Item No		Quantity	Rate	Amount
	SECTION NO 1			
	BILL NO 1			
	PRELIMINARIES			
	BUILDING AGREEMENT AND PRELIMINARIES			
	MEANING OF TERMS "TENDER / TENDERER"			
	Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder".			
	PRELIMINARIES			
	The JBCC Preliminaries Code 2103, May 2005 edition for use with the JBCC Principal Building Agreement Edition 4.1 Code 2101, March 2005 is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intent and meaning of each clause. These clauses are referred to by number and heading only. Where standard clauses or options are not applicable to the contract such modifications or corrections as are necessary are given under each relevant clause. Where an item is not relevant to this specific contract such item is marked. "N/A" signifying "Not Applicable".			
	PRICING OF PRELIMINARIES			
	Should Option A, as set out in clause B10.3 hereinafter be used for the adjustment of preliminaries then each item priced is to be allocated to one or more of the three categories Fixed, Value Related or Time Related and the respective amounts entered in the spaces provided under each item.			
	Items not priced in these Preliminaries shall be deemed to be included elsewhere in these Bills of Quantities.			
	Carried Forward Section No. 1		R	
	Bill No. 1 Preliminaries			

	Brought Forward		R	
	SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT			
	DEFINITIONS			
1	A1.0 DEFINITIONS AND INTERPRETATION			
	Clause 1.0			
	F:V:	Item		
	OBJECTIVE AND PREPARATION			
2	A2.0 OFFER, ACCEPTANCE AND PERFORMANCE			
	Clause 2.0			
	F:V: T:			
	l:	Item		
3	A3.0 DOCUMENTS			
	F:V:			
	T:	Item		
4	A4.0 DESIGN RESPONSIBILITY			
	Clause 4.0			
	<u>F</u> :V:			
	T:	Item		
5	A5.0 EMPLOYER'S AGENTS			
	Clause 5.0			
	F:V: T:			
	T:	Item		
	Carried Forward		R	
	Section No. 1			
	Bill No. 1 Preliminaries			

	Brought Forward		R	
6	A6.0 SITE REPRESENTATIVE			
	Clause 6.0			
	F:V: T:			
	·	Item		
7	A7.0 COMPLIANCE WITH REGULATIONS			
	Clause 7.0			
	Without limiting the generality of the provisions of Clause 7.0, the contractor's attention is drawn to the provisions of the Construction Regulations, 2014 issued in terms of the Occupational Health and Safety Act, 1993 in particular with Regulation 7(1)(a) requiring the compilation of a health and safety plan, as well as Regulation 8(5) requiring the appointment of a Construction Health and Safety Officer, the necessary documented health and safety specifications for the works 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's attention is also drawn to the and Part C4.2 (Annexure C) of this tender document. It is specifically stated that the employer shall prepare a documented health and safety specification for the works 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 reasonable provisions of the aforementioned health and safety specifications.			
	F:V: T:			
	'· <u></u>	Item		
8	A8.0 WORKS RISK			
	Clause 8.0			
	F:V: T:			
		Item		
				_
	Carried Forward Section No. 1		R	
	Bill No. 1 Preliminaries			

	Brought Forward		R	1
9	A9.0 INDEMNITIES			
	Clause 9.0  F: V: T:			
10	A10.0 WORKS INSURANCES Clause 10.0	Item		
	F:V:	Item		
		item		1
11	A11.0 LIABILITY INSURANCES  Clause 11.0  F:			
	·· <u></u>	Item		1
12	A12.0 EFFECTING INSURANCES Clause 12.0			
	F:V: T:	Item		
	A13.0 No clause			
14	A14.0 SECURITY Clause 14.0			
	F:V: T:	Item		
	Carried Forward  Section No. 1  Bill No. 1  Preliminaries		R	

	Brought Forward		R	
	EXECUTION			
15	A15.0 PREPARATION FOR AND EXECUTION OF THE WORKS			
	Clause 15.0			
	F:V: T:	Item		
16	A16.0 ACCESS TO THE WORKS			
	Clause 16.0			
	F:V: T:	Item		
17	A17.0 CONTRACT INSTRUCTIONS			
	Clause 17.0			
	In addition to the provisions of sub-clause 17.3 contract instructions are to be recorded in triplicate in a contract instruction book, which is to be supplied and maintained on site by the Contractor.			
	F:V: T:	ltem		
18	A18.0 SETTING OUT OF THE WORKS	lioni		
10	Clause 18.0			
	F:V: T:	Item		
19	A19.0 ASSIGNMENT			
	Clause 19.0			
	F:V: T:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R	
20	A20.0 NOMINATED SUB-CONTRACTORS			
	Clause 20.0			
	F:V: T:	Item		
21	A21.0 SELECTED SUBCONTRACTORS			
	Clause 21.0			
	Clause 21 is amended by replacing it with:			
	No Clause			
	F:V: T:			
	' <u></u>	Item		
22	A22.0 EMPLOYER'S DIRECT CONTRACTORS			
	Clause 22.0			
	F:V: T:	Item		
23	A23.0 CONTRACTOR'S DOMESTIC SUBCONTRACTORS			
	Clause 23.0			
	F:V: T:			
	1:	Item		
	COMPLETION			
24	A24.0 PRACTICAL COMPLETION			
	Clause 24.0			
	F:V: T:			
	1:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R		
25	A25.0 WORKS COMPLETION				
	Clause 25.0				
	F:V:				
	·	Item			
26	A26.0 FINAL COMPLETION				
	Clause 26.0				
	F:V: T:				
		Item			
27	A27.0 LATENT DEFECTS LIABILITY PERIOD				
	Clause 27.0				
	F:V: T:				
		Item			
28	A28.0 SECTIONAL COMPLETION				
	Clause 28.0				
	F:V: T:	Itam			
00	ACC C. DEWOLON OF DATE FOR RDACTION	Item			
29	A29.0 REVISION OF DATE FOR PRACTICAL COMPLETION				
	Clause 29.0				
	In addition to the provisions of sub-clause 17.3 contract instructions are to be recorded in triplicate in a contract				
	instruction book, which is to be supplied and maintained on site by the Contractor.				
	F:V: T:				
	T:	Item			
	Carried Forward		R		
	Section No. 1 Bill No. 1				
	Preliminaries				
		ı	1	i I	

	Brought Forward		R	
30	A30.0 PENALTY FOR NON-COMPLETION			
	Clause 30.0			
	F:V: T:			
	l:	Item		
	<u>PAYMENT</u>			
31	A31.0 INTERIM PAYMENT TO THE CONTRACTOR			
	Clause 31.0			
	F:V: T:			
	1:	Item		
32	A32.0 ADJUSTMENT TO THE CONTRACT VALUE			
	Clause 32.0			
	All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor.			
	F:V: T:			
	I	Item		
33	A33.0 RECOVERY OF EXPENSE AND LOSS			
	Clause 33.0			
	F:V: T:			
	'· <u></u>	Item		
34	A34.0 FINAL ACCOUNT AND FINAL PAYMENT			
	Clause 34.0			
	F:V: T:			
	· · <u> </u>	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			

	Brought Forward		R	
35	A35.0 PAYMENT TO OTHER PARTIES			
	Clause 35.0			
	F:V:			
	·· <u></u>	Item		
	CANCELLATION			
36	A36.0 CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT			
	Clause 36.0			
	F: V			
	F:V: T:	Item		
37	A37.0 CANCELLATION BY EMPLOYER - LOSS AND	110111		
01	DAMAGE			
	Clause 37.0			
	F:V:			
	l:	Item		
38	A38.0 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT			
	Clause 38.0			
	F:V:	Item		
		пеш		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			

	Brought Forward		R	
39	A39.0 CANCELLATION - CESSATION OF THE WORKS			
	Clause 39.0			
	F:V: T:			
	l:	Item		
	DISPUTE			
40	A40.0 DISPUTE SETTLEMENT			
	Clause 40.0			
	F:V: T:			
	I:	Item		
	SUBSTITUTE PROVISIONS			
41	A41.0 STATE CLAUSES			
	Clause 41.0			
	THE SCHEDULE			
	Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given in VOLUME 3 OF 3 that accompanies these Bills of Quantities			
	Details of changes made to the provision of JBCC standard documentation is given in C1.2 CONTRACT DATA in Volume 3 of 3 that accompanies these Bills of Quantities			
	CONTRACT DATA EC			
	F:V: T:			
	·	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R	
42	The defined listed variables applicable to this agreement as contained in the employer to contractor (EC) addendum (clause 42)			
	Information necessary for completion of those clauses contained in the addendum which are necessary for tender purposes is given in C1.2 Contract Data contained in Volume 3 of 3 of the documentation.			
	F:V: T:			
		Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			

	Brought Forward		R	
	SECTION B: JBCC PRELIMINARIES			
	B1.0 DEFINITIONS AND INTERPRETATION			
43	B1.1 Definitions and interpretation			
	Definition and interpretation (B1.1 - B1.4.6)			
	F:V: T:			
		Item		
	B2.0 DOCUMENTS			
44	B2.1 Checking of documents			
	F:V: T:			
	· · · · · · · · · · · · · · · · · · ·	Item		
45	B2.2 Provisional bills of quantities			
	F:V:			
	l:	Item		
46	B2.3 Availability of construction documentation			
	F:V: T:			
	l:	Item		
47	B2.4 Interests of agents			
	F:V:			
	T:	Item		
48	B2.5 Priced documents			
	F:V: T:			
	T:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			

Brought Forward			
B2.6 Tender submission		Ī	
Clause 2.6 is amended by replacing "JBCC Form of			
Tender" with "Form of Offer and Acceptance (C1.1)".			
Γ			
F:V: T:			
·· <del></del>	Item		
B3.0 THE SITE			
B3.1 Defined works area			
E. V.			
F:V: T:			
<del></del>	Item		
B3.2 Geotechnical investigation			
F:V: T:			
1	Item		
B3.3 Inspection of the site			
Tenderers shall complete the Site Inspection Certificate included in the tender documents and return the same with the tender submission.			
included in the tender documents and return the same with the tender submission.			
included in the tender documents and return the same	ltem		
included in the tender documents and return the same with the tender submission.	ltem		
included in the tender documents and return the same with the tender submission.	Item		
included in the tender documents and return the same with the tender submission.  F:V:T:	ltem		
included in the tender documents and return the same with the tender submission.  F: V: T:			
included in the tender documents and return the same with the tender submission.  F:V:T:	Item		
included in the tender documents and return the same with the tender submission.  F: V: T:  B3.4 Existing premises occupied  F: V:  T:			
included in the tender documents and return the same with the tender submission.  F: V:			
included in the tender documents and return the same with the tender submission.  F: V:			
included in the tender documents and return the same with the tender submission.  F: V: T:  B3.4 Existing premises occupied  F: V:  T:			
included in the tender documents and return the same with the tender submission.  F: V:	ltem		
included in the tender documents and return the same with the tender submission.  F: V:	ltem		
included in the tender documents and return the same with the tender submission.  F: V:	ltem		
included in the tender documents and return the same with the tender submission.  F: V:	ltem		
included in the tender documents and return the same with the tender submission.  F: V:	ltem	R	
included in the tender documents and return the same with the tender submission.  F:	ltem	R	
included in the tender documents and return the same with the tender submission.  F: V:	ltem	R	

	Brought Forward		R		
55	B3.6 Previous work - defects				
	F:V: T:				
	T:	Item			
56	B3.7 Services - known				
	F: V: T:				
	T:	Item			
57	B3.8 Services - unknown				
0.					
	F: V: T:				
		Item			
58	B3.9 Protection of trees				
	F:V: T:				
	·	Item			
59	B3.10 Articles of value				
	F: V:				
	F:V: T:	Item			
00	PO 44 Increasion of edicining appropria				
60	B3.11 Inspection of adjoining properties				
	F:V: T:				
		Item			
	<b>B4.0 MANAGEMENT OF CONTRACT</b>				
61	B4.1 Management of the works				
	F:V: T:				
	T:	Item			
			_		
	Carried Forward Section No. 1		R		
	Bill No. 1 Preliminaries				
	Ficilitilitaties				
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	Brought Forward		R		
62	B4.2 Programme for the works				
	F:V: T:				
	Т:	Item			
63	B4.3 Progress meetings				
	F:V: T:				
	I:	Item			
64	B4.4 Technical meetings				
	F:V: T:				
	1:	Item			
65	B4.5 Labour and plant records				
	F:V: T:				
	1:	Item			
	B5.0 SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS				
66	B5.1 Samples of materials				
	F:V: T:				
	·· <del></del>	Item			
67	B5.2 Workmanship samples				
	F:V: T:				
	·· <u></u>	Item			
68	B5.3 Shop drawings				
	F:V: T:				
	· · · · · · · · · · · · · · · · · · ·	Item			
	Carried Forward		R		
	Section No. 1 Bill No. 1				
	Preliminaries				
		1	1	ı	

	Brought Forward		R	
69	B5.4 Compliance with manufacturers' instructions			
	F:V: T:			
	I:	Item		
	B6.0 TEMPORARY WORKS AND PLANT			
70	B6.1 Deposits and fees			
	F:V: T:			
	1:	Item		
71	B6.2 Enclosure of the works			
	F:V: T:			
	T:	Item		
72	B6.3 Advertising			
	F:V: T:			
	T:	Item		
73	B6.4 Plant, equipment, sheds and offices			
	F:V: T:			
	T:	Item		
74	B6.5 Main notice board			
	<u>F</u> :V:			
	T:	Item		
75	B6.6 Subcontractors' notice board			
	F:V:			
	F:V: T:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			

	Brought Forward		R	
	B7.0 TEMPORARY SERVICES			
76	B7.1 Location			
	F:V: T:			
	·	Item		
77	B7.2 Water			
	Option [A] shall apply			
	F:V: T:			
	'. <u></u>	Item		
78	B7.3 Electricity			
	Option [A] shall apply			
	F:V: T:			
	·	Item		
79	B7.4 Telecommunication facilities			
	Option [A] shall apply			
	F:V: T:			
	·· <del></del>	Item		
80	B7.5 Ablution facilities			
	Option [A] shall apply			
	F:V: T:			
	· <del></del>	Item		
	B8.0 PRIME COST AMOUNTS			
81	B8.1 Responsibility for prime cost amounts			
	F:V: T:			
	· · · · · · · · · · · · · · · · · · ·	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			

	Brought Forward		R	
	B9.0 ATTENDANCE ON N/S SUBCONTRACTORS			
82	B9.1 General attendance			
	F:V: T:	Item		
83	B9.2 Special attendance			
	F:V: T:	Item		
84	B9.3 Commissioning - fuel, water and electricity			
	F:V: T:			
	'· <u> </u>	Item		
	B10.0 FINANCIAL ASPECTS			
85	B10.1 Statutory taxes, duties and levies			
	F:V: T:			
	·· <u></u>	Item		
86	B10.2 Payment for preliminaries			
	Option [A] shall apply			
	F:V: T:			
	· · · · · · · · · · · · · · · · · · ·	Item		
87	B10.3 Adjustment of preliminaries			
	Option [A] shall apply			
	F:V: T:			
		Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R	
88	B10.4 Payment certificate cash flow			
	F:V: T:	Item		
	B11.0 GENERAL			
89	B11.1 Protection of the works			
	F:V:	Item		
90	B11.2 Protection / isolation of existing / sectionally occupied works			
	F:V: T:	Item		
91	B11.3 Security of the works			
	F:V: T:	Item		
00		Item		
92	B11.4 Notice before covering work			
	F:V: T:	Item		
93	B11.5 Disturbance			
	F:V: T:	Item		
94	B11.6 Environmental disturbance			
	F:V: T:			
	T:	Item		
95	B11.7 Works cleaning and clearing			
	F:V: T:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			

	Brought Forward		R	
96	B11.8 Vermin			
	F:V: T:	Item		
97	B11.9 Overhand work			
	F:V: T:	Item		
98	B11.10 Instruction manuals and guarantees			
	F:V: T:	Item		
99	B11.11 As built information			
	F:V: T:	Item		
100	B11.12 Tenant installations			
	F:V: T:	Item		
	B12.0 SCHEDULE OF VARIABLES			
	B12.1 Schedule of variables			
	The Special Conditions of Contract included in Volume 3 of 3 shall amplify, modify or supersede, as the case may be, the Conditions of Contract of JBCC 2005 to the extent specified therein, and shall take precedence and shall govern in the interpretation of any ambiguity or inconsistency between it and the Conditions of Contract.			
101	F:V: T:	Item		
	Spaces requiring information must be filled in, shown as "not applicable" or deleted and not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross-referenced to the applicable clause of the <b>schedule</b> . Key cross reference clauses are italicized in [ ] brackets.			
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R	
	12.1 PRE-TENDER INFORMATION 12.1.1 Provisional Bills of Quantities [2.2] The quantities are provisional YES			
102	F:V: T:	Item		
	12.1.2 Availability of construction documentation [2.3] Construction documentation is complete YES			
103	F:V: T:	Item		
104	12.1.3 <i>Interest of agents</i> F:			
	T:  12.1.4 <b>Defined works area</b> [3.1] Details:  The precise area to be occupied by the contractor will be determined at site handover.	Item		
105	F: V: T: 12.1.5 <i>Geotechnical investigation</i>	Item		
106	F: V: T: 12.1.6	Item		
107	F:V:	ltem		
	Carried Forward  Section No. 1  Bill No. 1  Preliminaries		R	

	Brought Forward		R	i i
108	F:V: T:	Item		
	12.1.8 Previous work - defects			l
109	F:V: T:	Item		
	12.1.9. Services - known [3.7] Details:  Where relevant all known services are indicated on the drawings and will be shown out during site handover.			
110	F:V: T:	Item		
	12.1.10 Protection of trees			
111	F:V: T:	Item		
	12.1.11 Inspection of adjoining properties			
112	F:V:	Item		
	12.1.12 Enclosure of the works			
113	F:V: T:	Item		
	12.1.13 <i>Offices</i>			
114	F:V: T:	Item		
				<u> </u>
	Carried Forward		R	l
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward	R
	12.1.14 Main notice board	
	[6.5] Specific requirements:	
	A notice board is required YES	
15	F: V:	
13	F:V: T:	Item
	12.1.15 Subcontractors' notice board	
	[6.6] A notice board is required YES	
16	E· V·	
10	F:V: T:	Item
	12.1.16 <i>Water</i>	
	[7.2] Option A (by <b>contractor</b> )  YES	
	Option B (by <b>employer</b> - free of charge)	
	NO Option C (by <b>employer</b> - metered)	
	NO	
117	F· V·	
	F:V: T:	Item
	12.1.17 Electricity	
	[7.3] Option A (by contractor)  YES	
	Option B (by <b>employer</b> - free of charge)	
	NO Option C (by <b>employer</b> - metered)	
	NO	
118	F:V: T:	Item
		nem
	12.1.18 <i>Telecommunications</i> [7.4] Telephone	
	YES	
	Telephone and e-mail to be provided	
	Carried Forward	R
	Section No. 1	
	Bill No. 1 Preliminaries	

		<b>Brought Forward</b>		R	
119	F:V:	_			
			Item		
	12.1.19 <b>Ablution facilities</b> [7.5] Option A (by <b>contractor</b> )	V50			
	Option B (by <b>employer</b> )	YES NO			
120	E· V·				
120	F:V: T:	_	Item		
	12.1.20 <b>Protection of existing/section</b> works	nally occupied			
	[11.2] Protection is required	YES			
404					
121	F:V:	_	Item		
	12.1.21 <b>Special attendance</b> [9.2] Specific requirements:				
	[10.0] Character damentaria	N/A			
122	F:V:	_	Itam		
	12.1.22 Protection of works		Item		
	[11.1] Specific requirements:	N/A			
123	F:V: T:	_			
			Item		
	12.1.23 <b>Disturbance</b> [11.5] Specific requirements:	N/A			
		IVA			
124	F:V:	_	Item		
		Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries	Carried Forward		K	

	Brought Forward		R	
	12.1.24 <i>Environmental disturbance</i> [11.6] Specific requirements:  N/A			
125	F:V:	Item		
	Carried Forward  Section No. 1 Bill No. 1 Preliminaries		R	

	Brought Forward		R		
l.	SECTION C: SPECIFIC PRELIMINARIES				
	Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item				
126	C1 CONTRACT DRAWINGS				
	The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the works and the manner in which they are to be executed Should any part of the drawings not be clearly intelligible to the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent				
	F: V:				
	F:V: T:	Item			
127	C2 MODEL PREAMBLES FOR TRADES PREAMBLES				
	The items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Model Preambles for Trades as recommended and published by the Association of South African Quantity Surveyors, 1997 edition, and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained				
	F:V: T:				
	'· <u></u>	Item			
	Section No. 1 Bill No. 1 Preliminaries		R		
			l l		

	Brought Forward		R		
128	C3 TRADE NAMES				
	Wherever a trade name for any product has been described in the bills of quantities, the tenderers attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for submission of tenders If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for.				
	F:V: T:				
	1:	Item			
129	C4 OCCUPATIONAL HEALTH AND SAFETY				
	Allowance to be made under this clause for compliance with all requirements of the occupational health and safety act and regulations				
	F:V: T:				
	T:	Item			
	Health and Safety (Clause C15)				
	The Contractor shall allow for Health and Safety according to the Occupational Health and Safety Act, 1993, Construction Regulations 2014 as per Government Notice. Contractor to include all OHS requirements such as PPE, safety file, training, medicals, signage, safety officer				
130	F:V: T:	Item			
	Occupational Health and Safety Act				
	Carried Forward		R		
	Section No. 1 Bill No. 1 Preliminaries				
		1	j	1	

	Brought Forward		R	1
131	The contractor shall comply with all the requirements set out in the Construction Regulations, 2014 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document The contractor must take note that compliance with the Occupational Health and Safety Act, construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the Employer, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause, as well as the clauses that follow hereafter and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced under these clauses and no additional claims in this regard shall be entertained			
	F:V: T:	Item		ı
132	Principal contractor's initial obligations in respect of the Health and Safety Act, Construction Regulations, etc.  F:V:T:	ilein		
		Item		ı
133	Principal contractor's time related obligations in respect of the Health and Safety Act, Construction Regulations, etc.			
	F:V: T:	Item		
	Carried Forward  Section No. 1  Bill No. 1  Preliminaries		R	

	Brought Forward		R	
134	Notification of Construction Work as per the Act No. 85 of 1993			
	F:V: T:			
		Item		
135	Employers responsibility as per Act No. 85 of 1993			
	F:V: T:			
		Item		
136	Principal Contractors reponsibility as per Act No.85 of 1993			
	F:V: T:			
		Item		
137	Supervision of Construction Work as per Act No. 85 of 1993			
	F:V: T:			
	·· <del></del>	Item		
138	Risk assessment as per Act No. 85 of 1993			
	F:V: T:			
		Item		
139	Structures formwork as support as per Act No. 85 of 1993			
	F:V: T:	Item		
140	Excavation as per Act No. 85 of 1993			
	·			
	F:V: T:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1			
	Preliminaries			
				l

	Brought Forward		R	
141	Scaffolding as per Act No. 85 of 1993			
	F:V: T:			
		Item		
142	Explosived powered tools as per Act No. 85 of 1993			
	F:V: T:			
	T:	Item		
143	Construction vehicles and mobile plant as per Act No. 85 of 1993			
	F:V: T:			
		Item		
144	Electrical installation and machinery on construction site as per Act No. 85 of 1993			
	F:V: T:	Item		
145	Housekeeping on construction sites as per Act No. 85 of 1993			
	F:V: T:			
	'·	Item		
146	Stacking and storage on construction sites as per Act No. 85 of 1993			
	F:V: T:			
	I:	Item		
147	Construction welfare as per Act No. 85 of 1993			
	F:V: T:			
		Item		
	Provision of personal protective equipment (PPE)			
			_	
	Carried Forward Section No. 1		R	
	Bill No. 1 Preliminaries			

	Brought Forward		R	
148	Provision of reflective vests			
	F:V: T:			
		Item		
149	Provision of hard hats			
	F:V: T:	ltana		
		Item		
150	Provision of protective footwear			
	F:V: T:	Item		
151	Provision of earplugs			
	F:V: T:			
		Item		
152	Provision of dust masks			
	F:V: T:			
450	Dravisian of player	Item		
153	Provision of gloves			
	F:V: T:	Item		
154	Provision of high visibility overalls			
	F:V: T:			
	1:	Item		
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R	i i
155	Provision of SANS approved ear defenders			l
	F:V: T:	Item		
	Occupational Health and Safety			I
156	Allow for all compulsory Health and Safety files that must be completed daily and must be handed to the employer on completion of the contract.			
	F:V: T:	Item		l
157	Provision of covered refuse bins and refuse bags and waste (including hazardous) management.			l
	F:V: T:	Item		
158	F:V: T:	Item		l
159	Provision of signage			I
	F:V: T:	Item		l
160	Provision of full time construction health and safety officer			l
	F:V: T:	Item		l
161	Medical certificates and medical surveillance including initial (baseline) medical examinations, periodic examinations, and exit examinations			
	F:V: T:	Item		
				<u> </u>
	Carried Forward		R	I
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R	}
162	Medical screenings, examinations, etc			
	F:V: T:	Item		
163	Induction training			
	F:V: T:	Item		
164	Provision of first aid boxes			
	F: V:			
	F:V: T:	Item		
165	Noise monitoring including establishment of noise zones (plant), audiograms (personnel), etc			
	F:V: T:	Item		
166	Submission of health and safety file			
	F:V: T:	Item		
	HIV/AIDS Awareness			
	Provision for pricing of HIV/AIDS awareness is made under items hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained.			
	The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the Employer, notwithstanding the provisions of clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment			
	Carried Forward		R	
	Section No. 1 Bill No. 1 Preliminaries			

	Brought Forward		R	
167	F:V: T:	Item		
	Awareness Campaign			
	Selection, appointment, briefing and making available of an Awareness Campaign including provision of all relevant services, all in accordance with the HIV/AIDS Specification			
168	F:V: T:	Item		
	SUMMARY OF CATEGORIES			
	Category : Fixed R			
	Category : Value R			
	Category : Time R			
	Carried to Final Summary		R	
	Section No. 1 Bill No. 1			_
	Preliminaries			
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Item No		Quantity	Rate	Amount
	GENERAL SITEWORKS (PROVISIONAL)			
	SECTION NO. 2			
	BILL NO. 1			
	PREAMBLES			
	The contractor is referred to the Model Preambles for Trades (2008 Edition) as issued 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.			
	<u>View site</u>			
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	<u>Explosives</u>			
	No explosives whatsoever may be used for demolition purposes unless otherwise stated			
	Carried Forward  Section No. 2  Bill No. 1  General Siteworks		R	
		l	l	I I

	Brought Forward			R	
	General				
	Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent				
	REMOVAL OF TREES, ETC.				
1	Take out and remove tree with trunk exceeding 200mm and not exceeding 500mm girth including grubbing up roots and filling in holes with clean dry earth filling	No	3		
2	Take out and remove tree with trunk exceeding 500mm and not exceeding 2000mm girth including grubbing up roots and filling in holes with clean dry earth filling	No	11		
	RELOCATION OF SERVICES				
	ALUMINIUM FLAGPOLE				
	The following in a 8,5m high Standard Government type Aluminium Flagpole as "Aluweld" or other approved and erected on 600 x 600 x 800mm deep Class C concrete base, incl excavations, carting away, etc				
3	"Aluweld" Aluminium Flagpole or other approved comprising 76mm and 50mm od aluminium tubing tapered by way of an aluminium cone casting, welded and complete with spherical top cap, two pulleys, two cleats, two halyards (ropes) and swivel type base.	No	1		
	Site clearance				
4	Clear area of the site to be built upon including digging up and removing rubbish, debris, vegetation, hedges, boulders, shrubs and trees with trunk not exceeding 200mm girth and to a dumping site to be located by the Contractor	m2	10 141		
_		1112	10 141		
5	Stripping average 150mm thick layer of top soil and stockpiling on site.	m3	1 521		
	Carried Forward			R	
	Section No. 2 Bill No. 1 General Siteworks				

Brought Forward			R	
<u>EARTHWORKS</u>				
Open face excavation to form platforms and depositing excavated material over site, including haulage not exceeding 100m from perimeter of exacations	m3	1 773		
Cut to fill in Open face excavation to form platforms and depositing excavated material directly to fill areas over site compacting to 95%, including haulage not exceeding 100m from perimeter of excavations	m2	2 252		
Extra over open face excavations in earth for excavations in hardrock	m3	40		
Extra over open face excavations in earth for excavations in soft rock	m3	92		
Compaction of ground surface including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 97% modified AASHTO density	m2	10 063		
Extra over all excavations for carting away:				
Extra over all excavations for carting away excavated material as described (Contractor to allow for bulking).	m3	1 773		
FILLING ETC				
Filling of gravel-soil material G7 supplied by the contractor, compacted to 98% Mod AASHTO density				
Over site to make up levels	m3	1 911		
THE FOLLOWING IN WATER TANKS				
Excavation in earth not exceeding 2m deep:				
Excavate for surface trenches not exceeding 2m deep.	m3	5		
Risk of collapse not exceeding 1.5 m deep.	m2	18		
Backfilling to trenches.	m3	2		
Carried Forward Section No. 2 Bill No. 1 General Siteworks			R	
	EARTHWORKS  Open face excavation to form platforms and depositing excavated material over site, including haulage not exceeding 100m from perimeter of exacations  Cut to fill in Open face excavation to form platforms and depositing excavated material directly to fill areas over site compacting to 95%, including haulage not exceeding 100m from perimeter of excavations  Extra over open face excavations in earth for excavations in hardrock  Extra over open face excavations in earth for excavations in soft rock  Compaction of ground surface including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 97% modified AASHTO density  Extra over all excavations for carting away:  Extra over all excavations for carting away excavated material as described (Contractor to allow for bulking).  FILLING ETC  Filling of gravel-soil material G7 supplied by the contractor, compacted to 98% Mod AASHTO density  Over site to make up levels  THE FOLLOWING IN WATER TANKS  Excavation in earth not exceeding 2m deep:  Excavate for surface trenches not exceeding 2m deep.  Risk of collapse not exceeding 1.5 m deep.  Backfilling to trenches.	EARTHWORKS  Open face excavation to form platforms and depositing excavated material over site, including haulage not exceeding 100m from perimeter of exacations m3  Cut to fill in Open face excavation to form platforms and depositing excavated material directly to fill areas over site compacting to 95%, including haulage not exceeding 100m from perimeter of excavations m2  Extra over open face excavations in earth for excavations in hardrock m3  Extra over open face excavations in earth for excavations in soft rock m3  Compaction of ground surface including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 97% modified AASHTO density m2  Extra over all excavations for carting away:  Extra over all excavations for carting away excavated material as described (Contractor to allow for bulking). m3  FILLING ETC  Filling of gravel-soil material G7 supplied by the contractor, compacted to 98% Mod AASHTO density  Over site to make up levels m3  THE FOLLOWING IN WATER TANKS  Excavation in earth not exceeding 2m deep:  Excavate for surface trenches not exceeding 2m deep. m3  Risk of collapse not exceeding 1.5 m deep. m2  Backfilling to trenches. m3	EARTHWORKS  Open face excavation to form platforms and depositing excavated material over site, including haulage not exceeding 100m from perimeter of exacations m3 1773  Cut to fill in Open face excavation to form platforms and depositing excavated material directly to fill areas over site compacting to 95%, including haulage not exceeding 100m from perimeter of excavations m2 2 2552  Extra over open face excavations in earth for excavations in hardrock m3 40  Extra over open face excavations in earth for excavations in soft rock m3 92  Compaction of ground surface including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 97% modified AASHTO density m2 10 063  Extra over all excavations for carting away:  Extra over all excavations for carting away excavated material as described (Contractor to allow for bulking). m3 1 773  FILLING ETC  Filling of gravel-soil material G7 supplied by the contractor, compacted to 98% Mod AASHTO density  Over site to make up levels m3 1 911  THE FOLLOWING IN WATER TANKS  Excavation in earth not exceeding 2m deep:  Excavate for surface trenches not exceeding 2m deep. m3 5  Risk of collapse not exceeding 1.5 m deep. m2 18  Backfilling to trenches. m3 2  Carried Forward  Section No. 2  Bill No. 1	EARTHWORKS  Open face excavation to form platforms and depositing excavated material over site, including haulage not exceeding 100m from perimeter of exacations m3 1773  Cut to fill in Open face excavation to form platforms and depositing excavated material directly to fill areas over site compacting to 95%, including haulage not exceeding 100m from perimeter of excavations m2 2 252  Extra over open face excavations in earth for excavations in hardrock m3 40  Extra over open face excavations in earth for excavations in soft rock m3 92  Compaction of ground surface including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compact to 97% modified AASHTO density m2 10 063  Extra over all excavations for carting away:  Extra over all excavations for carting away excavated material as described (Contractor to allow for bulking). m3 1 773  FILLING ETC  Filling of gravel-soil material G7 supplied by the contractor, compacted to 98% Mod AASHTO density  Over site to make up levels m3 1 911  THE FOLLOWING IN WATER TANKS  Excavation in earth not exceeding 2m deep:  Excavation in earth not exceeding 2m deep. m3 5  Risk of collapse not exceeding 1.5 m deep. m3 2  Section No. 2  Billing to trenches.

	Brought Forward			R	
	Earth filling supplied by the Contractor compacted in 150mm layers to 93% Mod AASHTO at -1 to +2 of its optimum moisture content:				
16	Earth filling (G7) supplied by the Contractor under floors compacted.	m3	2		
	REINFORCED CONCRETE				
	25MPa/19mm concrete				
17	Slabs including beams	m3	3		
	Finishing top surfaces of concrete smooth with a wood float				
18	Surface beds, slabs, etc	m2	12		
	Mild steel reinforcement to structural concrete work				
19	All diameters	t	0,08		
	High tensile steel reinforcement to structural concrete work				
20	All diameters	t	0,88		
	Fabric reinforcement				
21	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	12		
	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				
22	Under surface beds	m2	18		
	Carried Forward				
	Section No. 2 Bill No. 1 General Siteworks			R	
		1			ı

	Brought Forward			R	
	"Jojo" or similar approved polyethylene above-ground rain-water harvesting system, including all sundry items, accessories, etc installed by an approved installer in strict accordance with the manufacturer's instructions and recommendation, and in accordance with the Architect's specifications and Engineering and Principal Agent approvals				
23	5 000 Litre "Vertical", or similar approved, circular tank, 2 200m diameter x 3 000m high, fixed on 200mm thick plinth (plinth elsewhere measured), including black lining internally, 20mm tap fitting, brass tap, 40mm outlet, plastic filter screen, 480mm clip-on lid, etc	No	3		
24	Extra over gutter for "Jojo" First Flush Diverter	No	3		
25	Extra over gutter for "Jojo" rainhead fitting	No	3		
	THE FOLLOWING IN PIT LATRINES				
	Excavation in earth not exceeding 2m deep:				
26	Excavate for holes not exceeding 2m deep.	m3	288		
	Risk of collapse of excavations				
27	Risk of collapse not exceeding 1.5 m deep.	m2	108		
28	Risk of collapse exceeding 1.5 m deep.	m2	36		
	Extra over all excavations for carting away				
29	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	288		
	Keeping excavations free of water				
30	Keeping excavations free of water		Item		
	<u>De-watering of seepage water and water from other subterranean sources in excavations</u>				
31	Provide pump with minimum 8,8 litre/hour capacity, including maintenance and removal		Item		
	Carried Forward Section No. 2 Bill No. 1 General Siteworks			R	

	Brought Forward			R	
32	Provide necessary hoses for the above, including couplings etc		ltem		
33	Allow for pumping		Item		
	SOIL POISONING				
	Soil insecticide				
34	To bottoms and sides of trenches etc	m2	216		
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	15MPa/19mm Concrete in:				
35	Surface blinding under footings and bases	m3	1		
36	Cavity infill in foundation (Provisional)	m3	6		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
37	Strip footings	m3	8		
38	Slabs including beams	m3	43		
39	Surface beds	m3	43		
40	Ramps	m3	14		
	MOVEMENT JOINTS, ETC				
	Isolation joints with "Dow Corning 813C" or similar approved sealant (sealant elsewhere measured) as per Drawing 500 / DTP / 301, Rev: P1				
41	10mm Joints not exceeding 300mm high	m	72		
	Carried Forward Section No. 2 Bill No. 1 General Siteworks			R	

	Brought Forward			R	
	TEST CUBES				
42	Making and testing 150 x 150 x 150mm concrete strength test cubes and submission of test reports to Principal Agent (Provisional)	No	16		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
43	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	72		
	Rough formwork to soffits				
44	Slabs exceeding 250mm and not exceeding 500mm thick propped up exceeding 1.5m and not high exceeding 3.5m high	m2	144		
	REINFORCEMENT (PROVISIONAL)				
	Mild steel reinforcement to structural concrete work				
45	All diameters	t	1,54		
	High tensile steel reinforcement to structural concrete work				
46	All diameters	t	17,66		
	Mild steel reinforcement to structural concrete work				
	Fabric reinforcement				
47	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	144		
	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.				
	O				
	Section No. 2 Bill No. 1 General Siteworks			R	

	Brought Forward			R	Ī
	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.				
	Turning pieces				
	Descriptions of lintels shall be deemed to include turning pieces				
	Brand Names				
	All brand names provided in the items below are merely to provide reference to indicative specifications and quality required from the Contractor. All equipment, fittings, etc. are to be approved by the Architect prior to installation by the Contractor.				
	<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)				
	Brickwork of NFX bricks (14 MPA nominal compressive strength) in class I mortar				
3	270mm Hollow walls of two half brick skis including wire ties	m2	122		
	Galvanised hoop iron cramps, ties, etc				
)	40 x 1,6mm Wall tie strips shot pinned to concrete and with ties bent out and built into brickwork	No	36		
	Carried Forward Section No. 2 Bill No. 1 General Siteworks			R	

	Brought Forward	ı		R	
	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				
50	Under surface beds	m2	144		
	Prime with one coat bitumen primer and two layers "Impermo" fully bonded waterproof membrane comprising coated with polyethelene film for heat bonding, laid with 100mm side and 150mm end laps				
51	On walls	m2	288		
52	On foundation beams	m2	144		
	JOINT SEALANTS, ETC				
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc				
53	10 x 25mm In expansion joints in floors including raking out expansion joint filler as necessary	m	72		
	Carried Forward to Summary of Section No. 2	,		R	
	Section No. 2 Bill No. 1				
	General Siteworks				

Item No		Quantity	Rate	Amount
	SECTION NO. 2			
	BILL NO. 2			
	PREAMBLES			
	The contractor is referred to the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	STORMWATER DRAINAGE, SOIL DRAINAGE AND WATER SUPPLY (PROVISIONAL)			
	SOIL DRAINAGE, ETC.			
	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.			
	<u>View site</u>			
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	Unplasticised polyvinyl chloride (uPVC) pipes:			
1	110mm Pipes vertical to cleaning eyes, etc. (no excavation).	8		
	Carried Forward		R	
	Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply			

	Brought Forward			R
2	110mm Pipes laid in and including trenches not exceeding 1m deep.	m	99	
3	110mm Pipes laid in and including trenches exceeding 1m not 2m deep.	m	124	
4	110mm Bend.	No	19	
5	110mm Junction.	No	12	
6	110mm Access junction.	No	9	
7	110mm Access rodding eye.	No	11	
	Gulleys, etc.:			
8	265 x 265mm'Besaans du Plessis Type 14A'(mass 9kg) cast iron single seal cleaning eye cover and frame.	No	4	
	Sundries:			
9	Cast 110mm horizontal pipe in concrete 15 Mpa/19mm.	m	12	
10	Cast 110mm vertical pipe in concrete 15 Mpa/19mm.	m	3	
	Extra over uPVC channel pipes for fittings:			
11	110mm Channel bend.	No	4	
12	110mm Channel junction.	No	9	
13	110mm Rodding eye.	No	5	
	EXTERNAL WATER SUPPLIES			
	Class 12 HDPE pressure pipes, as SABS 1200 LB including pipe bedding of 1979 and excavation and backfilling, cartaway surplus as SABS 1200 DB of 1982:			
14	15mm Pipes laid in and including trenches not exceeding 1 m deep.	m	90	
15	25mm Pipes laid in and including trenches not exceeding 1 m deep.	m	50	
	Carried Forward Section No. 2			R
	Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply			

	Brought Forward			R	1
16	50mm HDPE Pipes Class 6 laid in including trenches, bedding, blanket, backfilling and carting awaynot exceeding 1m deep	m	277		
	Extra over HDPE pipes for pressure fittings:				1
17	15mm Pipe fittings.	No	9		1
18	25mm Pipe fittings.	No	6		1
19	50mm Reducer.	No	7		1
20	50mm Bend.	No	22		1
21	50mm Reducing tee.	No	7		1
22	50mm BSP adaptor.	No	3		ı
	Unplasticised polyvinyl chloride (uPVC) pipes:				
23	UPVC Class 16 water pipes and laid in pipe trenches as SABS 1200 LB including pipe bedding of 1979 and excavation and backfilling, cartaway surplus as SABS 1200 DB of 1982:				
23	50mm pipes laid and including trenches not exceeding 1m deep including bedding, backfilling, cartaway surplus.	m	386		
	Extra over UPVC pipes for fittings				
24	50mm Bend	No	48		ı
25	50mm Tee	No	39		ı
26	50mm End Cap	No	8		ı
27	50mm Adaptor coupling	No	8		ı
28	50mm x75mm Adaptor coupling	No	2		1
29	50mm Non Return Valve	No	2		ı
30	50mm isolation valve	No	2		1
					ı
	Carried Forward Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply			R	
	Teleminater Brainage, Con Brainage and Water Cupply				ı

	Brought Forward			R	ĺ
31	50mm Gate Valve	No	4		
32	50mm Kent Type Water meter	No	1		
33	75mm Hydrant, including tees, bends complete with concrete pedestral	No	2		
34	Stand pipe complete with tap and 160mm PVC pipe filled with concrete pedestral	No	1		
35	Stand pipe complete with double tap and 160mm PVC pipe filled with concrete pedestal	No	2		
	SUNDRIES				
	Concrete Thrust blocks formed of 25Mpa Concrete for pipe sizes up to 75mmdia, including, necessary, excavation, formwork, reinforcement, cartaway surplus, etc for:				
36	Bend	No	67		
37	Tee	No	55		
	TANKS, ETC.				
	TAPS, VALVES, ETC.				
38	20mm Type'108 RB'hose bibtap with hose union.	No	2		
39	20mm Garden hose Reel Set (cleaning nozzle,water stop,connectors, adapters etc) 50m long with special folding mechanism for storage	No	2		
	GALVANISED STRUCTURAL STEEL OVERHEAD TANKS				
	Structural steel overhead tank stands in Accordance with the Structural and Mechanical Engineers layouts and specifications				
	FOUNDATION WORKS				
					_
	Carried Forward Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply			R	

	Brought Forward			R	Ì
	Excavation in earth not exceeding 2m deep and deposit excavated material in spoil heaps on site or cart away from site in bases				
40	Trenches	m3	206		l
41	Holes or bases	m3	42		l
42	Reduce ground excavation	m3	135		l
43	Surplus material from excavations on site to a suitable dumping site to be located by the contractor.	m3	213		
	Risk of collapse of excavations:				ı
44	Sides of trenches and hole excavations not exceeding 1.5m deep	m2	676		
	Filling with material from the excavations compacted to a density of at least 95% Mod.  AASHTO maximum density:				
45	Backfilling to trenches, holes, etc.	m3	194		l
	Filling, etc.				l
46	G7 Natural gravel in layers not exceeding 150 mm with a CBR of less than 15 and a maximum particle size of 100 mm, compacted to 95% Modified AASHTO density at optimum moisture content under in foundations, steps aprons, surface beds, etc	m3	56		
47	Imported G5 earth filling, supplied and carted onto the site by the Contractor, compacted to 95% modified AASHTO under solid floors.	m3	34		
	15MPa/19mm concrete:				l
48	Blinding	m3	16		ı
	30MPa/19mm Reinfoced concrete in:				l
49	Bases	m2	18		l
50	Stub column	m3	3		ı
					l
					<del></del>
	Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply			R	

	Brought Forward			R
	Finishing top surfaces of concrete smooth with a wood float:			
51	Surfaces of beds, stub columns, etc	m2	279	
	FORMWORK			
	Smooth formwork (Degree of Accuracy 11) to:			
52	Sides of stub bases	m2	11	
53	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	440	
64	20mm Chamfer to edges	m	467	
	Mild steel reinforcement to structural concrete work:			
5	Various Diameter bars.	kg	5	
	High tensile steel reinforcement to structural concrete work:			
3	Various Diameter bars.	kg	42	
	Bolts to columns and beams etc			
7	M24 750mm long anchor bolts or Upat Express Anchores with 80 x80 x14mm log plate welded , embedded in exact position in top of concrete including 75mm x 200mm deep pockets .	No	16	
	Non-shrink grout			
	25 MPa non-shrink grout			
3	Bedding approximately 60mm thick under 450 x 450mm base plate including chamfered edges all round	No	4	
	Tank support structure and frame			
9	Legs, rails, braces, access ladder etc.	t	1,30	
0	Platform beams, support etc.	t	2,64	
	Carried Forward Section No. 2 Bill No. 2			R
	Stormwater Drainage, Soil Drainage and Water Supply			

	Brought Forward			R	
61	High tensile bolts.	kg	70		
62	76 x 114mm treated SAP boarding fixed with galvanised bolts screws to steelwork (bolts elsewhere measured).	m	46		
63	18 000mm High galvanised mild steel cat ladder	No	1		
	GALVANISED STRUCTURAL STEEL TANKS				
	Galvanised steel:				
	The following in pre-manufactured 15200mm high galvanised steel overhead tanks complete with 5300mm x 5300mm tank platform and 1020mm high balustrade, tank stand formed of angle iron section legs, base plates, braces etc, including all welding, holes, bolts, nuts, washers, rivets, bolting, riveting, grinding smooth, catladder and fixing in position: all in accordance with Structural and Mechanical Engineers drawings				
64	Supply, installation and commissioning of approximately 261m3 (261kL) Galvanized Sectional Steel elevated tank on 10m stand including lockable roof complete, including handling, rigging, delivery, etc. with 4 x Connections & 2 x overflow	No	1		
	"Taps, valves, etc:"				
65	25mm Brass stop cock.	No	4		
66	"32mm ""No 1002/125"" or other approved brass non return gate valve with non-rising spindle."	No	8		
67	32mm Approved No.3 wing pump.	No	2		
	Galvanised steel pipes				
68	25mm Pipes on purpose-made supports including clamps fixed to tank steel structure	m	12		
69	25mm Pipes laid in and including trenches not exceeding 1m deep.	m	4		
70	32mm Pipes on purpose-made supports including clamps fixed to tank steel structure	m	12		
	Carried Forward Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply			R	

	Brought Forward			R	
	HDPE Class 6 water pipes and laid in pipe trenches as SABS 1200 LB (flexible pipe bedding) of 1979 and excavation and backfilling as SABS 1200 DB of 1982:				
71	50mm HDPE black polyethylene to top of water tank	m	120		
	HDPE compression fittings				
72	40mm Elbow male thread (90 Degree)	No	24		
73	50mm Elbow male thread (90 Degree)	No	17		
74	50mm males adapter	No	5		
75	50mm Nipple.	No	5		
76	50mm Bend.	No	8		
77	50mm Tee.	No	8		
78	Reducing Tee.	No	6		
	Extra over cast iron pipes for fittings				
79	25mm Elbow.	No	6		
80	32mm Elbow.	No	4		
81	25mm Tee.	No	4		
82	32mm Tee.	No	4		
83	32 x 32 x 25mm Reducing junction.	No	2		
84	32mm Union joint.	No	4		
85	Extra over for threading end of pipe for fitting.	No	4		
	<u>Sundries</u>				
86	Water drinking fountain complete in face brickwork pedestral built on concrete foundation, granite top and pipe work with 2No push down taps, drain out let to gulleys complete as per architect drawings	No	2		
	Carried Forward			R	
	Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply				

	Brought Forward			R	
ļ	STORMWATER CONCRETE CHANNELS				
	The following in concrete V Channels Surface Preparation				
	Earthworks				
87	Excavate in natural ground not exceeding 2m deep for surface trenches including setting aside in spoil heaps for later re-use or cart away.	m3	15		
	Miscellaneous				
88	Allow for risk of collapse to sides of excavations not exceeding 1.5m deep.	m2	47		
89	Load surplus or unsuitable material from spoil heaps and cart not exceeding 100m from the excavations including spreading and levelling and lightly compacting.	m3	15		
90	Compaction of ground surface, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod. AASHTO density.	m2	101		
	FILLING, ETC:				
91	Imported G5 earth filling, supplied and carted onto the site by the Contractor, compacted to 95% modified AASHTO under solid floors.	m3	10		
	30MPa/19mm Reinforced Concrete in:				
92	V-channels cast in panels including formwork	m3	15		
	<u>FORMWORK</u>				
93	Form work not exceeding 300mm in girth	m	156		
	Finishing top surfaces of concrete smooth with a wood float				
94	Surface beds, slabs, etc	m2	101		
	Carried Forward			R	
	Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply				

	Brought Forward			R	
	<u>Sundries</u>				
95	25 x25mm Chamfer to edges	m	312		
	Fabric reinforcement				
96	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	101		
	UPVC piping:				
97	250mm Diameter Class 16 pipe laid in trenches not exceeding 1m deep including selected granular material bedding cradle and backfilled with soil selected from the excavations compacted in 150mm thick layers to 93% Modified AASHTO, and cartaway surplus	m	10		
98	250mm Diameter Class 16 pipe laid in trenches exceeding 1m not exceeding 2m deep including selected granular material bedding cradle and backfilled with soil selected from the excavations compacted in 150mm thick layers to 93% Modified AASHTO, and cartaway surplus	m	15		
	Extra over UPVC pipe for:				
00		NI-	0		
99	250 x 45 degree Bend	No	2		
100	250 x 250 Junction	No	2		
	Sumps, Catchpits, Inspection Chambers, etc.:				
101	Stormwater inlet manhole with 550 x 550mm grating for small diameter 1m deep internally to invert level formed of hard burnt one brick sides in 1:3 cement mortar on and including 150 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) bottom projecting 75 mm beyond sides and mass concrete (15 MPa at 28 days in 12 mm stone) benching, rendered internally in 1:3 cement plaster with 100 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) kerb on top, rebated for and fitted with and including cast iron double seal cover and frame in accordance with SABS 558, bedded in 1:3 cement mortar and sealed in tallow including all necessary vitrified clay channels and fittings, excavations, formwork, holes through sides for pipes, etc	No	1		
	Carried Forward			R	
	Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply				

	Brought Forward			R	
102	Stormwater inlet manhole with 550 x 900mm grating for small diameter exceeding 1m not exceeding 2mdeep internally to invert level formed of hard burnt one brick sides in 1:3 cement mortar on and including 150 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) bottom projecting 75 mm beyond sides and mass concrete (15 MPa at 28 days in 12 mm stone) benching, rendered internally in 1:3 cement plaster with 100 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) kerb on top, rebated for and fitted with and including cast iron double seal cover and frame in accordance with SABS 558, bedded in 1:3 cement mortar and sealed in tallow including all necessary vitrified clay channels and fittings, excavations, formwork, holes through sides for pipes, etc	No	1		
103	Kerb-Inlet Manhole size 1220 mm x 1220mm an not exceeding 1m deep internally to invert level formed of hard burnt one brick sides in 1:3 cement mortar on and including 150 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) bottom projecting 75 mm beyond sides and mass concrete (15 MPa at 28 days in 12 mm stone) benching, rendered internally in 1:3 cement plaster with 100 mm thick mass concrete (20 MPa at 28 days in 19 mm stone) kerb on top, rebated for and fitted with and including cast iron double seal cover and frame type 2B in accordance with SABS 558, bedded in 1:3 cement mortar and sealed in tallow including all necessary vitrified clay channels and fittings, excavations, formwork, holes through sides for pipes, etc	No	1		
	Sundries:				
104	Cast 250mm horizontal pipe in concrete 25 Mpa/19mm including formwork.	m	6		
	Carried Forward			R	
	Section No. 2 Bill No. 2				
	Stormwater Drainage, Soil Drainage and Water Supply				

	Brought Forward			R	
	Spiling basin				
105	Triangular shaped concrete spill basin size 1,08m at head, 2,44m at base end and 1,209m along the sides, formed of 200mm thick concrete base with concrete upstand size 200 x 200mm high along two sides and 200 x 200mm footing along base end including all necessary excavation, formwork and backfilling, the top of the base inlaid with eleven hard burnt clay bricks protruding 55mm above the surface of the concrete and loose stones of 150 to 200mm diameter placed at the base of the spill basin for a width of 500mm	No	3		
106	Headwall Outlet Triangular shaped concrete spill basin size 1,08m at head, 2,44m at base end and 1,209m along the sides, formed of 200mm thick concrete base with concrete upstand size 200 x 200mm high along two sides and 200 x 200mm footing along base end including all necessary excavation, formwork and backfilling, the top of the base inlaid with eleven hard burnt clay bricks protruding 55mm above the surface of the concrete and loose stones of 150 to 200mm diameter placed at the base of the spill basin for a width of 500mm	No	1		
	Excavations in earth of more difficult character				
107	Extra over excavations in earth for excavation in soft rock.	m3	32		
108	Extra over excavations in earth for excavation in hard rock.	m3	14		
	<u>Sundries</u>				
109	Extra over all excavations for pipe trenches for carting away from the site all surplus material from the excavations (measured net - no allowance for bulking).	m3	77		
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 2 Stormwater Drainage, Soil Drainage and Water Supply			R	

m O		Quantity	Rate	Amount
	ROADS, PARKING AND PAVING (PROVISIONAL)			
	SECTION NO. 2			
	BILL NO. 3			
	PREAMBLES			
	The contractor is referred to the Model Preambles for Trades (2008 Edition) as issued 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.			
	<u>View site</u>			
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	THE FOLLOWING IN ACCESS PAVED ROAD			
	SOIL POISONING			
	Carried Forward		R	
	Section No. 2 Bill No. 3			
	Roads, Parking and Paving			
		I	I I	I I

	Brought Forward			R	
	Weedkiller (active ingredients metalaclor 102,8 g/1,terbitilasien 248.6 g/1 and atrasien 248 g/1) mixed in the proportion of 100 I water and applied at a rate of 10 I/m2				
1	Under roads, and parking	m2	2 205		
	Concrete block paving				
2	60mm Thick 25MPa precast concrete interlocking block paving of 220 x 97mm grey paving blocks in accordance with SABS Specification 1058 and laid to falls on 20mm sand layer with joints filled in with sand and vibrated, including all straight cutting	m2	1 799		
3	Cutting Units to fit Edge restraints	m	624		
	Precast concrete kerbing (complying with SABS 927) in 1m lengths, wet presses, placed in position, bedded and jointed in (3:1) cement mortar and flush pointed on exposed faces, including 15MPa/19mm unreinforced concrete haunching at back, excavation, backfilling, ramming, etc.:				
4	"Mountable kerb Figure8C, laid on 50mm thick 15Mpa mass concrete base or 1:3cement/sand mix and continuous kerb backing/hunching including intermittent expansion joint."	m	253		
5	"Mountable kerb Figure8C, laid on 50mm thick 15Mpa mass concrete base or 1:3cement/sand mix and continuous kerb backing/hunching including intermittent expansion joint." circular on plan	m	30		
6	Edge/ Fig12 kerb size 150 x 75mm high cast on 50mm thick mass concrete base and continuous kerb backing.	m	743		
	COURT MARKINGS				
7	Approved weather resistance 100mm Wide white paint marking to concrete surfaces	m	208		
8	Approved weather resistance 50mm Wide white paint marking to concrete surfaces	m	312		
9	Approved weather resistance 50mm Wide white paint marking (half round/circular) to concrete surfaces	m	48		
	Carried Forward			R	
	Section No. 2 Bill No. 3 Roads, Parking and Paving				

	Brought Forward			R	
	WASTE DRUM				
10	750mm diameter Suspended waste drum unit to municipal solid waste specifications consisting of two 100mm diameter creosote impregnated posts planted in 600 x 600 x 800mm deep holes including filling with class B concrete, and suspending 220 litre iron drum complete with pivoting bolts, including removing top of drum and drilling holes in bottom.	No	8		
	PLAYING COURT EQUIPMENT				
	Net, post				
11	Supply and Install prefabricated combination two net ball post with net and two netballs.Installation to be undertaken in accordance to manufacturers requirements.	No	2		
	Carried Forward to Summary of Section No. 2			R	
	Section No. 2 Bill No. 3 Roads, Parking and Paving				_

Item No		Quantity	Rate	Amount
	SECTION NO. 2			
	BILL NO. 4			
	DECANTING			
	PREAMBLES			
	The contractor is referred to the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	EXTERNAL WORKS			
	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.			
	<u>View site</u>			
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	<u>Explosives</u>			
	No explosives whatsoever may be used for demolition purposes unless otherwise stated			
	Carried Forward		R	
	Section No. 2 Bill No. 4 General Siteworks (Decanting)			

	Brought Forward			R	
	General				
	Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent				
	Compaction of surfaces				
1	Scarify in-situ material to a depth of 150mm and compact to 93% Mod AASHTO density.	m2	295		
	<u>FENCING</u>				
	TEMPORARY SECURITY FENCING				
	The Contractor is to allow for, in his rates, for any necessary site clearance or preparation of ground for the fencing installation.				
2	SANS approved weld mesh type temporary barrier fencing 1,8m high covered with a net fixed to and including 100mm diameter gum poles set securely min 300mm deep in ground at max 3m spacing including bracing, excavation, backfilling, etc.	m	550		
	Extra over timber post/mesh/net etc, fencing for:				
3	Pedestrian gate	No	2		
4	Vehicular gate	No	1		
	PREFABRICATED BUILDING STRUCTURES				
	NOTE: All the alternative building technology buildings are design build therefore the contractor must employ a competent qualified design team for the design, construction supervision and commissioning of the buildings. The Modular Structures Specifications for Design, Manufacture, Supply, Deliver and Erect Prefabricated Structures attached to these Bills must be applied by the design team. JBCC principal building agreement clause will not apply on the alternative building technology buildings.				
	Carried Forward			R	
	Section No. 2 Bill No. 4 General Siteworks (Decanting)				

Brought Forward	R	
Description of erection process:		
All material, workmanship, etc are to be of highest quality and must comply with SANS 10400 and SANS 204:2011.		
A Temporary Floor Construction Method is to be used for this Project, where temporary suspended floors constructed out of 19mm Treated Shutterboard (or similar approved) are placed on an Engineer Designed Galvanised Steel Structure.  The area under the floor structure is to be closed off with a durable side wall material.(Breathable Allow for Ventilation).		
Shop drawings and designs:		
Successful Contractor must provide the Principal Agent with shop drawings and floor designs before commencing with works on site. The Contractor must resume with the works only after the Client / Principal agent has approved the design of the buildings.		
Quality certificates:		
<ol> <li>Contractor must provide compaction certificate for density.</li> <li>Certificate of compliance for fire Extinguishers.</li> <li>Contractor must provide a structural walling certificate.</li> <li>Contractor must provide a roof covering certificate.</li> <li>Contractor must provide a certificate of compliance for electrical installation.</li> <li>Contractor must provide a lighting protection certificate where applicable.</li> <li>Contractor must provide a commission certificate for the entire building, it must also confirm the life expectancy of the building which be not less than 50 years.</li> </ol>		
Carried Forward	R	
Section No. 2 Bill No. 4 General Siteworks (Decanting)		

	Brought Forward	R
	Temporary structures	
5	Supply, transport, assembly and installation of single storey SANS approved new double mobile prefabricated block including two (2) No. classroom each with approximate size of 60m2 (internally) firmly fixed and suspended on appropriate tripods/jacks on movable concrete pads complete with corrugated roof coverings including necessary rainwater goods, vinyl floor tiles finishes, appropriate ceilings, light fittings, matching aluminium windows and doors, complete with corresponding ironmongery, steel burglars to all windows and steel security door to all doors. Each classroom block to be equipped with 4 No. steel cupboard bolted to floor, 4No. chalk boards & pinning boards, 2x 4,5kg fire extinguishers, etc Under floor void enclosure to match the prefabricated building material and finish. Complete with matching verandah supported on appropriate steel posts cast in concrete, steel steps and or concrete ramps where necessary.	
6	Supply, transport, assembly and installation of single storey SANS approved new mobile prefabricated administration block approximate size of 280m2 (internally) with 1 x female ablution and 1 x male ablution firmly fixed and suspended on appropriate tripods/jacks on movable concrete pads complete with corrugated roof coverings including necessary rainwater goods, vinyl floor tiles finishes, appropriate ceilings, light fittings, matching aluminium windows and doors, complete with corresponding ironmongery, steel burglars to all windows and steel security door to all doors. Under floor void enclosure to match the prefabricated building material and finish. Complete with matching verandah supported on appropriate steel posts cast in concrete, steel steps and or concrete ramps where necessary.	
	Carried Forward  Section No. 2  Bill No. 4  General Siteworks (Decanting)	R

	Brought Forward	Ī		R	
7	Supply, transport, assembly and installation of single storey SANS approved new mobile prefabricated Science Laboratory approximate size of 156m2 (internally) and Multi-Purpose Classroom approximate size of 60m2 (internally) firmly fixed and suspended on appropriate tripods/jacks on movable concrete pads complete with corrugated roof coverings including necessary rainwater goods, vinyl floor tiles finishes, appropriate ceilings, light fittings, matching aluminium windows and doors, complete with corresponding ironmongery, steel burglars to all windows and steel security door to all doors. Science laboratory to be fitted with 11 WHB as per the Architectural drawings. Under floor void enclosure to match the prefabricated building material and finish. Complete with matching verandah supported on appropriate steel posts cast in concrete, steel steps and or concrete ramps where necessary.	No	1		
8	Supply, transport, assembly and installation of single storey SANS approved new mobile prefabricated Guardhouse approximate size of 10m2 (internally) firmly fixed and suspended on appropriate tripods/jacks on movable concrete pads complete with corrugated roof coverings including necessary rainwater goods, vinyl floor tiles finishes, appropriate ceilings, light fittings, matching aluminium windows and doors, complete with corresponding ironmongery, steel burglars to all windows and steel security door to all doors. Under floor void enclosure to match the prefabricated building material and finish. Complete with matching verandah supported on appropriate steel posts cast in concrete, steel steps and or concrete ramps where necessary.	No	1		
9	Supply, transport, assembly and installation of single storey SANS approved new mobile prefabricated Library approximate size of 147m2 (internally) firmly fixed and suspended on appropriate tripods/jacks on movable concrete pads complete with corrugated roof coverings including necessary rainwater goods, vinyl floor tiles finishes, appropriate ceilings, light fittings, matching aluminium windows and doors, complete with corresponding ironmongery, steel burglars to all windows and steel security door to all doors. Under floor void enclosure to match the prefabricated building material and finish. Complete with matching verandah supported on appropriate steel posts cast in concrete, steel steps and or concrete ramps where necessary.	No	1		
	Carried Forward			R	
	Section No. 2 Bill No. 4 General Siteworks (Decanting)				

	Brought Forward			R	
10	Supply, transport, assembly and installation of single storey SANS approved new mobile prefabricated female ablution approximate size of 27m2 (internally) firmly fixed on pit latrine structure complete with corrugated roof coverings including necessary rainwater goods, vinyl floor tiles finishes, appropriate ceilings, light fittings, matching aluminium windows and doors, complete with corresponding ironmongery, steel burglars to all windows and steel security door to all doors. Each with 11 WC and 3 WHB. Under floor void enclosure to match the prefabricated building material and finish. Complete with matching verandah supported on appropriate steel posts cast in concrete, steel steps and or concrete ramps where necessary.	No	1		
11	Supply, transport, assembly and installation of single storey SANS approved new mobile prefabricated male ablution approximate size of 17m2 (internally) firmly fixed on pit latrine structure complete with corrugated roof coverings including necessary rainwater goods, vinyl floor tiles finishes, appropriate ceilings, light fittings, matching aluminium windows and doors, complete with corresponding ironmongery, steel burglars to all windows and steel security door to all doors. Each with 3 x WC, 2 x urinals and 4 x WHB. Under floor void enclosure to match the prefabricated building material and finish. Complete with matching verandah supported on appropriate steel posts cast in concrete, steel steps and or concrete ramps where necessary.	No	1		
	Carried Forward to Summary of Section No. 2 Section No. 2			R	<u> </u>
	Bill No. 4 General Siteworks (Decanting)				

Item No			Quantity	Rate	Amount
	SECTION NO. 2				
	BILL NO. 5				
	BOREHOLE (PROVISIONAL)				
	PREAMBLES				
	The contractor is referred to the Model Pream Trades (2008 Edition) as issued by the Assoc South African Quantity Surveyors before pricing	iation of			
	SUPPLEMENTARY PREAMBLES				
	<u>Descriptions</u>				
	Descriptions of bolts shall be deemed to incluand washers.	de nuts			
	Descriptions of expansion anchors and both chemical anchors and bolts shall be deemed to nuts, washers and mortices in brickwork or conc Metalwork described as "holed for bolt(s)" deemed to exclude the bolts unless of described.	rete. Shall be			
	<u>View site</u>				
	Before submitting his tender the tenderer shall visite and satisfy himself as to the nature and extermed the work to be done and the value of the material contained in the buildings or portions of the buildings demolished. No claim for any variations of the contract sum in respect of the nature and extent work or of inferior or damaged materials will be entertained.	nt of lls ings to e			
	Drilling				
1	Borehole drilling from 0-100m depth	m	100		
2	Borehole drilling from 100-200m depth	m	100		
3	152mm Steel casing	m	100		
	Carried Section No. 2 Bill No. 5 Borehole	Forward		R	

	Brought Forward			R	
	HYDROLOGICAL INVESTIGATION				
4	Allow for Specialist to conduct groundwater source development and infrastructure implementation consisting of the following:  Phase 1 Groundwater potential evaluation and borehole siting Site geohydrological setting and characterization and groundwater potential determination remote sensing - satelite images and air photos - ID target areas Geophysical survey to finalize drilling sites  Apointment of drilling sub-contractor Phase 2 Borehole drilling and testing Exploration Drilling to deliver one production borehole (Provision to be made for three holes) Aquifer Testing of 1 production borehole  Chemical water analysis Report with recommendations for sustainable use Water use registration and Licensing (Groundwater development to be carried out according to standards and guidelines set by the Department of Water Affairs (DWA) Water use to be registered and licensed Phase 3 Borehole infrastructure implementation Design equipment for pump equipment and related infrastructure Supply and installation of pumping infrastructure Water conveyance infrastructure Supply of storage infrastructure (10 000L)  Engineering design and project management Conctractor to include for any profit and overheads related to the above specialist services		Item		
5	Supply of 1 x Pumpset consisting of 2 x Pumps - variable speed pumps - Duty, standby and assist - Flowrate - 3 l/s at 300kPa pressure, including installation  UNREINFORCED CONCRETE CAST AGAINST	No	1		
	Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 20MPa at 28 days				
6	In base for columns, size 600 x 600 x 600mm, with wood floated top surface at ground level	No	1		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
7	20MPa surface bed	m3	2		
	Carried Forward Section No. 2 Bill No. 5 Borehole			R	

	Brought Forward			R	
	<u>FORMWORK</u>				
8	Form work to aprons not exceeding 300mm in girth	m	19		
	Finishing top surfaces of concrete smooth with a wood float including non-slip brush finish				
9	Surface beds, slabs, etc Fabric reinforcement	m2	23		
10	Mesh ref 193 reinforcement in surface bed	m2	23		
	Water tests				
11	Collection of water samples, carrying out their chemicals & biological tests in an approved laboratory and submitting the test report to the Engineer	No	1		
	Concrete collar				
12	Concrete collar complete	No	1		
	<u>Testing</u>				
13	Allow for testing and commissioning and registration of the bore holes with the Department of Water Affairs (DWA)	No	1		
	Openied Forward & Openies of Openies No. 2				
	Carried Forward to Summary of Section No. 2 Section No. 2 Bill No. 5 Borehole			R	

Bill	SECTION SUMMARY - EXTERNAL WORKS	Page		Amount	
No		No			
1	General Siteworks	43			
2	Stormwater Drainage, Soil Drainage and Water Supply	55			
3	Roads, Parking and Paving	58			
4	General Siteworks (Decanting)	64			
5	Borehole	67			
	Carried to Final Summary		R		
	Section No. 2				
					l

Item No			Quantity	Rate	Amount
	SECTION NO. 3				
	BILL NO. 1				
	MAIN SUPPLY				
	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.				
	<u>View site</u>				
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained				
1	Provisional sum of R200,000,00 for upgrade of main Supply from Eskom and all connection related cost			SUM	
	<u>Cables</u>				
	All Cables Rate Shall Include Cables Terminations				
2	70mm2 4-core PVC insulated cu cable to main distribution kiosk	m	531		
3	35mm2 Transformer to main distribution kiosk	m	531		
4	6mm2 4C SWA	m	1 000		
	Carried Forward Section No. 3 Bill No. 1 Main Supply			R	

	Brought Forward			R	
5	4mm2 Becw	m	1 000		
	Sleeves				
	High-density polyethylene (HDPE) flexible sleeve (trench and backfilling measured elsewhere)				
6	110mmØ	m	531		
	90 Degree long radius bends for high-density polyeth: Sleeve Piping				
7	110mmØ	m	27		
	Manholes				
8	Construction of manholes, complete with heavy duty 600 x 600 x 600 Brick Manhole (underground junction box	No	1		
	Excavation				
	Restricted excavation in all material				
9	Electrical cable trenches	m3	318		
	Filling				
10	Hard rock for Bedding Above/Below Electrical cable	m3	180		
	Test and Commissioning				
11	Test and Commissioning		Item		
	Section No. 3 Bill No. 1 Main Supply			R	

Item No		Quantity	Rate	Amount
	SECTION No. 4: PROVISIONAL SUMS			
	PROVISIONAL SUMS			
	PREAMBLES			
	The contractor is referred to the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	Work executed by direct contractors			
	Work listed under the heading "DIRECT CONTRACTORS WORK" will commence during the execution of this contract and the contractor shall allow free access to the site for these direct contractors. The contractor shall prepare a programme in conjunction with these direct contractors in order to complete the work successfully. The direct contractors will be regarded as nominated sub-contractors but payment will not be made to them via the contractor. The estimated values of these contracts are listed to enable the contractor to determine profit and attendances, if required			
	<u>General</u>			
	Unless otherwise described, all prime cost amounts and provisional sums exclude the cash discount of 5% and include for delivery to site of all articles concerned. All prime cost amounts and provisional sums are net and include for delivery to site of all articles concerned.			
	Profit and general attendance upon selected subcontractors			
	The item "Add for profit" and "Attend upon the above" which follows each selected subcontractor, shall be deemed to allow for the contractor's profit if required and to cover all the contractor's costs incurred in providing free of charge to the selected subcontractors, the following:			
	Carried Forward  Section No. 4  Bill No. 1  Provisional Sums		R	

Ī	Brought Forward	R	
	1.Access to the site and places where the subcontract work is to be carried out, including the reasonable use of any temporary personnel hoists erected by the contractor		
	2.Hoisting of the subcontractor's material in batches that can be handled by the contractor's hoist or crane during normal working hours		
	3. The provision of water and lighting and of single phase electric power to a position within 50m of the place where the subcontractor's work is to be carried out other than water, fuel and power for commissioning of any installation		
	4. The provision of an area for the subcontractor to establish temporary office accommodation and workshops and for the storage of plant and materials and goods		
	5.The use of erected scaffolding belonging to the contractor, along with others having the like right. Scaffolding will remain erected on site until all work which requires the use thereof has been completed		
	6.The use of ablution facilities and the like, where provided		
	7.The use of the site telecommunication facilities, where provided, subject to payment by the subcontractor for usage thereof		
	8.Making good in all trades and cleaning down and removal of rubbish on completion		
	Special attendance on nominated/selected subcontractors		
	Where "special attendance" such as unloading, storing, placing in position, providing special power supplies, specific hoisting, cranage and scaffolding requirements, provision of temporary casing and/or other specific protection of the works, special security and clearing away rubbish is required, a separate item describing the specific requirements in detail is to be provided for the pricing of such requirements		
	Carried Forward Section No. 4 Bill No. 1 Provisional Sums	R	_

Brought Forward	R	
Builder's work		
Builder's work in connection with specialist services is given elsewhere in these bills of quantities		
<u>Preliminaries</u>		
The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"		
COMMUNITY LIAISON OFFICER		
Allow the sum of R 42,000-00 (Forty-Two thousand rand) for the appointment of a community liason officer for the full duration of the project to be expended in whole or part as per the discretion of the Principal Agent	SUM	
Allow for profit	SUM	
Allow for attandance	SUM	
LOOSE FURNITURE		
Provide the sum of R 400,000.00 (Four-Hundred Thousand Rand) for Loose Furniture Supply and Delivery in the Library and Science Laboratory to be executed by a firm of specialists	SUM	
Allow for profit	SUM	
Allow for attandance	SUM	
PUMP HOUSE		
Provide the sum of R120 000.00 (One Hundred and Twenty Thousand Rand) for Pump House/Chlorination Works to be executed by a firm of specialists	SUM	
Allow for profit	SUM	
Allow for attandance	SUM	
Carried to Final Summary  Section No. 4  Bill No. 1  Provisional Sums	R	
	Builder's work  Builder's work in connection with specialist services is given elsewhere in these bills of quantities  Preliminaries  The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"  COMMUNITY LIAISON OFFICER  Allow the sum of R 42,000-00 (Forty-Two thousand rand) for the appointment of a community liason officer for the full duration of the project to be expended in whole or part as per the discretion of the Principal Agent  Allow for profit  Allow for attandance  LOOSE FURNITURE  Provide the sum of R 400,000.00 (Four-Hundred Thousand Rand) for Loose Furniture Supply and Delivery in the Library and Science Laboratory to be executed by a firm of specialists  Allow for profit  Allow for attandance  PUMP HOUSE  Provide the sum of R120 000.00 (One Hundred and Twenty Thousand Rand) for Pump House/Chlorination Works to be executed by a firm of specialists  Allow for profit  Allow for attandance	Builder's work Builder's work in connection with specialist services is given elsewhere in these bills of quantities  Preliminaries The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Sums"  COMMUNITY LIAISON OFFICER  Allow the sum of R 42,000-00 (Forty-Two thousand rand) for the appointment of a community liason officer for the full duration of the project to be expended in whole or part as per the discretion of the Principal Agent  Allow for profit  SUM  Allow for attandance  LOOSE FURNITURE  Provide the sum of R 400,000.00 (Four-Hundred Thousand Rand) for Loose Furniture Supply and Delivery in the Library and Science Laboratory to be executed by a firm of specialists  Allow for profit  Allow for profit  SUM  Allow for attandance  PUMP HOUSE  Provide the sum of R120 000.00 (One Hundred and Twenty Thousand Rand) for Pump House/Chlorination Works to be executed by a firm of specialists  SUM  Allow for profit  SUM  SUM  SUM  SUM  SUM  SUM  SUM  SU

SECTION SUMMARY - PROVISIONAL SUMS  SECTION No. 4: PROVISIONAL SUMS	Page No		Amoun
Provisional Sums	73		
Carried to Final Summary		R	
Section No. 4			

	FINAL SUMMARY				
Section No		Page No		Amount	
1	PRELIMINARIES	34			l
2	EXTERNAL WORKS	68			
3	ELECTRICAL WORKS	70			
4	PROVISIONAL SUMS	74			·
	SUB TOTAL		R		
	CONTINGENCY AMOUNT				
	Allow an amount of R600 000.00 (Six Hundred Thousand Rands) 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.		SUM		
	SUBTOTAL		R		
	CIDB B.U.I.L.D PROGRAM				
	Allow 0.05% for CIDB B.U.I.L.D Program. 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.		SUM		
			CON		
	SUBTOTAL		R		
	Provision for Value-Added Tax (VAT) at 15 percent		R		
	Note:				
	Tenderers must submit their tenders on the official form supplied for this purpose.				ļ 
	Carried to Form of Tender		R		