

ANNEXURE A

Bills of Quantities

BILLS OF QUANTITIES

FOR THE :

PROPOSED RESTORATION; REFURBISHMENT & ALTERATIONS TO
THE OLD CHEMISTRY BUILDING

AT :

UNIVERSITY OF PRETORIA MAIN CAMPUS
CORNER OF LYNNWOOD AND ROPER STREET; HATFIELD; PRETORIA

PREPARED FOR :

UNIVERSITY OF PRETORIA



PREPARED BY:

PE Mahapa Development Consultants

MARCH 2025

CONTENTS

ANNEXURE "A"

BILLS OF QUANTITIES

Page/s

Building Works

A.1	Bill 1	Preliminaries	17 pages
A.2	Bill 2	Alterations	7 pages
A.3	Bill 3	Masonry	3 pages
A.4	Bill 4	Roof Coverings	5 pages
A.5	Bill 5	Carpentry & Joinery	3 pages
A.6	Bill 6	Ceilings, Partitions and Access Flooring	7 pages
A.7	Bill 7	Floor Coverings, Wall Linings, etc.	1 page
A.8	Bill 8	Ironmongery	4 pages
A.9	Bill 9	Metalwork	4 pages
A.10	Bill 10	Plastering	1 page
A.11	Bill 11	Tiling	3 pages
A.12	Bill 12	Plumbing & Drainage	11 pages
A.13	Bill 13	Glazing	1 page
A.14	Bill 14	Paintwork	5 pages
A.15	Bill 15	Provisional Sums	3 pages
A.16		Final Summary for Building Works	1 page

ADDITIONS AND CHANGES TO PRELIMINARIES

SECTION A : PRINCIPAL BUILDING AGREEMENT

- Clause 1 as varied on Page 3 - 4
- Clause 5 as varied on Page 4
- Clause 11 as varied on Page 5
- Clause 12 as varied on Page 5 - 6
- Clause 19 as varied on Page 7
- Clause 23 as varied on Page 7
- Clause 25 as varied on Page 7 - 8
- Clause 26 as varied on Page 8
- Additional documents as on Page 9

Carried to Collection

Supplementary preambles and/or specifications are incorporated in these **bills of quantities** to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles

The **contractor's** prices for all items throughout these **bills of quantities** 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 **JBCC** Principal Building Agreement

Section B : A recital of the headings of the individual clauses in the aforementioned **JBCC** General Preliminaries

Section C : Any special clauses to meet the particular circumstances of the project

PRICING OF PRELIMINARIES

Should the **contractor** select Option A in the **contract data** for the adjustment of **preliminaries**, the amounts entered against the relevant items in these **preliminaries** are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)

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Bill No. 1
Preliminaries

R

SECTION A: PRINCIPAL BUILDING AGREEMENT

Interpretation (A1-A7)

1 Clause 1.0 - Definitions and interpretation

Pricing of bills of quantities

The **contractor** 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 **agreement**. Value Added Tax (VAT) is to be separately stated on the summary page of these **bills of quantities**

Items left unpriced will be deemed to be covered in prices against other items throughout these **bills of quantities** and no claim for any extras arising out of the **contractor's** omission to price any item will be entertained

Prices for all **construction equipment**, 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 **bills of quantities** 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 **contractor** shall, before submission of his tender, call for a written directive from the **principal agent**, failing which it shall be assumed that the **contractor** has allowed in his pricing for materials and workmanship in terms of international best practice

Carried to Collection

Bill No. 1
Preliminaries

R

Legal status of contractor

If the **contractor** constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then:

1. These persons are deemed to be jointly and severally liable to the **employer** for the performance of this **agreement**
2. These persons shall notify the **employer** of their leader who has assigned authority to bind the **contractor** and each of these persons
3. The **contractor** shall not alter its composition or legal status without the prior written consent of the **employer**

F:..... V:..... T:.....

Item

2 **Clause 2.0 - Law, regulations and notices**

F:..... V:..... T:.....

Item

3 **Clause 3.0 - Offer and acceptance**

F:..... V:..... T:.....

Item

4 **Clause 4.0 - Cession and assignment**

F:..... V:..... T:.....

Item

5 **Clause 5.0 - Documents****Value Added Tax**

Provision is made in the summary page of these **bills of quantities** for the inclusion of Value Added Tax (VAT)

Clause 5.6 is amended by the addition of the following:

Electronic issue of drawings

All drawings for this project will be issued electronically and the **contractor** shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically

F:..... V:..... T:.....

Item

Carried to Collection

R

Bill No. 1
Preliminaries

6	<p>Clause 6.0 - Employer's agents</p> <p>F:..... V:..... T:.....</p>	Item
7	<p>Clause 7.0 - Design responsibility</p> <p>F:..... V:..... T:.....</p>	Item
<u>Insurances and securities (A8-A11)</u>		
8	<p>Clause 8.0 - Works risk</p> <p>F:..... V:..... T:.....</p>	Item
9	<p>Clause 9.0 - Indemnities</p> <p>F:..... V:..... T:.....</p>	Item
10	<p>Clause 10.0 - Insurances</p> <p>F:..... V:..... T:.....</p>	Item
11	<p>Clause 11.0 - Securities</p> <p>Clause 11.5 is deleted Clause 11.6 is deleted Clause 11.7 is deleted</p> <p><i>(The employer does not issue a payment guarantee)</i></p> <p>F:..... V:..... T:.....</p>	Item
<u>Execution (A12 - A17)</u>		
12	<p>Clause 12.0 - Obligations of the parties</p> <p>Clause 12.2.6 is amended by the addition of the following:</p> <p>Within fifteen (15) working days of been given possession of the site the contractor shall submit to the principal agent for his review and acceptance a programme for the whole of the works showing the order in which the contractor proposes to execute the works. This programme becomes the baseline programme upon acceptance by the principal agent.</p> <p>The baseline programme shall have regard to</p>	
Carried to Collection		
Bill No. 1 Preliminaries		

R

the contract completion dates, any other milestones and any restraints set out in the contract. Thereafter, if the actual progress does not conform with the baseline **programme**, the **principal agent** is entitled to require the **contractor** to submit a revised **programme** showing the order of activities necessary to ensure completion of the **works** by the contract completion dates.

The **contractor** shall supply the **principal agent** with an electronic copy of each **programme**, together with a print-out bar chart or tabular report in a pre-agreed format. All **programmes** shall be prepared and submitted using Microsoft Project software.

Within fifteen (15) **working days** of the **contractor** submitting a **programme**, complete with all the information required by this clause, to the **principal agent** for acceptance, the **principal agent** will accept the **programme** or state reasons for not accepting the **programme**. If such reasons are given, the **contractor** shall take account of the reasons and resubmit the **programme** within five (5) **working days**.

If the **principal agent** fails to act the **programme** is deemed to be rejected

F:..... V:..... T:.....

Item

13 Clause 13.0 - Setting out

F:..... V:..... T:.....

Item

14 Clause 14.0 - Nominated **subcontractors**

F:..... V:..... T:.....

Item

15 Clause 15.0 - Selected **subcontractors**

F:..... V:..... T:.....

Item

16 Clause 16.0 - **Direct contractors**

F:..... V:..... T:.....

Item

Carried to Collection

R

Bill No. 1
Preliminaries

17	<p>Clause 17.0 - Contract instructions</p> <p>F:..... V:..... T:.....</p> <p><u>Completion (A18 - A24)</u></p>	Item	
18	<p>Clause 18.0 - Interim completion</p> <p>F:..... V:..... T:.....</p>	N/A	
19	<p>Clause 19.0 - Practical completion</p> <p>Refer to specific requirements necessary to achieve practical completion as stated in the contract data</p> <p>F:..... V:..... T:.....</p>	Item	
20	<p>Clause 20.0 - Completion in sections</p> <p>F:..... V:..... T:.....</p>	Item	
21	<p>Clause 21.0 - Defects liability period and final completion</p> <p>F:..... V:..... T:.....</p>	Item	
22	<p>Clause 22.0 - Latent defects liability period</p> <p>F:..... V:..... T:.....</p>	Item	
23	<p>Clause 23.0 - Revision of the date for practical completion</p> <p>Clause 23.1.1 is amended by the addition of the following :</p> <p>The adverse effect of weather conditions will exclude for normal weather conditions in region of the works of this agreement</p> <p>F:..... V:..... T:.....</p>	Item	
24	<p>Clause 24.0 - Penalty for late or non-completion</p> <p>F:..... V:..... T:.....</p> <p><u>Payment (A25 - A27)</u></p>	Item	
25	<p>Clause 25.0 - Payment</p>		
<p>Carried to Collection</p> <p>Bill No. 1 Preliminaries</p>			R

Clause 25.3.2 is amended by the addition of the following:

Material and goods stored off **site** shall not be included in the amount authorised for payment in terms of 25.5

Clause 25.3.4 is deleted and substituted with the following clause:

All fluctuations in cost, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the **contractor**. (Fixed Price Contract)

Clause 25.10 is deleted and substituted with the following clause:

Clause 25.10 - The **employer** shall pay the **contractor** the amount certified in an issued **payment certificate** within twenty one (21) **calendar days** of the date of receipt of both the **payment certificate [CD]**, including default and/or compensatory interest

F:..... V:..... T:.....

Item

26 Clause 26.0 - Adjustment of the **contract value** and **final account**

Clause 26.9.5 is deleted (*Adjustment for cost fluctuations*)

F:..... V:..... T:.....

Item

27 Clause 27.0 - Recovery of expense and/or loss

F:..... V:..... T:.....

Item

Suspension and termination (A28 - A29)

28 Clause 28.0 - Suspension by the **contractor**

F:..... V:..... T:.....

Item

29 Clause 29.0 - Termination

F:..... V:..... T:.....

Item

Dispute resolution (A30)

30 Clause 30.0 - Dispute resolution

F:..... V:..... T:.....

Item

Carried to Collection

R

Bill No. 1
Preliminaries

AGREEMENT

Form of Offer & Acceptance and Contract Data

31 **Form of Offer & Acceptance**

The required information of the **parties** and the amount of the **contract sum** shall be inserted in the Form of Offer & Acceptance (*Refer to Annexure C*) for signature of the **agreement** by the **parties**

F:..... V:..... T:.....

32 **Contract data**

Before submission of his tender the **contractor** is to complete the tenderer's selection in the **contract data**

F:..... V:..... T:.....

Item

Item

Carried to Collection

Bill No. 1
Preliminaries

R

SECTION B: GENERAL PRELIMINARIES**Definitions and interpretation (B1)**

33	Clause 1.1 - Definitions F:..... V:..... T:.....	Item
34	Clause 1.2 - Interpretation F:..... V:..... T:.....	Item

Documents (B2)

35	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item
36	Clause 2.2 - Provisional bills of quantities F:..... V:..... T:.....	Item
37	Clause 2.3 - Availability of construction information F:..... V:..... T:.....	Item
38	Clause 2.4 - Ordering of materials and goods F:..... V:..... T:.....	Item

Previous work and adjoining properties (B3)

39	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item
40	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item
41	Clause 3.3 - Inspection of adjoining properties F:..... V:..... T:.....	Item

The site (B4)

42	Clause 4.1 - Handover of site in stages F:..... V:..... T:.....	Item
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Carried to CollectionBill No. 1
Preliminaries

R

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

43	Clause 4.2 - Enclosure of the works F:..... V:..... T:.....	Item
44	Clause 4.3 - Geotechnical and other investigations F:..... V:..... T:.....	Item
45	Clause 4.4 - Encroachments F:..... V:..... T:.....	Item
46	Clause 4.5 - Existing premises occupied F:..... V:..... T:.....	Item
47	Clause 4.6 - Services - known F:..... V:..... T:.....	Item
<u>Management of contract (B5)</u>		
48	Clause 5.1 - Management of the works F:..... V:..... T:.....	Item
49	Clause 5.2 - Progress meetings F:..... V:..... T:.....	Item
50	Clause 5.3 - Technical meetings F:..... V:..... T:.....	Item
<u>Samples, shop drawings and manufacturer's instructions (B6)</u>		
51	Clause 6.1 - Samples of materials F:..... V:..... T:.....	Item
52	Clause 6.2 - Workmanship samples F:..... V:..... T:.....	Item
53	Clause 6.3 - Shop drawings F:..... V:..... T:.....	Item

Carried to Collection

Bill No. 1
Preliminaries

R

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

54	Clause 6.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item
<u>Deposits and fees (B7)</u>		
55	Clause 7.1 - Deposits and fees F:..... V:..... T:.....	Item
<u>Temporary services (B8)</u>		
56	Clause 8.1 - Water F:..... V:..... T:.....	Item
57	Clause 8.2 - Electricity F:..... V:..... T:.....	Item
58	Clause 8.3 - Ablution and welfare facilities F:..... V:..... T:.....	Item
59	Clause 8.4 - Communication facilities F:..... V:..... T:.....	Item
<u>Prime cost amounts (B9)</u>		
60	Clause 9.1 - Responsibility for prime cost amounts F:..... V:..... T:.....	Item
<u>Attendance on subcontractors (B10)</u>		
61	Clause 10.1 - General attendance F:..... V:..... T:.....	Item
62	Clause 10.2 - Special attendance F:..... V:..... T:.....	Item
<u>General (B11)</u>		
63	Clause 11.1 - Protection of the works F:..... V:..... T:.....	Item

Carried to Collection

R

Bill No. 1
Preliminaries

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

64	Clause 11.2 - Protection/isolation of existing works and works occupied in sections F:..... V:..... T:.....	Item
65	Clause 11.3 - Security of the works F:..... V:..... T:.....	Item
66	Clause 11.4 - Notice before covering work F:..... V:..... T:.....	Item
67	Clause 11.5 - Disturbance F:..... V:..... T:.....	Item
68	Clause 11.6 - Environmental disturbance F:..... V:..... T:.....	Item
69	Clause 11.7 - Works cleaning and clearing F:..... V:..... T:.....	Item
70	Clause 11.8 - Vermin F:..... V:..... T:.....	Item
71	Clause 11.9 - Overhand work F:..... V:..... T:.....	Item
72	Clause 11.10 - Tenant installations F:..... V:..... T:.....	Item
73	Clause 11.11 - Advertising F:..... V:..... T:.....	Item

Carried to Collection

Bill No. 1
Preliminaries

R

SECTION C: SPECIFIC PRELIMINARIES

74	<p>As built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records</p> <p>As built drawings of all services etc should be kept up to date and hand over to principal agent at practical completion</p> <p>F:..... V:..... T:.....</p>	Item		
75	<p>Contract instructions</p> <p>Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied by the contractor and maintained by the contractor</p> <p>F:..... V:..... T:.....</p>	Item		
76	<p>Drawings and dimensions</p> <p>Upon receipt of detail drawings for any works, the contractor shall, before putting that work in hand, ascertain that the dimensions given on the detail drawings correspond with the dimensions of any work already built</p> <p>In the event of a discrepancy between the detail drawings and the work already built, the discrepancy shall be brought to the principal agent's attention who shall decide the procedure</p> <p>F:..... V:..... T:.....</p>	Item		
Carried to Collection			R	
Bill No. 1 Preliminaries				

77	<p>Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the employer</p> <p>F:..... V:..... T:.....</p>	Item	
78	<p>Warranties for materials and workmanship</p> <p>Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract</p> <p>F:..... V:..... T:.....</p>	Item	
Carried to Collection			R
Bill No. 1 Preliminaries			

79

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 Annexure F&G : Health and Safety Specification for a copy of the relevant specifications) 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]

The **contractor** shall:

1. Comply with the health and safety specifications for the **works**
2. Prepare and agree with the health and safety consultant the health and safety plan for the **works**
3. Cooperate with the health and safety consultant in all respects
4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specifications
5. Conform to the conditions contained in the **employer's** health and safety specification

F:..... V:..... T:.....

Item

SUMMARY OF CATEGORIES

Category : Fixed R.....

Category : Value R.....

Category : Time R.....

Carried to Collection

R

Bill No. 1
Preliminaries

Section No. 1

Bill No. 1

Preliminaries

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

1

2

3

4

5

6

7

8

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10

11

12

13

14

15

16

Carried Forward to Summary of Section No. 1

Bill No. 1
Preliminaries

R

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 2</u></p> <p><u>ALTERATIONS (PROVISIONAL)</u></p> <p><u>PREAMBLES</u></p> <p>For preambles refer to "General Preambles for Trades 2017"</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>View site</u></p> <p>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 salvageable from the alterations. 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</p> <p><u>General</u></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to tenants in the building and to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p>			
	Carried to Collection		R	
	Bill No. 2 Alterations (Provisional)			

The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)

The term "**removing**" shall deem to include for loading, removing from site, cleaning and taking demolished item/rubble to a site located by Contractor

REMOVAL OF EXISTING WORK

Breaking down and removing brickwork from site etc

1	Half brick wall	m2	6
2	One brick wall	m2	10
3	Two brick wall	m2	11

Taking out and removing existing door and frames from opening and build in new door frames in to existing opening (making good and new door and frame elsewhere)

4	Timber single door and steel frame, size 813 x 2032mm high from half brick walls (New fire door to server room)	No	1
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Taking out/off and removing glass and mirrors

5	Glass from steel windows, including cleaning out rebates and preparing for new glass	m2	5
6	Glass from timber windows, including cleaning out rebates and preparing for new glass	m2	7
7	Remove all existing putty from steel frames including cleaning out rebates and preparing for and including new putty	m2	50
8	Remove all existing putty from timber frames including cleaning out rebates and preparing for and including new putty	m2	28
9	Remove all existing putty from timber frames including cleaning out rebates and preparing for and including new timber beading	m2	45

Carried to Collection

Bill No. 2
Alterations (Provisional)

R

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

Existing ironmongery, sash mechanisms, etc.

10	Service existing ironmongery on doors	Sets	12
11	Service existing ironmongery on windows	Sets	29
12	Service existing sash mechanisms to timber windows	Sets	14

Taking down and removing roofs, floors, panelling, ceilings, partitions, etc

13	Ceilings including brandering, light fittings, ceiling extractor fans, curtain tracts, suspended ceilings, bulkheads, etc	m2	90
14	Drywall partitioning 4000mm high including doors, ironmongery, glazed borrowed lights, etc	m	3

Taking out and removing sundry joinery work

15	All counters, desks, shelving, cupboards, joinery, etc. from area for new Career Service Centre	Item	
16	Timber skirtings	m	5

Taking out/off and removing sundry metalwork

17	Steel balustrade to paraplegic ramp	m	4
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Taking up and removing carpet tiles and handing it over to the employer

18	Carpet floor covering with cove / skirting including preparing screed for new floor covering	m2	65
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Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes

19	Tiles to floors	m2	90
20	Tiles to walls	m2	2

Taking out and removing sundry items

21	Blinds, size 1300 x 2600mm from windows including handing it over to the employer	No	2
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Carried to Collection

Bill No. 2
Alterations (Provisional)

R

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

22	Blinds, size 1300 x 2600mm from windows including storing, cleaning, servicing and re-installing on completion of area	No	4
<u>Taking out and removing piping, sanitary fittings, taps, etc including disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u>			
23	Vitreous china wash hand basin, including taps, etc.	No	1
24	Stainless steel sink, including taps, etc.	No	1
<u>PREPARATORY WORK TO EXISTING SURFACES</u>			
25	Allow to close single timber door (D1-2) permanently		Item
26	Clean existing sandstone	m2	208
27	Allow to black out and close-up existing window, size 1230 x 2594mm overall, with and including 50mm thick 'Isoboard' thermal insulation with timber frame	No	1
<u>MAKING GOOD OF FINISHES ETC</u>			
<u>Making good internal cement plaster</u>			
28	Walls where half brick walls removed	m	8
29	Walls where one brick walls removed	m	4
<u>Making good 85mm surface bed and screed</u>			
30	Floors where 110mm brick walls removed	m	1
31	Floors where 220mm brick walls removed	m	3
32	Floors where 440mm brick walls removed	m	3
<u>Making good aluminium surfaces</u>			
33	Clean existing aluminium louvres in timber door including re-fixing where necessary	m2	8
Carried to Collection			
Bill No. 2 Alterations (Provisional)			

R

BUILDING UP OPENINGS**Brickwork in NFP bricks in class II mortar in building up openings**

34	One brick walls, including reinforcement	m2	4
35	One and a half brick walls, including reinforcement	m2	4

OPENINGS THROUGH EXISTING WALLS ETC**Breaking out for and forming plain openings through brick walls, including prestressed concrete lintels, making good cement plaster on both sides and into reveals and with 20 MPa concrete thresholds with steel trowelled finish (making good paintwork elsewhere)**

36	Opening 1060 x 2550mm high through one brick wall	No	1
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Breaking out for and forming openings through brick walls for new doors and windows including necessary precast concrete lintels and making good plaster on both sides (new windows, doors, door frames and making good paintwork elsewhere)

37	Opening for door, size 1000 x 2125mm high through one brick wall (D7-001)	No	1
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SUNDRIES**Change swing of existing timber door**

38	Allow to change swing of double leaf timber door including alterations to frame, etc. (D2-001)		Item
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Stained-glass windows

39	Inspect, restore and repair existing clear glass with lead saddle bars by an accredited stained-glass restorer (accreditation certificate required)	m2	25
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Existing Ironmongery, etc.

40	Allow the amount of R10 000.00 (Ten Thousand Rand) to replace damaged ironmongery and sash window mechanisms where required (<i>may only be replaced if approved by Architect with a CI</i>)		Item	10 000.00
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Bill No. 2
Alterations (Provisional)

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

Replace damaged / missing sandstone

- 41 Allow the amount of R10 000.00 (Ten Thousand Rand) to replace damaged / missing sandstone where necessary (*may only be replaced if approved by Architect with a CI*)

Item

10 000.00

Allowance for unforeseen work

- 42 Allow the amount of R20 000.00 (Twenty Thousand Rand) for required work which cannot entirely foreseen, defined or detailed

Item

20 000.00

Carried to Collection

R

Bill No. 2
Alterations (Provisional)

Section No. 1

Bill No. 2

Alterations (Provisional)

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

18

19

20

21

22

23

Carried Forward to Summary of Section No. 1

Bill No. 2
Alterations (Provisional)

R

Carried to Collection

SUPERSTRUCTURE

Brickwork in NFP bricks (7MPa nominal compressive strength) in class II mortar with all joints grouted in solid with liquid cement mortar

1	Half brick walls	m2	20
2	One brick walls	m2	64

BRICKWORK SUNDRIES

Brickwork reinforcement

3	75mm Wide reinforcement built in horizontally	m	59
4	150mm Wide reinforcement built in horizontally	m	188

"Fabcon" prestressed fabricated lintels

5	110 x 75mm Lintels in lengths not exceeding 3m	m	46
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Carried to Collection

Bill No. 3
Masonry

R

Section No. 1

Bill No. 3

Masonry

COLLECTION

Total Brought Forward from Page No.

**Page
No**

25

26

Amount

Carried Forward to Summary of Section No. 1

Bill No. 3
Masonry

R

Carried to Collection

ACCESS TO THE WORKS:**CUTTING THROUGH FLOORS AND CEILINGS****Cutting through:**

1	Gypsum plasterboard ceilings and timber brandering for access to roof space (making good measured elsewhere)	m2	6
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MAKING GOOD OF FINISHES ETC**Making good gypsum plasterboard ceilings and
timber brandering**

2	Ceilings in patches, including painting of patches	m2	6
3	Extra over ceiling in patches for 600 x 600mm trap door of 75 x 114mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	6

REPAIR WORK TO ROOF STRUCTURE:**STRUCTURAL TIMBERWORK ETC****Wrought SA Pine grade 7**

4	Bracing to existing roof timber members consisting of 114 x 38mm timber runners fixed to and including existing timbers with 114 x 114mm angle plate 6mm thick and 8no M8 bolts with 25 x 25 x 2.4mm square washers at 700mm centners (Refer to Structural Engineer Drawing P2023-00148-051 - DETAIL 1 attached to the back of these bills of quantities)	m	84
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Sundries

5	Allow the amount of R20 000.00 (Twenty Thousand Rand) to replace damaged purlins, etc. that cannot be defined or detailed	Item	20 000.00
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TREATMENT ON WOOD SURFACES**Two coats of a 50/50 mix of raw linseed oil and
turpentine**

6	Roof timber trusses, purlins, battens, etc. (Measured flat on plan)	m2	810
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Carried to Collection**R**

Bill No. 4
Roof Coverings

ROOF COVERINGS**SUPPLEMENTARY PREAMBLES****Guarantee**

The roof covering and cladding is to be carried out strictly in accordance with the manufacturer's instruction. On completion the roof covering and accessories are to be inspected by the Manufacturer who is to provide a 5 year guarantee against defective materials and faulty workmanship

The roof is to be guaranteed weather tight for a period of 5 years period, calculated from the handed over date of the completed project

"Marseille" clay tiles restoration and refurbishment

"Marseille" clay roof tiles to be inspected and repaired by an approved installer (accreditation certificate required)

PREPARATORY WORK TO EXISTING ROOF SURFACES**Repair work to existing 'Marseille' Clay Roof**

7	Allow to inspect existing clay roof tiles including, fastening all loose tiles, ridges, flashings, etc. and to restore roof to be water and weather proof (replacing of damaged tiles measured elsewhere)	m2	960
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Making good 229 x 381mm "Marseille" clay tiles by removing damaged tiles and replacing with new all as per suppliers specifications and recommendations

8	Roof covering with pitches not exceeding 25 degrees	m2	288
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Carried to Collection

Bill No. 4
Roof Coverings

R

ROOF SUNDRIES

ROOF AND WALL INSULATION

"Alucushion Bubblefoil FR Double-sided" multi-layered reinforced double-sided aluminium foil sheeting in accordance with SANS 1381-4 with a mass of not less than 293g/m² and a Class I fire rating in accordance with SANS 0177-3

- 9 Insulation sheeting laid taut over purlins (at approximately 686mm centres) and fixed concurrent with roof covering with minimum 100mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required

m2

769

Carried to Collection

Bill No. 4
Roof Coverings

R

Section No. 1

Bill No. 4

Roof Coverings

COLLECTION

Total Brought Forward from Page No.

**Page
No**

28

29

30

31

Amount

Carried Forward to Summary of Section No. 1

Bill No. 4
Roof Coverings

R

Item No			Quantity	Rate	Amount
	<u>BILL NO. 5</u>				
	<u>CARPENTRY AND JOINERY</u>				
	<u>PREAMBLES</u>				
	For preambles refer to "General Preambles for Trades 2017"				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>Joinery</u>				
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc				
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete				
	Items described as "plugged" shall be deemed to be the countersunk screwing to and including plastic plugs in brickwork or concrete				
	<u>SKIRTINGS</u>				
	<u>Wrought meranti</u>				
1	Skirting plugged (PC amount of R85.00/m nett delivered to site excluding VAT)	m	77		
2	Labour, waste, fixing material, etc on the above	m	77		
3	Profit and attendance on the above	m	77		
	<u>TIMBER DOORS, ETC</u>				
	<u>Semi-solid flush doors with 3,2mm plain hardboard covering on both sides, hung to timber frames</u>				
4	40mm Single door, size 762 x 2032mm high	No	2		
5	40mm Single door, size 813 x 2032mm high	No	1		
	Carried to Collection				
	Bill No. 5 Carpentry and Joinery				R

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

6	Extra over for 300 x 300mm framed opening for metal louvre unit (louvre unit elsewhere)	No	3
<u>Solid laminated chipboard core fire doors</u>			
7	Class A fire door, size 813 x 2032mm high including pressed steel frame for half brick wall and preparing frame for door closer and lock	No	1
<u>FRAMES ETC</u>			
<u>Wrought hardwood</u>			
8	44 x 80mm Rebated frame for 762 x 2032mm high door	No	2
9	44 x 80mm Rebated frame for 813 x 2032mm high door	No	1
<u>JOINERY SUNDRIES</u>			
<u>Undercut doors</u>			
10	Undercut 40mm doors 20mm high, including finishing bottom of door with exposed edge strips	m	2
<u>PANELLING ETC</u>			
<u>"OWA Ideacoustic Standard 32"</u>			
11	16mm Panelling system fixed to and including a wooden subframe system to walls all as per suppliers specifications	m2	51
<u>"Weavers World Enviro PET Acoustic Panels"</u>			
12	9mm Acoustic panelling system fixed to drywalling all as per suppliers specifications (Meeting POD)	m2	20

Carried to Collection

Bill No. 5
Carpentry and Joinery

R

Section No. 1

Bill No. 5

Carpentry and Joinery

COLLECTION

Total Brought Forward from Page No.

**Page
No**

33

34

Amount

Carried Forward to Summary of Section No. 1

Bill No. 5
Carpentry and Joinery

R

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 6</u></p> <p><u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u></p> <p><u>PREAMBLES</u></p> <p>For preambles refer to "General Preambles for Trades 2017"</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><u>Ceilings</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Bulkheads</u></p> <p>Unless otherwise described bulkheads shall be deemed to be horizontal along the length</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p> <p><u>CEILING TIMBERS, BEADS, INSULATION, ETC</u></p> <p><u>"KNAUF" insulation</u></p>			
1	135mm Insulation in blanket form closely fitted and laid on top of branderling between roof timbers etc	m2	640	
	Carried to Collection			
	Bill No. 6 Ceilings, Partitions and Access Flooring			

R

SUSPENDED CEILINGS**SUPPLEMENTARY PREAMBLES****Proprietary suspended ceilings**

Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations

Flush plastered gypsum plasterboard suspended ceilings

Ceilings shall comprise 12,5mm gypsum plasterboard boards screwed to and including screw-up suspension grid consisting of main tees at 1 200mm centres and galvanised steel capped cross tees at 400mm centres and with tape fixed over joints and the whole finished with gypsum plaster trowelled to a smooth polished surface

The grid shall be suspended by means of galvanised steel L-section hangers at suitable centres, securely shot-pinned or screwed to concrete, steel or wood

Flush plastered gypsum plasterboard suspended bulkheads

Bulkheads shall comprise galvanised steel studding of 63,5mm top and bottom tracks with vertical studs at maximum 400mm centres, pop-riveted to the top and bottom tracks with similar additional vertical studs as necessary at abutments, ends, etc and covered as described with plasterboard screwed to studding with drywall screws at maximum 300mm centres. Boards shall be butt jointed and finished with tape and jointing compound and the whole finished with gypsum plaster trowelled to a smooth polished surface to the thickness recommended by the manufacturer

Descriptions shall be deemed to include any additional studs at ends and intersections, corner beads, cornices at junctions with ceilings, jointing compound, tape, etc

Carried to Collection

Bill No. 6

Ceilings, Partitions and Access Flooring

R

<u>12.5mm "Gyproc Concealed" gypsum plasterboard screw-up to and including "Gypframe D37/32" tee suspension grid including hangers etc, with tape fixed over joints and the whole finished with gypsum plaster trowelled to a smooth polished surface</u>		
2	Ceilings suspended exceeding 1m and not exceeding 2m below timber at trusses at 1.7m centres	m2 68
3	Opening for 100mm diameter downlighter (Provisional)	No 33
4	Extra over ceiling in patches for 600 x 600mm trap door of 75 x 114mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No 1
<u>"Pelican Systems" cornices, perimeter trims, etc to suspended ceilings</u>		
<u>NOTE:</u> The price for cornices must include for all cornices to be sealed with an approved sealant to walls		
5	PS2 pre-painted cornices for flush plastered ceilings, plugged	m 99
<u>BULKHEADS</u>		
<u>12.5mm "Gyproc" gypsum plaster board in bulkheads with butt joints and skimmed and screwed to and including drywall studs</u>		
6	Bulkhead between suspended ceiling and wall, formed of 2000mm x 7000mm horizontal side with one corner circular on plan (450mm radius) and one 820mm deep vertical side, suspended exceeding 1m and not exceeding 2m below timber trusses at 1.7m centres	No 1
7	Bulkhead in Meeting POD in partitioning roof, formed of 800mm x 1240mm horizontal side and 60mm deep vertical sides	No 1
<u>Sundries to bulkheads</u>		
8	Supply and install lightweight steel structure for bulkhead, size 2000 x 7000 x 820mm high overall	Item
Carried to Collection		
Bill No. 6 Ceilings, Partitions and Access Flooring		

R

9	Detail to bulkhead, 820mm high consisting of 19 x 60mm timber (Oak) slats screwed with 10mm gaps (70mm c/c) to and including timber backing branding covered with black fabric and screwed to bulkhead (Refer to PLASTERED BULKHEAD DETAIL on Architect Drawing 104 Rev 00, attached to the back of these bills of quantities)	m	9
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PARTITIONS ETC**SUPPLEMENTARY PREAMBLES****"Gyproc Classic Wall" partition systems**

Partitions consisting of 48mm galvanised steel studs at 610mm centres as vertical support secured in matching galvanised steel floor and ceiling channels, clad on one or both sides as described, including additional studs as necessary at abutments, ends, etc. Board cladding shall be fixed and jointed in strict accordance with the manufacturer's instructions

Unless otherwise described, prices for partitions shall be deemed to include for standard flat section aluminium skirting on boarded sides

Wall paper and paint or varnish finishes are given separately

DRYWALL PARTITIONS

89mm Partition, comprising of one layer of 12,5mm "RhinoBoard" to both sides screw fixed at max 220mm centers with 25mm drywall screws to 63mm steel studs placed at 400 to 600mm centers, 63mm bottom track plugged, joints finished with Fibatape and Rhinoglide all as per manufacturers specifications, finished smooth for decoration by others

10	Partitions 2125mm high with bottom track plugged	m	5
11	Extra over partition 2125mm high for vertical abutment	No	2
12	Extra over partition 2125mm high for fair end	No	2

The Following in Meeting POD:

Carried to Collection

Bill No. 6
Ceilings, Partitions and Access Flooring

R

	<u>89mm Horizontal partition, comprising of one layer of 12.5mm "RhinoBoard" to both sides screw fixed at max 220mm centers with 25mm drywall screws to 63mm steel studs placed at 400 to 600mm centers, 63mm track fixed to top of horizontal drywalls (measured elsewhere), joints finished with Fibatape and Rhinoglide all as per manufacturers specifications, finished smooth for decoration by others</u>		
13	Horizontal partitioning over drywalls in Meeting POD (Meeting POD roof)	m2	7
	<u>89mm Partition, comprising of one layer of 12.5mm "RhinoBoard" to both sides screw fixed at max 220mm centers with 25mm drywall screws to 63mm steel studs placed at 400 to 600mm centers, 63mm bottom track plugged, joints finished with Fibatape and Rhinoglide all as per manufacturers specifications, finished smooth for decoration by others</u>		
14	Partitions 2423mm high with bottom track plugged	m	3
15	Extra over partition 2423mm high for fair end	No	1
	<u>89mm Partition, comprising of one layer of 12.5mm "RhinoBoard" to one side and two layers of 12.5mm "RhinoBoard" to the other side screw fixed at max 220mm centers with 25mm drywall screws to 63mm steel studs placed at 400 to 600mm centers, 63mm bottom track plugged, joints finished with Fibatape and Rhinoglide all as per manufacturers specifications, finished smooth for decoration by others</u>		
16	Partitions 2423mm high with bottom track plugged	m	5
17	Extra over partition 2423mm high for fair end	No	1
18	Extra over partition 2423mm high for corner	No	2

Carried to Collection

R

Bill No. 6
Ceilings, Partitions and Access Flooring

Purpose made powder coated aluminium shopfront consisting of door with fixed side lights, including clip-on glazing beads with neoprene seals and glazed with 8.76mm McLam Sound Stop acoustic glass as per architects drawings and SANS 10400 part N, including all ironmongery, etc installed into drywall (See schedule attached to the back of these bills of quantities)

19	Purpose made shopfront, size 2500 x 2300mm high overall with one single door, size 924 x 2300mm high	No	1
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"Isover Cavitybatt" thermal and acoustic insulation

20	100mm Thick glasswool insulation blanket in cavity of partitioning	m2	39
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Carried to Collection

Bill No. 6
Ceilings, Partitions and Access Flooring

R

Section No. 1
Bill No. 6
Ceilings, Partitions and Access Flooring

COLLECTION

Total Brought Forward from Page No.

**Page
No** **Amount**

36
37
38
39
40
41

Carried Forward to Summary of Section No. 1
Bill No. 6
Ceilings, Partitions and Access Flooring

R

Item No		Quantity	Rate	Amount
	<u>BILL NO. 7</u>			
	<u>FLOOR COVERINGS, WALL LININGS, ETC</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "General Preambles for Trades 2017"			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Fixing</u>			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
	<u>FLOOR COVERINGS</u>			
	<u>226mm x 1216mm x 2.5mm Thick "Wanabiwood Classic" flexible LVT plank flooring (Colour: TBC) fixed with approved adhesive to a screed (screed elsewhere) floor, laid according to manufacturer's instructions</u>			
1	On floors	m2	76	
	<u>"Belgotex Grafica Blocks" carpet tiles (colour: Back Ally) fixed with approved adhesive to a screed (screed elsewhere) floor, laid according to manufacturer's instructions</u>			
2	On floors	m2	61	
	<u>Carpet tiles to match existing (PC amount of R300.00/m2 nett, delivered to site and excluding VAT) fixed with approved adhesive to a screed (screed elsewhere) floor, laid according to manufacturer's instructions (Termite infestation damaged carpet tiles)</u>			
3	On floors	m2	4	
4	Labour, waste, fixing material, etc on the above	m2	4	
5	Profit and attendance on above	m2	4	
	Carried Forward to Summary of Section No. 1			
	Bill No. 7			
	Floor Coverings, Wall Linings. etc.			
			R	

Item No			Quantity	Rate	Amount
	<u>BILL NO. 1</u>				
	<u>IRONMONGERY</u>				
	<u>PREAMBLES</u>				
	For preambles refer to "General Preambles for Trades 2017"				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>Finishes to ironmongery</u>				
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BC Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded				
	<u>IRONMONGERY SETS</u>				
	<u>Ironmongery to new fire door</u>				
1	Allow the amount of R3000/No for ironmongery set to fire single door	No	1		
2	Labour, waste, fixing material, etc on the above	No	1		
3	Profit and attendance on the above	No	1		
	<u>HINGES, BOLTS, ETC.</u>				
	<u>Manufactured by "QS Products"</u>				
4	3mm Ball bearing brass hinge	No	9		
	<u>LOCKS</u>				
	<u>Manufactured by "QS Products"</u>				
5	Allow the amount of R300/No for bathroom lockset	No	2		
6	Labour, waste, fixing material, etc on the above	No	2		
7	Profit and attendance on the above	No	2		
	Carried to Collection				
	Bill No. 8 Ironmongery				
				R	

HANDLES**Manufactured by "QS Products"**

8	19 x 200mm "D Handle" Stainless steel pull handles fixed back to back	Pairs	3
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PUSH PLATES AND KICK PLATES**1.2mm Thick satin finished stainless steel plates countersunk screwed along edges at not exceeding 200mm centres**

9	762 x 200mm Push plate	No	4
10	813 x 200mm Push plate	No	2
11	762 x 200mm Kick plate	No	4
12	813 x 200mm Kick plate	No	2

DOOR CLOSERS**Manufactured by "QS Products"**

13	Allow the amount of R1800/No for door closer	No	3
14	Labour, waste, fixing material, etc on the above	No	3
15	Profit and attendance on the above	No	3

SUNDRIES**Manufactured by "QS Products"**

16	Allow the amount of R100/No for door stop, plugged	No	3
17	Labour, waste, fixing material, etc on the above	No	3
18	Profit and attendance on the above	No	3

BATHROOM FITTINGS**Approved bathroom fittings**

19	Allow the amount of R700/No (excl VAT) for toilet roll holder	No	2
20	Labour, waste, fixing material, etc on the above	No	2

Carried to CollectionBill No. 8
Ironmongery

R

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

21	Profit and attendance on the above	No	2
22	Allow the amount of R700/No (excl VAT) for paper towel holders	No	2
23	Labour, waste, fixing material, etc on the above	No	2
24	Profit and attendance on the above	No	2
25	Allow the amount of R300/No (excl VAT) for soap dispensers	No	2
26	Labour, waste, fixing material, etc on the above	No	2
27	Profit and attendance on the above	No	2
28	Allow the amount of R850/No (excl VAT) for waste bins	No	4
29	Labour, waste, fixing material, etc on the above	No	4
30	Profit and attendance on the above	No	4
<u>BLINDS</u>			
<u>Approved installer</u>			
31	Allow the amount of R2000/No (excl VAT) to supply and install approved blind to window, size 1300 x 2600mm	No	2
32	Profit and attendance on the above	No	2

Carried to Collection

Bill No. 8
Ironmongery

R

Section No. 1

Bill No. 8

Ironmongery

COLLECTION

Total Brought Forward from Page No.

**Page
No**

44

45

46

Amount

Carried Forward to Summary of Section No. 1

Bill No. 8
Ironmongery

R

Carried to Collection

The following certificates shall be provided prior to commencement of site work:

- 1 A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product
- 2 A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively
- 3 A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process
- 4 A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked
- 5 A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years

STEEL BALUSTRADING

Welded balustrading to ramp

1	Balustrade including finish (PC amount of R1 600.00/m supplied, installed and excluding VAT)	m	4
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ALUMINIUM WINDOWS, DOORS, ETC

NOTE:

The colour of all powder coated aluminium sections shall be standard white colour unless otherwise described

NOTE:

The price for all aluminium windows must include for all windows to be seal with an approved sealant to the outside and the inside

Carried to Collection

Bill No. 9
Metalwork

R

Purpose made powder coated aluminium top hung opening out windows, including clip-on glazing beads with neoprene seals and glazed obscure glass as per architects drawings and SANS10400 part N, including all ironmongery, etc. and plugged to brickwork or concrete (See schedule attached to the back of these bills of quantities)

2	Allow the PC amount of R980.00/No (nett, delivered to site and excluding VAT) for aluminium windows, size 533 x 654mm	No	2
3	Labour, waste, fixing material, etc on the above	No	2
4	Profit and attendance on above	No	2

Purpose made powder coated aluminium doors including clip-on glazing beads with neoprene seals and glazed with 8.76mm McLam Sound Stop acoustic glass as per architects drawings and SANS 10400 part N, including all ironmongery, etc plugged to brickwork or concrete (See schedule attached to the back of these bills of quantities)

5	Allow the PC amount of R8 000.00/No (nett, delivered to site and excluding VAT) single door, size 1000 x 2125mm high overall	No	1
6	Labour, waste, fixing material, etc on the above	No	1
7	Profit and attendance on above	No	1

ALUMINIUM LOUVRE UNITS

Natural anodised horizontal aluminium fixed louvre units screwed into timber frames

8	Louvre unit for 300 x 300mm high opening	No	3
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Carried to Collection

Bill No. 9
Metalwork

R

Section No. 1

Bill No. 9

Metalwork

COLLECTION

Total Brought Forward from Page No.

**Page
No**

48

49

50

Amount

Carried Forward to Summary of Section No. 1

Bill No. 9
Metalwork

R

Item No		Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "General Preambles for Trades 2017"			
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	25mm Thick on floors and landings	m2	144	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
2	On walls	m2	202	
3	On narrow widths	m2	5	
4	On existing walls in patches (Provisional)	m2	53	
	<u>EXTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
5	On existing walls in patches (Provisional)	m2	73	
6	On existing narrow widths (Provisional)	m2	61	
	<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>			
7	25 x 3mm Brass dividing strips in varying lengths, embedded on edge at junction between different floor finishes (Provisional)	m	5	
	Carried Forward to Summary of Section No. 1			
	Bill No. 10			
	Plastering			
			R	

Item No		Quantity	Rate	Amount
	<u>BILL NO. 11</u>			
	<u>TILING</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "General Preambles for Trades 2017"			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Fixing</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat			
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles			
	<u>WALL TILING</u>			
	<u>Wall tiles (PC amount of R200.00/m2 nett, delivered to site and excluding VAT) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted grout</u>			
1	On walls in isolated panels, splash backs, etc	m2	2	
2	Labour, waste, fixing material, etc on the above	m2	2	
3	Profit and attendance on the above	m2	2	
4	On walls	m2	29	
5	Labour, waste, fixing material, etc on the above	m2	29	
6	Profit and attendance on the above	m2	29	
	Carried to Collection			
	Bill No. 11			
	Tiling			
			R	

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

7	On walls in narrow widths	m2	1
8	Labour, waste, fixing material, etc on the above	m2	1
9	Profit and attendance on the above	m2	1
<u>FLOOR TILING</u>			
<u>Floor tiles (PC amount of R200.00/m2 nett, delivered to site and excluding VAT) fixed with adhesive on screed (elsewhere) and flush pointed with grout</u>			
10	On floors	m2	7
11	Labour, waste, fixing material, etc on the above	m2	7
12	Profit and attendance on the above	m2	7
13	Skirting 100mm high	m	5
14	Labour, waste, fixing material, etc on the above	m	5
15	Profit and attendance on the above	m	5

Carried to Collection

Bill No. 11
Tiling

R

Section No. 1

Bill No. 11

Tiling

COLLECTION

Total Brought Forward from Page No.

**Page
No**

53

54

Amount

Carried Forward to Summary of Section No. 1

Bill No. 11

Tiling

R

Carried to Collection

PVC-U pressure pipes and fittings

Pipes of 50mm diameter and smaller shall be plain ended with solvent welded PVC-U loose sockets and fittings

Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be PVC-U and all other fittings shall be cast iron, all with similar push-in type joints

High density polyethylene (HDPE) pipes and fittings

Pipes shall be type IV and of the class specified with compression fittings

Polypropylene pipes

Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with heat welded thermoplastic or where so described compression fittings

Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions

Copper pipes

Pipes shall be hard drawn and half-hard pipes of the class described. 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-siphon pipes, capillary solder fittings and compression fittings shall be an approved type. Capillary solder fittings shall comply with ISO 2016

Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition

Carried to Collection

Bill No. 12
Plumbing and Drainage (Provisional)

R

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing" and 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

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

Paper wrapping to pipes

Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings

Disinfection of water pipework

Water pipework is to be disinfected at completion

Petrolatum anti-corrosion tape

Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with 10% overlaps

Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions

Prices for wrapping of pipes shall include for all work as described to couplings in the length

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 in accordance with manufacturers' instructions and trenches shall be carefully backfilled

Carried to Collection

Bill No. 12
Plumbing and Drainage (Provisional)

R

Where no manufacturers' instructions exist, pipes shall be laid in accordance with the relevant section of SANS 2001

General

Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately)

Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends

Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site

Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)

Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)

As-built drawings

Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere)

RAINWATER DISPOSAL

0,6mm Galvanised sheet steel gutters and rainwater pipes with powder coated finish on outside

1	150 x 100mm Roof gutters with beaded front edge	m	41
2	100 x 75mm Rainwater down pipes	m	20
3	Extra over eaves gutter for outlet for 100 x 75mm down pipe	No	4
4	Extra over rainwater pipe for bend	No	8

Carried to Collection

Bill No. 12
Plumbing and Drainage (Provisional)

R

Restoration, Refurbishment and Alterations

-60-

SANITARY FITTINGS**NOTE:**

The price for labour, waste, fixing material must include for all sanitary fittings to be sealed next to walls and floors with an approved silicone sealant

"Kwikot" stainless steel

20	"Classique" single end bowl drop-in sink, size 790 x 500mm including 90mm waste (code: KWI-DSI-790-SE) and fitted in to joinery cupboard (cupboard measured elsewhere)	No	1
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"Vaal"

21	335 x 290mm "Weaver Mini" vanity basin with tap hole mounted on vanity slab (vanity slab elsewhere)	No	2
22	"Orchid" wall hung WC pan with cradle bracket and legs including "Jazz" double flap seat (flush valve and flush pipe elsewhere)	No	2

WASTE UNIONS ETC

Waste unions for basins, sinks, etc shall comprise of a chromium plated waste union with grating, rubber washers and locknut

"Cobra Watertech"

23	32mm "Slotted" chromium plated basin waste union without plug, chain & stay (code: 303)	No	2
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TRAPS, ETC

24	40mm Rubber "P" or "S" trap	No	1
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"Cobra Watertech"

25	32mm Chromium plated bottle trap (code: 340)	No	2
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TAPS, VALVES, ETC**"Cobra Watertech"**

26	15mm chromium plated angle regulating valve (COB-232-10/N)	No	11
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Carried to Collection

R

Bill No. 12
Plumbing and Drainage (Provisional)

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

27	15mm "Stella Original" chromium plated standard basin mixer (code: 3294S/NT)	No	2
28	15mm "Ledimo" chromium plated sink mixer, wall type (code: LO-266/041/10/N)	No	1
29	"Flushmaster Junior FJ2-100" chromium plated exposed type toilet flush valve for back entry installation, including flush pipe	No	2
<u>SANITARY PLUMBING</u>			
<u>PVC-U soil and vent pipes</u>			
30	50mm Pipes	m	8
31	50mm Pipes chased into brickwork	m	8
32	110mm Pipes	m	17
33	110mm Pipes laid in ground or earth filling under solid floors not exceeding 1m deep.	m	8
<u>Extra over PVC-U soil and vent pipes for fittings</u>			
34	50 x 38mm Threaded adaptor	No	2
35	50mm Bend	No	12
36	50mm Access bend	No	6
37	50mm Junction	No	2
38	50mm Access junction	No	3
39	110 x 50mm Reducer	No	4
40	110mm Bend	No	7
41	110mm Plain junction	No	3
42	110mm Access bend	No	3
43	110mm Access junction	No	2
44	110 x 50mm Reducing access junction	No	4
45	110mm End cap	No	1
46	110mm Straight pan connector	No	2

Carried to Collection

R

Bill No. 12
Plumbing and Drainage (Provisional)

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

47	110mm Vent cowl	No	1
48	110mm "GI-two-way" vent valve	No	1
49	110mm Rodding eye in end of pipe	No	1
50	Wire ball bird protector in 110mm pipe	No	1
<u>Sundries</u>			
51	Cutting through existing 85mm thick concrete surface bed, 710mm wide for new 110mm drainage pipe including excavation, bedding, backfilling, compaction, disposal of surplus material, waterproofing, concrete surface bed, etc. (pipe measured elsewhere)	m	8
<u>Testing</u>			
52	Testing waste pipe system		Item
<u>WATER SUPPLIES</u>			
<u>Class 10 HDPe type IV pipes</u>			
53	50mm Pipes laid in and including trenches not exceeding 1m deep	m	5
<u>Extra over Class 10 HDPe type IV pipes for fittings</u>			
54	50mm Fittings	No	2
55	50mm Reducer	No	1
56	50mm Bend	No	2
57	50mm Threaded adaptor	No	1
<u>Class II copper pipes</u>			
58	15mm Pipes	m	9
59	15mm Pipes chased into brick walls	m	14
60	22mm Pipes	m	5
61	42mm Pipes	m	5
62	42mm Pipes chased into brick walls	m	4

Carried to Collection

Bill No. 12
Plumbing and Drainage (Provisional)

R

Extra over class II copper pipes for capillary fittings

63	15mm Fittings	No	40
64	22mm Fittings	No	6
65	42mm Elbow	No	2
66	42mm Tee	No	1
67	42mm Reducing Tee	No	1
68	42mm Reducer	No	1
69	42mm Brass fullway gate valve jointed to copper pipe including adaptors	No	1

Flexible service pipes

70	15mm Service pipe 350mm girth	No	11
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Sundries

71	Supply and install a pressure reducing valve (PVR) and 50mm water meter station complete for building	No	1
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Testing

72	Testing water pipe system		Item
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ELECTRIC WATER HEATERS**Manufactured by "Kwikot"**

73	10 Litre "Prisma Classique" under-basin electric water heater	No	1
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PIPE PROTECTION**Paper lagging**

74	Two layers of stout brown paper tightly wrapped around 15mm pipe and couplings and tied with wire prior to building in	m	14
75	Two layers of stout brown paper tightly wrapped around 22mm pipe and couplings and tied with wire prior to building in	m	4

Carried to Collection

Bill No. 12
Plumbing and Drainage (Provisional)

R

UP - OLD CHEMISTRY BUILDING

Restoration, Refurbishment and Alterations

76	Extra for wrapping around fittings not exceeding 30mm diameter	No	28		
<u>PIPE INSULATION</u>					
<u>"Thermaflex" pipe insulation</u>					
77	Insulation to 15mm pipe and couplings	m	5		
78	Insulation to 22mm pipe and couplings	m	5		
79	Insulation to 42mm pipe and couplings	m	5		
80	Extra for wrapping around fittings not exceeding 30mm diameter	No	46		
81	Extra for wrapping around 42mm elbow	No	3		
82	Extra for wrapping around 42mm tee	No	2		
83	Extra for wrapping around 42mm valve	No	1		
<u>HOLES ETC</u>					
<u>Core drilling hole exceeding 100mm and not exceeding 200mm diameter</u>					
84	460mm Thick wall	No	2		
<u>SUNDRIES</u>					
<u>Sundry allowance</u>					
85	Allow the amount of R50 000.00 (Fifty Thousand) for air relief valves, pressure gauges, isolators, non return valves, thermostats etc or cost which cannot entirely foreseen, defined or detailed		Item		50 000.00
Carried to Collection				R	
Bill No. 12 Plumbing and Drainage (Provisional)					

Section No. 1
Bill No. 12
Plumbing and Drainage (Provisional)

COLLECTION

Total Brought Forward from Page No.

**Page
No**
Amount

56
57
58
59
60
61
62
63
64
65

Carried Forward to Summary of Section No. 1
Bill No. 12
Plumbing and Drainage (Provisional)

R

Bill No. 13
Glazing

Item No		Quantity	Rate	Amount
	<u>BILL NO. 14</u>			
	<u>PAINTWORK</u>			
	<u>PREAMBLES</u>			
	For preambles refer to "General Preambles for Trades 2017"			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Description of paintwork shall be deemed to include for the preparation of surfaces, including filling, stopping, sanding, priming, of nail heads and screws and for all cutting in			
	<u>Paint specification</u>			
	All painting shall be done in accordance with "PLASCON" specifications and rates must include for all primers undercoats and final coats.			
	All contractors and projects to be registered with "Plascon".			
	<u>PREPARATORY WORK TO EXISTING WORK</u>			
	<u>Previously painted plastered surfaces</u>			
	Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth			
	<u>Previously painted metal surfaces</u>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<u>Previously painted wood surfaces</u>			
	Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth			
	Carried to Collection		R	
	Bill No. 14 Paintwork			

PAINTWORK, ETC TO PREVIOUSLY PAINTED WORK**ON INTERNAL FLOATED PLASTER SURFACES**

Strip, wash down with soap solution, fill where necessary with suitable stopping or patching plaster, spot prime and rub down, apply one coat "Plascon Plaster Primer" and two coats "Plascon Double Velvet" paint

1	On internal walls	m2	266
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ON EXTERNAL FLOATED PLASTER SURFACES

Strip, wash down with soap solution, fill where necessary with suitable stopping or patching plaster, spot prime and rub down, apply one coat "Plascon Plaster Primer" and two coats "Plascon Wall and All" paint

2	On external walls	m2	787
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ON FIBRE-CEMENT BOARD SURFACES

Strip, wash down with soap solution, fill where necessary with suitable stopping material, spot prime and rub down, apply one coat "Plascon Plaster Primer" and two coats "Plascon Wall and All" paint

3	On fascias and barge boards	m2	27
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ON METAL SURFACES

Strip down to bare metal, repair frame, treat with approved rust inhibitor, prime with "Plascon Metalcare Metal WB Primer" and two coats "Plascon Super Universal Enamel" paint

4	On windows with burglar bars (both sides)	m2	101
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5	On ventilation grilles	m2	7
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6	Eaves gutters not exceeding 300mm girth	m	136
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7	Rainwater downpipes not exceeding 300mm girth	m	65
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8	Rainwater hopper boxes	No	3
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Carried to Collection

Bill No. 14
Paintwork

R

ON WOOD SURFACES

Strip/sand, wash down with soap solution, fill where necessary with suitable stopping material, spot prime and rub down, apply one coat "Plascon Wood Primer" and two coats "Plascon Super Universal Enamel" paint

9	On external roof overhangs including cornices, etc.	m2	109
10	On doors	m2	10
11	Door frames etc	m2	13
12	"Cottage pane" windows, sash doors, etc (both sides)	m2	146
13	On window subframe	m	224

PAINTWORK ETC TO NEW WORK**ON FLOATED PLASTER**

One coat "Plascon Plaster Primer" and two coats "Plascon Double Velvet" paint

14	On internal walls	m2	177
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ON PLASTERBOARD

One coat "Plascon Plaster Primer" and two coats "Plascon Super Acrylic Polvin" paint

15	On partitioning	m2	189
16	On ceilings, bulkheads and cornices	m2	91

ON METAL

One coat "Plascon Merit Metal Primer (UC501)" and two coats "Plascon Super Universal Enamel" paint

17	On door frames	m2	1
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ON WOOD

Sand down, one coat "Plascon Professional Wood Primer (PP800)" and two coats "Plascon Super Universal Enamel" paint

18	On doors	m2	13
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Carried to Collection

Bill No. 14
Paintwork

R

Restoration, Refurbishment and Alterations

-71-

Section No. 1

Bill No. 14

Paintwork

COLLECTION

Total Brought Forward from Page No.

**Page
No**

68

69

70

71

Amount

Carried Forward to Summary of Section No. 1

Bill No. 14
Paintwork

R

Item No		Quantity	Rate	Amount
	<u>BILL NO. 15</u>			
	<u>PROVISIONAL SUMS</u>			
	<u>Note:</u>			
	All cost price items and provisional sums will be net and no Builder's discount will be applicable			
	<u>PROVISIONAL SUMS FOR NOMINATED/SELECTED SUBCONTRACT WORKS</u>			
	<u>Electrical Installation</u>			
1	Allow the amount of R336 850.00 (Three Hundred and Thirty Six Thousand Eight Hundred and Fifty Rand) for electrical installation	Item		336 850.00
2	Profit and attendance on above		%	
	<u>Electronic Installation</u>			
3	Allow the amount of R325 000.00 (Three Hundred and Twenty Five Thousand Rand) for electronic installation	Item		325 000.00
4	Profit and attendance on above		%	
	<u>Air Conditioning Installation</u>			
5	Allow the amount of R732 000.00 (Seven Hundred and Thirty Two Thousand Rand) for air conditioning installation	Item		732 000.00
6	Profit and attendance on above		%	
	<u>Joinery</u>			
7	Allow the amount of R55 000.00 (Fifty Five Thousand Rand) for all joinery consisting of a reception counter, kitchenette, counter tops, etc.	Item		55 000.00
8	Profit and attendance on above		%	
	Carried to Collection		R	
	Bill No. 15 Provisional Sums			

Restoration, Refurbishment and Alterations

Carried to Collection

Bill No. 15

Provisional Sums

Section No. 1

Bill No. 15

Provisional Sums

COLLECTION

Total Brought Forward from Page No.

**Page
No**

73

74

Amount

Carried Forward to Summary of Section No. 1

Bill No. 15
Provisional Sums

R

Restoration, Refurbishment and Alterations

Carried to Final Summary

Carried to Form of Offer and Acceptance