

Item No		Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>BILL No. 1</u>			
	<u>PRELIMINARIES</u>			
1	Site Establishment F:..... V:..... T:.....	Item		
2	Supervision F:..... V:..... T:.....	Item		
3	Guarantees and insurances F:..... V:..... T:.....	Item		
4	Plant and equipment F:..... V:..... T:.....	Item		
5	Safety and security F:..... V:..... T:.....	Item		
6	The Site: Existing premises occupied F:..... V:..... T:.....	Item		
7	Programme of the works F:..... V:..... T:.....	Item		
	Carried to Collection		R	
	Section 1			
	Bill No. 1			
	Preliminaries			

8	Progress & Technical Meetings F:..... V:..... T:.....	Item		
9	Samples of materials F:..... V:..... T:.....	Item		
10	Enclosure of the works F:..... V:..... T:.....	Item		
11	Main Notice Board F:..... V:..... T:.....	Item		
12	Temporary Services: Water F:..... V:..... T:.....	Item		
13	Temporary Services: Electricity F:..... V:..... T:.....	Item		
14	Temporary Services: Telecommunications F:..... V:..... T:.....	Item		
15	Temporary Services: Ablutions F:..... V:..... T:.....	Item		
Carried to Collection			R	
Section 1 Bill No. 1 Preliminaries				

SPECIFIC PRELIMINARIES

16 LOCAL LABOUR

It is a general requirement of this contract that persons normally resident in the locality of the works (local labour) be given preference for employment on the contract. Provided, however, that should adequate and appropriate labour not be available within the locality, other may be employed subject to satisfactory proof being provided that every reasonable endeavour has been made to employ local labour. The Contractor shall identify the local community leaders with the purpose of negotiating with them regarding the utilization of local labour in the construction process. In this regard, the Contractor shall furthermore give preference, wherever possible to the employment of single heads of households, women and youth. The Contractor shall, in general, maximize the involvement of the local community.

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

Item

17 Occupational Health and Safety Act No. 85 of 1993

Bidders are to allow for costs in providing and implementing a "Construction Phase Safety, Health and Environmental Plan". Bidders are further reminded that it is their responsibility to amend their safety plan if the assessed risk of the work changes in the slightest manner.

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

Item

SUMMARY OF CATEGORIES

18 SUB - TOTAL: FIXED ITEMS

Item

19 SUB - TOTAL: VALUE - RELATED ITEMS

Item

20 SUB - TOTAL: TIME - RELATED ITEMS

Item

Carried to Collection

R

Section 1
Bill No. 1
Preliminaries

[illegible]

Item No	Quantity	Rate	Amount
<u>SECTION 2</u>			
<u>BILL No. 1 : ALTERATIONS</u>			
<u>MODEL PREAMBLES</u>			
The tenderer is referred to the "Model Preambles for Trades 2008" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Existing Furniture, Equipment, etc</u>			
The Contractor shall not remove or damage any furniture, equipment or similar items that belong to the Department except when specifically described in the items to follow: The Contractor must give the Principal Agent sufficient notice if the removal of these items are required before any prescribed alterations can be done			
<u>Damage to existing finishes</u>			
The Contractor will be held responsible for all damage however caused to existing finishes and fittings, etc. and he must make good all damage at his own expense to the approval of the Principal Agent.			
Breaking down, demolition and alteration activities and tasks, hacking off of existing plaster, etc. is to be executed with care so as to prevent damage to remaining floor and wall surfaces and finishes (where these are to be retained). Tenders will be deemed to include allowance for any necessary protection of existing surfaces and structures as may be necessary to effect the above, as the cost of repairing damage to existing surfaces and structures will be solely for the Contractors account			
Carried to Collection			R
Section 2 Bill No. 1 Alterations			

Responsibility for site

The Contractor is to note that upon possession of the site by himself, and extending until practical completion is achieved, he is solely responsible for the site, site security, general upkeep and cleaning of the site and all other responsibilities in maintaining a construction site in conformance with but not limited to, the Construction Regulations 2014, all local by-laws, all user client regulations, and all Client regulations and procedures. Tenderers are therefore urged to study all available material and to investigate the site fully and areas contiguous to the site, in order to determine the range and extent of responsibility. No additional monetary and/or time claims will be entertained in respect of the above

Explosives

No explosives whatsoever may be used for demolition purposes unless otherwise stated

General

The Contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum amount of disturbance to adjoining classroom blocks and their students. He shall provide proper protection of the works and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the Principal Agent

Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the Principal Agent

Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately

Carried to Collection

R

Section 2
Bill No. 1
Alterations

"Taking out and removing doors, windows, etc"

implies that the door, etc is to be carefully taken down together with the frame, linings, architraves, window sills, etc complete and where brick lintels occur, it must be supported and propped until the openings are built up or new doors or windows built in position

Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc. and making good floor and wall finishes to match existing

"Forming openings" for doors or windows, etc implies that the plaster or any other covering is to be hacked off and an opening formed sufficient in size to receive the building in of the frame and cramps, and the forming of new dampproof courses, lintels, sills, etc. After building in of the new frame, the opening is to be built against the frame, plaster or faced brickwork to be made good both sides and reveals and floor screeds prepared for finishings to match existing

"Making good" implies that all necessary repairs are to be made to reinstate articles that may be damaged through the removal or otherwise, and the supplying of any new materials to match existing work, and is to include any necessary repairs to adjacent finishings such as floors, skirtings, plaster, painting, etc and such making good is to match adjoining work in all respects and in all trades

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

The Contractor to acknowledge that sequencing of the work will be necessary to accommodate the operational aspects of the school. The Contractor to accordingly factor the above requirement in the construction programme and pricing

Carried to Collection

R

Section 2
Bill No. 1
Alterations

"Breaking down and removing" walls, etc implies that the wall is to be taken down to the extent shown on the drawings or as may be described and that all necessary shoring is to be provided and allowed for to ensure the safety of the building during the pulling down or until new walls are erected and all portions of the remaining walls where distrubed or affected by the removal are to be made good and left ready for plaster or other finishings as described

Where removal is included in the heading, sub-heading or item description, prices shall be deemed to include for the necessary costs of removal and appropriate disposal of materials including but not limited to labour, transportation and disposal costs. No further claims in this regard will be entertained

"Building up openings" implies that after the removal of any doors, windows or screens that may be decribed to be taken down, the opening is to be filled up solid (or to the tickness as shown) with new brickwork and is to include all necessary cutting away to form toothings to thoroughly bond to the new work and new finishes to both sides as described.

Removal of asbestos material

All preparatory work, alterations, etc., to existing asbestos cement roof sheeting, gutters, rainwater pipes, etc., is to be carried out strictly by an approved and certified specialist company and in accordance with statutory requirements (Occupational Health and Safety Act, 1993 - Asbestos Regulations 2001) and all necessary precautions must be taken when working with and disposing of asbestos cement products and the disposal of waste water resulting from cleaning operations, etc.

Carried to Collection

R

Section 2
Bill No. 1
Alterations

The following shall apply in respect of asbestos removal

The removal of asbestos shall be carried out by a certified entity, registered in accordance with the Occupational Health and Safety Act. 1993 and the Asbestos Regulations 2001

Asbestos in all forms/building elements that is to be removed, shall be carried out in strict accordance with aforementioned regulation and a certificate issued by the entity as contemplated in the above, shall be provided per block for the removal thereof, where the term block shall in this context refer to any single, free standing building structure, regardless of size or purpose

Corresponding disposal certificates shall be issued by the facility at which the asbestos is disposed off, with said facility to, prior to the disposal of any asbestos material provide satisfactory proof that the facility is duly registered and fully compliant in terms of the act, to receive the asbestos material

Under no circumstances is the Contractor nor any of his duly authorised representatives to sell and/or give away asbestos material to any member/s of the school community, the community in general or the public at large. Should this be found to be occurring, the Contractor will be held responsible contractually and may further be prosecuted criminally

The cost for complying with the above, and all requirements of regulation as reflected above is to be priced for in terms for removal of asbestos material. No further claims in this regard will therefore be entertained

Carried to Collection

R

Section 2
Bill No. 1
Alterations

TEMPORARY BARRIERS, SCREENS, ETC

Temporary barriers, screens, etc including removal and allow for re-use

1	SANS approved weld mesh type temporary barrier fencing 1,8m high with shade cloth fixed to and including 100mm diameter gum poles set securely min 300mm deep in ground at max 3m spacing	m	250
2	Double gate size 3 x 1.8m high	No	1

REMOVAL OF EXISTING WORK

Taking out and removing timber doors, etc

3	Timber single door 813 x 2032mm high	No	14
---	--------------------------------------	----	----

Taking out and removing glass and mirrors, etc

4	Glass from steel windows including cleaning out rebates and preparing for new glass (new glass elsewhere)	m2	67
---	---	----	----

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

5	Corrugated metal roof sheeting including timber roof purlins, underlay etc.	m2	1 265
6	Gypsum plasterboard ceilings including cornices, timber bandering, etc	m2	814
7	Fascia boards and fixings	m	230
8	Barge boards and fixings	m	71
9	Rainwater gutters and fixings	m	230
10	Rainwater downpipes and fixings	m	36

Prepare existing surfaces for new finish

11	Clean down, etc. existing emulsion painted internal plastered walls, prepare by removing all loose and flaking paint, dirt, grease and grime to receive new enamel paint finish	m2	923
----	---	----	-----

Carried to Collection

Section 2
Bill No. 1
Alterations

R

12	Clean down, etc. existing emulsion painted external plastered walls, prepare by removing all loose and flaking paint, dirt, grease and grime to receive new enamel paint finish	m2	520		
	<u>Taking out and removing ironmongery</u>				
13	Damaged chalkboard 2400 x 1140mm	No	14		
	<u>Hacking up/off and removing granolithic, screeds, plaster, etc. from concrete or brickwork and preparing surfaces for new screeds, plaster, etc</u>				
14	Plaster from walls in patches	m2	577		
15	Screed to floors.	m2	788		
	<u>STRUCTURAL REPAIRS</u>				
	<u>Repairs to structural cracks, etc</u>				
16	Rake out existing minor structural crack in blockwork, remove all debris/loose material including four times shot fixing 32 x 1,6mm thick strap x 500mm long at 500mm centres and plaster over (plaster measured elsewhere).	m	127		
17	Rake out existing major structural crack in blockwork, remove all debris/loose material including embedding steel rods, cutting or drilling slots (60mm deep) in brickwork at 250mm centres to embed 8mm mild steel bars fixed between mortar joints with injected epoxy resin	m	55		
	<u>SERVICE</u>				
	<u>Steel Windows</u>				
18	Service window including lubricating ironmongery and leave in good workable condition	No	70		
	<u>TEMPORARY ACCOMODATION</u>				
19	Rental of temporary accommodation approximate size 7 x 7m wide, including standard windows, burglar bars, curtains and tracks, two tier steps for access, light fittings, electrical certificate of compliance, for a period of six (4) calendar months	No	3		

Carried to Collection

R

Section 2
Bill No. 1
Alterations

**ECDoE DISASTER SCHOOLS:
EZIZITYANENI JUNIOR SECONDARY SCHOOL**

[illegible]

Section 2

Bill No. 1

Alterations

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

5

6

7

8

9

10

11

12

Carried to Final Summary

R

Section 2

Bill No. 1

Alterations

Item No	Quantity	Rate	Amount
<u>SECTION 3</u> <u>BILL No. 1</u> <u>MASONRY</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates. <u>SUPPLEMENTARY PREAMBLES</u> <u>Proprietary products in descriptions:</u> Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent. <u>Sizes in descriptions:</u> Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick. <u>Face bricks:</u> Bricks shall be ordered timeously to obtain uniformity in size and colour. <u>Pointing:</u> Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, and cleaning etc. <u>Samples, etc:</u> Rates for brickwork, faced brickwork, etc shall include for all required samples.			
Carried to Collection			R
Section 3 Bill No. 1 Masonry			

Concrete masonry units:

Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7 MPa

Wall ties for blockwork:

Wall ties shall be polypropylene "Permaties" complying with BS 76377. Ties for hollow walls shall be of sufficient length to allow not less than 75mm of each end to be built into the blockwork. Ties are to be spaced at intervals of not more than 1m in the horizontal direction and not more than 400mm staggered in the vertical direction except at openings, vertical joints or ends of walls where they are to be placed vertically above each other

Blockwork:

Blockwork shall comply with SABS 0145 "Concrete Masonry Construction"

Surfaces shall have joints raked out to a depth of at least 10mm and pointed on exposed surfaces. Cavities of hollow walls shall be kept free of mortar droppings or other undesirable matter. Every second perpend of the bottom course of the external skin of hollow walls shall be left open as a weep hole.

Standard complementary blocks:

Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, three-quarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary

Carried to Collection

R

Section 3
Bill No. 1
Masonry

SUPERSTRUCTURE

3,5MPa Cement blocks in class II mortar

1	M140 block wall in beamfilling	m2	80
2	M140 block walls	m2	108

BRICKWORK SUNDRIES

Galvanized brickwork reinforcement

3	75mm Wide reinforcement built in horizontally	m	810
---	---	---	-----

15MPa Mass concrete

4	Infill to single row of M140 U block blockwork	m	270
---	--	---	-----

Cramps, ties, etc:

5	30 x 1.6mm Galvanized roof tie 1600mm long with one end fixed to timber and other built into brickwork or concrete.	No	96
---	---	----	----

Carried to Collection

R

Section 3
Bill No. 1
Masonry

Section 3

Bill No. 1

Masonry

COLLECTION

Total Brought Forward from Page No.

**Page
No**

14

15

16

Amount

Carried Forward to Summary of Section No. 3

R

Section 3
Bill No. 1
Masonry

Item No	Quantity	Rate	Amount
<u>BILL No. 2</u> <u>ROOF COVERINGS ETC.</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates. <u>SUPPLEMENTARY PREAMBLES</u> <u>Proprietary products in descriptions:</u> Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent. <u>Fixing:</u> Fixing shall be done according to SABS 1200HB with minimum 225mm end laps. <u>Guarantee:</u> The contractor will be required to provide a written guarantee, stating that :1. The roof sheeting is of the specified thickness.2. The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years. <u>Pricing:</u> Prices for roof covering and cladding are to include for all necessary drive screws, hook bolts, sheet bolts, nuts, washers, etc., for drilling holes for screws and bolts including removing all swarf from the sheeting and all right angle cutting and waste (Measured net).			
Carried to Collection			R
Section 3 Bill No. 2 Roof Coverings Etc.			

PROFILED METAL SHEETING AND ACCESSORIES

0.6mm thick corrugated roof sheeting with "globalcoat" finish on one side in single lengths fixed to 50 x 75mm timber purlins at maximum 1140mm cc and 0.6mm galvanized sheet steel accessories with globalcoat" finish on one side 38x114mm wall plates, 38 x114mm bracing, 38x114mm prefabricated roof trusses at max 1150mm cc as per specialist, 50x75mm timber purlins, 76x76mm splayed eaves purlins. purlins/rafters all in accordance with manufacturer's recommendations

1	Roof covering with pitch not exceeding 25 degrees.	m2	1 723
	<u>0.6mm Flashings pre-painted to match roof sheeting and fixed in strict accordance with manufacturer's recommendations:</u>		
2	Ridge 550mm girth with minimum 225mm laps, fixed to roof sheeting (measured net).	m	146
3	Standard narrow and broad flute closers.	m	292

ROOF INSULATION

Reflective foil insulation or equal approved 420 Heavy industrial grade reinforced aluminium foil insulation double sided, heavy grammage reflective foil laminate incorporating eight layers of aluminium foil, reinforcing scrim, Kraft paper and polyethylene, tested for conformance with SABS 1381: Part IV- 1985, with a Class 1 fire rating in accordance with SABS 0177: part III - 1981 and BS 476 part 5, 6 and 7, secured to each truss/rafter with 38mm x 3,2mm x 1100mm hardboard counter batten strips positioned flush with the bottom edge of the material thus leaving 150mm overlap exposed at the top for the next layer and 150mm overlap thereafter on each 1250mm width roll. All to be fixed in accordance with manufactures specification

4	Insulation laid taut over timber purlins (at approximately 700mm centres) and fixed concurrent with purlins, etc.	m2	1 723
---	---	----	-------

Carried to Collection

Section 3
Bill No. 2
Roof Coverings Etc.

R

Section 3

Bill No. 2

Roof Coverings Etc.

COLLECTION

Total Brought Forward from Page No.

**Page
No**

18

19

Amount

Carried Forward to Summary of Section No. 3

Section 3

Bill No. 2

Roof Coverings Etc.

R

Item No	Quantity	Rate	Amount
<u>BILL No. 3</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>MODEL PREAMBLES</u>			
The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>ROOFS ETC</u>			
<u>MONOPLANAR PREFABRICATED METAL CONNECTED TIMBER ROOF TRUSSES</u>			
All trusses to be fabricated in a factory by a truss fabricator who holds a current Certificate of Competence awarded by the Institute for Timber Construction			
TR1 & TR2 Certificates are to be issued for each Block before occupation may take place			
<u>PREFABRICATED ROOF TRUSSES HAVING A PITCH NOT EXCEEDING 25 DEGREES</u>			
NOTE: All timber roof trusses including nail-plated trusses and bolted trusses with lapped members must comply with SABS 0243 : THE DESIGN, MANUFACTURE AND ERECTION OF TIMBER TRUSSES			
Prices for roof trusses are to include for all temporary bracing and supports and for all necessary top and bottom chord bracing, wind bracing and runners where required and TR1 and TR2 Certificates			
<u>TIMBER</u>			
Timber for trusses to be South African softwood structural timber and shall be at least of grade 4 and in accordance with SABS Specification No.'s 563 or 1245 or laminated timber in accordance with SABS 1460			
Carried to Collection		R	
Section 3			
Bill No. 3			
Carpentry and Joinery			

METAL CONNECTOR PLATES

Metal truss connector plates shall be made from galvanised steel of at least 1mm nominal thickness, with a minimum yield strength of 250MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be 0,275Kg/m² commercial class hot dipped galvanising

The connector plates shall have been tested by the CSIR and be a size capable of transmitting the forces between the members of a truss without exceeding the design values given in the CSIR report

BOLTS

Bolts shall be to BS 4190 or SABS 135 with appropriate washers. (See below)

WASHERS

Square or round washers of the following minimum dimensions shall be used with all bolts:

WASHER DIMENSIONS

Bolts Size	Width (mm)	Thickness
up to M8	25	2,5
up to M12	36	4,0
up to M20	60	5,0

SHEAR PLATES, TOOTH CONNECTORS AND SPLIT RINGS

These shall be as specified in BS 1579 and installed in accordance with the CSIR Publication : HOUT 468, "The Design, Manufacture and Erection of Timber Trusses".

NAILS

These shall be in accordance with SABS 820 : 1974

TRUSS CONSTRUCTION

The trusses shall be constructed to ensure the correct profile, overhangs and cambers

All joints are to be close fitting butt joints made by precision pressing of the metal connector plates into each side of the joint

Carried to Collection

Section 3
Bill No. 3
Carpentry and Joinery

R

TRUSS DESIGN

All trusses shall be designed by a registered Professional Engineer employed by the Contractor in accordance with the SABS Code of Practice for the Design of Timber Structures SABS 0163 and the Code of Practice for General Procedures and Loadings SABS 0160

TRUSS SPACING

The truss centres shall be less than or equal to that described in the Bills for each respective truss type

DRAWINGS

Prints shall be provided to the consulting engineer/ architect for approval. These drawings shall be signed by a Professional Engineer

The following minimum information shall be supplied:

- * Details of the roof system with the positions of all trusses and beams clearly indicated
- * Bracing details
- * All truss details, including valley trusses where applicable, with the following clearly detailed:-
 - All member sizes and grades
 - Connector plate sizes for all truss joints. Code numbers are deemed sufficient
- * All connection and hold down details between trusses, girders, beams and supports
- * The type of roof covering, ceiling and any other loads taken into account in the design

The dimensions in the descriptions of trusses are nominal and verification measurements are to be obtained from site before design or fabrication commences, and must be designed in accordance with the environmental conditions of the area

Carried to Collection

Section 3
Bill No. 3
Carpentry and Joinery

R

GENERAL

The following schedule of prices includes all timber of the required grade and type shown on the designs, all cutting and waste, cutting to exact length and end angles necessary to manufacture the respective truss types, the supply of all connector plates, fabrication of the trusses, checking the completed truss for quality, as well as loading, transporting to the site and offloading

The trusses must be suitable stored and protected on site as directed by the Secretary or his Representative

ERECTION

The trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the Manual "The Erection and Bracing of Timber Roof Trusses" published by the Institute for Timber Construction and the Council for Scientific and Industrial Research of as detailed by the designer of the SABS Code of Practice: "The Design, Manufacture and Erection of Timber Roof Trusses"

TRUSS LOADING

The trusses shall be designed for:

- * Roof Cover: 0,53mm Metal roof sheeting
- * Max Purlin centres: 1250mm
- * Ceilings: Plasterboard ceilings
- * Overhang: Min 600mm

Carried to Collection

Section 3
Bill No. 3
Carpentry and Joinery

R

TRUSSES

- a. All the roof trusses to be constructed as shown on the roof plans.

- b. All the roof trusses to be designed and constructed with softwood structural timber to include for live loads, wind loads and to take corrugated roof covering, purlins and fibre cement or plasterboard ceilings with brandering. Each roof truss shall have all its members accurately cut and close butted together and rigidly fixed by CSIR approved patented galvanized metal spiked connectors, fixed on both sides of each intersection by an approved method, all in accordance with the manufacturer's instructions

- c. Unless otherwise described all rafter feet are to extend 600mm beyond the length of the tie beam, with ends twice splay cut

- d. Upon completion of the contract the Registered Professional Engineer must issue to the Principal Agent a certificate to the effect that the roof has been erected in accordance with his approved design, under his supervision and that the entire roof is structurally stable. The lump sum price of the roof trusses and purlins or battens (bottom purlin or tilting fillet to be wrought) shall include for the design and supervision by a Registered / Professional Engineer and for all necessary runners, overhangs wrought all round and trimmed and splay cut as required, braces, hoisting and fixing, etc.,but shall exclude fixing brackets and hurricane clips, wall plates, fascia, barge boards, roof coverings, purlins, etc. which are all separately measured

- e. The tenderer's attention is drawn to the fact that the description of the trusses only represents the overall size (fascia to fascia) and not the required design

- f. Erection must be carried out as described in "The Erection and Bracing of Timber Roof Trusses" published by the Truss Plate Association of South Africa Ltd. and the National Timber Research Institute, CSIR

- g. Descriptions of roof trusses shall be deemed to include for design, manufacture, supply, hoisting and fixing in position, trimming ends, notching, etc. and for any temporary bracing

Carried to Collection

Section 3
Bill No. 3
Carpentry and Joinery

R

PREFABRICATED ROOF TRUSSES, ETC.

Plate nailed pitched timber roof construction

Sawn Softwood

1	Design, supply and install roof truss system complete in accordance with the Standard Building Regulations to suit roof area approximate size 532m ² (measured on flat floor area inclusive of overhangs, etc)		Item		
2	Design, supply and install roof truss system complete in accordance with the Standard Building Regulations to suit roof area approximate size 187m ² (measured on flat floor area inclusive of overhangs, etc)		Item		
3	Design, supply and install roof truss system complete in accordance with the Standard Building Regulations to suit roof area approximate size 451m ² (measured on flat floor area inclusive of overhangs, etc)		Item		
<u>Sawn softwood:</u>					
4	38 x 114mm Wall plate.	m	224		
5	50 x 70mm purlins.	m	1 610		
<u>Sundries:</u>					
6	TRI FIX or equal approved hurricane clip fixed using 10 x 32mm galvanised clout nails (Provisional).	No	2 053		

Carried to Collection

R

Section 3
Bill No. 3
Carpentry and Joinery

EAVES, VERGES, ETC

Pressed fibre-cement:

7	12 x 225mm EVERITE NUTEC medium density fibre-cement fascia board (product no (041-202) or equal approved. Aluminium H-Profile fascia joiners (product no 685-1950. Drill and for fix with Hot dipped galvanised screws and washers.	m	230
8	Extra on last for splay cut end.	No	12
9	80 x 200mm EVERITE NUTEC fibre cement socketless Barge boards (Product no 521-731) or equal approved. Aluminium H-profile barge board joiners(product No 685-187). drill for and fix with Hot dipped galvanise screws and washers. 76 x 50mm trimmer batten fixed underside of purlin ends for barge board fixing.	m	71
10	Extra on last for splay cut end.	No	18

DOORS ETC

40mm thick Saligna 'Blaco' Ledge and brace battered door with 40 x 110mm styles and top rail, 20 x 150mm middle ledge, 20 x 225mm bottom ledge and 20 x 110mm braces:

11	813 x 2032mm high single door.	No	14
----	--------------------------------	----	----

SKIRTINGS

SANS Approved Meranti:

12	69mm high Timber skirting screw fixed at 450mm centres, mitered at corners and splayed joints in running lengths, suitable for decoration.	m	420
----	--	---	-----

Carried to Collection

Section 3
Bill No. 3
Carpentry and Joinery

R

Section 3

Bill No. 3

Carpentry and Joinery

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

21

22

23

24

25

26

27

Carried Forward to Summary of Section No. 3

R

Section 3

Bill No. 3

Carpentry and Joinery

Item No	Quantity	Rate	Amount
<u>BILL No. 4</u> <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates. <u>SUPPLEMENTARY PREAMBLES</u> <u>Proprietary products in descriptions:</u> Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent. <u>Descriptions:</u> Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete. Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as bolted the bolts have been given.			
Carried to Collection			
Section 3 Bill No. 4 Ceilings, Partitions and Access Flooring			

NAILED UP CEILINGS

12mm "Rhinoboard" gypsum plasterboard ceilings fixed to 38x38mm brandering at max 400cc including 'H' profile jointing strips all to manufacturers instructions:

1	Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres with cross brandering at joints, ends of sheets and at light fittings, etc.	m2	788		
2	Extra over ceiling for forming trap door size 635 x 635mm in clear formed with 38 x 50mm sawn S.A. pine framing covered with ceiling boarding and set in 38 x 76mm wrought S.A. pine rebated kerb, including trimmers.	No	14		
<u>Cornice</u>					
3	75mm gypsum coved cornice.	m	420		
<u>100mm thick non-combustible light weight ceiling insulation 12kg/m³ closely fitted with ends butted firmly between tie beams and laid loose on top of brandering between roof timbers, all in accordance with manufacturer's recommendations.</u> <u>• R-value: 2,50m² K/W</u> <u>• Thermal conductivity: 0,04 W/m²/K</u>					
4	100mm Insulation laid between roof trusses and on top of brandering, etc.	m2	788		

Carried to Collection

R

Section 3
Bill No. 4
Ceilings, Partitions and Access Flooring

Section 3

Bill No. 4

Ceilings, Partitions and Access Flooring

COLLECTION

Total Brought Forward from Page No.

**Page
No**

29

30

Amount

Carried Forward to Summary of Section No. 3

Section 3

Bill No. 4

Ceilings, Partitions and Access Flooring

R

Item No	Quantity	Rate	Amount
<u>BILL No. 5</u>			
<u>FLOOR COVERINGS, WALL LININGS, ETC</u>			
<u>MODEL PREAMBLES</u>			
The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Proprietary products in descriptions:</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
<u>Cleaning:</u>			
Rates for floor covering shall include for proper cleaning on completion.			
<u>VINYL FLOOR COVERINGS</u>			
<u>2.5mm thick x 300mm x 300mm high quality flexible vinyl floor tiles laid in Marley No.60 Plus acrylic adhesive, or equal approved, spread with trowel having 1.5mm x 1.5mm x 1.5mm triangular notches at 4.00mm centres, colour as approved by architect all as per manufacturer's recommendation</u>			
1	On floors.	m2	788
<u>POLISH, SEALERS, ETC</u>			
<u>Scrub with a diluted neutral detergent complying with SABS 825 and thoroughly rinse, Apply three coats of a water based floor dressing complying to SABS 1042 on:</u>			
2	Vinyl tile flooring	m2	788
Carried Forward to Summary of Section No. 3			R
Section 3			
Bill No. 5			
Floor Coverings, Wall Linings, Etc.			

Item No		Quantity	Rate	Amount
	<u>BILL No. 6</u>			
	<u>IRONMONGERY</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Dorma or equal approved Hinges:</u>			
1	102 x75 x 3mm Two Ball Bearing Butt Hinge (Stainless Steel) - Code DBB-SS-009	Pairs	14.0	
	<u>Union or equal approved Locks:</u>			
2	4 Lever mortice lockset with satin-chrome plated handles Code - CZ682-24-61CH	No	14	
	<u>Union or equal approved Door Stop</u>			
3	Door stop - Code - AL8730AS	No	14	
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>			
4	2400 x 1200mm Magnetic white board or equal approved fixed to walls with an approved Aluminium frame, plugged and screwed to walls with counter sunk brass screws and cupped washers.	No	14	
5	Pinning board 4800 x 1200mm High overall of 9mm "Van Dyk" or equal approved pinning board glued to 3mm masonite back plugged and screwed to wall and framed with 70 x 22mm rebated wrought Saligna frame with one vertical middle rail.	No	14	
	Carried Forward to Summary of Section No. 3			
	Section 3			
	Bill No. 6			
	Ironmongery			

[illegible]

Item No	Quantity	Rate	Amount
<u>BILL No. 8</u> <u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u> <u>MODEL PREAMBLES</u> The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates. <u>SUPPLEMENTARY PREAMBLES</u> <u>Proprietary products in descriptions:</u> Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent. <u>Copper pipes:</u> Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be 'Cobra Watertech' type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground. <u>Chasing:</u> Chasing pipes into new walls shall be regarded as "building in" and is not measured separately. The cost of chasing, wrapping in suitable bown paper and making good shall be included in the rates for pipes.			
Carried to Collection		R	
Section 3 Bill No. 8 Plumbing and Drainage (Provisional)			

Holes for pipes through new walls:

No allowance for holes and drilling for pipes through new walls has been made in these bills of quantities, the price for all holes and making good shall be deemed to be included in the description of pipes.

Reducing fittings:

Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.

Description of pipes laid in trenches:

Descriptions of pipes laid in trenches shall be deemed to include for carting away all surplus excavated material to a dumping site located by the contractor.

Excavations:

No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.

'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.

Laying, backfilling, bedding, etc of pipes:

Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB: Earthworks (Pipe trenches) Clause 5.7.2 will only be applicable if authorised by the Engineer in writing.

Carried to Collection

Section 3
Bill No. 8
Plumbing and Drainage (Provisional)

R

Flush pans:

Flush pans shall have straight or side outlets and 'P' or 'S' traps as necessary.

Stainless steel basins, sinks, wash troughs, urinals, etc:

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Fixing:

Descriptions of wall mounted, floor standing, drop-in, etc type sanitary fittings shall be deemed to include fixing in position and all fixing accessories.

Descriptions of proprietary items shall include fixing in position and all fixing accessories as specified by the manufacturer.

Waste unions:

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.

Sleeve pipes:

Electrical sleeve pipes to be Class 34 and are to include for draw wires.

Carried to Collection

R

Section 3
Bill No. 8
Plumbing and Drainage (Provisional)

RAINWATER DISPOSAL:

Seamless aluminium gutters

1	100 x 75mm Seamless aluminium OGEE gutter with baked enamel finish fixed to manufactures specification.	m	230
2	Extra eaves gutter for stopped end.	No	12
3	Extra over eaves gutter for outlet for 100 x 75mm Aluminium downpipe.	No	12
4	100 x 75mm fluted Aluminium downpipe with baked enamel finish fixed to suppliers specification.	m	36
5	Extra over rainwater downpipe for bend.	No	48

Carried to Collection

Section 3
Bill No. 8
Plumbing and Drainage (Provisional)

R

Section 3

Bill No. 8

Plumbing and Drainage (Provisional)

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

35

36

37

38

Carried Forward to Summary of Section No. 3

R

Section 3

Bill No. 8

Plumbing and Drainage (Provisional)

Item No		Quantity	Rate	Amount
	BILL No. 9			
	GLAZING			
	MODEL PREAMBLES			
	The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
	SUPPLEMENTARY PREAMBLES			
	Proprietary products in descriptions:			
	Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
	GLAZING TO STEEL WITH PUTTY			
	All glazing shall be in accordance with SABS 0400 - 1990, SABS 1263 - 1. All safety flazing materials (individual panes) shall be permanently marked. Such marking shall be visible after glazing process. If it is not marked, it is not safety glass.			
	<u>6.38mm clear safety glass secured into galvanized window with a compatible UV resistant sealant</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	67	
2	Issue of Glazing Certificate.		Item	
	Carried Forward to Summary of Section No. 3		R	
	Section 3 Bill No. 9 Glazing			

Item No	Quantity	Rate	Amount
<u>BILL No. 10</u>			
<u>PAINTWORK</u>			
<u>MODEL PREAMBLES</u>			
The tenderer is referred to the "General Preambles for Trades 2017" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates.			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>Proprietary products in descriptions:</u>			
Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.			
All work to be executed in strict accordance with the specifications of the paint manufacturer.			
Where surfaces of plaster etc are sandy / friable, the first coat must be replaced with plaster primer thinned 10% with turpentine.			
<u>PAINTWORK ETC TO EXISTING WORK</u>			
<u>ON FLOATED PLASTER</u>			
<u>Apply one coat DULUX Trade alkali resistant plaster prime followed by two coats of DULUX trade 100 low sheen or equal approved. Colour to Architects Approval.</u>			
1	On internal walls.	m2 923	
2	On external walls	m2 520	
Carried to Collection			R
Section 3 Bill No. 10 Paintwork			

ON FIBRE-CEMENT BOARD SURFACES

Apply one coat DULUX Trade alkali resistant plaster prime followed by two coats of DULUX trade 100 low sheen or equal approved coats of finishing paint or equal approved. All joints to be taped, skimmed and rubbed to a smooth finish. Colour to Architects Approval.

3	Ceilings and cornices.	m2	788
4	Fascias and barge boards.	m2	134

ON METAL SURFACES

Clean down thoroughly with galvanised iron cleaner, wash down with water, prime with one coat metal primer and finish with two coats superior quality enamel on:

5	Windows with burglar bars (both sides measured).	m2	169
---	--	----	-----

ON WOOD

Apply one coat DULUX galvanised iron primer, one coat of DULUX universal undercoat followed by two coats of DULUX Gloss enamel paint or equal approved. Colour to Architects Approval.

6	On doors.	m2	49
---	-----------	----	----

Three coats superior quality clear gloss varnish

7	On doors	m2	49
---	----------	----	----

8	Skirtings, rails, frames, etc not exceeding 300mm girth	m	420
---	---	---	-----

Prepare and brush surface to remove all loose contaminants and apply two coats of "Carbolineum" wood preserver or equal approved

9	On timber trusses and purlins.	m2	108
---	--------------------------------	----	-----

Carried to Collection

R

Section 3
Bill No. 10
Paintwork

Section 3

Bill No. 10

Paintwork

COLLECTION

Total Brought Forward from Page No.

**Page
No**

41

42

Amount

Carried Forward to Summary of Section No. 3

Section 3
Bill No. 10
Paintwork

R

Section 3

SECTION SUMMARY - BUILDING WORKS

**Bill
No**

**Page
No**

Amount

Masonry

17

Roof Coverings Etc.

20

Carpentry and Joinery

28

Ceilings, Partitions and Access Flooring

31

Floor Coverings, Wall Linings, Etc.

32

Ironmongery

33

Plastering

34

Plumbing and Drainage (Provisional)

39

Glazing

40

Paintwork

43

Carried to Final Summary

R

Section 3

Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL No. 1</u>			
	<u>WALKWAYS, RAMPS, STEPS, ETC</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "Model Preambles for Trades 2008" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates			
	<u>THE FOLLOWING IN UNCOVERED WALKWAYS</u>			
	<u>Excavation not exceeding 2m deep</u>			
1	Reducing levels and depositing excavated material in prescribed stock piles on site.	m3	8	
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>			
2	Off site to a dumping site to be found by the Contractor.	m3	8	
	<u>Filling supplied by the contractor under concrete pavement, etc</u>			
3	G7 Subgrade material, compacted to 93% Mod AASHTO density	m3	16	
4	G5 Natural subbase material, compacted to 95% Mod AASHTO density	m3	16	
	<u>Compaction of surfaces:</u>			
5	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m2	53	
	Carried to Collection			
	Section 4			
	Bill No. 1			
	Uncovered walkways, Ramps, Steps, etc			

<u>Prescribed density tests on filling:</u>					
6	In-situ dry density test.	No	2		
<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>					
7	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming.	m2	53		
<u>One layer of 250 micron 'USB GREEN' waterproof sheeting sealed at laps with 'Gunplas Pressure Sensitive Tape':</u>					
8	Under surface beds.	m2	53		
<u>CONCRETE PAVING BLOCKS</u>					
<u>Paving of 50mm thick 200x100mm 25MPa Bevel Bond paver blocks grey in colour in herringbone pattern on and including 20mm thick sand bed with dry filler sand swept and vibrated into joints all laid on subgrade (elsewhere measured) conforming to SABS 1200D degree of accuracy I:</u>					
9	Paving to walk ways areas, etc laid to falls.	m2	53		
10	Extra over ordinary paving for 200mm wide block-on-flat header course edging circular on plan on 100mm thick mortar bed including unreinforced concrete haunching along outside edge.	m	5		
<u>Kerbing</u>					
<u>Precast or in situ mass concrete (25 MPa - 19 mm stone) kerbs cast in convenient lengths with exposed faces finished smooth from the mould and all salient angles rounded, jointed and pointed in 1:3 cement mortar, including excavations, formwork, etc. (Refer to drawing no. SRK/IDT/005 attached)</u>					
11	Figure 6 Barrier kerb size 150 x 300mm high channel with unreinforced concrete haunching including excavation, backfilling, etc.	m	70		
Carried to Collection					
Section 4					
Bill No. 1					
Uncovered walkways, Ramps, Steps, etc					

Section 4

Bill No. 1

Uncovered walkways, Ramps, Steps, etc

COLLECTION

Total Brought Forward from Page No.

**Page
No**

45

46

Amount

Carried Forward to Summary of Section No. 4

Section 4

Bill No. 1

Uncovered walkways, Ramps, Steps, etc

R

Item No		Quantity	Rate	Amount
	<u>BILL No. 2</u>			
	<u>STORMWATER CHANNELS</u>			
	<u>MODEL PREAMBLES</u>			
	<u>STORMWATER APRONS</u>			
	<u>Cast in-situ Ref 193 mesh reinforced concrete (25MPa) apron, finished smooth on all exposed surfaces in 3:1 cement plaster trowelled smooth and with angles rounded, cast in suitable lengths not exceeding 1.8m, including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in 3:1 cement mortar. Concrete apron to be tinted, colour to be specified by the Engineer.</u>			
1	900 x 100mm apron laid in position in ground in 1800mm sections including all excavations, ramming, trimming, formwork, reinforcement, expansion joints, floating, etc	m	112	
	<u>STORMWATER CHANNELS</u>			
	<u>Cast in-situ Ref 193 mesh reinforced concrete (25MPa) open stormwater channels having V-shaped waterway formed in top, finished smooth on all exposed surfaces in 3:1 cement plaster trowelled smooth and with angles rounded, cast in suitable lengths not exceeding 1.8m, including all formwork, moulds, shallow excavation, filling and ramming, laying to falls, bedding and pointing in 3:1 cement mortar. Concrete apron to be tinted, colour to be specified by the Engineer.</u>			
2	900 x 100mm V' channel 50mm deep in centre laid in position in ground in 1800mm sections including all excavations, ramming, trimming, formwork, reinforcement, expansion joints, floating, etc	m	85	
3	Extra for 700mm angle	No	5	
	Carried to Collection		R	
	Section 4			
	Bill No. 2			
	Stormwater reticulation			

4	Extra for forming 200mm thick 700mm wide spreader with 200mm high edges fanning out to 1 960mm width at furthest end with hard burnt bricks pitching cast in ass diffusers including working off concrete to a smooth finish and draining onto natural ground with 150 - 200mm diameter loose stones	No	5		
Section 4 Bill No. 2 Stormwater reticulation		Carried to Collection		R	

Section 4

Bill No. 2

Stormwater reticulation

COLLECTION

Total Brought Forward from Page No.

**Page
No**

48

49

Amount

Carried Forward to Summary of Section No. 4

Section 4

Bill No. 2

Stormwater reticulation

R

Item No		Quantity	Rate	Amount
	<u>BILL No. 3</u>			
	<u>RAINWATER TANKS AND STANDS</u>			
	<u>MODEL PREAMBLES</u>			
	The tenderer is referred to the "Model Preambles for Trades 2008" for supplementary and comprehensive expansion of descriptions, appropriate provision for which shall be deemed to have been included in all relevant rates			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Density testing on filling:</u>			
	Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.			
	<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
1	Trenches.	m3	47	
	<u>Extra over trench and hole excavations in earth for excavation:</u>			
2	Soft rock.	m3	5	
3	Hard rock.	m3	2	
	<u>Extra over all excavations for carting away:</u>			
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	25	
	<u>Risk of collapse of excavations:</u>			
5	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	95	
	Carried to Collection			
	Section 4			
	Bill No. 3			
	Rainwater Tanks and Stands			

	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93%:</u>				
6	Backfilling to trenches, holes, etc.	m3	24		
	<u>Compaction of surfaces</u>				
7	Compaction of ground surface under floors, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.	m2	37		
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	<u>25Mpa/19mm Concrete</u>				
8	Strip footings.	m3	12		
	<u>REINFORCED CONCRETE</u>				
	<u>25 MPa/19mm Concrete:</u>				
9	Tank concrete slab.	m3	4		
	<u>FINISHING TOP SURFACE OF CONCRETE</u>				
	<u>Finishing top surfaces of concrete smooth with a steel trowel including adding additional cement while concrete is still green to attain a smooth, hard surface:</u>				
10	Surface beds, slabs, etc.	m2	37		
Carried to Collection				R	
Section 4					
Bill No. 3					
Rainwater Tanks and Stands					

ROUGH FORMWORK (DEGREE OF ACCURACY III)

Rough Formwork to Sides:

11	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	59	
----	---	---	----	--

REINFORCEMENT (PROVISIONAL)

12	Type 395 fabric reinforcement in concrete surface beds, slabs, etc.	m2	37	
----	---	----	----	--

MASONRY

BRICKWORK IN FOUNDATIONS (PROVISIONAL)

Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:

13	One brick walls.	m2	21	
----	------------------	----	----	--

BRICKWORK IN SUPERSTRUCTURE

Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar:

14	One brick walls.	m2	36	
----	------------------	----	----	--

BRICKWORK AND BLOCKWORK SUNDRIES

Brickwork reinforcement:

15	230mm Wide reinforcement built in horizontally.	m	356	
----	---	---	-----	--

16	Ditto, but in foundations (Provisional).	m	237	
----	--	---	-----	--

Carried to Collection

Section 4
Bill No. 3
Rainwater Tanks and Stands

R

FACE BRICKWORK

"Roan satin FBX " clay face brick or equal Architect approved, 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 zones 1-2:

17	Extra over brickwork for face brickwork externally.	m2	36	
----	---	----	----	--

PLUMBING AND DRAINAGE

TANKS ETC

Plastic water tanks etc:

18	5000 Litre light duty cylindrical tank complete with lid, 15mm brass bibtap with handle suitable for locking and 4 No. galvanised stay wires 2.5m each long connected to tank, with and including 4 No. eye bolts cast into concrete.	No	6	
----	---	----	---	--

19	Hole top of tank for 100mm pipe.	No	6	
----	----------------------------------	----	---	--

Carried to Collection

Section 4
Bill No. 3
Rainwater Tanks and Stands

R

Section 4

Bill No. 3

Rainwater Tanks and Stands

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

51

52

53

54

Carried Forward to Summary of Section No. 4

R

Section 4

Bill No. 3

Rainwater Tanks and Stands

Section 4

SECTION SUMMARY - EXTERNAL WORKS (PROVISIONAL)

**Bill
No**

**Page
No**

Amount

Uncovered walkways, Ramps, Steps, etc

47

Stormwater reticulation

50

Rainwater Tanks and Stands

55

Carried to Final Summary

R

Section 4

Item No		Quantity	Rate	Amount
<u>SECTION 5</u>				
<u>BILL No. 1</u>				
<u>PROVISIONAL SUMS</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
Tenderers are advised that no claim in respect of loss of profit or Preliminary charges based on the omission of these amounts will be considered and the said amounts will be omitted strictly without any financial compensation payable to the Contractor.				
Provisional sums and Budgetary allowances contained herein may be omitted or reduced at the Employer's discretion and the Contractor shall not be entitled to claim for any loss by way of reductions or omission of any discount, or percentage relating to Provisional amounts and Budgetary sums or any loss of profit related thereto.				
<u>ELECTRICAL INSTALLATION</u>				
1	Provide the sum of R450 000.00 for Electrical Installation	Item		450 000.00
2	Add: Mark-up		%	
<u>BUDGETARY ALLOWANCES</u>				
<u>The following budgetary allowances are for work to be executed at rates in the bills of quantities or to be agreed by the Principal agent:</u>				
3	Provide the sum of R26 000.00 for the employment of a Community Liaison Officer to be employed by the Main Contractor and be paid an allowance of R6 500.00 a month for the full contract duration.	Item		26 000.00
4	Add: Mark-up		%	
			R	
Carried to Final Summary				
Section 5				
Bill No. 1				
Provisional Sums				

[illegible]