9		
2/13/114	Ø100mm vent 2way valve	No	9		
	WASTE TRAPS				
2/13/115	40mm 'Dutton' flexi rubber "P" trap complete with coupling clamps.	No	3		
2/13/116	Supply and install chromium plated 'Cobra' Bottle Trap with 40mm female inlet x 50mm outlet for PVC tube connection	No	15		
2/13/117	110mm Floor Drain complete a trap.	No	3		
2/13/118	110mm Floor Gulley Complete with gulley stone, trap and crate	No	9		
	Carried to Collection			R	
	Bill No. 13 PLUMBING & DRAINAGE				

Bill No. 13				
PLUMBING & DRAINAGE				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	72			
	73			
	74			
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	77			
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	86			
Carried Forward to Summary of Section No. 2		R		
Bill No. 13 PLUMBING & DRAINAGE				

Item No			Quantity	Rate	Amount	
	SECTION 2					
	BILL NO. 14					
	GLAZING					
	PREAMBLES					
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.					
	GLAZING TO STEEL WITH PUTTY					
	5.38mm Clear laminated safety glass					
	4 mm Clear float glass fixed to steel window with putty					
2/14/1	Panes not exceeding 0,1m²	m2	65			
	4 mm Opaque glass fixed to steel window with putty					
2/14/2	Panes not exceeding 0,1m²	m2	9			
	<u>MIRRORS</u>					
2/14/3	Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with foam backing strip all round to plugs in walls  6mm "GG" quality polished glass mirror 450 x 600mm high with polished edges fixed to wall with four 35mm round nose chromium plated mirror screws	No	23			
	Carried Forward to Summary of Section No. 2 Bill No. 14 GLAZING			R		_

Item No			Quantity	Rate	Amount	
	SECTION 2					
	BILL NO. 15					
	<u>PAINTWORK</u>					
	PREAMBLES					
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.					
	SUPPLEMENTARY PREAMBLES					
	DESCRIPTIONS					
	Descriptions of paintwork shall be deemed to include for all cutting in					
	PAINTWORK, ETC TO NEW WORK					
	ON FLOATED PLASTER					
	Prepare, stop and apply one coat masonry primer, one universal undercoat and two coats acrylic PVA paint such as Plascon True Colour Fresh Linen or similar approved					
2/15/1	On internal plastered walls	m2	1 156			
	ON PLASTERBOARD					
	Prepare, stop and apply two full coats semi-gloss PVA co-polymer paint to comply with SABS Specification No. 643					
2/15/2	On ceilings and cornices	m2	594			
	ON METAL					
	Carried to Collection			R		
	Bill No. 15 PAINTING			K		

Prepare and apply two coats bitumen paint					
On inside of 100 x 125mm galvanised sheet iron eaves					
gatter pereits inting	m2	51			
Prepare, stop and apply one coat alkaline resistant primer, one coat universal undercoat and two coats eggshell enamel paint					
On eaves gutters	m2	59			
On down pipes	m2	6			
Prepare, touch up factory primer and apply one coat universal undercoat and two full coats high gloss enamel paint					
On Windows with burglar bars (both sides measured					
nat)	m2	149			
On Steel & glass cottage pane door (both sides					
measured flat)	m2	12			
On pressed steel door frames	m2	47			
Prepare and apply one coat zinc phosphate alkyd resin primer, one coat universal undercoat and two full coats high gloss enamel paint					
On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	74			
ON WOOD					
Prepare, stop and apply three coats clear varnish					
On doors	m2	158			
On meranti skirting, dado rail etc.	m	605			
One coat creosote paint					
On roof timbers at eaves and verges	m2	76			
					+
Carried to Collection			R		<u> </u>
PAINTING					
	Prepare, stop and apply one coat alkaline resistant primer, one coat universal undercoat and two coats eggshell enamel paint  On eaves gutters  On down pipes  Prepare, touch up factory primer and apply one coat universal undercoat and two full coats high gloss enamel paint  On Windows with burglar bars (both sides measured flat)  On Steel & glass cottage pane door (both sides measured flat)  On pressed steel door frames  Prepare and apply one coat zinc phosphate alkyd resin primer, one coat universal undercoat and two full coats high gloss enamel paint  On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)  ON WOOD  Prepare, stop and apply three coats clear varnish  On doors  On meranti skirting, dado rail etc.  One coat creosote paint  On roof timbers at eaves and verges  Carried to Collection	On inside of 100 x 125mm galvanised sheet iron eaves gutter before fixing m2  Prepare, stop and apply one coat alkaline resistant primer, one coat universal undercoat and two coats eggshell enamel paint  On eaves gutters m2  On down pipes m2  Prepare, touch up factory primer and apply one coat universal undercoat and two full coats high gloss enamel paint  On Windows with burglar bars (both sides measured flat) m2  On Steel & glass cottage pane door (both sides measured flat) m2  On pressed steel door frames m2  Prepare and apply one coat zinc phosphate alkyd resin primer, one coat universal undercoat and two full coats high gloss enamel paint  On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) m2  ON WOOD  Prepare, stop and apply three coats clear varnish  On doors m2  On meranti skirting, dado rail etc. m  One coat creosote paint  On roof timbers at eaves and verges m2  Carried to Collection  Bill No. 15	On inside of 100 x 125mm galvanised sheet iron eaves gutter before fixing m2 51  Prepare, stop and apply one coat alkaline resistant primer, one coat universal undercoat and two coats eggshell enamel paint  On eaves gutters m2 59  On down pipes m2 6  Prepare, touch up factory primer and apply one coat universal undercoat and two full coats high gloss enamel paint  On Windows with burglar bars (both sides measured flat) m2 149  On Steel & glass cottage pane door (both sides measured flat) m2 12  On pressed steel door frames m2 47  Prepare and apply one coat zinc phosphate alkyd resin primer, one coat universal undercoat and two full coats high gloss enamel paint  On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) m2 74  ON WOOD  Prepare, stop and apply three coats clear varnish  On doors m2 158  On meranti skirting, dado rail etc. m 605  One coat creosote paint  On roof timbers at eaves and verges m2 76	On inside of 100 x 125mm galvanised sheet iron eaves gutter before fixing  Prepare, stop and apply one coat alkaline resistant primer, one coat universal undercoat and two coats eggshell enamel paint  On eaves gutters  On down pipes  On down pipes  On Windows with burglar bars (both sides measured flat)  On Steel & glass cottage pane door (both sides measured flat)  On pressed steel door frames  On pressed steel door frames  Prepare and apply one coat universal undercoat and two full coats high gloss enamel paint  On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)  On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)  On wood  Prepare, stop and apply three coats clear varnish  On doors  On meranti skirting, dado rail etc.  One coat creosote paint  On roof timbers at eaves and verges  Carried to Collection  R  Bill No. 15	On inside of 100 x 125mm galvanised sheet iron eaves gutter before fixing m2 51  Prepare, stop and apply one coat alkaline resistant primer, one coat universal undercoat and two coats eggshell enamel paint  On eaves gutters m2 59  On down pipes m2 6  Prepare, touch up factory primer and apply one coat universal undercoat and two full coats high gloss enamel paint  On Windows with burglar bars (both sides measured flat) m2 149  On Steel & glass cottage pane door (both sides measured flat) m2 12  On pressed steel door frames m2 47  Prepare and apply one coat zinc phosphate alkyd resin primer, one coat universal undercoat and two full coats high gloss enamel paint  On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) m2 74  ON WOOD  Prepare, stop and apply three coats clear varnish  On doors m2 158  On meranti skirting, dado rail etc. m 605  One coat creosote paint  On roof timbers at eaves and verges m2 76  Bill No. 15

Bill No. 15			
PAINTING			
COLLECTION			
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PAINTING			

	SECTION SUMMARY - BUILDING WORKS			
Bill No		Page No		Amount
2/1	EARTHWORKS	35		
2/2	CONCRETE, FORMWORK & REINFORCEMENT	39		
2/3	MASONRY	44		
2/4	WATERPROOFING	47		
2/5	ROOF COVERINGS	48		
2/6	CARPENTRY & JOINERY	53		
2/7	CEILINGS & BULKHEADS	56		
2/8	FLOOR COVERINGS & WALL LINNINGS	57		
2/9	IRONMONGERY	62		
2/10	METALWORK	69		
2/11	PLASTERING	70		
2/12	TILING	71		
2/13	PLUMBING & DRAINAGE	87		
2/14	GLAZING	88		
2/15	PAINTING	91		
	Comind to Final Commence			
	Carried to Final Summary		R	

Item No			Quantity	Rate	Amount
	SECTION NO. 3	I			
	BILL NO. 1				
	BULK EARTHWORKS (PROVISIONAL)				
	PREAMBLES				
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.				
	SITE CLEARANCE, ETC				
3/1/1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	1 341		
3/1/2	Strip topsoil average 100mm deep and dispose off site	m2	1 341		
	Taking out and removing, grubbing up roots and filling in holes				
3/1/3	Tree exceeding 200mm and not exceeding 500mm girth	No	15		
3/1/4	Tree exceeding 500mm and not exceeding 1000mm girth	No	15		
	Relocation of the existing jungle gym				
3/1/5	Relocation of the existing bungle gym if required		Item		
	BULK EXCAVATION, FILLING, ETC TO FORM PLATFORMS				
	Open face excavation in earth over sloping site				
3/1/6	Open face excavation	m3	242		
	Extra over bulk excavation in earth for excavation in				
3/1/7	Soft rock	m3	24		
	Carried to Collection			R	
	Bill No. 1 BULK EARTHWORKS (PROVISIONAL)				

3/1/8	Hard rock	m3	12		
	Extra over all excavations for carting away				
3/1/9	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	242		
	Keeping excavations free of water				
3/1/10	Keeping excavations free of all water other than subterranean water		Item		
	FILLING, ETC				
	Earth filling of obtained from excavations compacted in 150mm layers to 93% Mod AASHTO density				
3/1/11	Filling to form level platforms	m3	242		
	Earth filling of G5 material supplied by the contractor compacted in 150mm layers to 95% Mod AASHTO density				
3/1/12	Filling to form level platforms	m3	484		
	Compaction of surfaces				
3/1/13	Compaction of natural or excavated ground surface under floors, etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	807		
	Prescribed density tests on filling				
3/1/14	"Modified AASHTO Density" test	No	16		
	SOIL POISONING				
	Soil insecticide in accordance with SANS 5859				
3/1/15	Under floors including forming and poisoning shallow furrows against foundation walls, filling in furrows and ramming	m2	807		
	Carried to Collection			R	
	Bill No. 1 BULK EARTHWORKS (PROVISIONAL)				

Bill No. 1				]
BULK EARTHWORKS (PROVISIONAL)				Ī
COLLECTION				1
	Page No		Amount	Ì
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				1
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Bill No. 1 BULK EARTHWORKS (PROVISIONAL)				<u> </u>
BOLK LARTHWORKS (FROVIOUNAL)				1
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Item No			Quantity	Rate	Amount
	SECTION NO. 3				
	BILL NO. 2				
	SEWER RETICULATION (PROVISIONAL)				
	PREAMBLES				
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.				
	SEWER PIPEWORK				
	UPVC Class 34 pipes including excavation, bedding, backfilling and compaction and disposal of surplus material				
3/2/1	160mm Pipes laid in and including trenches not exceeding 1m deep	m	192		
3/2/2	160mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	1		
	Extra over uPVC class 34 pipes for fittings				
3/2/3	22.5 Degree bend	No	6		
3/2/4	45 Degree bend	No	6		
3/2/5	45 degree plain junction	No	6		
3/2/6	Rodding eye	No	2		
	<u>Sundries</u>				
3/2/7	350 x 350mm 15MPa Unreinforced concrete encasing around 160mm horizontal pipe	m3	24		
3/2/8	110mm uPVC cleaning eye to end of 110mm uPVC pipe	No	2		
	Carried to Collection			R	
	Bill No. 2 SEWER RETICULATION (PROVISIONAL)				

3/2/9	350 x 350 x 50mm Thick precast concrete inspection eye marker slab finished smooth on exposed surfaces with letters "I.O." or "I.E." on top and placed flush in ground or paving  MANHOLES	No	2		
	Precast concrete manholes with medium duty concrete manhole cover and frame, frame bedded in 1:3 cement mortar, spacers bedded in 1:6 cement mortar and precast concrete slab including excavations, backfilling, compaction, risk of collapse, cartaway surplus material, 150mm thick unreinforced 25MPa/19mm concrete base projecting 65mm wide from walls, benching, junctions, channelling, and step irons all in accordance with engineer's drawings for the following depths:				
3/2/10	1000mm diameter (internally) Precast concrete manhole not exceeding 1.0m deep internally	No	5		
	SEWER CONNECTION				
3/2/11	Cutting into side of existing manhole chamber for and connecting 160mm pipe including inserting 160mm channel junction and making good concrete benching	No	1		
	TESTING				
3/2/12	Testing soil drainage system		Item		
	Carried to Collection			R	
	Bill No. 2				<del> </del>
	SEWER RETICULATION (PROVISIONAL)				

Bill No. 2				
SEWER RETICULATION (PROVISIONAL)				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	96			
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Bill No. 2 SEWER RETICULATION (PROVISIONAL)				<u> </u>
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Item No			Quantity	Rate	Amount
	SECTION NO. 3				
	BILL NO. 3				
	WATER RETICULATION (PROVISIONAL)				
	WATER PIPEWORK				
	uPVC Class 12 pressure pipes including excavation, bedding, backfilling and compaction and disposal of surplus material				
3/3/1	50mm Pipes laid in and including trenches not exceeding 1m deep	m	179		
3/3/2	50mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	1		
	Extra over uPVC class 12 pipes for fittings				
3/3/3	50mm Bend	No	5		
3/3/4	50mm Junction	No	5		
3/3/5	50mm Elbow	No	5		
3/3/6	50mm Equal Tee	No	5		
	<u>Sundries</u>				
3/3/7	50mm Brass gate valve	No	4		
3/3/8	110mm Brass gate valve	No	1		
3/3/9	50mm Brass non-return valve	No	4		
3/3/10	620 x 550mm Valve box including brick chamber below not exceeding 1m deep internally, heavy duty weight frame and cover, excavation, backfilling, compaction and disposal of surplus material	No	4		
	Carried to Collection			R	
	Bill No. 3 WATER RETICULATION (PROVISIONAL)				

3/3/11	25Mpa/19mm Unreinforced concrete in thrust blocks at bends, junctions, etc including necessary extra excavation, backfilling, formwork, etc	No	20		
	TESTING				
3/3/12	Testing water supply pipe system		Item		
	Carried to Collection Bill No. 3			R	
	WATER RETICULATION (PROVISIONAL)				

Bill No. 3				
WATER RETICULATION (PROVISIONAL)				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	99			
	100			
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WATER RETICULATION (PROVISIONAL)				

Item No			Quantity	Rate	Amount
	SECTION NO. 3				
	BILL NO. 4				
	WALKWAYS (PROVISIONAL)				
	PREAMBLES				
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.				
	BULK EXCAVATION, FILLING, ETC TO FORM PLATFORMS				
	Excavation in earth not exceeding 2m deep				
3/4/1	Reduce levels under paving	m3	72		
	Extra over bulk excavation in earth for excavation in				
3/4/2	Soft rock	m3	7		
3/4/3	Hard rock	m3	4		
	Extra over all excavations for carting away				
3/4/4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	72		
	Compaction of surfaces				
3/4/5	Compaction of natural or excavated ground surface under floors, etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	241		
	SOIL POISONING				
	Carried to Collection			R	
	Bill No. 4 WALKWAYS (PROVISIONAL)				
			l	1	

	Weed killer under a 10 year guarantee by firm of specialist				
3/4/6	Under paving, etc	m2	241		
	LAYER WORK				
	Earth filling of G5 material supplied by the contractor compacted in 150mm layers to 95% Mod AASHTO density				
3/4/7	Filling under paved areas	m3	144		
	Coarse river sand filling supplied by the contractor				
3/4/8	Under paved walkway areas	m3	72		
	Filling of 19mm crushed stone, consolidated				
3/4/9	On floors	m3	2		
	Prescribed density tests on filling				
3/4/10	"Modified AASHTO Density" test	No	5		
	<u>PAVING</u>				
	Shape S-A interlocking precast concrete paving blocks complying with SANS 1058, with butt joints on 20mm thick river sand bed with sand swept into joints, including preparation of ground or filling				
3/4/11	Paving of 60mm thick blocks	m2	241		
	KERBING				
	Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing				
3/4/12	Kerb (SABS 927 fig 10) 150 x 300mm high with 150 x 40mm thick 1:6 cement mortar bed and 300 x 200 x 200mm overall 19MPa/19mm unreinforced concrete haunching at back of each joint including excavation, backfilling, etc	m	292		
	Carried to Collection Bill No. 4			R	
	WALKWAYS (PROVISIONAL)				

Bill No. 4				
WALKWAYS (PROVISIONAL)				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	102			
	103			
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Bill No. 4 WALKWAYS (PROVISIONAL)				_
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Item No		Quantity	Rate	Amount
	SECTION NO. 3			
	BILL NO. 5			
	<u>LANDSCAPING</u>			
	PREAMBLES			
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	Maintenance period			
	All planted areas shall be maintained for a period of three months after practical completion as defined in the contract with the exception of hydro seeded areas which shall be maintained for 12 months after an acceptable cover has been obtained.			
	This maintenance shall consist of keeping clear of weeds and litter, loosening soil where necessary every two weeks, replacing damaged, diseased or dead plants, pruning, cutting and mowing as necessary and watering so as to keep the plant material in a healthy growing condition.			
	LANDSCAPING			
	Ground preparation			
3/5/1	Cultivation and preparation of areas to be planted	2 293		
	Well sifted topsoil supplied by the contractor, including spreading and levelling			
3/5/2	In plant beds, grassed areas and holes for trees, shrubs, etc	2 293		
	Compost, lime and fertilizer			
3/5/3	Compost in plant beds, holes for trees, shrubs, etc	2 293	1	
	Carried to Collection  Bill No. 5  LANDSCAPING		R	

	Grassing, ground covers, etc					
3/5/4	Instant lawn sods approximately 500 x 500 x 50mm thick	m2	293			
	Precast bench					
3/5/5	Allow a PC Sum of R2600/No for installation of the precast concrete bench	No	2			
	<u>Maintenance</u>					
3/5/6	Allow for maintaining landscaping for a period of three months after practical completion, including watering, weeding, cutting, replacing dead plants, etc		Item			
	Carried to Collectio	n		R		
	Bill No. 5 LANDSCAPING					
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Bill No. 5			
LANDSCAPING			
COLLECTION			
COLLECTION  Total Brought Forward from Page No.	Page No 105 106		Amount
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Item No		Quantity	Rate	Amount
1	SECTION NO. 3			
	BILL NO. 6			
	<u>FENCING</u>			
	PREAMBLES			
	The contractor is referred to the General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors before pricing this bill.			
	FENCING			
	Removal of existing work			
3/6/1	Removal of existing fence and dispose off site	n 626		
	The following in framed and welded steel fencing including fixing in position complete			
3/6/2	1800mm High ClearVu fence or Similar approved including high - strength 2.5m wide mesh panel with a 100mm high and 50mm wide aperture, 70x 44mm H profile and 60 x 60 x 1.6mm hollow square including concrete base and installed according to manufacturers specification	744		
	r	n 714		
3/6/3	1200mm (wide) x 2060mm, Singles leaf pedestrian gate.Gate frame shall be made with 50mm x 50mm x 2mm tube with the Nylofor PVC panels secured to the gate frame using mini spider brackets. The support posts shall be 76mm x 76mm x 2mm with support hinges.The locking posts shall be 76mm x 76mm x 2mm. The gates shall be fit with a barrel bolt for locking the gate.All frames and posts shall be HDG then PES coated to match the fence. All fixator components to be stainless steel Grade 304 per ISO 9223, installed as per manufacturers specification.			
	N	1		
	Carried Forward to Summary of Section No. 3		R	
	Bill No. 6 FENCING			

Bill	SECTION SUMMARY - EXTERNAL WORKS	Page		Amount	
No		No			
3/1	BULK EARTHWORKS (PROVISIONAL)	95			
3/2	SEWER RETICULATION (PROVISIONAL)	98			
3/3	WATER RETICULATION (PROVISIONAL)	101			
3/4	WALKWAYS (PROVISIONAL)	104			
3/5	LANDSCAPING	107			
3/6	FENCING	108			
	Carried to Final Summary		R		

Item No			Quantity	Rate	Amount
	SECTION NO. 4				
	BILL NO. 1				
	ELECTRICAL DISTRIBUTION BOARDS				
	Electrical installation according to SANS 10142 and SANS				
	Distribution Board DB-GH (Admin Block)				
4/1/1	Supply and install flush mounted distribution board complete with frames, sub-frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.  Material and labour excluding the items listed hereunder	No	1		
	Equipment provided in Distribution Board				
4/1/2	16 Ampere S.P. 6 kA	No	6		
4/1/3	20 Ampere S.P. 6 kA	No	6		
4/1/4	32 Ampere D.P. 6 kA	No	2		
A / A / F	00 A 0 D. 0 LA		2		
4/1/5	63 Ampere S.P. 6 kA	No	2		
4/1/6	63 Ampere D.P. 6 kA	No	1		
	Earth Leakage Unit				
4/1/7	63 Ampere single phase 6 kA 30 mA	No	2		
	Moulded Case circuit breakers				
4/1/8	80 Ampere S.P. 10 kA	No	1		
4/1/9	63 Ampere S.P. 6 kA	No	2		
	Carried to Collection			R	
	Bill No. 1 ELECTRICAL DISTRIBUTION BOARD				

	Class 1 Surge Arrestor	1			
4/1/10	Imax 15kA Surge Arrestor	No	1		
	<u>Labels</u>				
4/1/11	Danger sign and labels as specified	No	1		
	<u>Distribution Board DB-B3 (Three Classroom)</u>				
4/1/12	Supply and install flush mounted distribution board complete with frames, sub-frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail. Material and labour excluding the items listed hereunder	No	1		
	Equipment provided in Distribution Board				
4/1/13	16 Ampere S.P. 6 kA	No	4		
4/1/14	20 Ampere S.P. 6 kA	No	9		
4/1/15	63 Ampere S.P. 6 kA	No	2		
4/1/16	63 Ampere D.P. 6 kA	No	1		
	Earth Leakage Unit				
4/1/17	63 Ampere single phase 6 kA 30 mA	No	2		
	Class 1 Surge Arrestor				
4/1/18	Imax 6kA Surge Arrestor	No	1		
	<u>Labels</u>				
4/1/19	Danger sign and labels as specified	No	1		
	<u>Distribution Board DB-GH (Guard House)</u>				
4/1/20	Supply and install flush mounted weatherproof distribution board complete with doors, frames, subframes, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail. Material and labour excluding the items listed hereunder	No	1		
	Carried to Collection Bill No. 1 ELECTRICAL DISTRIBUTION BOARD			R	

	Equipment provided in Distribution Board				
4/1/21	16 Ampere S.P. 6 kA	No	1		
4/1/22	20 Ampere S.P. 6 kA	No	1		
4/1/23	63 Ampere S.P. 6 kA	No	1		
4/1/24	63 Ampere D.P. 6 kA	No	1		
	Earth Leakage Unit				
4/1/25	63 Ampere single phase 6 kA 30 mA	No	1		
	Class 1 Surge Arrestor				
4/1/26	Imax 6kA Surge Arrestor	No	1		
	<u>Labels</u>				
4/1/27	Danger sign and labels as specified	No	1		
	Block C (Existing DB)				
	Supply and install circuit breaker. Material and labour excluding the items listed hereunder				
4/1/28	63 Ampere D.P. 6 kA	No	1		
	Electrical Certificate of Compliance				
4/1/29	Issue Supplementary Electrical Certificate of Compliance for above existing Block-A DB	No	1		
	Carried to Collection			R	
	Bill No. 1 ELECTRICAL DISTRIBUTION BOARD				F
	ELLO MICAL DIO MIDO HON BOAND				

Bill No. 1				
ELECTRICAL DISTRIBUTION BOARD				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	110			
	111			
	112			
Carried Forward to Summary of Section No. 4		R		
Bill No. 1 ELECTRICAL DISTRIBUTION BOARD				

Item No			Quantity	Rate	Amount
	SECTION NO. 4				
	BILL NO. 2				
	LOW VOLTAGE RETICULA	<u>TION</u>			
	Electrical installation according to S	SANS 10142 and SANS			
	Low Voltage Cables				
	600/1000V grade PVC/PVC/SWA/copper conductor cable (termina conductors elsewhere measured trenching (excavations elsewher	<u>itions and earth</u> I) Cable laid in			
4/2/1	25mm² x 4-core	m	160		
4/2/2	16mm² x 4-core	m	280		
4/2/3	10mm² x 2-core	m	60		
	Cable Terminations complete inc				
4/2/4	25mm² x 4-core	m	2		
4/2/5	16mm² x 4-core	No	4		
4/2/6	10mm² x 2-core	No	2		
	Bare Stranded Copper Earth Wire Cables (terminations elsewhere				
4/2/7	16mm²	m	160		
4/2/8	10mm²	m	280		
	Bill No. 2	Carried to Collection		R	
	LOW VOLTAGE RETICULATION				

4/2/9	6mm²	m	60		
	Bare Stranded Copper Earth Wire Terminations complete including drilling, bolting, lugs, connections and commissioning				
4/2/10	16mm²	No	2		
4/2/11	10mm²	No	4		
4/2/12	6mm²				
		No	2		
	<u>EXCAVATIONS</u>				
	All excavations, back filling and compaction must be done manually using local labour Excavate for cable and sleeve trench including temporary support of sides, keeping excavations dry, backfilling and compacting to the Engineer's specification				
4/2/13	Pickable Soil	m3	60		
4/2/14	For Soft Rock	m3	20		
4/2/15	For Hard Rock	m3	10		
	CABLE MARKERS				
4/2/16	PVC warning marking tape	m	250		
	MANHOLES				
4/2/17	600 x 600 x 800 mm	No	3		
	SLEEVES				
4/2/18	50mm dia	m	60		
4/2/19	110mm dia	m	440		
	Carried to Collection Bill No. 2 LOW VOLTAGE RETICULATION			R	

	DRAW WIRE					
4/2/20	Galvanised 1,6mm dia. draw wire specified placed in position for cas building or chased into brickwork in bushes	ting into concrete,	m	600		
4/2/21	300x300mm Draw box with tampe	r proof cover	No	2		
		Carried to Collection			R	
	Bill No. 2 LOW VOLTAGE RETICULATION					

Bill No. 2				
LOW VOLTAGE RETICULATION				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	114			Ĺ
	115			 
	116			 
Carried Forward to Summary of Section No. 4		R		
Bill No. 2 LOW VOLTAGE RETICULATION		IX.		
LOW VOLTAGE RETICULATION				

Item No		Ī	Quantity	Rate	Amount
	SECTION NO. 4				
	BILL NO. 3				
	NEW ADMINISTRATION BLOCK				
	Electrical installation according to SANS 10142 and SANS				
	NOTE:Tenderers are advised to study the specification before pricing the bill.(Complete installation: Internal electrical installation)				
	SMALL POWER AND LIGHTING				
	Conduit and accessories as specified Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles.				
4/3/1	20mm	m	1 300		
4/3/2	25mm	m	100		
	Round conduit box as specified placed in position for casting into concrete, building or chased into brickwork or surface mounted including locknuts and bushes				
4/3/3	60mm deep	No	50		
	Carried to Collection			R	
	Bill No. 3 ADMIN BLOCK SMALL POWER AND LIGHTING				

	Wall boxes as specified placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes				
4/3/4	100 x 50mm	No	18		
4/3/5	100 x 100mm	No	24		
	Expansion joint boxes as specified placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.				
4/3/6	300 x 300mm	No	3		
	CONDUCTORS				
	600/1000V grade PVC insulated stranded copper conductors drawn into conduit				
4/3/7	2,5mm²	m	1 200		
4/3/8	4,0mm²	m	800		
	Bare stranded copper earth conductors drawn into conduits				
4/3/9	2,5mm²	m	1 000		
	POWER OUTLETS				
	Complete with cover plate fixed in flush boxes (boxes elsewhere measured)				
	Socket Outlets				
	16 Ampere round 3-pin 250V grade				
4/3/10	Single switched socket outlet with Euro socket	No	15		
4/3/11	Double switched socket outlet	No	6		
4/3/12	Double dedicated switched socket outlet	No	1		
	Carried to Collection			R	
	Bill No. 3 ADMIN BLOCK SMALL POWER AND LIGHTING				

4/3/13	32A double pole Isolator (weatherproof)	No	1		
	<u>Light Switches</u>				
4/3/14	16 Ampere 250V grade single lever one way	No	13		
4/3/15	16 Ampere 250V grade single lever two way	No	2		
4/3/16	16 Ampere 250V grade double lever one way	No	1		
	WIRE WAYS AND LUMINAIRES				
	Conduit & accessories as specified Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles				
4/3/17	25mm	m	300		
	Wall boxes as specified placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes				
4/3/18	100 x 100mm	No	10		
	Blank Covers				
4/3/19	100 x 100mm	m	10		
	DRAW WIRE				
4/3/20	Galvanised 1,6mm draw wire	m	350		
	<u>APPLIANCES</u>				
	Surface mounted appliance complete				
4/3/21	16 Ampere photo cell in an empty luminaire	No	1		
	<u>LUMINAIRES</u>				
	Carried to Collection			R	
	Bill No. 3 ADMIN BLOCK SMALL POWER AND LIGHTING				

	Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps				
4/3/22	Type C - 15W LED, round bulkhead luminaire complete with polycarbonate diffuser and cool white lamp. IP65	No	21		
4/3/23	Type F2 - 2x18W T8 LED, 1200mm surface mounted open channel luminaire complete with cool white lamp.	No	6		
4/3/24	Type F4 - 2x22W T8 LED, 1500mm surface mounted open channel luminaire complete with cool white lamps.	No	13		
4/3/25	Type V1 - 2x18W T8 LED, 1200mm surface mounted luminaire complete with cool white lamps and vapourproof diffusers.	No	1		
4/3/26	Type V2 - 2x22W T8 LED, 1500mm surface mounted luminaire complete with cool white lamps and vapourproof diffuser.	No	1		
	TESTING AND COMMISSIONING				
	Test and commission of the complete				
4/3/27	Electrical installation		Item		
				_	
	Carried to Collection Bill No. 3			R	
	ADMIN BLOCK SMALL POWER AND LIGHTING				

Bill No. 3				
ADMIN BLOCK SMALL POWER AND LIGHTING				
COLLECTION				
	Page No		Amount	
Total Brought Forward from Page No.	118			
	119			
	120			
	121			
Carried Forward to Summary of Section No. 4		R		
Bill No. 3 ADMIN BLOCK SMALL POWER AND LIGHTING				

Item No			Quantity	Rate	Amount
110	SECTION NO. 4				
	BILL NO. 4				
	THREE CLASSROOM BLOCK POWER AND LI				
	Electrical installation according to SANS 10142 and SANS				
	NOTE:Tenderers are advised to study the specification before pricing the bill.(Complete installation: Internal electrical installation)				
	SMALL POWER AND LIGHTING				
	Conduit and accessories as specified Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles.				
4/4/1	20mm	m	1 000		
4/4/2	25mm	m	50		
	Round conduit box as specified placed in position for casting into concrete, building or chased into brickwork or surface mounted including locknuts and bushes				
4/4/3	60mm deep	No	52		
	Carried to Collection			R	
	Bill No. 4 THREE CLASSROOM BLOCK POWER AND LIGHTING				

	Wall boxes as specified placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes				
4/4/4	100 x 50mm	No	17		
4/4/5	100 x 100mm	No	20		
	Expansion joint boxes as specified placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.				
4/4/6	300 x 300mm	No	2		
	CONDUCTORS				
	600/1000V grade PVC insulated stranded copper conductors drawn into conduit				
4/4/7	2,5mm²	m	1 300		
4/4/8	4,0mm²	m	700		
	Bare stranded copper earth conductors drawn into conduits				
4/4/9	2,5mm²	m	1 000		
	POWER OUTLETS				
	Complete with cover plate fixed in flush boxes (boxes elsewhere measured)				
	Socket Outlets				
	16 Ampere round 3-pin 250V grade				
4/4/10	Single switched socket outlet with Euro socket	No	15		
4/4/11	Double switched socket outlet	No	3		
	Carried to Collection			R	
	Bill No. 4 THREE CLASSROOM BLOCK POWER AND LIGHTING				

	<u>Light Switches</u>				
4/4/12	16 Ampere 250V grade single lever one way	No	5		
4/4/13	16 Ampere 250V grade single lever two way	No	6		
4/4/14	16 Ampere 250V grade double lever one way	No	6		
	<u>APPLIANCES</u>				
	Surface mounted appliance complete				
4/4/15	16 Ampere photo cell in an empty luminaire	No	1		
	<u>LUMINAIRES</u>				
	Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps				
4/4/16	Type C - 15W LED, round bulkhead luminaire complete with polycarbonate diffuser and cool white lamp. IP65	No	21		
4/4/17	Type F1 - 1x18W T8 LED, 1200mm surface mounted open channel luminaire complete with cool white lamp.	No	6		
4/4/18	Type F2 - 2x18W T8 LED, 1200mm surface mounted open channel luminaire complete with cool white lamps.	No	3		
4/4/19	Type F4 - 2x22W T8 LED, 1500mm surface mounted open channel luminaire complete with cool white lamps.	No	18		
4/4/20	Type V - 2x22W T8 LED, 1500mm surface mounted luminaire complete with cool white lamps and vapourproof diffuser.	No	3		
	TESTING AND COMMISSIONING				
	Test and commission of the complete				
4/4/21	Electrical installation		Item		
					$\perp$
	Carried to Collection			R	
	Bill No. 4 THREE CLASSROOM BLOCK POWER AND LIGHTING				

Bill No. 4				
THREE CLASSROOM BLOCK POWER AND LIGHTING				
COLLECTION				
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Total Brought Forward from Page No.	123			
	124			
	125			
Carried Forward to Summary of Section No. 4		R		
Bill No. 4 THREE CLASSROOM BLOCK POWER AND LIGHTING				=
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Item No			Quantity	Rate	Amount	
	SECTION NO. 4					
	BILL NO. 5					
	GUARD HOUSE SMALL POWER AND LIGHTING					
	Electrical installation according to SANS 10142 and SANS					
	NEW GUARD HOUSE					
	Tenderers are advised to study the specification before pricing the bill.(Complete installation: Internal Electrical Installation)					
	SMALL POWER AND LIGHTING					
	Conduit and accessories as specified Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles.					
4/5/1	20mm	m	120			
	Round conduit box as specified placed in position for casting into concrete, building or chased into brickwork or surface mounted including locknuts and bushes					
4/5/2	60mm deep	No	7			
	Carried to Collection			R		_
	Bill No. 5 GUARD HOUSE SMALL POWER AND LIGHTING					

	Wall boxes as specified placed in position for				
	casting into concrete, building or chased into brickwork including locknuts and bushes Where				
	cavity walls or face brick walls are encountered tenderers must allow to install deep back to back				
	(one end closed) wall boxes				
4/5/3	100 x 50mm	No	2		
4/5/4	100 x 100mm	No	2		
	Conductors				
	600/1000V grade PVC insulated stranded copper conductors drawn into conduit				
4/5/5	2,5mm²	m	140		
4/5/6	4,0mm²	m	60		
	Bare stranded copper earth conductors drawn into conduits				
4/5/7	2,5mm²	m	100		
	POWER OUTLETS				
	Complete with cover plate fixed in flush boxes (boxes elsewhere measured)				
	Socket Outlets				
	16 Ampere round 3-pin 250V grade				
4/5/8	Single switched socket outlet with 3-pin euro socket	No	1		
4/5/9	Double switched socket outlet	No	1		
	Light Switches				
4/5/10	16 Ampere 250V grade single lever one way	No	2		
	<u>APPLIANCES</u>				
	Surface mounted appliance complete				
4/5/11	16 Ampere photo cell in an empty luminaire	No	1		
	Carried to Collection			R	$\top$
	Bill No. 5				+
	GUARD HOUSE SMALL POWER AND LIGHTING				

	<u>LUMINAIRES</u>			
	Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps			
4/5/12	Type C - 15W LED, round bulkhead luminaire complete with polycarbonate diffuser and cool white lamp. IP65 No	5		
4/5/13	Type F2 - 2x18W T8 LED, 1200mm surface mounted open channel luminaire complete with cool white lamps.	1		
	TESTING AND COMMISSIONING			
	Test and commission of the complete			
4/5/14	Electrical installation		SUM	
	Carried to Collection		R	
	Bill No. 5			
	GUARD HOUSE SMALL POWER AND LIGHTING			

Bill No. 5				
GUARD HOUSE SMALL POWER AND LIGHTING				
COLLECTION				
Total Brought Forward from Page No.	Page No		Amount	
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Bill No. 5 GUARD HOUSE SMALL POWER AND LIGHTING				

Item No		Quantity	Rate	Amount
	SECTION NO. 4			
	BILL NO. 6			
	PROVISIONAL SUMS			
	Electrical installation according to SANS 10142 and SANS			
4/6/1	Earthing and Lightning Protection System	Item		30 000.00
4/6/2	Add profit & attendance for above item		SUM	
4/6/3	Modification of existing Block-C DB	Item		5 000.00
4/6/4	Add profit & attendance for above item		SUM	
4/6/5	Floodlights	Item		10 000.00
4/6/6	Add profit & attendance for above item		SUM	
4/6/7	Bell and Alarm System	Item		22 500.00
4/6/8	Add profit & attendance for above item		SUM	
4/6/9	Power Supply Upgrade	Item		200 000 00
4/6/10	Add profit & attendance for above item		SUM	
4/6/11	Refurbishment of Block C	Item		18 000.00
4/6/12	Add profit & attendance for above item m	1		
	Carried Forward to Summary of Section No. 4		R	
	Bill No. 6 PROVISIONAL SUMS			

Bill	SECTION SUMMARY - ELECTRICAL	Page		Amount	
No		No			
4/1	ELECTRICAL DISTRIBUTION BOARD	113			
4/2	LOW VOLTAGE RETICULATION	117			
4/3	ADMIN BLOCK SMALL POWER AND LIGHTING	122			
4/4	THREE CLASSROOM BLOCK POWER AND LIGHTING	126			
4/5	GUARD HOUSE SMALL POWER AND LIGHTING	130			
4/6	PROVISIONAL SUMS	131			
	Carried to Final Summary		R		

Item No		Quantity	Rate	Amount
	SECTION NO. 5			
	BILL NO. 1			
	FIRE AND DIRECTIONAL SIGNAGE			
	Photo luminescent fire and directional signage in multiples of 190 x 190mm as SANS 1186 - 1&5 photo luminescent, installed in accordance with SANS 10400 and framed with standard aluminium moulding and mounted with concealed screws to brickwork or concrete.			
5/1/1	Directional signage type E1.	3		
5/1/2	Directional signage type E2	3		
5/1/3	Directional signage type E3.	15		
5/1/4	Fire signage type F4.	9		
5/1/5	Fire signage type F13	2		
5/1/6	Fire signage type F49	) 1		
	FIRE APPLIANCES ETC.			
5/1/7	"Chubb" hose reel complete with control valve, 30m length of 20mm red reinforced hose, nozzlecock and bracket, all mounted on strongly constructed wall bracket complete with bolts grouted in and including mortices in wall and joint to steel pipes N	2		
5/1/8	"Chubb" 4.5kg DCP fire extinguisher on and including hardwood backboard plugged, screwed and plugged to wall.	D 12		
5/1/9	"Chubb" 5kg CO2 fire extinguisher on and including hardwood backboard plugged, screwed and plugged to wall.	2		
	Carried to Collection  Bill No. 1 FIRE PROTECTION		R	

	FIRE SUPPLIES				]
	Fire reticulation shall be installed in accordance with SANS 1200 series of specifications, and pipe bedding shall be Class B SANS 1200 LB.				
	Class 16 (SANS 966) uPVC pressure pipes: Extra over HDPE pressure pipes for the following Class 16 uPVC pressure fittings:				
5/1/10	25mm pipe fittings	Lot	1		
	Medium class galvanised mild steel pipe according to SANS 62-1 with threaded connections including straight sockets in running lengths:				
5/1/11	25mm pipe	m	20		
5/1/12	25mm pipe fittings	Lot	1		
5/1/13	'Densyl Tape: Wrapping around 100mm pipe including fittings.	Lot	1		
		LOI	'		
	Carried to Collection			R	
	Bill No. 1 FIRE PROTECTION				<del> </del>
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Bill No. 1				
FIRE PROTECTION				
COLLECTION				
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Total Brought Forward from Page No.	133			
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Carried Forward to Summary of Section No. 5		R		_
Bill No. 1 FIRE PROTECTION				

Item No		Quantity	Rate	Amount	
1	SECTION NO. 5				
	BILL NO. 2				
	PROVISIONAL SUMS				
	Allow the amount for electrical installation and wiring, complete for fire protection equipment as well as for adjustment of Mechanical engineering services to be used at the discretion of the principal agent and deducted in whole or in part if not required.	Item		3 500.	00
5/2/2	Add profit & Attendance		SUM		
	Out of Famous 14 O		_		
	Bill No. 2		R		<del></del>
	THO VIOLOTATE COMO				
	Carried Forward to Summary of Section No. 5 Bill No. 2 PROVISIONAL SUMS		R		

Bill No	SECTION SUMMARY - MECHANICAL INSTALLATION	Page No		Amount	
5/1	FIRE PROTECTION	135			
5/2	PROVISIONAL SUMS	136			
					_
	Carried to Final Summary		R		

Item No		Quantity	Rate	Amount
	SECTION 6			
	PROVISIONAL SUMS			
	1.The following sums and amounts are NET.			
	3. Unless a specific percentage mark-up for Attendance is indicated in a rate column, the amount priced by the Contractor for Attendance against each Provisional Sum shall be deemed to be the Lump Sum and shall not be adjusted unless the scope of the sub contract varies significantly.			
	4. Provisional Sums contained here-in may be omitted or reduced at the employer's sole discretion and the Contractor shall not be entitled to claim for any loss by way of reductions or omissions or any discount, or percentage relating to Provisional Sums or PC amounts or any loss of profit related thereto.			
	FIXED FURNITURE, LOOSE FURNITURE AND JOINERY FITTINGS			
6/1/1	Provide the sum of R650 000.00 (Six Hundred and Fifty Thousand Rand) for fixed furniture, loose furniture and joinery fittings installed complete.	Item		650 000,00
6/1/2	Due fit are above them.			650 000.00
6/1/2	Profit on above item	Item		
6/1/3	Attendance on ditto	Item		
	JUNGLE GYM			
6/1/4	Provide the sum of R50 000.00 (Fifty Thousand Rand) for jungle gym installed complete.			
		Item		50 000 00
6/1/5	Profit on above item	Item		
6/1/6	Attendance on ditto	Item		
	Carried to Collection  Bill No. 1 PROVISIONAL SUMS		R	

	RELOCATION OF EXISTING PREFAB CLASSROOM				
6/1/7	Provide the sum of R30 000.00 (Thirty Thousand Rand) for relocation of existing prefab classroom installed complete.				
	·	Item		30 000 00	)
6/1/8	Profit on above item	Item			
6/1/9	Attendance on ditto	Item			
	COMMUNITY LIAISON OFFICER				
6/1/10	Provide the amount of R 99,000.00 (Nighty Nine Thousand Rands) for employment of Community Liaison Officer. (Allowance for R 9 000.00 per month for 11 months)	Item		99 000 00	0
6/1/11	Attendance on above item	Item			
	PSC PSC				
6/1/12	Provide the amount of R 10,000.00 (Ten Thousand Rands) for PSC meetings. (For the duration of the project)	Item		10 000 00	0
6/1/13	Attendance on above item	Item			
					_
	Carried to Collection		R		_
	Bill No. 1 PROVISIONAL SUMS				
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Bill No. 1				
PROVISIONAL SUMS				
COLLECTION				
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Carried to Final Summary Bill No. 1		R		_
PROVISIONAL SUMS				

	FINAL SUMMARY			
Section No		Page No		Amount
1	PRELIMINARY & GENERAL	31		
2	BUILDING WORKS	92		
3	EXTERNAL WORKS	109		
4	ELECTRICAL	132		
5	MECHANICAL INSTALLATION	137		
6	PROVISIONAL SUMS	140		
	SUBTOTAL		R	
	<u>CONTINGENCIES</u>			
	The tenderer shall add 10% of the works including preliminaries as Contingency Amount for the unforeseen and the sum provided is under the sole control of the client and upon approval by the Client Representative and deducted in whole or in part.			
	and deducted in miles of in part.	Item		
	SUBTOTAL		R	
	VAT at the rate of 15%		R	
	Carried to Form of Offer		R	