

N1054



University of Venda
Creating Future Leaders

KCMQS PROJECT NO. N1054

**Centre of Entrepreneurship and Nutritional analysis Lab at the University
of Venda, Thohoyandou, Limpopo Province
(CIDB GRADING NO: 6GB)
VOLUME 2 OF 2**

PROCUREMENT DOCUMENT

(Based on NEC3 Engineering and Construction Contract)

Date of Issue: 23 June 2022

Issued by:

Director Facilities Management

University of the Venda, Thohoyandou

Name of tenderer:

Telephone Number:

Email Address:

Fax Number:

Cellphone Number:

Closing date: AS PER TENDER INVITATION

PREAMBLES FOR TRADE

PREAMBLES FOR TRADES

1. MODEL PREAMBLES FOR TRADES

The "Specification of Materials and Methods to be used - PW371" as issued by the Department of Public Works shall apply and shall be deemed to be incorporated herein.

The Bidders are referred to the above-mentioned document for the full description of materials to be used and work to be executed.

A copy of the above-mentioned document is available at the offices of the Principal Agent for inspection.

2. VARIATIONS AND/OR ADDITIONS TO MODEL PREAMBLES FOR TRADES

- a. All work to be done in accordance to the detailed specification as per the Engineers and Architects drawings.
- b. Where variations and/or additions to Model Preambles differ from Clauses contained in the "Specification of Materials and Methods to be used - PW371", the variations and/or additions to Preambles shall take precedence.

3. MATERIALS AND WORKMANSHIP

Materials and workmanship shall be the best of their respective kinds. Only undamaged materials may be used in the works. Work shall be to the satisfaction of the Architect/Engineer and shall be executed in accordance with good building practice and the relevant Manufacturer's instruction. Where the term "approved" is used in connection with materials and workmanship, it shall mean that such materials shall be to the approval, instructions or choice of the Architect.

4. STANDARD SPECIFICATIONS

Materials and Workmanship shall comply with the Standard Building Regulations (SBR), National Building Regulations (NBR), SABS1200, the specifications and codes of practice of the South African Bureau of Standards, and CSIR recommendations. In cases of variance, these "Specification of Materials and Methods to be used - PW371" and any supplementary preambles thereto shall have precedence over the above-mentioned regulations, specifications and codes of practice. In cases of variance between the SBR and NBR, the NBR shall have precedence.

The latest issues of the above-mentioned regulations, specifications and codes of practice, as well as those of any other specifying body, to which reference is made, shall be applicable.

References to standard specifications and/or building regulations in these "Specification of Materials and Methods to be used - PW371" are for the information of the Contractor and shall in no way relieve him of his obligations under the Contract.

SECTION 1: PRELIMINARIES

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA

Where no provision is made in Bills of Quantities to indicate which of the three categories in (v) apply or where no selection is made, the adjustments shall be beased on the following breakdown:

- a) 10 percent is Fixed
- b)15 percent is Value related
- c) 75 percent is Time Related

The adjustments of the Preliminaries shall apply not withstanding the actual employment of resources in the execution of the works. The contract value used for the adjustment of the Preliminaries shall exclude any contingecy sum and the amount for Preliminaries

SECTION A: CONDITIONS OF CONTRACT

CORE CLAUSES

GENERAL

Action (clause 10)

Actions (clause 10.1)

Fixed Related	Item
Value Related	Item
Time Related	Item

Identified and defined terms (clause 11)

Condition of contract (clause 11.1)

Fixed Related	Item
Value Related	Item
Time Related	Item

Carried to Collection

R

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Defined terms (clause 11.2)

Item

Item

Item

Interpretation of the law (clause 12.1 - 12.4)

Item

Item

Item

Communication (clause 13.1 - 13.8)

Item

Item

Item

The Project Manager and the Supervisor (clause 14.1 - 14.4)

Item

Item

Item

R

3

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Adding to the Working Areas (clause 15)

Adding to the Working Areas (clause 15.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Early Warning (clause 16)

Early Warning (clause 16.1 - 16.4)

Fixed Related

Item

Value Related

Item

Time Related

Item

Ambiguities and inconsistencies (clause 17)

Ambiguities and inconsistencies (clause 17.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Illegal and impossible requirements (clause 18)

Illegal and impossible requirements (clause 18.1)

Fixed Related

Item

Value Related

Item

Carried to Collection

R

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	Time Related	Item	
<u>Prevention (clause 19)</u>			
Prevention (clause 19.1))			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>THE CONTRACTOR'S MAIN RESPONSIBILITIES</u>			
<u>Providing the Works (clause 20)</u>			
Providing the Works (clause 20.1)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>The Contractor's design (clause 21)</u>			
The contractor's design (clause 21.1 - 21.3)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Using the Contractor's design (clause 22)</u>			
Using the Contractor's design (clause 22.1)			
Carried to Collection			R
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Design of Equipment (clause 23)</u>			
Design of Equipment (clause 23.1)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>People (clause 24)</u>			
People (clause 24.1 - 24.2)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Working with the Employer and Others (clause 25)</u>			
Working with the Employer and Others (clause 25.1 - 25.3)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
Carried to Collection			R
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Sub-contracting (clause 26)

Sub-contracting (clause 26.1 - 26.3)

Fixed Related

Item

Value Related

Item

Time Related

Item

Other responsibilities (clause 27)

Other responsibilities (clause 27.1 - 27.4)

Fixed Related

Item

Value Related

Item

Time Related

Item

TIME**Starting, Completion and Key dates (clause 30)**

Starting date (clause 30.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Completion date (clause 30.2)

Fixed Related

Item

Value Related

Item

Carried to Collection

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	Time Related	Item	
Key date (clause 30.3)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>The Programme (clause 31)</u>			
The Programme (clause 31.1 - 31.3)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Revising the programme (clause 32)</u>			
Revising the programme (clause 32.1 - 32.2)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Access to and use of the Site (clause 33)</u>			
Access to and use of the Site (clause 33.1)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
Carried to Collection			R
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Instruction to stop or not to start work (clause 34)

Instruction to stop or not to start work (clause 34.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Take over (clause 35)

Take over (clause 35.1 - 35.3)

Fixed Related

Item

Value Related

Item

Time Related

Item

Acceleration (clause 36)

Acceleration (clause 36.1 - 36.3)

Fixed Related

Item

Value Related

Item

Time Related

Item

TESTING AND DEFECTS**Testing and inspections (clause 40)**

Testing and inspections (clause 40.1 - 40.6)

Carried to Collection**R**

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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Fixed Related	Item	
Value Related	Item	
Time Related	Item	
<u>Testing and inspections before delivery (Clause 41)</u>		
Testing and inspection before delivery (clause 41.1)		
Fixed Related	Item	
Value Related	Item	
Time Related	Item	
<u>Searching for and notifying Defects (Clause 42)</u>		
Searching for and notifying Defects (Clause 42.1 - 42.2)		
Fixed Related	Item	
Value Related	Item	
Time Related	Item	
<u>Correcting Defects (Clause 43)</u>		
Correcting Defects (Clause 43.1 - 43.4)		
Fixed Related	Item	
Value Related	Item	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	Time Related	Item	
<u>Accepting Defects (clause 44)</u>			
Accepting Defects (clause 44.1 - 44.2)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Uncorrected Defects (clause 45)</u>			
Uncorrected Defects (clause 45.1 - 45.2)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>PAYMENT</u>			
<u>Assessing the amount due (clause 50)</u>			
Assessing the amount due (clause 50.1 - 50.5)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
	Carried to Collection		R
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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Payment (clause 51)

Payment (clause 51.1 - 51.4)

Fixed Related

Item

Value Related

Item

Time Related

Item

Defined Cost (clause 52)

Defined Cost (clause 52.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

The Bills of Quantities (clause 55)

The bills of quantities (clause 55.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

COMPENSATION EVENTS**Carried to Collection****R**

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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Compensation events (clause 60)

Compensation events (clause 60.1 - 60.7)

Fixed Related

Item

Value Related

Item

Time Related

Item

Notifying compensation events (clause 61)

Notifying compensation events (clause 61.1 - 61.7)

Fixed Related

Item

Value Related

Item

Time Related

Item

Quotation for compensation events (clause 62)

Quotation for compensation events (clause 62.1 - 62.6)

Fixed Related

Item

Value Related

Item

Time Related

Item

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Assessing compensation events (clause 63)

Assessing compensation events (clause 63.1 - 63.13)

Fixed Related

Item

Value Related

Item

Time Related

Item

The Project Manager's assessment (clause 64)

The Project Manager's assessment (clause 64.1 - 64.4)

Fixed Related

Item

Value Related

Item

Time Related

Item

Implementing compensation events (clause 65)

Implementing compensation events (clause 65.1 - 65.4)

Fixed Related

Item

Value Related

Item

Time Related

Item

Carried to Collection

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

TITLE**The Employer's title to Plant and Materials (clause 70)**

Plant and Materials outside the working area (clause 70.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Plant and Materials within the working area (clause 70.2)

Fixed Related

Item

Value Related

Item

Time Related

Item

Marking Equipment, Plant and Materials outside Working Areas (clause 71)

Marking Equipment, Plant and Materials outside Working Areas (clause 71.1)

Fixed Related

Item

Value Related

Item

Carried to Collection

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	Time Related	Item	
<u>Removing Equipment (clause 72)</u>			
Removing Equipment (clause 72.1)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Objects and materials within the site (clause 73)</u>			
Objects and materials within the site (clause 73.1 - 73.2)			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>RISK AND INSURANCE</u>			
<u>Employer's risk (clause 80)</u>			
Employer's risk (clause 80.1)			
	Fixed Related	Item	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	Value Related	Item		
	Time Related	Item		
<u>Contractor's risk (clause 81)</u>				
Contractor's risk (clause 81.1)				
	Fixed Related	Item		
	Value Related	Item		
	Time Related	Item		
<u>Repairs (clause 82)</u>				
Repairs (clause 82.1)				
	Fixed Related	Item		
	Value Related	Item		
	Time Related	Item		
<u>Indemnity (clause 83)</u>				
Indemnity (clause 83.1- 83.2)				
	Fixed Related	Item		
	Value Related	Item		
	Fixed Related	Item		
	Value Related	Item		
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Insurance cover (clause 84)

Time Related

Item	Value
1. The first step in the process of creating a new product is to identify a market need.	100%
2. The second step in the process of creating a new product is to develop a prototype.	100%
3. The third step in the process of creating a new product is to conduct market research.	100%
4. The fourth step in the process of creating a new product is to develop a business plan.	100%
5. The fifth step in the process of creating a new product is to secure financing.	100%
6. The sixth step in the process of creating a new product is to launch the product.	100%
7. The seventh step in the process of creating a new product is to monitor sales and customer feedback.	100%
8. The eighth step in the process of creating a new product is to make improvements based on feedback.	100%
9. The ninth step in the process of creating a new product is to expand the product line.	100%
10. The tenth step in the process of creating a new product is to establish a long-term relationship with customers.	100%

Fixed Related

Item

Value Related

Item

Time Related

Item

Insurance policies (clause 85)

Insurance policies (clause 85.1 - 85.4)

Fixed Related

Item

Value Related

Item

Time Related

Item

If the Contractor does not insure (clause 86)

If the Contractor does not insure (clause 86.1)

Fixed Related

Item

Value Related

Item

Carried to Collection

R

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CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL ANALYSIS LAB AT THE UNIVERSITY OF VENDA

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Fixed Related	Item	
Value Related	Item	
Time Related	Item	
<u>Procedures on termination (clause 92)</u>		
Procedures on termination (clause 92.1 - 92.2)		
Fixed Related	Item	
Value Related	Item	
Time Related	Item	
<u>Payment on termination (clause 93)</u>		
Procedures on termination (clause 93.1 - 93.2)		
Fixed Related	Item	
Value Related	Item	
Time Related	Item	
<u>MAIN OPTION CLAUSES</u>		
<u>DISPUTE RESOLUTION</u>		
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Option W1

Dispute Resolution (clause W1.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

The Adjudicator (clause W1.2)

Fixed Related

Item

Value Related

Item

Time Related

Item

The Adjudication (clause W1.3)

Fixed Related

Item

Value Related

Item

Time Related

Item

Review by the Tribunal (clause W1.4)

Fixed Related

Item

Value Related

Item

Time Related

Item

SECONDARY OPTION CLAUSES**Price adjustment for inflation (Option X1)**

Defined terms (clause X1.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Carried to Collection**R**

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Performance bond (Option X13)

Performance bond (Option X13.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Advanced payment to the contractor (Option X14)

Advanced payment to the contractor (Option X14.1 - X14.3)

Fixed Related

Item

Value Related

Item

Time Related

Item

Limitation of the Contractor's liability for his design to reasonable skill and care (Option X15)

Limitation of the Contractor's liability for his design to reasonable skill and care (Option X15.1 - X15.2)

Fixed Related

Item

Value Related

Item

Time Related

Item

Retention (Option X16)

Retention (Option X16.1 - X16.2)

Fixed Related

Item

Value Related

Item

Time Related

Item

Carried to Collection

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Low performance damages (Option X17)

Low performance damages (Option X17.1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Limitation of Liability (Option X18)

Limitation of Liability (Option X18.1 - X18.5)

Fixed Related

Item

Value Related

Item

Time Related

Item

CONTRACT DATA

Contractual Requirements as stated elsewhere in the document

ESTABLISHMENT OF FACILITIES ON THE SITE**Facilities for Project Manager**

Furnished offices (In no 1)

Fixed Related

Item

Value Related

Item

Time Related

Item

Name boards (In no 1)

Fixed Related

Item

Carried to Collection

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

	Value Related	Item	
	Time Related	Item	
Offices and storage sheds			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
<u>Facilities for the contractor</u>			
Living accommodation			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
Ablution and latrine facilities			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
Tools and Equipments			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
Water supplies, electric power, communication, dealing with water and access			
	Fixed Related	Item	
	Value Related	Item	
	Time Related	Item	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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SECTION 2: ALTERATIONS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item
No

Quantity

Rate

Amount

SECTION NO.2

BILL NO.1

ALTERATIONS

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineering Specifications attached to these documents.

SUPPLEMENTARY PREAMBLES

For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"

REMOVAL OF EXISTING WORK:

ALTERATIONS

NATURE OF WORK Tenderers are advised to visit the site and to satisfy themselves as to the nature and extent of the work to be done and provide in their tenders for any items not specifically mentioned which they may deem necessary for the proper completion of the work. Tenderers are advised that the adjacent existing buildings will be in occupation during the progress of the work and due allowance must be made for the work being carried out at such times and in such manner as will least interfere with the routine of the occupants and as may be directed by the Principal Agents

DIMENSIONS The Contractor is advised to take all dimensions affecting the existing buildings on the site, as he will be held solely responsible for all new work being of the correct sizes.

Carried to Collection

R

Section No. 2
ALTERATIONS
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ALTERATIONS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

PIPES, ETC. Special care is to be taken not to interfere unnecessarily with any water supply pipes or other piping that may be met with and found necessary to disconnect or cut, are to be effectively stopped off and any new connections that may be necessary are to be made with proper fittings and to the satisfaction of the Principal Agent to whom due notice must be given of any alterations to the existing services.

PROTECTION In taking down and removing existing work the utmost care is to be observed to avoid any structural or other damage to the remaining portions of the buildings. The Contractor must also protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc., from damage during the progress of the work and provide all necessary materials for so doing. The Contractor will be held solely responsible for any damage to persons or property and for the safety of the structure throughout the whole of this Contract and must make good at his own expense any damage that may occur.

CREDITS, ETC. Old materials from the pulling down (except such as are described to be re-used or handed over) are to become the property of the Contractor who shall allow credit as provided for in the summary at the end of these Bills of Quantities. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before re fixing. Old materials described to be handed over are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. None of the old stock bricks from the pulling down are to be re-used for any new work.

MATERIALS, ETC. The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.

DEMOLITIONS, ETC.

REMOVAL OF EXISTING WORK

Carried to Collection

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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SECTION 3: BUILDINGS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item
No

Quantity

Rate

Amount

SECTION NO.3

BILL NO.1

FOUNDATIONS

For Preambles refer to "Department of Public Works:
Specification of material and methods to be used -
PW371"

SUPPLEMENTARY PREAMBLES

Nature of ground

The nature of the ground is assumed to be sandy
weathered granite, therefore "earth", but possibly
interspersed with "hard rock"

Excavation for working space in rock

Notwithstanding clause 11 page 8 of the Standard
System of Measuring Building Work, excavation for
working space in rock will be measured in cubic metres
to the extent executed and given as "extra over" bulk
excavation or trench and hole excavation as the case
may be

Carting away of excavated material

Descriptions of carting away of excavated material shall
be deemed to include loading excavated material onto
trucks directly from the excavations or, alternatively,
from stock piles situated on the building site

Filling

Notwithstanding the reference to prescribed multiple
handling in clause 1 page 6 of the Standard System of
Measuring Building Work, prices for filling and backfilling
shall include for all selection and any multiple handling
of material

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Section No. 3
BUILDINGS
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FOUNDATIONS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Excavations

All excavations will be by hand

Concrete curing before propping

All concrete will be allowed to cure for 14 days before allowing for propping, The contractor will not prop until they have submitted concrete tests result to the Engineers for approval

Concrete mixing

All concrete to be in line with SABS1200

All site mixed concrete to have mix design approved and tested before casting

All concrete to be vibrated

No 50/50 slag cement may be used without the Engineer's approval

Reinforcement

Reinforcement steel to be supported on spacer blocks and not broken bricks or tiles

Brickwork

All brickwork to comply with SABS 0164

All bricks to have compressive strength of 7Mpa and are to be at least six (6) weeks old before being built into the walls

Sand to comply with SABS 1090

Mortar mix to be 1:6 with 10 litres of lime added per sack of cement. Alternatively masonry cement may be used

Joints

Brickwork to be provided with flush joints

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

All longitudinal joints to be 10mm wide and solidly caulked with mortar. Failure to comply will mean mandatory demolition

EARTHWORKS

BULK EXCAVATION, FILLING, ETC

Open face excavation in earth over sloping site

1	Open face excavation	m3	543
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Risk of collapse of excavations

2	Sides of bulk excavations not exceeding 1,5m deep	m2	572
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Extra over all excavations for carting away

3	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	543
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EXCAVATIONS

Excavation in earth not exceeding 2m deep

4	Trenches	m3	121
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Extra over all excavations for carting away

5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	121
---	--	----	-----

Risk of collapse of excavations

6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	402
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Keeping excavations free of water

7	Keeping excavations free of all water other than subterranean water	Item	
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FILLING ETC

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	<u>Earth filling of G7 material supplied by the contractor, compacted to 95% Mod AASHTO density</u>		
8	Under floors, steps, pavings, etc	m3	38
	<u>Prescribed density tests on filling</u>		
9	"Mod. AASHTO Density" test	No	48
	<u>SOIL POISONING</u>		
	<u>Soil insecticide to be executed with SABS compliance by a firm of specialists under a 5 year guarantee</u>		
10	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	757
11	To bottoms and sides of trenches etc	m2	563
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
12	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	757
13	To bottoms and sides of trenches etc	m2	563
	<u>CONCRETE, FORMWORK & REINFORCEMENT</u>		
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>15MPa/19mm concrete</u>		
14	Surface blinding under footings and bases	m3	8
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>30MPa/19mm concrete</u>		
15	Ground beams	m3	113
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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TEST CUBES

- 16 Allow for preparing a set of three (3) concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.

No

18

CONCRETE SUNDRIES

Stripping back head of concrete pile for a height not exceeding 300mm to expose reinforcement including trimming to defined level and bending reinforcement as necessary for casting into pile cap

- 17 250mm Diameter pile

No

115

Sundries

- 18 Carefully drill 150mm deep into existing reinforced concrete ground beam for fixing of 16mm diameter reinforcement bar (rebar e/m)

No

124

- 19 400mm Long x 16mm diameter high tensile reinforcement bar with 150mm length fixed to existing ground beam with "Epoxy Epidemix 372" or equivalent approved and the other cast into concrete (holes e/m)

No

62

- 20 400mm Long x 16mm diameter high tensile reinforcement bar with 150mm length fixed to existing ground beam with "Epoxy Epidemix 372" or equivalent approved and the other end built into brickwork (holes e/m)

No

62

REINFORCEMENT

Mild steel reinforcement to structural concrete work

- 21 10mm Diameter bars

t

2.88

High tensile steel reinforcement to structural concrete work

- 22 12mm Diameter bars

t

3.45

- 23 16mm Diameter bars

t

5.18

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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**CONCRETE, FORMWORK AND
REINFORCEMENT**

For Preambles refer to "Department of Public Works:
Specification of material and methods to be used -
PW371"

SUPPLEMENTARY PREAMBLES

Cost of tests

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)

Breeze concrete

Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated

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CONCRETE, FORMWORK & REINFORCEMENT

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Formwork

Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use

The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself

Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

Concrete curing before propping

All concrete will be allowed to cure for 14 days before allowing for propping, The contractor will not prop until they have submitted concrete tests result to the Engineers for approval

Concrete mixing

All concrete to be in line with SABS1200

All site mixed concrete to have mix design approved and tested before casting

All concrete to be vibrated

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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No 50/50 slag cement may be used without the Engineer's approval

Reinforcement

Reinforcement steel to be supported on spacer blocks and not broken bricks or tiles

Propping of structures

Propping will be approved by the Engineers prior to casting

REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES

30MPa/19mm concrete

1	Surface beds cast in panels on waterproofing	m3	91
2	Extra over for concrete thickening in surface beds size approximately 100mm deep, 300mm at top and tapering both sides to 200mm at bottom, including all excavations, cart away, etc.	m	14

REINFORCED CONCRETE

30MPa/19mm concrete

3	Slabs including beams and inverted beams	m3	10
---	--	----	----

TEST CUBES

4	Allow for preparing a set of three (3) concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	No	30
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CONCRETE SUNDRIES

Finishing top surfaces of concrete smooth with a wood float/steel trowel

5	Surface beds, slabs, etc	m2	757
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	<u>Finishing top surfaces of concrete smooth with a power float</u>		
6	Surface beds, slabs, etc	m2	77
	<u>MOVEMENT JOINTS ETC</u>		
	<u>Saw cut joints</u>		
7	5 x 10mm Saw cut joints in top of concrete	m	125
	<u>Joint forming material in movement joints:</u>		
8	10mm Bitumen impregnated fibre board not exceeding 300mm wide	m	407
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>		
	<u>Smooth formwork to soffits</u>		
9	Slabs propped up exceeding 3,5m and not exceeding 6,5m high	m2	77
	<u>MOVEMENT JOINTS ETC</u>		
	<u>"Abe Construction Chemicals"</u>		
10	225mm Wide two (2) layers three (3) ply malthoid between horizontal concrete and brickwork	m	47
	<u>REINFORCEMENT</u>		
	<u>Fabric reinforcement</u>		
11	Steeledale Mesh standard square fabric mesh, nominal mass 1,0 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (Ref 100), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	757

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- 12 Steeledale Mesh standard square fabric mesh, nominal mass 3,95kg/m² with nominal 5,6mm thick wires and 200 x 200mm pitch (Ref 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.

m2

77

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MASONRY

For Preambles refer to "Department of Public Works:
Specification of material and methods to be used -
PW371"

SUPPLEMENTARY PREAMBLES

BRICKWORK

Sizes in descriptions

Where sizes in descriptions are given in brick units, "one
brick" shall represent the length and "half brick" the
width of a brick

Linings to concrete

Descriptions of linings to concrete, unless otherwise
described, shall be deemed to include wire ties

Hollow walls etc

Descriptions of hollow walls shall be deemed to include
250mm long stainless steel or galvanized wire ties three
(3) every square meter

Reinforced brick lintels

Lintels shall bear at least 160mm onto adjacent walling.
Where such bearing cannot be obtained due to the
proximity of adjacent openings the lintel shall be
continuous

Brickwork

All brickwork to comply with SABS 0164

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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All bricks to have compressive strength of 7Mpa and are to be at least six (6) weeks old before being built into the walls

Sand to comply with SABS 1090

Mortar mix to be 1:6 with 10 litres of lime added per sack of cement. Alternatively masonry cement may be used

Joints

Brickwork to be provided with flush joints

All longitudinal joints to be 10mm wide and solidly caulked with mortar. Failure to comply will mean mandatory demolition

SAMPLES

Samples of all masonry building units, shall consist of a minimum of 6 units

BRICKWORK

SUPERSTRUCTURE

Brickwork of NFX bricks (7 MPa nominal compressive strength) in class II mortar

1	Half brick walls	m2	33
2	One brick walls	m2	994
3	Brick-on-edge walls	m2	136
4	One and half brick walls	m2	148

BRICKWORK SUNDRIES

Brickwork reinforcement

5	75mm Wide reinforcement built in horizontally	m	256
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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6	150mm Wide reinforcement built in horizontally	m	8,089
7	225mm Wide reinforcement built in horizontally	m	71
	<u>"Allied Concrete" prestressed fabricated lintels</u>		
8	110 x 70mm Lintels in lengths not exceeding 3m	m	28
	<u>Turning pieces</u>		
9	230mm Wide turning pieces to lintels etc	m	26
	<u>Holes:</u>		
10	Leave or form opening through one brickwall for pipe n.e 100mm diameter	No	11
11	Leave or form opening through one brickwall for pipe exceeding 100 and not exceeding 200mm diameter	No	7
	<u>Galvanised hoop iron cramps, ties, etc</u>		
12	Drill 26mm diameter hole	No	12
13	100 x 150 x 8mm Thick flat bars twice drilled for anchor bolts (bolts and holes e/m)	No	24
14	125 x 75 x 8mm Angle iron	m	15
15	24mm x 300mm Chemical anchors	No	12

FACE BRICKWORK

Face clay face brick, size 222 x 106 x 73mm, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zone 1-2 (PC Amount R10 000-00/1000 VAT excl. supplied and delivered to site)

16	Extra over brickwork for face brickwork	m2	604
17	Half brick wall faced both sides	m2	6
18	Extra over brickwork for brick-on-edge header course lintel pointed on face and 110mm soffit	m	36

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19	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	11		
20	Fair cutting and fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	7		
	<u>Brick-on-edge header course coping, sills, etc of (PC Amount R10 000-00/1000 VAT excl. supplied and delivered to site) face bricks pointed with recessed joints on all exposed faces</u>				
21	230mm Wide sill set sloping and slightly projecting	m	12		
22	Coping on top of one brick wall	m	28		
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	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"			
	<u>DAMPPROOFING OF WALLS AND FLOORS</u>			
	<u>Gundle Gunplas DPC 250 Blue Black damp proof course in walls to Agreement Certificate 2001/284 laid with minimum 150mm overlaps.</u>			
1	In walls	m2	74	
	<u>Gundle USB Green co ex 250µm damp proof membrane under concrete surface beds to SANS mark 952-1985 type C laid with minimum 150mm overlaps and sealed with Gunplas pressure sensitive tape.</u>			
2	Under surface beds	m2	757	
	<u>JOINT SEALANTS, ETC</u>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	10 x 50mm In saw cut joints including raking out of expansion joint filler as necessary	m	125	
4	10 x 20mm In isolation joints including raking out of expansion joint filler as necessary	m	407	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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BILL NO.5

CARPENTRY AND JOINERY

For Preambles refer to "Department of Public Works:
Specification of material and methods to be used -
PW371"

SUPPLEMENTARY PREAMBLES

Particle board:

Particle board shall comply with the following
specifications:

- a) SABS 1300 Particle board: exterior and flooring type
- b) SABS 1301 Particle board: interior type

Joinery:

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

Fixing

Items described as "nailed" shall be deemed to be fixed
with hardened steel nails or shot pins to brickwork or
concrete

Decorative laminate finish:

Laminate finish shall be glued under pressure. Edge
strips shall be butt jointed at junctions with adjacent
similar finish

SKIRTINGS

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CARPENTRY & JOINERY

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	<u>Wrought meranti</u>				
1	19 x 70mm Skirting nailed to wall at 400mm cc with 50mm steel nails and including 19mm quarter round nailed to skirting with 25mm headless nails at 300mm centres maximum with all nail heads filled and finished flush	m	476		
	<u>DOORS, ETC</u>				
	<u>40mm Semi-solid core interior door with masonite cladding both sides suitable for painting</u>				
2	Door size 900 x 2100mm high (D6)	No	1		
3	Door size 813 x 2100mm high cut 100mm at bottom (D5)	No	6		
	<u>40mm Solid core flush panel doors with masonite veneer hung to steel frames</u>				
4	Door size 813 x 2068mm high (D1,D2)	No	10		
5	Door size 813 x 2100mm high (D4)	No	2		
6	Double door 1369 x 2040mm high, with two equal leaves, each leaf with rebated meeting edges (D7)	No	1		
7	Double door 1510 x 2100mm high, with two equal leaves, each with rebated meeting edges (D3)	No	3		
	<u>SUNDRIES</u>				
8	Cut opening in 40mm solid door for louvre opening 450 x 300mm high (D6)	No	1		
9	Cut opening in 40mm solid door for louvre opening 620 x 400mm high (D2,D4)	No	10		
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IRONMONGERY

For Preambles refer to "Department of Public Works:
Specification of material and methods to be used -
PW371"

SUPPLEMENTARY PREAMBLES

Descriptions

Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs

"EN-SUITE" LOCKS

TYPE 1 - (D1,D2,D8-PARTITION)

- | | | | |
|---|---|----|----|
| 1 | Dormakaba Tubular Stainless Steel 155mm long spring loaded lever handle in Stainless Steel finish (Code: TH120BP cylinder). | No | 24 |
| 2 | Dormakaba Stainless Steel cylinder sash lock (Code: D036S) with 57mm backset. | No | 12 |
| 3 | Dormakaba Satin Nickel 63mm - 31.5 + 31.5mm Grand master keyed E-SP 5 Pin Knob cylinder (Code: DKC206301GMK). | No | 12 |
| 4 | Dormakaba Nickel Plated floor mounted door stop (Code: DDS-NP-018), size 24 x 45mm fixed in accordance with the manufacturer's recommendations. | No | 12 |

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IRONMONGERY

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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<u>TYPE 2 (D4)</u>					
5	Dormakaba mechanical hold open TS 91B HO-SL cam action slide channel door closer (Code: TS 91B HO-SL) with a closing force of EN 3 for maximum 950mm wide door. Door closer compliant with EN 1154, and CERTI FIRE approved (Certificate No.CF 119) for door types ITT 120, MM/IMM 240 (ISO 9001)	No	2		
6	Dormakaba Tubular straight Stainless Steel bolt through pull handle (Code: DPH210BT), size 30mm diameter x 300mm long.	No	2		
7	Dormakaba grade 430 Stainless Steel plate (Code: DPP-430-BL), size 150 x 300 x 1,2mm with 6 (six) counter-sunk fixing holes plugged and screwed with aluminium screws.	No	2		
8	Dormakaba Stainless Steel cylinder deadlock (Code: D037D) with 57mm backset.	No	2		
9	Dormakaba Brass 40.5mm grand master keyed E-SP 5 pin single cylinder (Code: DSC204101GMK).	No	2		
10	Dormakaba 52mm diameter Stainless Steel cylinder escutcheon (Code: DCE-002).	No	2		
11	Dormakaba Nickel Plated floor mounted door stop (Code: DDS-NP-018), size 24 x 45mm fixed in accordance with the manufacturer's recommendations.	No	2		
12	Dormakaba "Male " engraved grade 304 Stainless Steel sign (Code: DSS-130), size 150 x 150 x 1,2mm with counter-sunk fixing holes plugged and screwed with aluminium screws.	No	1		
13	Dormakaba "Female" engraved grade 304 Stainless Steel sign (Code: DSS-131), size 150 x 150 x 1,2mm with counter-sunk fixing holes plugged and screwed with aluminium screws.	No	1		
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	<u>TYPE 3 - (D5)</u>				
14	Dormakaba grade 430 Stainless Steel plate (Code: DPP-430-BL), size 150 x 300 x 1,2mm with 6 (six) counter-sunk fixing holes plugged and screwed with aluminium screws.	No	6		
15	Dormakaba Tubular straight Stainless Steel bolt through pull handle (Code: DPH301C) fixed on grade 430 Stainless Steel plate, size 150 x 300 x 1,2mm with 6 (six) counter-sunk fixing holes plugged and screwed with aluminium screws.	No	6		
16	Dormakaba M4 patent male/female fixing screws	No	36		
17	Dormakaba Stainless Steel bathroom deadlock (Code: DMWC-SS-008) with 55mm backset.	No	6		
18	Dormakaba 52 x 52mm Stainless Steel square bathroom WC bolt set (Code: DWC-006).	No	6		
19	Dormakaba Stainless Steel hat and coat hook with rubber buffer (Code: DHC-SS-031), size 70 x 25 x 80mm fixed in accordance with the manufacturer's recommendations.	No	6		
	<u>TYPE 4 (D6)</u>				
20	Dormakaba non hold open code TS 73V PA DC-PAB-SL rack and pinion projecting arm door closer with a closing force of EN 2-4 for maximum 1 100mm wide door.	No	1		
21	Dormakaba Tubular straight Stainless Steel bolt through pull handle (Code: DPH301BBT), size 25mm diameter x 325mm long.	No	2		
22	Dormakaba M4 patent male/female fixing screws	No	12		
23	Dormakaba Stainless Steel bathroom deadlock (Code: D032D) with 57mm backset.	No	1		
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24	Dormakaba 52 x 52mm Stainless Steel square bathroom WC bolt set (Code: DWC-006).	No	1		
25	Dormakaba Nickel Plated floor mounted door stop (Code: DDS-NP-018), size 24 x 45mm fixed in accordance with the manufacturer's recommendations.	No	1		
26	Dormakaba grade 430 Stainless kick plate (Code: DKP-430-SF), size 300 x 900 x 1,2mm with 12 (twelve) counter-sunk fixing holes plugged and screwed with aluminium screws.	No	2		
27	Dormakaba "Male/Female" engraved grade 304 Stainless Steel sign (Code: DSS-132MF), size 150 x 150 x 1,2mm with counter-sunk fixing holes plugged and screwed with aluminium screws.	No	1		
28	Dormakaba "Disabled" engraved grade 304 Stainless Steel sign (Code: DSS-133), size 150 x 150 x 1,2mm with counter-sunk fixing holes plugged and screwed with aluminium screws.	No	1		
<u>TYPE 5 - (D7)</u>					
29	Dormakaba mechanical hold open TS 91B cam action slide channel door closer (Code: TS 91B HO) with a closing force of EN 3 for maximum 950mm wide door.	No	2		
30	Dormakaba surface mounted door coordinator (Code: SR392), fitted in accordance with manufacturer's recommendations.	No	1		
31	Dormakaba Tubular straight Stainless Steel bolt through pull handle (Code: DPH210BT), size 30mm diameter x 300mm long.	No	2		
32	Dormakaba grade 430 Stainless Steel plate (Code: DPP-430-BL), size 150 x 300 x 1,2mm with 6 (six) counter-sunk fixing holes plugged and screwed with aluminium screws.	No	2		
Carried to Collection				R	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

33	Dormakaba Stainless Steel cylinder deadlock (Code: D037D) with 57mm backset.	No	1		
34	Dormakaba Satin Nickel 63mm - 31.5 + 31.5mm Grand master keyed E-SP 5 Pin double cylinder (Code: DDC206301GMK).	No	1		
35	Dormakaba 52mm diameter Stainless Steel cylinder escutcheon (Code: DCE-002).	No	1		
36	Dormakaba Nickel Plated Rebate conversion kit for Euro Profile locks (Code: D038R).	No	1		
37	Dormakaba Satin Chrome flush bolt with heel and let set into concrete (Code: DFB-SC-180), size 48 x 19 x 153mm fixed in accordance with the manufacturer's recommendations.	No	1		
38	Dormakaba Satin Chrome flush bolt with heel and let set into metal (Code: DFB-SC-180), size 48 x 19 x 153mm fixed in accordance with the manufacturer's recommendations.	No	1		
39	Dormakaba Stainless Steel dust proof strike (Code: DPS-SS-032), size 38 x 19mm fixed in accordance with the manufacturer's recommendations.	No	1		
40	Dormakaba Nickel Plated floor mounted door stop (Code: DDS-NP-018), size 24 x 45mm fixed in accordance with the manufacturer's recommendations.	No	2		
TYPE 6 (D3,D3 ON PARTITION)					
41	Dormakaba Tubular Stainless Steel 155mm long spring loaded lever handle in Stainless Steel finish (Code: TH120BP cylinder).	No	8		
42	Dormakaba Stainless Steel cylinder sash lock (Code: D036S) with 57mm backset.	No	4		
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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43	Dormakaba Satin Nickel 63mm - 31.5 + 31.5mm Grand master keyed E-SP 5 Pin double cylinder (Code: DDC206301GMK).	No	4		
44	Dormakaba Nickel Plated Rebate conversion kit for Euro Profile locks (Code: D038R).	No	4		
45	Dormakaba Satin Chrome flush bolt with heel and let set into concrete (Code: DFB-SC-180), size 48 x 19 x 153mm fixed in accordance with the manufacturer's recommendations.	No	4		
46	Dormakaba Satin Chrome flush bolt with heel and let set into metal (Code: DFB-SC-180), size 48 x 19 x 153mm fixed in accordance with the manufacturer's recommendations.	No	4		
47	Dormakaba Nickel Plated Rebate conversion kit for Euro Profile locks (Code: D038R).	No	4		
48	Dormakaba Stainless Steel dust proof strike (Code: DPS-SS-032), size 38 x 19mm fixed in accordance with the manufacturer's recommendations.	No	4		
49	Dormakaba Nickel Plated floor mounted door stop (Code: DDS-NP-018), size 24 x 45mm fixed in accordance with the manufacturer's recommendations.	No	8		
<u>TYPE 7 - (ALO1,AL02)</u>					
50	Dormakaba mechanical hold open TS 91B cam action slide channel door closer (Code: TS 91B HO) with a closing force of EN 3 for maximum 950mm wide door.	No	4		
51	Dormakaba surface mounted door coordinator (Code: SR392), fitted in accordance with manufacturer's recommendations.	No	2		
Carried to Collection				R	
Section No. 3 BUILDINGS Bill No. 6 IRONMONGERY					

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

52	Dormakaba Tubular offset Stainless Steel back-to-back pull handle (Code: DPH217BTB), size 25mm diameter x 590mm long.	No	8		
53	Dormakaba Stainless Steel narrow stile dead lock operating with european profile cylinder (Code: D02735) with 35mm backset.	No	2		
54	Dormakaba Satin Nickel 63mm - 31.5 + 31.5mm Grand master keyed E-SP 5 Pin double cylinder (Code: DDC206301GMK).	No	2		
55	Dormakaba 30 x 64mm Stainless Steel narrow style cylinder escutcheon (Code: DCE-105).	No	4		
56	Dormakaba Stainless Steel dust proof strike (Code: DPS-SS-032), size 38 x 19mm fixed in accordance with the manufacturer's recommendations.	No	2		
57	Dormakaba Nickel Plated floor mounted door stop (Code: DDS-NP-018), size 24 x 45mm fixed in accordance with the manufacturer's recommendations.	No	4		
<u>BATHROOM FITTINGS</u>					
<u>"Kimberly Clark"</u>					
58	MR2 Stainless Steel Toilet Tissue Dispenser stainless steel (Code: SA426130), overall size 130 x 135 x 256mm high, installed by a Kimberly Clark® installation team.	No	7		
59	KIMBERLY-CLARK PROFESSIONAL* Electronic Foam Soap and Sanitiser Dispenser colour White (Code: U9214700), overall size 190 x 290 x 100mm high, installed by a Kimberly Clark® installation team.	No	3		
60	Stainless Steel Disposer (Code: SA426135), overall size 345 x 290 x 390mm high, installed by a Kimberly Clark® installation team.	No	3		
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Section No. 3 BUILDINGS Bill No. 6 IRONMONGERY					

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

	"Trox Technik" natural anodised aluminium finished louvres				
67	Trox or similar approved natural aluminium door louvre size 450 x 300mm high (D6)	No	1		
68	Trox or similar approved natural aluminium door louvre size 620 x 400mm high (D2,D4)	No	10		
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Carried to Collection					
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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IRONMONGERY

CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL ANALYSIS LAB AT THE UNIVERSITY OF VENDA

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

General

Workshop drawings to be approved by the architect before manufacture

SUPPORT ANGLES

Welded columns in single lengths with flat section base, top, bearer and connection plates bolted to concrete

- | | | | |
|---|--|---|----|
| 1 | Two (2) x 150 x 100 x 10kg/m Hot dipped galvanised angle section welded back to back laid in brickwork as lintels above openings | m | 13 |
|---|--|---|----|

PRESSED STEEL DOOR FRAMES

1,2mm Double rebated frames suitable for half brick walls

- | | | | |
|---|--|----|---|
| 2 | Frame for door size 813 x 2068mm high (D2) | No | 2 |
|---|--|----|---|

- | | | | |
|---|--|----|---|
| 3 | Frame for door size 813 x 2100mm high cut 100mm short at the bottom (D5) | No | 6 |
|---|--|----|---|

1,2mm Double rebated frames suitable for one brick walls

- | | | | |
|---|---|----|---|
| 4 | Frame for door size 813 x 2068mm high (D1,D2) | No | 8 |
|---|---|----|---|

- | | | | |
|---|--|----|---|
| 5 | Frame for door size 813 x 2100mm high (D4) | No | 2 |
|---|--|----|---|

- | | | | |
|---|--|----|---|
| 6 | Frame for door size 900 x 2100mm high (D6) | No | 1 |
|---|--|----|---|

- | | | | |
|---|---|----|---|
| 7 | Frame for door size 1369 x 2040mm high (D7) | No | 1 |
|---|---|----|---|

- | | | | |
|---|---|----|---|
| 8 | Frame for door size 1510 x 2100mm high (D3) | No | 1 |
|---|---|----|---|

- | | | | |
|---|--|----|---|
| 9 | Frame for door size 1510 x 2100mm high set in created openings (openings e/m) (D3) | No | 2 |
|---|--|----|---|

ALUMINIUM WINDOWS, DOORS, ETC.

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METALWORK

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

	<u>Purpose made aluminium doors, sidelights and fanlights glazed with laminated safety glass and plugged to brickwork or concrete</u>				
10	Anodized aluminium window 600 x 900mm high (W01) (PC Amount R1 500-00 each VAT excl. supplied, delivered and installed on site by an approved specialist)	No	8		
11	Anodized aluminium window 900 x 1200mm high (W02) (PC Amount R2 000-00 each VAT excl. supplied, delivered and installed on site by an approved specialist)	No	12		
12	Purpose made aluminium window size 600 x 3350mm high (AL04) (PC Amount R6 100-00 each VAT excl. supplied, delivered and installed on site by an approved specialist)	No	14		
13	Purpose made aluminium window size 4410 x 3005mm high (AL05) (PC Amount R34 700-00 each VAT excl. supplied, delivered and installed on site by an approved specialist)	No	1		
14	Purpose made aluminium door size 3930 x 3605mm high inclusive of preparation of doors for ironmongery (e/m) (AL01) (PC Amount R44 200-00 each VAT excl. supplied, delivered and installed on site by an approved specialist)	No	1		
15	Purpose made aluminium door size 4470 x 3605mm high inclusive of preparation of doors for ironmongery (e/m) (AL02) (PC Amount R52 700-00 each VAT excl. supplied, delivered and installed on site by an approved specialist)	No	1		
16	Purpose made aluminium window size 5232 x 3828mm high (AL03) (PC Amount R54 300-00 each VAT excl. supplied, delivered and installed on site by an approved specialist)	No	1		
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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METALWORK

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ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item No	Quantity	Rate	Amount
<u>SECTION NO.3</u>			
<u>BILL NO.8</u>			
<u>PLASTERING</u>			
For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Plastering of concrete soffits</u>			
The plasterer should make sure that the surface to be plastered does not deviate from the required plane by more than 10mm. All high areas should be removed by hacking or cutting. Fill low areas by applying undercoats of plaster not exceeding 15m in thickness, apply one coat plaster to surface, leave to stiffen, strike off with a striker board, and wood float to an even surface and to a thickness of 10 - 15mm thick.			
<u>SCREEDS</u>			
<u>Screeds on concrete</u>			
1	20mm Thick on floors and landings	m2	132
2	25mm Thick on floors and landings	m2	632
<u>Granolithic Screeds</u>			
3	30mm Thick on floors and landings	m2	1
4	Grano skirting 75mm high	m	4
<u>INTERNAL PLASTER</u>			
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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PLASTERING

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PLASTERING

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SECTION NO.3

BILL NO.9

TILING

For Preambles refer to "Department of Public Works:
Specification of material and methods to be used -
PW371"

WALL TILING

300 x 600 x 11.5mm Porcelain tiles flush pointed with tinted jointing compound on brickwork including cement (PC R250.00/m2 Vat excl. supplied)

1	On walls	m2	214
2	On narrow widths, etc.	m2	4
3	Fair exposed cutting and fitting around pipe not exceeding 100mm diameter	No	11
4	Fair exposed cutting and fitting around pipe exceeding 100mm and not exceeding 200mm diameter	No	7
<u>240 x 240 x 11,5mm Terracotta ceramic tiles flush pointed with tinted jointing compound on brickwork including cement (PC R300-00/m2 Vat excl. supplied)</u>			
5	External window sills formed of cut tiles to size 110mm wide	m	17

FLOOR TILING

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Section No. 3
BUILDINGS
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TILING

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

600 x 600 x 11,5mm Non-slip porcelain floor tiles (PC R250-00/m2 VAT excl supplied) fixed with Ceresit Tylon adhesive to screeds (screeds elsewhere) with straight joints in both direction flush pointed with Ceresit Tylon 33 tinted jointing compound

6 On floors and landings

m2 132

7 Skirting of 600 x 150mm high cut tile

m 64

EDGES, ETC.

Sundries

8 Aluminium edge strip on top of cut skirting (PC Amount R40-00/m Vat excl. supplied and delivered to site)

m 64

Carried to Collection

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BUILDINGS
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TILING

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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TILING

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TILING

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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SECTION NO.3

BILL NO.11

PAINTWORK

For Preambles refer to "Department of Public Works:
Specification of material and methods to be used -
PW371"

**PREPARATORY WORK TO EXISTING
WORK**

Previously painted plastered surfaces

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

Previously painted metal surfaces

Surfaces shall be thoroughly rubbed and cleaned down.
Blistered or peeling paint shall be completely removed
down to bare metal

Previously painted wood surfaces

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

PAINTWORK ETC TO NEW WORK

ON FLOATED PLASTER

Carried to Collection

R

Section No. 3
BUILDINGS
Bill No. 11
PAINTWORK

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Plascon Professional Superior Matt to interior new cement plaster.

Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with two coat Professional Plaster Primer (PP700) with an overcoating time of 16 hours and finish with two coats Professional Superior Matt (PEM 950) with 2 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.

- Environment : C1 - inland
- Topcoat : Professional Superior Matt
- Number of coats of topcoat : two coats
- Overcoating time for topcoat : 2,00 hour
- Primer/Base coat : Professional Plaster Primer
- Overcoating time for primer/base coat : 16,00 hour
- Specification document : NW107t.

1 On internal walls

m2

1,459

ON METAL

Duragloss 100 Enamel long oil alkyd paint to interior shop primed mild steel. Surface to be clean, dry and rust free. Prime surface with one coat Dulux Corrocote 1 (Code: D193-0839) with an overcoating time of 4 hours, undercoat with one coat Dulux Universal Undercoat (Code: D196-0763) with an overcoating time of 18 hours and finish with two coats Duragloss 100 Enamel (Code: M371-0734) with an overcoating time of 18 hours.

2 On door frames

m2

45

ON WOOD

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Section No. 3
BUILDINGS
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PAINTWORK

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

	<u>Plascon Professional Eggshell Enamel to interior new wood. Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Professional Wood Primer (PP 800) with an overcoating time of 16 hours and finish with two coats Professional Eggshell Enamel (PSB 700) with 16 hours drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>		
3	On doors	m2	109
	<u>Plascon Woodcare Coloured Varnish to interior new wood. Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Woodcare Coloured Varnish (VSN) with an overcoating time of 16 hours and finish with two coats Woodcare Coloured Varnish (VSN) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u>		
4	On skirtings, rails, etc. n.e exceeding 300mm girth	m	476

**PAINTWORK ETC TO PREVIOUSLY
PAINTED WORK**

ON FLOATED PLASTER

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

	<p><u>Plascon Professional Superior Matt to interior previously painted cement plaster.</u></p> <p><u>Surface to be assessed and the appropriate surface preparation clauses selected for remedial procedure.</u> <u>Prime with two coats Professional Plaster Primer (PP700) with an overcoating time of 16 hours and finish with two coats Professional Super Matt (PEM 900) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u></p> <ul style="list-style-type: none"> • <u>Environment : C1 - inland</u> • <u>Topcoat : Professional Super Matt</u> • <u>Number of coats of topcoat : two coats</u> • <u>Overcoating time for topcoat : 1,00 hour</u> • <u>Primer/Base coat : Professional Plaster Primer</u> • <u>Overcoating time for primer/base coat : 16,00 hour</u> • <u>Specification document : RD115t.</u> 		
5	On internal walls	m2	145
	<p><u>Plascon Professional Superior Matt to exterior previously painted cement plaster.</u></p> <p><u>Surface to be assessed and the appropriate surface preparation clauses selected for remedial procedure.</u> <u>Prime with one coat Professional Plaster Primer (PP700) with an overcoating time of 16 hours and finish with two coats Professional Superior Matt (PEM 950) with 2 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u></p> <ul style="list-style-type: none"> • <u>Environment : C1 - inland</u> • <u>Topcoat : Professional Superior Matt</u> • <u>Number of coats of topcoat : two coats</u> • <u>Overcoating time for topcoat : 2,00 hour</u> • <u>Primer/Base coat : Professional Plaster Primer</u> • <u>Overcoating time for primer/base coat : 16,00 hour</u> • <u>Specification document : RD107t.</u> 		
6	On external walls	m2	157

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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PAINTWORK

SECTION 4: PLUMBING & DRAINAGE

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item No		Quantity	Rate	Amount
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	<u>BILL NO. 1</u>			
	<u>SANITARY FITTINGS ETC</u>			
	For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"			
	<u>SANITARY FITTINGS</u>			
	<u>"Vaal"</u>			
1	Vaal Sanitaryware vitreous china "Hibiscus" close coupled 90 degrees outlet open rim front single flush suite complete with lids and fitments (Code 772654) complete with Jazz thermoset toilet seat (code 8531Z0)	No	6	
2	Vaal Sanitaryware Pearl Paraplegic vitreous china floor mounted paraplegic washdown suite colour White (Code: 730103WH), comprising 90° outlet pan (Code: 750202WH) and matching 9 litre cistern, including lid, fitments and purpose-made chromium plated side flush lever (Code: 7100LLWH).	No	1	
3	Vaal Sanitaryware Hibiscus vitreous china wall hung basin colour White (Code: 702303WH) with Classic floor mounted pedestal (Code: 715000WH), overall size 510 x 405mm with one taphole including integrated overflow and chainstay hole(basin waste text)(basin waste code prefix)(basin waste code)(basin waste code suffix), bolted to wall with 2No.10mm bolts (Code: 8448Z000) and sealed with silicone sealant where basin meets wall.	No	6	
4	Vaal Sanitaryware 600 x 385 x 380mm Lavatera top inlet white vitreous china wall mounted urinal (Code: 705426WH) including 38mm chromium plated domical grating and chromium plated top inlet spreader (Code: 8542Z000), flush valve (by others - Recommended: Cobra FJ6000), fixed on and including two hanger brackets (Code: 8127Z000).	No	3	
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	PLUMBING & DRAINAGE			
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	SANITARY FITTINGS			

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

"Franke"

- 5 Franke Cascade Model CDX651 Grade 304 18/10 polished stainless steel single bowl a overall size 925 x 500mm with one 343 x 410 x 171mm deep bowl and one 160 x 280 x 139mm deep bowl, fitted onto cupboard (elsewhere specified).

No

2

WASTE UNIONS ETC"Cobra Watertech"

- 6 "Cobra Ref. 316" sink waste with 70mm diameter flange, 45mm long shank, backnut, plug and chain
- 7 Cobra Watertech 32mm chrome plated anti-theft plug with spindle (Code: 309-32).
- 8 Cobra Watertech 32mm chrome plated slotted basin waste union (no chain or stay) (Code: 303)

No

2

No

6

No

6

TRAPS ETC"Marley"

- 9 40mm Deep seal "P" or "S" trap

No

2

"Cobra Watertech"

- 10 Cobra Watertech 40mm chrome plated bottle trap (Code: 365-50) with 75mm deep re-seal, adjustable telescopic pipe and 50mm outlet.

No

9

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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PLUMBING & DRAINAGE

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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	<u>SECTION NO. 4</u>			
	<u>BILL NO. 2</u>			
	<u>SANITARY PLUMBING</u>			
	For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"			
	<u>SANITARY PLUMBING</u>			
	<u>uPVC, soil and vent pipes</u>			
1	50mm Pipes	m	10	
2	110mm Pipes	m	17	
3	50mm Pipes laid in and including trenches not exceeding 1m deep below surface beds	m	7	
4	50mm Pipes suspended not exceeding 1m below suspension level	m	5	
5	110mm Pipes laid in and including trenches not exceeding 1m deep below surface beds	m	10	
6	110mm Pipes suspended not exceeding 1m below suspension level	m	9	
	<u>Extra over uPVC, soil and vent pipes for fittings</u>			
7	50mm BSP adaptor	No	9	
8	50mm Access bend	No	4	
9	50mm Access junction	No	3	
10	110mm Pan connector	No	7	
11	110mm Junction	No	2	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

12	110mm Bend	No	6
13	110 x 50 x 110mm Reducing junction	No	1
14	110mm Access bend	No	3
15	110mm Access junction	No	2
16	110 x 110 x 50mm Access reducing junction	No	1
17	110 x 50 x 50mm Double reducing access junction	No	1
18	110 x 50 x 50mm Double reducing junction	No	1
19	110mm Access double junction	No	2
20	110mm GI vent valve	No	1
<u>Sundries</u>			
21	Unreinforced concrete encasing to 50mm horizontal pipe	m	7
22	Unreinforced concrete encasing to 110mm horizontal pipe	m	10
23	Unreinforced concrete encasing to 110mm vertical bend	No	6
24	Unreinforced concrete encasing to 110mm vertical pipe	m	2

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PLUMBING & DRAINAGE
Bill No. 2
SANITARY PLUMBING

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Section No. 4

PLUMBING & DRAINAGE

Bill No. 2

SANITARY PLUMBING

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PLUMBING & DRAINAGE

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SANITARY PLUMBING

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Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO. 3</u>			
<u>WATER SUPPLIES</u>			
For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>"Polycop" polypropylene pipes:</u>			
Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated			
Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions			
All pipe diameters are nominal external			
<u>"Polylink" polypropylene pipes:</u>			
Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers			
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers

Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same

All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions

All pipe diameters are nominal external

WATER SUPPLIES

The following in trenches for pipes (pipes e/m)

1	Excavation not exceeding 2m deep	m3	4
2	Risk of collapse to sides of trench and hole excavations not exceeding 1,5m deep	m2	13
3	Backfilling to trenches, holes, with selected materials supplied by the contractor compacted in 150mm layers to 90% Mod AASHTO density to form fill blanket	m3	1
4	Backfilling to trenches, holes, with earth filling obtained from the excavations supplied by the contractor compacted in 150mm layers to 90% Mod AASHTO density to form fill blanket	m3	1
5	Backfilling to trenches, holes, with selected granular supplied by the contractor materials compacted in 150mm layers to 90% Mod AASHTO density to form bedding cradle	m3	2
6	Extra over all excavations for carting away surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	3
7	Keeping excavations free of water		Item

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PLUMBING & DRAINAGE
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WATER SUPPLIES

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

<u>Class 12 black HDPE high density polyethylene pipes with and including "Plasson" compression fittings</u>			
8	22mm Pipes laid in trenches not exceeding 1m deep (trench e/m)	m	7
<u>Extra over class 12 HDPE high density polyethylene pipes for "Plasson" compression fittings</u>			
9	22mm Fittings	No	4
<u>Class 0 copper pipes with capillary couplings</u>			
10	15mm Pipes	m	10
<u>Extra over class 0 copper pipes for capillary fittings</u>			
11	15mm Fittings	No	36
<u>TAPS, VALVES, ETC</u>			
<u>"Cobra Watertech"</u>			
12	Cobra Watertech 15mm MI x FI x 50mm long extension piece (Code: 057-15).	No	4
13	Cobra Watertech 15mm chrome plated pillar tap (Code: 503-21B) with blue indice and elbow action lever, manufactured in accordance with SANS 226:2009 Type 2 (BS 5412).	No	1
14	Cobra Watertech Chrome Slimline Junior Flushmaster exposed flush valve (Code: FJS6-000), installed in accordance with the manufacturer's recommendations.	No	3
15	Cobra Watertech Gala single lever basin mixer (Code: GA-651), manufactured in accordance with SANS 1480-9, installed in accordance with the manufacturers recommendations.	No	5
16	Cobra Watertech 15mm angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	13
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

17	Cobra Watertech Star 15mm chrome plated sink mixer (Code: 266-041-10) with aerated swivel spout and concealed connections, manufactured in accordance with SANS 226:2009 Type 1 (BS 5412).	No	2
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ELECTRIC WATER HEATERS

"Franke"

18	Zip stainless steel 10 litre Hydroboil, size 340 x 205 x 630mm high with instant boiling water, two way tap control and under counter triple-action water conditioning system, SK3 drip tray (code: 390019) with brackets, connected to 15mm cold water supply and 220 volt 15 amp electrical power supply, plugged and screwed to wall and fitted under 1 year guarantee	No	2
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FIRE APPLIANCES ETC

"Chubb"

19	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	2
20	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1

WATER SUPPLIES TO FIRE APPLIANCES

The following in trenches for pipes (pipes e/m)

21	Excavation not exceeding 2m deep	m3	10
22	Risk of collapse to sides of trench and hole excavations not exceeding 1,5m deep	m2	32
23	Backfilling to trenches, holes, with selected materials obtained from excavations compacted in 150mm layers to 90% Mod AASHTO density to form fill blanket	m3	3

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WATER SUPPLIES

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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24	Backfilling to trenches, holes, with selected materials supplied by the contractor compacted in 150mm layers to 90% Mod AASHTO density to form fill blanket	m3	3		
25	Backfilling to trenches, holes, with selected granular supplied by the contractor materials compacted in 150mm layers to 90% Mod AASHTO density to form bedding cradle	m3	4		
26	Extra over all excavations for carting away surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	7		
27	Keeping excavations free of water		Item		
	<u>Class 12 black HDPE high density polyethylene pipes with and including "Plasson" compression fittings</u>				
28	32mm Pipes laid in trenches not exceeding 1m deep (trenches e/m)	m	16		
	<u>Extra over class 12 black HDPE high density polyethylene pipes for "Plasson" compression fittings</u>				
29	32mm Junction	No	1		
30	32mm Bend	No	2		
31	32 x 22 x 32mm Reducing junction	No	1		
	<u>Galvanised steel pipes</u>				
32	22mm Pipes	m	2		
	<u>Extra over galvanised steel pipes for steel fittings</u>				
33	22mm Fittings	No	2		
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

SOIL DRAINAGE

The following in trenches for pipes (pipes e/m)

1	Excavation not exceeding 2m deep	m3	4
2	Risk of collapse to sides of trench and hole excavations not exceeding 1,5m deep	m2	14
3	Backfilling to trenches, holes, with selected materials obtained from excavations compacted in 150mm layers to 90% Mod AASHTO density to form fill blanket	m3	1
4	Backfilling to trenches, holes, with selected materials supplied by the contractor compacted in 150mm layers to 90% Mod AASHTO density to form fill blanket	m3	1
5	Backfilling to trenches, holes, with selected granular supplied by the contractor materials compacted in 150mm layers to 90% Mod AASHTO density to form bedding cradle	m3	2
6	Extra over all excavations for carting away surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	3
7	Keeping excavations free of water	Item	

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SOIL DRAINAGE

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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Section No. 4

PLUMBING & DRAINAGE

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SOIL DRAINAGE

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

SOIL DRAINAGE

The following in trenches for pipes (pipes e/m)

1	Excavation not exceeding 2m deep	m3	3
2	Risk of collapse to sides of trench and hole excavations not exceeding 1,5m deep	m2	19
3	Keeping excavations free of water		Item
<u>uPVC Underground drain pipes including couplings in the running lengths</u>			
4	110mm Pipes laid in trenches not exceeding 1m deep (trenches e/m)	m	32

FILTER FABRIC

"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions

5	"Kaymat U14" around stone filling in sub-soil drain trenches	m2	38
<u>27mm Graded stone filling or similar approved</u>			
6	In holes	m3	3

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STORMWATER DRAINAGE

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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PLUMBING & DRAINAGE

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STORMWATER DRAINAGE

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STORMWATER DRAINAGE

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 6</u>			
	<u>WORK IN CONNECTION WITH SECTION BILL 2 TO 4</u>			
	<u>BUILDER'S WORK</u>			
	<u>TESTING</u>			
1	Provide all necessary water, etc., for and test the whole of the plumbing services, sanitary fittings, pumps, etc., and in stages as deemed necessary, including chlorination, complete to the satisfaction of the architect and the local authority, replace any defective work free of charge, including any necessary re-testing and leave in perfect condition upon completion	Item		
2	Allow for testing and commissioning the whole of the plumbing services, sanitary fittings, pumps, etc., including any necessary re-setting, etc., for optimal performance of the entire system to duration of the contract, maintenance and guarantee period	Item		
	<u>AS-BUILT DRAWINGS</u>			
3	Allow for an updated set of as-built drawings to be handed to the architect at completion of the contract	Item		
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PLUMBING & DRAINAGE

SECTION SUMMARY - PLUMBING & DRAINAGE

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SECTION 5: SITE WORKS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item No	Quantity	Rate	Amount
<u>SECTION NO. 5</u>			
<u>BILL NO. 1</u>			
<u>APRONS AROUND BUILDINGS</u>			
For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"			
<u>EARTHWORKS</u>			
<u>Excavation in earth not exceeding 2m deep</u>			
1	To reduce levels to final levels under aprons and storm water channels	m3	63
2	Rip and scarify ground level to a depth of 150mm and consolidate to 93% mod. AASHTO density at -2% to 1% OMC at bottom of holes not exceeding 2350 x 2350mm wide	m2	210
<u>Extra over all excavations for carting away</u>			
3	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	63
<u>Earth filling of G7 material supplied by the contractor, compacted to 95% Mod AASHTO density</u>			
4	Imported G7 material laid in 150mm thick layers and compacted to 93% mod. AASHTO density. Minimum CBR = 15%, Maximum size 2/3 of layer thickness, PI < 12 or 3 GM + 10; maximum swell 1,5% @ 100% Mod AASHTO. Grading Modules = 2,7 >= GM >= 0,75	m2	210
<u>SOIL POISONING</u>			
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

	<u>Soil insecticide to be executed with SABS compliance by a firm of specialists under a 5 year guarantee</u>		
5	Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	210
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
6	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	210
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>		
	<u>25 MPa/20 mm concrete</u>		
7	Aprons cast in panels to falls	m3	21
8	Stormwater channels cast in panels	m3	11
	<u>Finishing top surfaces of concrete smooth with a wood float</u>		
9	Aprons to falls	m2	140
	<u>Grooves, channels, mortices, sinkings, etc. in concrete</u>		
10	Segmental channel with radius 290mm and minimum depth of 100mm on top of concrete, incl. all excavations, cart away etc.	m	140
	<u>Smooth formwork to sides</u>		
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	280

MOVEMENT JOINTS ETC

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Section No. 5
SITE WORKS
Bill No. 1
APRONS AND STORM WATER CHANNELS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Section No. 5

SITE WORKS

Bill No. 1

APRONS AND STORM WATER CHANNELS

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SITE WORKS

Bill No. 1

APRONS AND STORM WATER CHANNELS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BILL NO.2</u>			
	<u>PAVING</u>			
	For Preambles refer to "Department of Public Works: Specification of material and methods to be used - PW371"			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Materials and workmanship must be in accordance to the following SABS 1200 specifications:</u>			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<u>Soil poisoning and weed killer</u>			
	Soil insecticide and weed killer to be executed with SABS compliance by a firm of specialists under a 5 year guarantee under paving			
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Open face excavation in earth over site</u>			
1	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3	120	
2	Excavate in pickable earth to reduce ground level below paving and but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	80	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

3	Rip and scarify ground level to a depth of 150mm and consolidate to 93% mod. AASHTO density (minimum CBR 5)	m2	400
4	Extra over excavation for excavation in soft rock	m3	3
5	Extra over excavation for excavation in hard rock	m3	3
<u>Walkway layers</u>			
The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.			
Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit			
6	Selected filling previously set aside laid in 150mm thick layers to 96% mod. AASHTO density, PI \leq 6, Grading Modules = 2,6 \geq GM \geq 1,2	m3	120
7	150mm Thick imported G6 material laid in 150mm thick layers and compacted to 96% mod. AASHTO density, PI \leq 6, Grading Modules = 2,6 \geq GM \geq 1,2	m3	80
8	"Mod. AASHTO Density" test	No	10

WALKWAYS

Interlocking paving

9	60mm Thick double interlocking (DZZ) precast grey coloured concrete paving blocks laid in a herringbone pattern on and including 25mm thick washed river sand founding layer and covered with plaster sandlayer vibrated into joints with a plate vibrator all laid on subgrade conforming to SANS 1200 D Degree Of Accuracy I. Paving to be inspected and re-sanded after three months.	m2	400
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SITE WORKS
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

10	Weed-killing treatment of surface under paving etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	400
11	Soil poisoning under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	400
<u>Kerbs, etc</u>			
12	Precast concrete figure 8B kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	60
13	Extra over cutting paving blocks to fit edge	m	60
<u>Sundries</u>			
14	Mass concrete (25MPa) in 60 x 60mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc	m	60

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SITE WORKS
Bill No. 2
PAVING, ETC

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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SECTION 6: PROVISIONAL SUMS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

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SECTION NO. 6

BILL NO. 1

PROVISIONAL AMOUNTS ETC

**PROVISIONAL SUMS FOR SELECTED SUB-
CONTRACT WORKS**

SUPPLEMENTARY PREAMBLES

General

All prime cost amounts and provisional sums are net and include for delivery to site of all articles concerned

Sub contractors will be treated as domestic sub contractors for the purpose of this contract. They shall be selected sub contractors and the main contractor will be afforded the opportunity to reject such sub contractors prior to appointment provided reasonable justification is given

Profit

Where stated, the contractor may allow for profit if required

General attendance upon selected sub-contractors

The item "Attendance" which follows each provisional sum for selected sub-contractors work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the selected sub-contractors, the following:

1. The services as in clause B7 of the Preliminaries
2. Making good in all trades and cleaning down and removal of rubbish on completion

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PROVISIONAL SUMS
Bill No. 1
PROVISIONAL SUMS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

<u>Preliminaries</u>			
The contractor is referred to the Preliminaries for further amplification of "Prime Cost Amounts and Provisional Amounts"			
<u>Piling, etc.</u>			
1	Provide the sum of R1 150 000-00 (one million one hundred and fifty thousand rand) for piling by Specialists	Item	1,150,000.00
2	Allow for giving every facility to Specialists as described	Item	
3	Allow for profit on above if required	Item	
<u>Ceilings and Partitions, etc.</u>			
4	Provide the amount of R450 000.00 (four hundred and fifty thousand rand) for the supply and installation of Ceilings by Specialists	Item	450,000.00
5	Allow for profit on above if required	Item	
6	Allow for giving every facility to Specialists as described	Item	
<u>Air Conditioning and Ventilation Installation:</u>			
7	Provide the sum of R800 000-00 (eight hundred thousand rand) for HVAC Installation by Specialists	Item	800,000.00
8	Allow for giving every facility to Specialists as described	Item	
9	Allow for profit on above if required	Item	
<u>Electrical Installation</u>			
10	Provide the sum of R900 000-00 (nine hundred thousand rand) for Electrical Installation by Specialists	Item	900,000.00
11	Allow for giving every facility to Specialists as described	Item	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

12	Allow for profit on above if required	Item		
	<u>Fire Detection and Protection</u>			
13	Provide the sum of R300 000-00 (three hundred thousand rand) for Fire Detection System by Specialists	Item	300,000.00	
14	Allow for giving every facility to Specialists as described	Item		
15	Allow for profit on above if required	Item		
	<u>Signage</u>			
16	Provide the sum of R20 000,00 (twenty thousand rand) for Signage Installation by Specialists	Item	20,000.00	
17	Allow for giving every facility to Specialists as described	Item		
18	Allow for profit on above if required	Item		
	<u>Cold Room</u>			
19	Provide the sum of R90 000,00 (ninety thousand rand) for the supply and installation of Cold Room by Specialists	Item	90,000.00	
20	Allow for giving every facility to Specialists as described	Item		
21	Allow for profit on above if required	Item		
	<u>Fume Cabinets</u>			
22	Provide the sum of R150 000,00 (one hundred fifty thousand rand) for the supply and installation of Fume Cabinets by Specialists	Item	150,000.00	
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**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

23	Allow for giving every facility to Specialists as described	Item	
24	Allow for profit on above if required	Item	
	<u>Floor Coverings, etc</u>		
25	Provide the amount of R350 000.00 (three and hundred fifty thousand rand) for the supply and installation Floor Coverings by Specialists	Item	350,000.00
26	Allow for profit on above if required	Item	
27	Allow for giving every facility to Specialists as described	Item	
	<u>CCTV, Access Control and Public Address Control and PA Address</u>		
28	Provide the amount of R690 000.00 (six hundred and ninety thousand rand) for the supply and installation CCTV, Access control and PA System by Specialists	Item	690,000.00
29	Allow for profit on above if required	Item	
30	Allow for giving every facility to Specialists as described	Item	
	<u>Precast concrete slabs, etc</u>		
31	Provide the sum of R100 000.00 (one hundred thousand rands) for the supply and installation of pre cast concrete slab by Specialists	Item	100,000.00
32	Allow for giving every facility to Specialists as described	Item	
33	Allow for profit on above if required	Item	
	<u>UPS Installation, etc</u>		
34	Provide the amount of R445 000.00 (four hundred and forty five thousand rand) for the supply and installation CCTV, Access control and PA System by Specialists	Item	445,000.00
Carried to Collection			
Section No. 6			
PROVISIONAL SUMS			
Bill No. 1			
PROVISIONAL SUMS			

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

35	Allow for profit on above if required	Item		
36	Allow for giving every facility to Specialists as described	Item		
	<u>Joinery Installation</u>			
37	Provide a sum of R500 000-00 (five hundred thousand rand) for the supply and installation of Joinery by Specialists	Item	500,000.00	
38	Allow for profit on above if required	Item		
39	Allow for giving every facility to specialist as described	Item		
Carried to Collection			R	
Section No. 6 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS				

CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
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Section No. 6

PROVISIONAL SUMS

Bill No. 1

PROVISIONAL SUMS

COLLECTION

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Section No. 6
PROVISIONAL SUMS
Bill No. 1
PROVISIONAL SUMS

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Item No		Quantity	Rate	Amount
	<u>SECTION NO 6</u>			
	<u>BILL NO 2</u>			
	<u>PROVISIONAL AMOUNTS ETC</u>			
	<u>PROVISIONAL SUMS FOR SELECTED SUB-CONTRACT WORKS</u>			
	<u>HOLES THROUGH WALLS</u>			
	<u>Holes</u>			
1	Leave or form opening through one brickwall for pipe n.e 100mm diameter	No	2	
2	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter	No	2	
	<u>SLEEVES</u>			
	<u>Plastic sleeves for pipes not exceeding 100mm diameter</u>			
3	Sleeve not exceeding 250mm long	No	3	
4	Sleeve exceeding 250mm and not exceeding 500mm long	No	4	
	<u>Plastic sleeves for pipes exceeding 100mm and not exceeding 200mm diameter</u>			
5	Sleeve not exceeding 250mm long	No	2	
6	Sleeve exceeding 250mm and not exceeding 500mm long	No	4	
	<u>HOLES ETC</u>			
	<u>Core drilling of hole for pipe not exceeding 50mm diameter</u>			
7	300mm Reinforced concrete slab, beam, wall, etc	No	2	
	Carried to Collection			R
	Section No. 6			
	PROVISIONAL SUMS			
	Bill No. 2			
	BUILDER'S WORK			

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Section No. 6
PROVISIONAL SUMS
Bill No. 2
BUILDER'S WORK

**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Section No. 6

PROVISIONAL SUMS

Bill No. 2

BUILDER'S WORK

COLLECTION

Total Brought Forward from Page No.

**Page
No**

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Amount

Carried Forward to Summary of Section No. 6

R

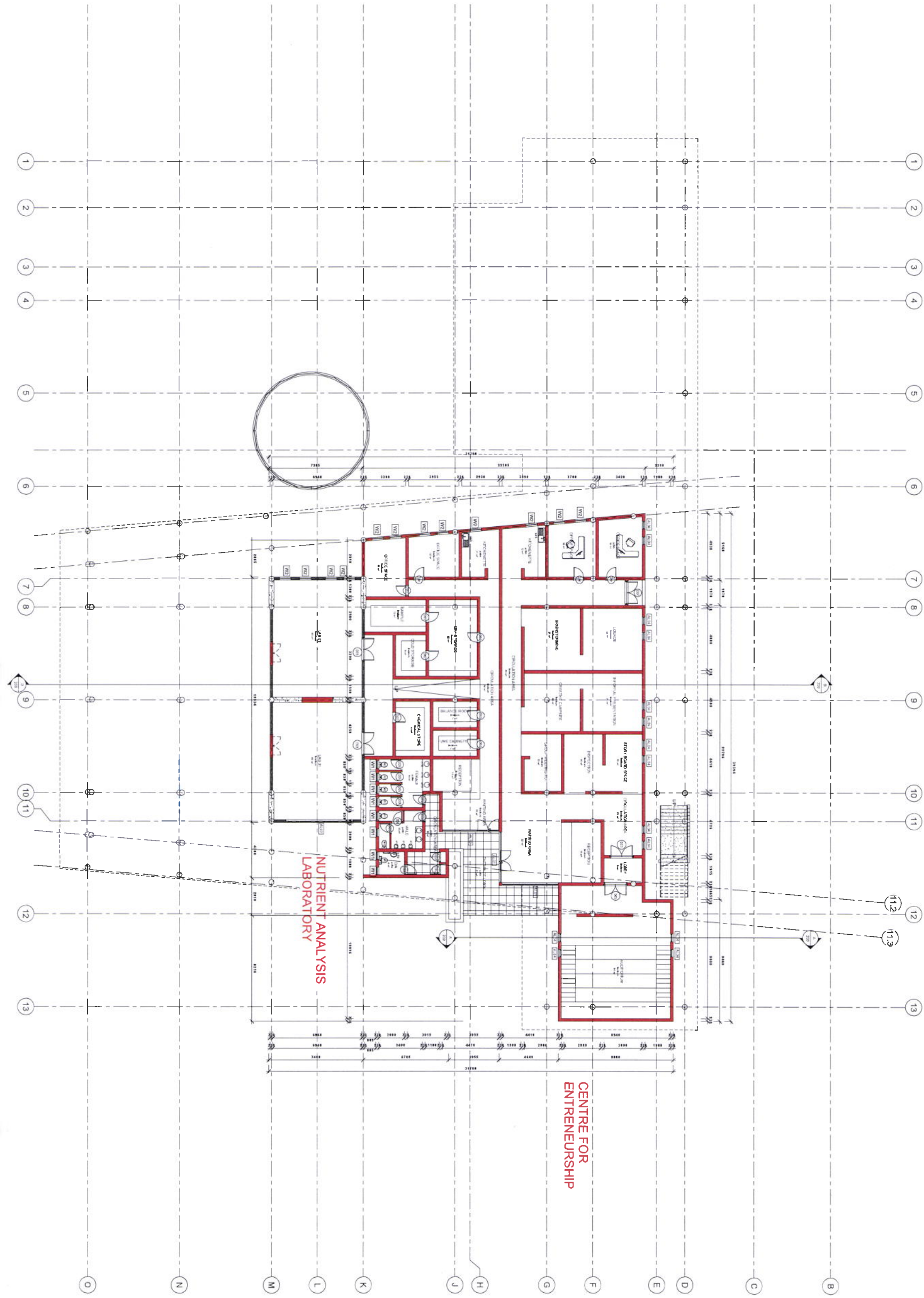
Section No. 6
PROVISIONAL SUMS
Bill No. 2
BUILDER'S WORK

FINAL SUMMARY

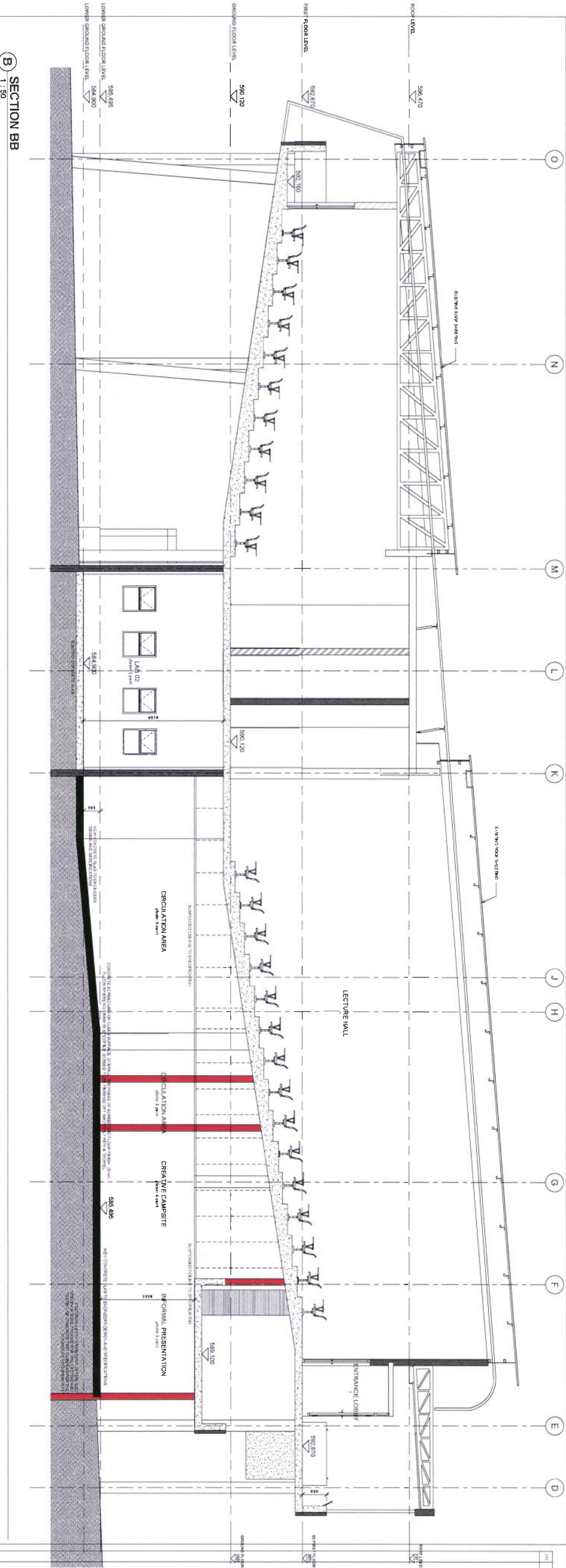
**CENTRE OF ENTREPRENEURSHIP AND NUTRITIONAL
ANALYSIS LAB AT THE UNIVERSITY OF VENDA**

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES	28	
2	ALTERATIONS	32	
3	BUILDINGS	80	
4	PLUMBING & DRAINAGE	101	
5	SITE WORKS	110	
6	PROVISIONAL SUMS	120	
	Sub Total 1		R
	<u>CONTINGENCY SUM</u>		
	Allow the amount of R400 000-00 (Four hundred thousand rand) for Contingencies for building work, to be used as directed by the Project Manager and deducted in whole or in part if not required	Item	400,000.00
	<u>SPECIAL CONDITIONS</u>		
	Provide the sum of R300 000,00 (Three hundred thousand rand) for fluctuations in cost	Item	300,000.00
	Sub Total (VAT EXCL.) CARRIED TO TENDER FORM		R
	Tax		R
	Sub Total (VAT INCL.) CARRIED TO TENDER FORM		R
	Carried to Form of Tender		R

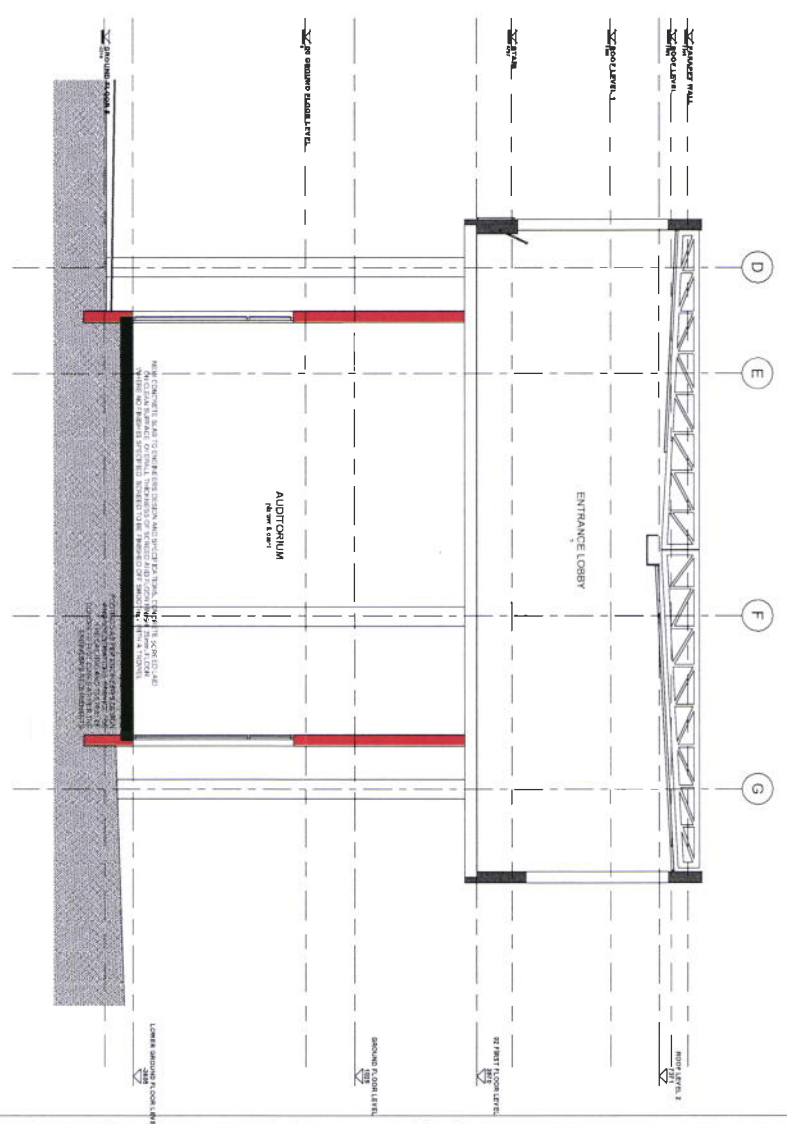
ARCHITECT DRAWINGS



LOWER GROUND FLOOR LEVEL
1 : 100



SECTION BB
1:50



SECTION AA
1:50

