

## SECTION NO. 1

# BILL NO. 1

## PRELIMINARIES

## BUILDING AGREEMENT AND PRELIMINARIES

The JBCC Edition 4.1 Code 2101 March 2005 Principal Building Agreement, prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described.

The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities

Contractor's are referred to the abovementioned documents for the full intent and meaning of each clause thereof

These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract, such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the abovementioned documents

Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"

## PREAMBLES FOR TRADES

The Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained

**Carried Forward**

R

Bill No. 1  
Preliminaries

<b>Brought Forward</b>		R
<p>Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles</p> <p><b><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></b></p> <p><b><u>Definitions</u></b></p> <p>1 Definitions and Interpretation (Clause 1.0)</p> <p><b><u>Objective and preparations</u></b></p> <p>2 Offer, Acceptance and Performance obligations (Clause 2.0)</p> <p>3 Documents (Clause 3.0)</p> <p>4 Design Responsibility (Clause 4.0)</p> <p>5 Employer's Agents (Clause 5.0)</p> <p>6 Contractor's site Representative (Clause 6.0)</p> <p>7 Compliance with Laws and Regulations (Clause 7.0)</p> <p>Without limiting the generality of the provisions of Clause 7.0, the contractor's attention is drawn to the provisions of the Construction Regulations, 2003 issued in terms of the Occupational Health and Safety Act, 1993 and Part C4.2 (Annexure C) of this tender document. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specifications (Inclusive of appointment of IAI as per Asbestos Regulations)</p>		Item
		Item
		Item
		Item
		Item
		Item
		Item
<b>Carried Forward</b>		R
<p>Bill No. 1 Preliminaries</p>		

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward		R	
8	Works Risk (Clause 8.0)	Item		
9	Indemnities (Clause 9.0)	Item		
10	General Insurances (Clause 10.0)	Item		
11	Special Insurances (Clause 11)	Item		
12	Effecting Insurances (Clause 12)	Item		
13	Assignment (Clause 13)	Item		
14	Security (Clause 14)	Item		
	<b><u>Execution</u></b>			
15	Preparation For and Execution of The Works (Clause 15)	Item		
16	Site and Access (Clause 16)			
	<i>Clause 16.7 Known Services</i>			
	<i>Clause 16.8 Protection of trees</i>	Item		
17	Contract Instructions (Clause 17)	Item		
18	Setting Out Of The Works (Clause 18)			
	The contractor shall notify the Principal Agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments.	Item		
19	Temporary works and plant (Clause 19)			
	The contractor shall provide, maintain and remove on completion all perimeter scaffolding required by the contractor for the due and proper fulfilment of the works	Item		
20	Nominated Subcontractors (Clause 20)	Item		
21	Selected Subcontractors (Clause 21)	Item		
22	Employer's Direct Contractors (Clause 22)	Item		
	<b>Carried Forward</b>		R	
	Bill No. 1 Preliminaries			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward		R	
23	Contractor's Domestic Subcontractors (Clause 23)	Item		
	<b><u>Completion</u></b>			
24	Practical Completion (Clause 24)	Item		
25	Works Completion (Clause 25)	Item		
26	Final Completion (Clause 26)	Item		
27	Latent Defects Liability Period (Clause 27)	Item		
28	Sectional Completion (Clause 28)	Item		
29	Revision of Date for Practical Completion (Clause 29)			
	The removal and replacement of materials and/or workmanship which do not conform to specification or drawing shall not constitute grounds for the extension of the construction period nor the adjustment of contract value (Clause 29.3)	Item		
30	Penalty for Late or Non-Completion (Clause 30)	Item		
	<b><u>Payment</u></b>			
31	Interim Payment to the Contractor (Clause 31)			
	The inclusion of materials and goods stored off site in the amount authorized for payment in terms of Clause 31.4 shall be at the sole discretion of the Principal Agent and such inclusion shall only be considered upon the provision, by the contractor, of an approved guarantee issued by a registered commercial bank. Clause 31.6.5 is therefore not applicable.	Item		
32	Adjustment to the Contract Value (Clause 32)			
	All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor.	Item		
33	Recovery of Expense and Loss (Clause 33)	Item		
34	Final Account and Final Payment (Clause 34)	Item		
35	Payment to Other Parties (Clause 35)	Item		
	<b>Carried Forward</b>		R	
	Bill No. 1 Preliminaries			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	<b>Brought Forward</b>		R	
	<b><u>Termination</u></b>			
36	Termination by Employer - Contractor's Default (Clause 36)	Item		
37	Termination by Employer - Loss and Damage (Clause 37)	Item		
38	Termination by Contractor - Employer's Default (Clause 38)	Item		
39	Termination - Cessation of the Works (Clause 39)	Item		
	<b><u>Dispute</u></b>			
40	Dispute Settlement (Clause 40)	Item		
	<b><u>Contract Agreement</u></b>			
41	Post tender provisions (Clause 41)The required post tender information shall be inserted in the post tender provisions after consultation with the contractor	Item		
42	Contractual agreement (Clause 42)The required information of the contracting parties and the amount of the accepted contract sum shall be inserted in the contractual agreement for signature of the agreement by the contracting parties	Item		
	<b><u>SECTION B: PRELIMINARIES</u></b>			
	<b><u>Definitions and Interpretation</u></b>			
43	Definitions and Interpretation (Clause 1.0)	Item		
	<b><u>Documents</u></b>			
44	Checking of Documents (Clause 2.1)	Item		
45	Provisional Bills of Quantities (Clause 2.2)	Item		
46	Availability of Construction Documentation (Clause 2.3)	Item		
	<b><u>Previous work and adjoining properties</u></b>			
47	Previous Work - Dimensional Accuracy (Clause 3.1)	Item		
	<b>Carried Forward</b>		R	
	Bill No. 1 Preliminaries			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward		R	
48	Previous Work - Defects (Clause 3.2)	Item		
49	Inspection of Adjoining Properties (Clause 3.3)	Item		
	<b><u>Samples, Shop Drawings and Manufacturer's Instructions</u></b>			
50	Samples of Materials (Clause 4.1)	Item		
51	Workmanship Samples (Clause 4.2)	Item		
52	Shop Drawings (Clause 4.3)	Item		
53	Compliance with Manufacturer's Instructions (Clause 4.4)	Item		
	<b><u>Deposits and Fees</u></b>			
54	Deposits and Fees (Clause 5.1)	Item		
	<b><u>Temporary Services</u></b>			
55	Water (Clause 6.1)	Item		
56	Electricity (Clause 6.2)	Item		
57	Telecommunication Equipment (Clause 6.3)	Item		
58	Ablution Facilities (Clause 6.4)	Item		
	<b><u>Prime cost Amounts</u></b>			
59	Responsibility for Prime Cost Amounts (Clause 7.1)	Item		
	<b><u>Special Attendance on N/S Subcontractors</u></b>			
60	Special Attendance (Clause 8.1)	Item		
	<b><u>GENERAL</u></b>			
61	Protection of the Works (Clause 9.1)	Item		
62	Protection / Isolation of Existing / Sectionally Occupied Works (Clause 9.2)	Item		
63	Security of the Works (Clause 9.3)	Item		
	<b>Carried Forward</b>		R	
	Bill No. 1 Preliminaries			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R	
64	Notice Before Covering Work (Clause 9.4)	Item		
65	Disturbance (Clause 9.5)	Item		
66	Environmental Disturbance (Clause 9.6)	Item		
67	Works Cleaning and Clearing (Clause 9.7)	Item		
68	Vermin (Clause 9.8)	Item		
69	Overhand Work (Clause 9.9)	Item		
<b><u>SECTION C: SPECIFIC PRELIMINARIES</u></b>				
<b><u>Contract Price Adjustment Provisions</u></b>				
70	Bidders are advised that this Contract shall be a <b>Fixed Price Contract</b> and shall not be subject to the Contract Price Adjustment Provisions (CPAP) or any other escalation formula and therefore bidder are to allow for any increases (except any variations in the rate of Value Added Tax) in cost of labour, materials, transport, etc.	Item		
<b><u>Site Instructions</u></b>				
71	Site Instructions issued on site are to be recorded in triplicate in a site instruction book which is maintained on site by the contractor.			
	F:..... V:..... T:.....	Item		
Carried Forward			R	
Bill No. 1 Preliminaries				

	<b>Brought Forward</b>		R
	<p><b><u>Warranties for material and workmanship</u></b></p> <p>Where warranties for materials and /or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the Principal Agent on certified completion of contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor.</p> <p>F:..... V:..... T:.....</p> <p><b><u>Co-operation of contractor for cost management</u></b></p> <p>It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The principal agent undertakes to make available to the contractor all budgetary allowances and cost assessments/ reports to enable the proper procedure to be implemented and the contractor shall attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures, as necessary, to all subcontractors</p> <p>F:..... V:..... T:.....</p>		
72		Item	
	<b>Carried Forward</b>		R
	<p>Bill No. 1 Preliminaries</p>		



Brought Forward		R	
<b><u>Confidentiality</u></b>			
73	<p>The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works</p> <p>No information regarding this project shall be published or disclosed without the prior written consent of the employer</p> <p>F:..... V:..... T:.....</p>	Item	
<b><u>Testing of windows for watertightness</u></b>			
74	<p>Each window shall be tested for watertightness with water sprayed on by means of a 20mm hosepipe using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure in the hosepipe shall be boosted by means of compressed air or other approved means</p> <p>F:..... V:..... T:.....</p>	Item	
75	<p>Tender Data Schedule</p> <p>F:..... V:..... T:.....</p>	Item	
76	<p>General Conditions of Contract</p> <p>F:..... V:..... T:.....</p>	Item	
77	<p>Special Conditions of Contract</p> <p>F:..... V:..... T:.....</p>	Item	
78	<p>Contract Data</p> <p>F:..... V:..... T:.....</p>	Item	
Carried Forward		R	
Bill No. 1 Preliminaries			

[illegible]

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>ALTERATIONS (PROVISIONAL)</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>View site</u></b></p> <p>Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <p><b><u>Explosives</u></b></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated</p> <p><b><u>General</u></b></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>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</p>			
	<b>Carried Forward</b>		R	
	<p>Bill No. 1 Alterations (Provisional)</p>			

<b>Brought Forward</b>		R
<p>Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and re-hanging, 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</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>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)</p> <p>Items described as to be re-used or to be handed over to the Client are to be carefully dismantled where necessary and stacked on site where directed, and the Contractor will be responsible for their removal and storage until required, and shall make good all items missing, damaged or broken at his own expense</p> <p>Unless otherwise described, no materials from the alterations shall be re-used in any new work without the written approval of the client.</p>		
<b>Carried Forward</b>		R
<p>Bill No. 1 Alterations (Provisional)</p>		

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<p>Prices are to include for carting away from site all materials not specifically mentioned as being stored on site for re-use or handed over to the client and all rubbish, debris, etc., arising from the alterations, etc., and for making good all work damaged or disturbed to the approval of the client</p> <p><b><u>REMOVAL OF EXISTING WORK</u></b></p> <p><b><u>Breaking up and removing reinforced concrete</u></b></p>			
1	For surface beds, walkways & v-drains	m2	550
2	Rainwater tank bases	m3	9
<b><u>Breaking up and removing unreinforced concrete</u></b>			
3	Steps	m3	35
<b><u>Breaking down and removing brickwork, etc</u></b>			
4	Half brick wall	m2	70
5	One brick wall	m2	747
<b><u>Taking out and removing doors, windows, etc. including thresholds, sills etc.</u></b>			
6	Timber single door and frame not exceeding 2,5m2	No	103
7	Timber double door and frame exceeding 2,5m2 and not exceeding 5m2	No	3
8	Glazed steel window not exceeding 2,5m <sup>2</sup>	No	11
<b><u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u></b>			
<p><b><u>Note:</u></b> Tenderers are to comply with the Occupational Health and Safety Act - Asbestos Regulations.</p> <p>Tenderers are to allow for all specialist equipment, tools, signage, etc. deem necessary for the safe removal and disposal of all asbestos.</p>			
Carried Forward			R
Bill No. 1 Alterations (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward			R
9	Pitched roof 1500m2 overall flat area, of timber trusses and purlins, asbestos roof sheeting, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	No	1	
10	Pitched roof 369m2 overall flat area, of timber trusses and purlins, corrugated roof sheeting, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	No	1	
11	Pitched roof 285m2 overall flat area, of timber trusses and purlins, corrugated roof sheeting, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	No	1	
12	Pitched roof 60m2 overall flat area, of timber trusses and purlins, corrugated roof sheeting, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	No	1	
13	Pitched roof 46m2 overall flat area, of timber trusses and purlins, corrugated roof sheeting, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	No	1	
14	Pitched roof 34m2 overall flat area, of timber trusses and purlins, corrugated roof sheeting, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	No	1	
15	Asbestos sheet roof covering and timber purlins	m2	849	
16	Acoustic tile suspended ceilings, including suspension grid, hangers, cornices, etc	m2	60	
17	Fascias and barges	m	30	
	<b><u>Taking up and removing wood block floor coverings, vinyl floor coverings, carpets, etc and preparing screeds for new floor coverings</u></b>			
18	Timber floor covering	m2	2 043	
	Carried Forward			R
Bill No. 1 Alterations (Provisional)				

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Taking out and removing ironmongery</u></b>			
19	Ironmongery from steel windows	No	126
20	Ironmongery from timber doors	No	2
<b><u>Taking out/off and removing sundry metalwork</u></b>			
21	Steel gates from walls, not exceeding 2,5m2 bolted to brickwork	No	4
22	Steel handrails and balustrades from walls	m2	13
<b><u>Hacking up/off and removing granolithic, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screed, plaster, tile finishes, etc</u></b>			
23	Plaster from walls	m2	1 468
<b><u>Taking out and removing piping, sanitary fittings, etc, including cutting off as necessary, disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u></b>			
24	Vitreous china wash hand basin, including short lengths of piping, etc	No	21
25	Vitreous china WC pan, including short lengths of piping, etc.	No	33
<b><u>Taking out and removing rainwater goods etc, including cutting off as necessary, disconnecting piping</u></b>			
26	Taking down and removing 150 x 100mm Ogee roof gutters	m	30
27	Taking down and removing 75mm diameter uPVC rainwater downpipes	m	6
<b><u>Taking out and removing glass and mirrors</u></b>			
28	Glass from steel windows with beads, including cleaning out rebates and preparing for new glass	m2	118
<b><u>REPAIRS TO EXISTING BUILDINGS</u></b>			
Carried Forward			R
Bill No. 1 Alterations (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Repairs to brickwork/ blockwork</u></b>			
29	Repairs to brickwork/ blockwork with structural grout and reinforcement	m2	135
<b><u>BUDGETARY ALLOWANCES</u></b>			
<b><u>The following budgetary allowances are for work to be executed either by the contractor or any nominated / selected sub-contractor as instructed by the principal agent and priced at bill rates to be agreed in terms of the contract.Tenderers are to allow in their overall Preliminaries costs for this scope of work as no additional Preliminaries will be entertained should this work proceed. The Employer reserves the right to execute this work in part or in whole or omit the entire scope.</u></b>			
30	Provide the amount of R 20 000.00 (Twenty Thousand Rand) for Reinforced Concrete Steps	Item	20 000.00
31	Provide the amount of R 45 000.00 (Forty-Five Thousand Rand) for Refurbishment of Existing Corrugated Sheetting Storage Structure	Item	45 000.00
32	Provide the amount of R 63 500.00 (Sixty-Three Thousand and Five Hundred Rand) for Air Monitoring Equipment	Item	63 500.00
33	Provide the amount of R 354 000.00 (Three Hundred and Fifty-Four Thousand Rand) for Sundry Builders Work	Item	354 000.00
<b>Carried Forward to Summary of Section No. 2</b>			R
Bill No. 1			
Alterations (Provisional)			



Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT (PROVISIONAL)</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Cost of tests</u></b></p> <p>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 principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent (Test cubes are measured separately)</p> <p><b><u>Formwork</u></b></p> <p>Descriptions 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</p> <p>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</p> <p>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</p>			
	<b>Carried Forward</b>		R	
	<p>Bill No. 2 Concrete, Formwork and Reinforcement (Provisional)</p>			

Brought Forward			R
<p>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"</p> <p>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"</p> <p><b><u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u></b></p> <p><b><u>30MPa/19mm concrete</u></b></p>			
1	Surface beds	m3	96
<b><u>TEST CUBES</u></b>			
2	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	18
<b><u>CONCRETE SUNDRIES</u></b>			
<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>			
3	Surface beds, slabs, etc	m2	637
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<b><u>Rough formwork to sides</u></b>			
4	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	1 292
<b><u>REINFORCEMENT</u></b>			
Carried Forward			R
Bill No. 2 Concrete, Formwork and Reinforcement (Provisional)			

Brought Forward					
	<u>Fabric reinforcement</u>				R
5	Type 311 fabric reinforcement in concrete surface beds etc	m2	637		
<p><b>Carried Forward to Summary of Section No. 2</b></p> <p>Bill No. 2 Concrete, Formwork and Reinforcement (Provisional)</p>					R

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Concrete masonry units</u></b>			
	Blocks are to be either solid or hollow modular dense concrete masonry units having a compressive strength of 7MPa			
	<b><u>Wall ties for blockwork</u></b>			
	Wall ties shall be polypropylene ties 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			
	<b><u>Blockwork</u></b>			
	Blockwork shall comply with SANS 10145 "Concrete Masonry Construction"			
	Surfaces to be plastered shall have joints raked out to a depth of at least 10mm to provide a key. 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			
	<b>Carried Forward</b>			
	Bill No. 3 Masonry (Provisional)		R	

<b>Brought Forward</b>	R
<p><b><u>Standard complementary blocks</u></b></p> <p>Descriptions of blockwork shall be deemed to include standard complementary blocks such as corner, threequarter, half and quarter blocks required in the construction of corners, reveals, jambs, ends, etc to solid and hollow walls and for bonding as necessary</p> <p><b><u>BRICKWORK</u></b></p> <p><b><u>Sizes in descriptions</u></b></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p><b><u>Hollow walls</u></b></p> <p>Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p><b><u>Bagged and sealed walls</u></b></p> <p>Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats bitumen emulsion waterproofing coating</p> <p><b><u>Face bricks</u></b></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p> <p><b><u>Pointing</u></b></p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p> <p><b><u>BRICKWORK</u></b></p> <p><b><u>SUPERSTRUCTURE</u></b></p>	
<b>Carried Forward</b>	R
<p>Bill No. 3 Masonry (Provisional)</p>	

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar</u>			
1	Half brick walls	m2	86
2	One brick walls	m2	747
	One brick walls in beamfilling	m2	5
<b><u>BRICKWORK SUNDRIES</u></b>			
<u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u>			
3	On brick walls, piers, etc	m2	379
<u>2.5mm Galvanised brick reinforcement</u>			
4	150mm Wide reinforcement built in horizontally	m	3 924
<u>Galvanised hoop iron cramps, ties, etc</u>			
5	30 x 1,6mm Roof tie 1,5m long with one end built into brickwork and other end fixed to timber	No	49
<b><u>FACE BRICKWORK</u></b>			
<u>Corobrik Firelight Travertine face bricks pointed with flush horizontal and vertical joints</u>			
6	Extra over brickwork for face brickwork	m2	189
<b><u>BLOCKWORK</u></b>			
<b><u>SUPERSTRUCTURE</u></b>			
<u>Blockwork in class II mortar</u>			
7	M200 block walls in beamfilling	m2	125
<b>Carried Forward to Summary of Section No. 2</b>			R
Bill No. 3 Masonry (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Waterproofing</u></b>			
	Waterproofing of roofs, basements, etc. shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc. with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>			
	<b><u>One layer 375 micron embossed polyethylene dampproof course (SANS 952-1985 type B)</u></b>			
1	In walls	m2	27	
	<b><u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u></b>			
2	Under surface beds	m2	583	
	<b>Carried Forward to Summary of Section No. 2</b>			R
	Bill No. 4			
	Waterproofing (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Corrugated metal sheeting and accessories</u></b>			
	Roof sheeting systems are to be manufactured in strict accordance with the supplier's specifications.			
	Fixing of all roof sheeting is to be in accordance with the manufacturer's approved instruction book.			
	The manufacturer shall comply with ISO9002 Quality Management System.			
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
	<b><u>0.58mm Colorbond IBR profile sheeting, colour one side fixed to timber purlins (elsewhere measured) and fixed strictly in accordance with the manufacturer's instructions</u></b>			
1	Roof covering with pitches not exceeding 25 degrees	m2	2 407	
2	Ridge/ hip/ valley cappings	m	367	
3	Side/ head wall flashings	m	35	
4	Narrow and broad flute closers	m	718	
	<b><u>ROOF AND WALL INSULATION</u></b>			
	<b><u>"Sisalation FR430" Heavy Industrial Grade Aluminum Foil based insulation</u></b>			
5	Insulation laid taut over purlins and fixed concurrent with roof covering including galvanised steel straining wires	m2	2 407	
	<b>Carried Forward to Summary of Section No. 2</b>			R
	Bill No. 5			
	Roof Covering (Provisional)			



Item No		Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS (BLOCKS A-K)</u></b>				
	<b><u>BILL NO. 6</u></b>				
	<b><u>CARPENTRY AND JOINERY (PROVISIONAL)</u></b>				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	<b><u>Fixing</u></b>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete				
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere				
	<b><u>Joinery</u></b>				
	Descriptions of frames shall be deemed to include frames, transomes, rails, etc				
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts				
	<b>Carried Forward</b>			R	
	Bill No. 6 Carpentry and Joinery (Provisional)				

Brought Forward				R
<b><u>PREFABRICATED TIMBER ROOF TRUSSES, ETC</u></b>				
<b><u>NOTE:</u></b>				
Timber roof trusses are to comply with SABS Code of Practice 0243. (The design, manufacture and erection of timber trusses, including nail-plated and bolted trusses with lapped members)				
The following is applicable in respect of roof trusses:				
Trusses are at maximum 1200mm centres. Roof covering is IBR profiled metal sheeting colour one side on 50 x 76mm purlins. Ceilings are nailed gypsum plasterboard on brandering				
The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from site before design or fabrication commences				
<b><u>Design, supply and install nailed roof truss system complete in accordance with the Standard Building Regulations, including cross battens at hips, valleys, etc. fixed to trusses with and including ring shank nails, hurricane clips at exposed sections and at ridges, temporary and permanent bracing, etc. to suit:</u></b>				
1	Roof area approximate size 1500m2 (on flat area inclusive of overhangs)	No	1	
2	Roof area approximate size <b>369m2 (on flat floor area inclusive of overhangs)</b>	No	1	
3	Roof area approximate size 24m2 (on flat area inclusive of overhangs)	No	1	
4	Roof area approximate size 285m2 (on flat area inclusive of overhangs)	No	1	
5	Roof area approximate size 34m2 (on flat area inclusive of overhangs)	No	1	
6	Roof area approximate size 3m2 (on flat area inclusive of overhangs)	No	1	
<b>Carried Forward</b>				R
Bill No. 6 Carpentry and Joinery (Provisional)				

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward			R
7	Roof area approximate size <b>60m2 (on flat floor area inclusive of overhangs)</b>	No	2	
8	Roof area approximate size <b>46m2 (on flat floor area inclusive of overhangs)</b>	No	1	
9	Roof area approximate size 26m2 (on flat area inclusive of overhangs)	No	1	
10	Allowance for the issue of TR1 and TR2 certificates after completion of entire roof installation, signed by a competent person		Item	
	<b><u>STRUCTURAL TIMBERWORK ETC</u></b>			
	<b><u>Wrought softwood</u></b>			
11	38 x 114mm Bearers bolted to roof trusses	m	312	
12	76 x 50mm Purlins	m	984	
13	76 x 76mm Splayed gutter purlins	m	246	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<b><u>High density plain fibre-cement fascias and barge boards</u></b>			
14	225 x 12mm Fascia's boards, including galvanised steel H-profile jointing strips	m	429	
15	200 x 80mm Barge boards, including galvanised steel H-profile jointing strips	m	123	
	<b><u>DOORS ETC</u></b>			
	<b><u>Wrought meranti</u></b>			
16	44mm Framed and ledged batten single door 813 x 2032mm high, comprising of top rail, stiles, middle ledge and bottom ledge, filled in with tongued and grooved V-jointed one side vertical boarding with tongued and grooved joints to top rail and stiles and with inner edges of framing and abutting edges of boarding chamfered to form V-joint	No	107	
	<b>Carried Forward</b>			R
	Bill No. 6 Carpentry and Joinery (Provisional)			

-B.O.Q-28

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 7</u></b>			
	<b><u>CEILINGS, PARTITIONS AND ACCESS FLOORING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and the Supplementary Preambles which are incorporated into this Bill of Quantities			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Fixing</u></b>			
	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			
	<b><u>Ceilings</u></b>			
	Unless otherwise described ceilings shall be deemed to be horizontal			
	<b><u>NAILED-UP CEILINGS</u></b>			
	<b><u>6,4mm Gypsum plasterboard</u></b>			
1	Ceilings including standard steel brandering in one direction only, joined with joiner sections and hung with suspension brackets including standard steel perimeter angles fixed to walls etc.	m2	2 275	
2	Extra over ceiling for 600 x 600mm trap door with wrought softwood rebated framing hinged to open 180 degrees onto ceiling	No	13	
	<b><u>CORNICES, ETC.</u></b>			
	<b>Carried Forward</b>			R
	Bill No. 7 Ceilings, Partitions and Access (Provisional)			

[illegible]

Item No		Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>				
	<b><u>BILL NO. 8</u></b>				
	<b><u>FLOOR COVERINGS, WALL LININGS, ETC</u></b> <b><u>(PROVISIONAL)</u></b>				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	<b><u>Fixing</u></b>				
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc				
	<b><u>FLOOR COVERINGS</u></b>				
	<b><u>Supply and install vinyl floor tiles (P.C. Amount R200.00 /m2), installed with suitable adhesive, all in accordance with SANS 10186:2010, the code of practice for textile floor coverings</u></b>				
1	On floors	m2	200		
2	On turn-ups	m	148		
	<b><u>SKIRTINGS, NOSINGS, ETC</u></b>				
	<b><u>"ETC" or other equal and approved</u></b>				
3	Cove former (Code: CF20)	m	148		
	<b><u>POLISH, SEALERS, ETC</u></b>				
	<b><u>Two coats wax polish</u></b>				
4	On floors	m2	200		
	<b>Carried Forward to Summary of Section No. 2</b>				
	Bill No. 8				R
	Floor Coverings, Wall Linings, etc (Provisional)				

## **SECTION NO. 2 : EXISTING BUILDINGS** **(BLOCKS A-K)**

**BILL NO. 9**

## IRONMONGERY (PROVISIONAL)

The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)

## SUPPLEMENTARY PREAMBLES

## Proprietary items

Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items

Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered

On request returnable samples are to be provided to the principal agent for consideration

### Finishes to ironmongery

Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list:

**Carried Forward**

R

Bill No. 9  
Ironmongery (Provisional)



DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	<b>Brought Forward</b>			R	
	BS Satin bronze lacquered				
	CH Chromium plated				
	SC Satin chromium plated				
	SE Silver enamelled				
	GE Grey enamelled				
	AN Anodised natural				
	AS Anodised silver				
	AB Anodised bronze				
	AG Anodised gold				
	ABL Anodised black				
	PB Polished brass				
	PL Polished and lacquered				
	PT Epoxy coated				
	SD Sanded				
	<b><u>HINGES, BOLTS, ETC</u></b>				
	<b><u>"Union" or other equal and approved</u></b>				
1	Stainless steel two ball bearing butt hinge EN1935GRD13 (Code: JH-BB-STD-2-SS)	Pairs	109.0		
	<b><u>LOCKS</u></b>				
	<b><u>"Union" or other equal and approved</u></b>				
2	E/P Cylinder upright lock (Code: L-2215-78SS/SL)	No	108		
3	Satin nickel gemini profile thumb-turn cylinder 65mm (Code: CY2X19-65SNKD)	No	108		
	<b><u>HANDLES</u></b>				
	<b><u>"Union" or other equal and approved</u></b>				
4	Stainless steel E/Profile Cylinder lever handle on backplate (Code: SS6SG01-44-05SS)	No	108		
	<b><u>BATHROOM FITTINGS</u></b>				
	<b><u>"Franke" or other equal and approved</u></b>				
5	Toilet roll holder, plugged	No	28		
	<b>Carried Forward</b>			R	
	Bill No. 9				
	Ironmongery (Provisional)				

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
6	Grade 304 18/10 stainless steel 32mm diameter straight grab rail (Code: CNTX750) with fine grip (Code: 2510006) 750mm x 95mm deep, plugged and screwed to the wall with stainless steel screws	No	8
<b><u>SUNDRIES</u></b>			
<b><u>"Union" or other equal and approved</u></b>			
7	Stainless steel floor mounted door stop (Code: 87001SS)	No	108
8	Green writing board with chalk, plugged	No	3
<b>Carried Forward to Summary of Section No. 2</b>			R
Bill No. 9			
Ironmongery (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 10</u></b>			
	<b><u>METALWORK (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Descriptions of bolts, anchors, etc</u></b>			
	Descriptions of bolts shall be deemed to include nuts and washers			
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
	Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres			
	<b><u>STEEL GATES, SCREENS, ETC</u></b>			
	<b><u>Welded screens and gates to steel frame</u></b>			
1	Single gate 920 x 2150mm high of 25 x 25mm hollow section frame and 25 x 25mm hollow section horizontal middle rail, filled in with 25 x 25mm hollow section vertical bars at 90mm centres and fitted with a pair of suitable hinges welded to post and with ears for padlock	No	5	
2	Double gate 1511 x 2150mm high of 25 x 25mm hollow section frame and 25 x 25mm hollow section horizontal middle rail, filled in with 25 x 25mm hollow section vertical bars at 90mm centres and fitted with a pair of suitable hinges welded to post and with ears for padlock	No	3	
	<b><u>GALVANISED STEEL BALUSTRADING</u></b>			
	<b>Carried Forward</b>		R	
	Bill No. 10 Metalwork (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Welded balustrading to walkways</u></b>			
3	Horizontal balustrading to walkways 1000mm high, with top rail, intermediate balusters between top and bottom rails and posts with base plate bolted to concrete	m	16
<b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b>			
<b><u>1,2mm Double rebated frames suitable for one brick walls</u></b>			
4	Door frames	No	3
<b>Carried Forward to Summary of Section No. 2</b>			R
Bill No. 10 Metalwork (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLASTERING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and the Supplementary Preambles which are incorporated in this Bill of Quantities			
	<b><u>SCREEDS</u></b>			
	<b><u>Screeds wood floated, on concrete</u></b>			
1	25mm Thick on floors and landings	m2	300	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>Cement plaster steel trowelled, on brickwork</u></b>			
2	On walls	m2	3 197	
	<b><u>AIR GRATINGS</u></b>			
3	235 X 157mm White plastic plain pattern air grating fixed flush with plaster face	No	62	
	<b>Carried Forward to Summary of Section No. 2</b>			R
	Bill No. 11 Plastering (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 12</u></b>			
	<b><u>TILING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Fixing</u></b>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat			
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" range of products as recommended by the manufacturer of the tiles			
	<b><u>WALL TILING</u></b>			
	<b><u>Supply and install ceramic tiles (P.C. Amount R250.00 /m2) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted grout</u></b>			
1	On walls	m2	8	
	<b><u>FLOOR TILING</u></b>			
	<b><u>Supply and install ceramic floor tiles (P.C. Amount R250.00 /m2) fixed with adhesive to screed (screed elsewhere) and flush pointed with tinted grouting</u></b>			
2	On floors and landings	m2	12	
	<b>Carried Forward to Summary of Section No. 2</b>			R
	Bill No. 12			
	Tiling (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 13</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Wire gratings</u></b>			
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings			
	<b><u>Stormwater channels</u></b>			
	Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site			
	<b><u>French drains</u></b>			
	Descriptions of french drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, geofabric filter blanket over stone, 300mm earthfilling over and disposal of surplus material on site			
	<b><u>Septic tanks</u></b>			
	Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site			
	<b>Carried Forward</b>		R	
	Bill No. 13 Plumbing and Drainage (Provisional)			

<b>Brought Forward</b>	R
<p><b><u>Stainless steel basins, sinks, wash troughs, urinals, etc</u></b></p> <p>Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0)</p> <p>Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc shall be Type 304 (18/8)</p> <p>Stainless steel for laboratory sinks, photographic equipment, etc shall be Type 316 (18/8)</p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><b><u>Sealing of edges</u></b></p> <p>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</p> <p><b><u>uPVC pipes and fittings</u></b></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p><b><u>uPVC pressure pipes and fittings</u></b></p> <p>Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><b><u>High density polyethylene (HDPE) pipes and fittings</u></b></p> <p>Pipes shall be type IV and of the class specified with "Plasson" or "Alprene" compression fittings</p>	
<b>Carried Forward</b>	R
<p>Bill No. 13</p> <p>Plumbing and Drainage (Provisional)</p>	



<b>Brought Forward</b>	R
<p><b><u>"Polycop" polypropylene pipes</u></b></p> <p>Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or where so described "Polylock" compression fittings</p> <p>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</p> <p><b><u>Copper pipes</u></b></p> <p>Pipes shall be hard drawn and half-hard "Maksal" pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers.</p> <p>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</p> <p>Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition</p> <p><b><u>Reducing fittings</u></b></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained</p> <p><b><u>Fixing of pipes</u></b></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level</p>	
<b>Carried Forward</b>	R
<p>Bill No. 13 Plumbing and Drainage (Provisional)</p>	

<b>Brought Forward</b>	R
<p><b><u>Paper wrapping to pipes</u></b></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><b><u>Disinfection of water pipework</u></b></p> <p>Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere)</p> <p><b><u>Laying, backfilling, bedding, etc of pipes</u></b></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following:</p> <p>SABS 1200L : Medium-pressure pipelines SABS 1200LD: Sewers SABS 1200LE: Stormwater drainage</p> <p>Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches)</p> <p>Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)</p> <p>Unless otherwise described bedding of rigid pipes shall be Class B bedding</p> <p><b><u>General</u></b></p> <p>Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc are given separately)</p> <p>Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends</p>	
<b>Carried Forward</b>	R
<p>Bill No. 13 Plumbing and Drainage (Provisional)</p>	

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<p>Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site</p> <p>Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)</p> <p>Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)</p> <p><b><u>As built drawings</u></b></p> <p>Where required, the contractor shall prepare an updated set of as built drawings. At completion of the contract the contractor shall hand these drawings to the Principal Agent for reproducing onto the originals for handing over to the employer.</p> <p><b><u>RAINWATER DISPOSAL</u></b></p> <p><b><u>Seamless aluminium prepainted gutters and rainwaterpipes</u></b></p>			
1	150 x 100mm Ogee roof gutters	m	448
2	100 x 75mm Rainwater pipes	m	172
3	Extra over gutter for stopped end	No	48
4	Extra over rainwater pipe for bend	No	106
5	Extra over gutter for outlet for 75mm pipe	No	53
6	Extra over rainwater pipe for shoe	No	53
<b><u>SANITARY FITTINGS</u></b>			
Carried Forward			R
Bill No. 13 Plumbing and Drainage (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>"Atlas Plastics (Pty) Ltd" or other approved</u></b>			
7	Atlas Plastics "Christy" (Code 945AP) wash hand basin with splashback, colour Granite, overall size 580 x 410mm wide with 2 tap holes and 40mm waste outlet, plugged and screwed to wall with galvanised screws and brackets	No	21
8	Atlas "VIP 200" (code 222AP) pedestal with footpiece complete with seat and lid screwed in precast slab including inlet funnel (code 224AP) riveted to shaft.	No	33
9	Atlas 507 AP bowl urinal C/W 496 AP waterless urinal fitting, waste, etc complete.	No	5
<b><u>WASTE UNIONS ETC</u></b>			
<b><u>"Cobra Watertech"</u></b>			
10	Cobra Watertech 32mm chrome plated slotted basin waste (Code: 303) with 62mm diameter flange, 80mm long shank and plug	No	21
<b><u>TRAPS ETC</u></b>			
<b><u>"Cobra Watertech"</u></b>			
11	Cobra Watertech 32mm chrome plated bottle trap (Code: 345/50) with 75mm deep re-seal, adjustable telescopic pipe and 50mm outlet	No	21
<b><u>TAPS, VALVES, ETC</u></b>			
<b><u>"Cobra Watertech" or other approved</u></b>			
12	Cobra Watertech 15mm chrome plated isolating ball valve (Code: 1090-15) F x F inlets and plastic coated plated steel lever handle	No	21
13	15mm Chromium plated 'Star 106-15' basin bibtap	No	21
<b>Carried Forward to Summary of Section No. 2</b>			R
Bill No. 13 Plumbing and Drainage (Provisional)			

Item No		Unit	Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b>				
	<b><u>BILL NO. 14</u></b>				
	<b><u>GLAZING (PROVISIONAL)</u></b>				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	<b><u>Float glass</u></b>				
	The term "float glass" is used for monolithic annealed glass				
	<b><u>Laminated glass</u></b>				
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>				
	<b><u>6mm Thick clear float glass</u></b>				
1	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	132		
	<b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b>				
	<b><u>6mm Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u></b>				
2	Mirror 300 x 400mm high	No	18		
	<b>Carried Forward to Summary of Section No. 2</b>				
	Bill No. 14				
	Glazing (Provisional)				
				R	

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2 : EXISTING BUILDINGS (BLOCKS A-K)</u></b>			
	<b><u>BILL NO. 15</u></b>			
	<b><u>PAINTWORK (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>PREPARATORY WORK TO EXISTING WORK</u></b>			
	<b><u>Previously painted plastered surfaces</u></b>			
	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			
	<b><u>Previously painted metal surfaces</u></b>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<b><u>Previously painted wood surfaces</u></b>			
	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			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>"DULUX" or other equal and approved</u></b>			
	<b><u>ON METAL SURFACES</u></b>			
	<b>Carried Forward</b>		R	
	Bill No. 15 Paintwork (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward			R
	<u>Spot priming bare metal surfaces, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u>			
1	Burglar bars	m2	522	
2	Balustrades	m2	43	
	<b><u>ON INTERNAL PLASTERBOARD SURFACES</u></b>			
	<u>One coat trade alkali resistant plaster primer and two coats luxurious silk paint for interior use</u>			
3	Ceilings and cornices	m2	2 300	
	<b><u>ON FIBRE-CEMENT BOARD SURFACES</u></b>			
	<u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint</u>			
4	Fascias and barge boards not exceeding 300mm girth, including priming metal jointing strips	m	196	
	<b><u>ON WOOD SURFACES</u></b>			
	<u>One coat primer and two coats premium quality polyurethane enamel paint to timber doors, door frames, etc.</u>			
5	Doors	m2	401	
	<b><u>PAINTWORK, ETC TO PREVIOUSLY PAINTED WORK</u></b>			
	<u>"DULUX" OR OTHER EQUAL AND APPROVED</u>			
	<b><u>ON INTERNAL FLOATED PLASTER SURFACES</u></b>			
	<u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint</u>			
6	Walls	m2	7 309	
	<b>Carried Forward to Summary of Section No. 2</b>			R
	Bill No. 15			
	Paintwork (Provisional)			

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2 : EXISTING BUILDINGS</u></b> <b><u>(BLOCKS A-K)</u></b></p> <p><b><u>BILL NO. 16</u></b></p> <p><b><u>EXTERNAL WORKS (PROVISIONAL)</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>DEMOLITIONS</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>View site</u></b></p> <p>Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <p><b><u>Explosives</u></b></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated</p> <p><b><u>General</u></b></p> <p>Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent</p> <p>Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site</p>			
	<b>Carried Forward</b>		R	
	<p>Bill No. 16</p> <p>External Works (Provisional)</p>			



DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Breaking up and removing</u></b>			
1	100mm Thick reinforced concrete surface beds, walkways and v-drains	m	570
2	Breaking up and removing reinforced concrete rainwater tank bases	No	4
<b><u>CONCRETE STORMWATER V-DRAINS AND WALKWAYS</u></b>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>Testing of material and filling</u></b>			
Descriptions of earth filling, compaction, etc shall be deemed to include for all necessary testing required in accordance with the SABS 1200 series			
<b><u>Site clearance</u></b>			
3	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m2	980
<b><u>Excavation in earth not exceeding 2m deep</u></b>			
4	Over site between buildings, retaining walls, etc to reduce levels and dispose in prescribed stock piles on site	m3	98
<b><u>Extra over all excavations for carting away</u></b>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	98
<b><u>Keeping excavations free of water</u></b>			
6	Keeping excavations free of water other than subterranean water	Item	
Carried Forward			R
Bill No. 16 External Works (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward			R
	<b><u>Compaction of surfaces</u></b>			
7	Compaction of ground surfaces under pavings etc, including scarifying for a depth of 100mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	980	
	<b><u>Soil poison</u></b>			
	<b><u>Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrisien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/m<sup>2</sup></u></b>			
8	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	980	
	<b><u>25MPa/19mm reinforced concrete</u></b>			
9	V-Drains cast in panels	m3	79	
10	Walkways cast in panels	m3	19	
	<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>			
11	Surface beds, slabs, v-drains, etc.	m2	980	
	<b><u>Expansion joints with 10mm softboard between vertical concrete surfaces, including necessary formwork</u></b>			
12	Not exceeding 300mm high through slabs	m	1 960	
	<b><u>Rough formwork to sides</u></b>			
13	Edges, risers, ends and reveals not exceeding 300mm high	m	980	
	<b><u>One layer 250 micron green polyethylene waterproofsheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u></b>			
14	Under V-Drains, surface beds, etc	m2	980	
	<b>Carried Forward</b>			R
	Bill No. 16 External Works (Provisional)			

Bill No. 16  
External Works (Provisional)

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Bill No	<u>SECTION SUMMARY</u>	Page No	Amount	
1	Alterations (Provisional)	16		
2	Concrete, Formwork and Reinforcement (Provisional)	19		
3	Masonry (Provisional)	22		
4	Waterproofing (Provisional)	23		
5	Roof Covering (Provisional)	24		
6	Carpentry and Joinery (Provisional)	28		
7	Ceilings, Partitions and Access (Provisional)	30		
8	Floor Coverings, Wall Linings, etc (Provisional)	31		
9	Ironmongery (Provisional)	34		
10	Metalwork (Provisional)	36		
11	Plastering (Provisional)	37		
12	Tiling (Provisional)	38		
13	Plumbing and Drainage (Provisional)	44		
14	Glazing (Provisional)	45		
15	Paintwork (Provisional)	47		
16	External Works (Provisional)	51		
Carried to Final Summary			R	

Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>Nature of ground</u></b>			
A soils investigation has been carried out on the site by the Engineer and the report is annexed to these Bills of Quantities			
<b><u>Working space</u></b>			
Working space for formwork will only be paid for where specifically required and instructed in writing by the Engineer.			
In the case of column base and pile cap excavations, where the dimensions between the column face and the excavation face is less than 500mm, working space has been measured for the width of the column face from the commencing level of excavation to the top of the column base or pile cap only where the top of the column base or pile cap exceeds 1.5m below the commencing level of excavation.			
No separate item for working space is provided or will be considered where the face of the measured excavation is 750mm or more away from the finished face of the structure. Separate items for working space for the building of brick foundation walls on ordinary concrete wall footings will not be considered.			
<b><u>Carting away of excavated material</u></b>			
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			
<b>Carried Forward</b>		R	
Bill No. 1 Earthworks (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Filling</u></b>			
References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter			
<b><u>Testing</u></b>			
Prices for filling are to include for all necessary density and other tests			
<b><u>SITE CLEARANCE</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m2	560
<b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b>			
<b><u>EXCAVATIONS ETC</u></b>			
<b><u>Excavation in earth not exceeding 2m deep</u></b>			
2	To reduce levels under floors etc	m3	701
3	Thickening under surface beds	m3	34
<b><u>Extra over trench and hole excavations in earth for excavation in</u></b>			
4	Soft rock	m3	73
5	Hard rock	m3	37
<b><u>Extra over all excavations for carting away</u></b>			
6	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	732
Carried Forward			R
Bill No. 1 Earthworks (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Risk of collapse of excavations</u></b>			
7	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	269
<b><u>Keeping excavations free of water</u></b>			
8	Keeping excavations free of all water other than subterranean water.	Item	
<b><u>FILLING ETC</u></b>			
<b><u>Filling of 'G6' material supplied and carted onto site by the Contractor, compacted to a density of at least 98% Mod. AASHTO maximum density in layers not exceeding 150mm</u></b>			
9	Under floors, pavings, etc	m3	376
<b><u>Filling of 'G7' material supplied and carted onto site by the Contractor, compacted to a density of at least 98% Mod. AASHTO maximum density in layers not exceeding 150mm</u></b>			
10	Under floors, pavings, etc	m3	244
<b><u>Compaction of surfaces</u></b>			
11	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO density	m2	540
<b><u>WEED KILLERS, INSECTICIDES, ETC</u></b>			
<b><u>Soil insecticide in accordance with SANS 5859</u></b>			
12	Under floors etc including forming and poisoning shallow furrows against foundation walls etc. filling in furrows and ramming.	m2	540
13	To bottoms and sides of trenches etc	m2	381
<b><u>TESTS</u></b>			
Carried Forward			R
Bill No. 1 Earthworks (Provisional)			

**DEVELOPMENT BANK OF SOUTHERN AFRICA**  
**KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME**  
**MALANDELA PUBLIC SECONDARY SCHOOL**

Brought Forward			R
<u>Prescribed density tests on filling</u>			
14	"Modified AASHTO Density" test	No	12
15	"Field Density" test including "Optimum Moisture Content" (four readings per test).	No	12
Carried Forward to Summary of Section No. 3			R
Bill No. 1 Earthworks (Provisional)			



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Cost of tests</u></b>			
	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 principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent (Test cubes are measured separately)			
	<b><u>Formwork</u></b>			
	Descriptions 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			
	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			
	<b>Carried Forward</b>		R	
	Bill No. 2 Concrete, Formwork and Reinforcement (Provisional)			

Brought Forward			R
<p>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"</p> <p>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"</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>			
1	Surface blinding under footings and bases	m3	27
<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>			
2	Surface beds including thickening	m3	115
<b><u>TEST CUBES</u></b>			
3	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	48
<b><u>CONCRETE SUNDRIES</u></b>			
<b><u>Finishing top surfaces of concrete smooth with a power float</u></b>			
4	Surface beds, slabs, etc	m2	540
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u></b>			
Carried Forward			R
Bill No. 2 Concrete, Formwork and Reinforcement (Provisional)			

Brought Forward			R
<b><u>Rough formwork to sides</u></b>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	189
<b><u>MOVEMENT JOINTS ETC</u></b>			
<b><u>Expansion joints with 10mm closed cell expanded polyethylene between vertical concrete and brick surfaces</u></b>			
6	Not exceeding 300mm high to edges of surface beds and slabs	m	33
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<b><u>High tensile steel reinforcement to structural concrete work</u></b>			
7	Bars in various diameters	t	4
<b><u>Fabric reinforcement</u></b>			
8	Type 617 fabric reinforcement in concrete surface beds etc	m2	596
<b>Carried Forward to Summary of Section No. 3</b>			R
Bill No. 2			
Concrete, Formwork and Reinforcement (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Sizes in descriptions</u></b>			
	Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.			
	<b><u>Face bricks</u></b>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<b><u>Pointing</u></b>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc.			
	<b><u>BRICKWORK IN SUPERSTRUCTURE</u></b>			
	<b><u>Brickwork of COROBRICK COMMONS bricks in cement mortar</u></b>			
1	Half brick walls	m2	219	
2	One brick walls	m2	605	
	<b><u>BRICKWORK SUNDRIES</u></b>			
	<b><u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u></b>			
3	On brick walls, piers, etc	m2	587	
	<b>Carried Forward</b>			
	Bill No. 3 Masonry (Provisional)			
			R	

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>2.5mm Galvanised brickwork reinforcement</u></b>			
4	75mm Wide reinforcement built in horizontally	m	862
5	150mm Wide reinforcement built in horizontally	m	3 753
<b><u>Prestressed concrete fabricated lintels</u></b>			
6	110 x 75mm Lintels in lengths not exceeding 3m	m	120
<b><u>Turning pieces:</u></b>			
7	110mm Wide turning piece to lintels, etc.	m	120
<b><u>FACE BRICKWORK</u></b>			
<b><u>"Corobrik Firelight Satin FBX" imperial face bricks pointed with recessed horizontal and vertical joints</u></b>			
8	Extra over brickwork for face brickwork	m <sup>2</sup>	898
9	Extra over brickwork for brick-on-edge header course lintel	m	89
<b><u>Brick-on-edge header course copings, sills, etc of "Corobrik Firelight Travertine FBX" face bricks, with ruled joints and perpend</u></b>			
10	230mm Wide sill set sloping and slightly projecting	m	41
<b>Carried Forward to Summary of Section No. 3</b>			R
Bill No. 3 Masonry (Provisional)			

Item No		Quantity	Rate	Amount
<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>				
<b><u>BILL NO. 4</u></b>				
<b><u>WATERPROOFING (PROVISIONAL)</u></b>				
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<b><u>Waterproofing</u></b>				
Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
<b><u>One layer 375 micron embossed polyethylene damp-proof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	123	
<b><u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds	m2	540	
<b><u>Two coats "ABE Brixéal" bitumen emulsion waterproof coating</u></b>				
3	On bagged brick walls	m2	587	
<b><u>"Sika or other equally approved" Cemflex acrylic based emulsion waterproofing and bonding agent, colour Off-White mixed and applied in accordance with the manufacturers recommendations including Cemflex fabric</u></b>				
4	On shower floors	m2	8	
5	On shower walls	m2	69	
<b>Carried Forward to Summary of Section No. 3</b>				R
Bill No. 4 Waterproofing (Provisional)				

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Corrugated metal sheeting and accessories</u></b>			
	Roof sheeting systems are to be manufactured in strict accordance with the supplier's specifications.			
	Fixing of all roof sheeting is to be in accordance with the manufacturer's approved instruction book.			
	The manufacturer shall comply with ISO9002 Quality Management System.			
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
	<b><u>"Global Roofing Solutions" or other equal and approved, 0.53mm thick 686mm cover IBR 686 profile Supergalum AZ150 spelter G550, Egret White finish top coat and standard backing coat to other side, fixed to timber purlins (measured elsewhere) and fixed strictly in accordance with the manufacturer's instructions</u></b>			
1	Roof covering with pitch not exceeding 25 degrees	m2	565	
	<b><u>0.53mm AZ150 spelter supergalum steel sheet accessories to preceding roof covering</u></b>			
2	Roll-top type ridge capping 550mm girth, including dressing edges into corrugations of roof covering on both sides	m	35	
3	Hip cappings 400mm girth	m	78	
4	IBR pattern polyclosures to underside of ridge capping	m	35	
5	IBR pattern polyclosures to underside of hip capping	m	78	
	<b>Carried Forward</b>			
	Bill No. 5 Roof Coverings (Provisional)			
			R	

Brought Forward				R
<b><u>ROOF AND WALL INSULATION</u></b>				
<b><u>"Sisalation FR405" or other equal and approved multi-layered reinforced double-sided aluminium foil sheeting</u></b>				
6	Insulation sheeting laid taut over purlins and fixed concurrent with roof covering with minimum 150mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	304	
<b><u>"Isover " or other equal and approved, 50mm Thick Factorylite non combustible light weight fibreglass glasswool thermal roof insulation</u></b>				
7	Insulation blanket fixed to rafters (at approximately 750mm centres) with 150mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and doublesided tape at edges where required	m2	305	
<b>Carried Forward to Summary of Section No. 3</b>				R
Bill No. 5				
Roof Coverings (Provisional)				



Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>CARPENTRY AND JOINERY (PROVISIONAL)</u></b>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>Fixing</u></b>			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere			
<b><u>Joinery</u></b>			
Descriptions of frames shall be deemed to include frames, transomes, rails, etc			
Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
<b>Carried Forward</b>		R	
Bill No. 6 Carpentry and Joinery (Provisional)			

## Brought Forward

R

## PREFABRICATED TIMBER ROOF TRUSSES, ETC

**NOTE:**

Timber roof trusses are to comply with SABS Code of Practice 0243. (The design, manufacture and erection of timber trusses, including nail-plated and bolted trusses with lapped members)

The following is applicable in respect of roof trusses:

Trusses are at maximum 1200mm centres. Roof covering is IBR profiled metal sheeting colour one side on 50 x 76mm purlins. Ceilings are nailed fibre cement on branderling

The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from site before design or fabrication commences

**Design, supply and install nailed roof truss system complete in accordance with the Standard Building Regulations, including cross battens at hips, valleys, etc. fixed to trusses with and including ring shank nails, hurricane clips at exposed sections and at ridges, temporary and permanent bracing, etc. to suit:**

- |   |  |    |      |
|---|--|----|------|
| 1 | Roof area approximate size <b>110m2 (on flat floor area inclusive of overhangs)</b>  | No | 4    |
| 2 | Allowance for the issue of TR1 and TR2 certificates after completion of entire roof installation, signed by a competent person |    | Item |

## STRUCTURAL TIMBERWORK ETC

### Wrought softwood

- |   |   |   |     |
|---|---|---|-----|
| 3 | 38 x 114mm Bearers bolted to roof trusses | m | 153 |
| 4 | 76 x 50mm Purlins                         | m | 480 |
| 5 | 76 x 76mm Splayed gutter purlins          | m | 120 |

### EAVES. VERGES, ETC

**Carried Forward**

R

Bill No. 6  
Carpentry and Joinery (Provisional)

Brought Forward			R
<u>High density plain fibre-cement fascias and barge boards</u>			
6	225 x 12mm Fascia's boards, including galvanised steel H-profile jointing strips	m	182
<u>DOORS, ETC.</u>			
<u>Wrought meranti</u>			
<u>The Tenderer is referred to the door schedules attached to these Bills of Quantities for details. Refer to Architect's Drawings No. 5101</u>			
7	44mm Framed and ledged batten solid core single door 813 x 2032mm high, comprising of top rail, stiles, middle ledge and bottom ledge, filled in with tongued and grooved V-jointed one side vertical boarding with tongued and grooved joints to top rail and stiles and with inner edges of framing and abutting edges of boarding chamfered to form V-joint, hung to steel frames	No	24
8	44mm Framed and ledged batten semi solid single door 813 x 2032mm high, comprising of top rail, stiles, middle ledge and bottom ledge, filled in with tongued and grooved V-jointed one side vertical boarding with tongued and grooved joints to top rail and stiles and with inner edges of framing and abutting edges of boarding chamfered to form V-joint, hung to steel frames	No	16
<b>Carried Forward to Summary of Section No. 3</b>			R
Bill No. 6 Carpentry and Joinery (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 7</u></b>			
	<b><u>CEILINGS, PARTITIONS AND ACCESS FLOORING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and the Supplementary Preambles which are incorporated into this Bill of Quantities			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Fixing</u></b>			
	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			
	<b><u>Ceilings</u></b>			
	Unless otherwise described ceilings shall be deemed to be horizontal			
	<b><u>NAILED-UP CEILINGS</u></b>			
	<b><u>4mm "Nutech" fibre cement or similar approved</u></b>			
1	Ceilings including standard steel brandering in one direction only, joined with joiner sections and hung with suspension brackets including standard steel perimeter angles fixed to walls etc.	m2	255	
2	Extra over ceiling for 600 x 600mm trap door with wrought softwood rebated framing hinged to open 180 degrees onto ceiling	No	8	
	<b><u>CORNICES, ETC.</u></b>			
	<b>Carried Forward</b>			R
	Bill No. 7 Ceilings, Partitions and Access (Provisional)			

Brought Forward			R
	<u>Fibre cement cornices</u>		
3	76mm Coved cornices	m	357
Carried Forward to Summary of Section No. 3			R
Bill No. 7			
Ceilings, Partitions and Access (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 8</u></b>			
	<b><u>IRONMONGERY (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document General Preambles for Trades (2017 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Proprietary items</u></b>			
	Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items			
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered			
	On request returnable samples are to be provided to the principal agent for consideration			
	<b><u>HINGES, BOLTS, ETC</u></b>			
	<b><u>"Union" or other equal and approved</u></b>			
1	Stainless steel two ball bearing butt hinge EN1935GRD13 (Code: JH-BB-STD-2-SS)	Pairs	40.0	
	<b><u>LOCKS</u></b>			
	<b><u>"Union" or other equal and approved</u></b>			
2	E/P Cylinder upright lock (Code: L-2215-78SS/SL)	No	40	
	<b><u>HANDLES</u></b>			
	<b>Carried Forward</b>			R
	Bill No. 8 Ironmongery (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<u>"Union" or other equal and approved</u>			
3	Stainless steel E/Profile Cylinder lever handle on backplate (Code: SS6SG01-44-05SS)	No 40	
<b><u>BATHROOM FITTINGS</u></b>			
<u>"La Gio Bella" or other equal and approved</u>			
4	Fiorano chrome soap dish (Code: GIO-4369), fixed to wall	No 8	
5	Rieti chrome toilet roll holder (Code: GIO-3925), fixed to wall	No 8	
6	Demola double robe hooks chrome (Code: GIO-3323), fixed to wall	No 8	
<b><u>SUNDRIES</u></b>			
<u>"Union" or other equal and approved</u>			
7	Stainless steel floor mounted door stop (Code: 87001SS)	No 40	
<b>Carried Forward to Summary of Section No. 3</b>			R
Bill No. 8			
Ironmongery (Provisional)			

Item No		Quantity	Rate	Amount
<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>				
<b><u>BILL NO. 9</u></b>				
<b><u>METALWORK (PROVISIONAL)</u></b>				
The Tenderer is referred to the relevant Clauses in the separate document General Preambles for Trades (2017 Edition)				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<b><u>Descriptions of bolts, anchors, etc.</u></b>				
Descriptions of bolts shall be deemed to include nuts and washers				
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres				
<b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b>				
<b><u>1,2mm Double rebated frames suitable for one brick walls with two 100mm butt hinges</u></b>				
1	Frame for door 813 x 2032mm high	No	24	
<b><u>1,2mm Single rebated frames suitable for half brick walls with two 100mm butt hinges</u></b>				
2	Frame for door 813 x 2032mm high	No	16	
<b><u>Purpose made windows with 10mm diameter burglar bars to opening sashes</u></b>				
3	540 x 1336mm High window type 1, complete	No	8	
4	1038 x 1336mm High window type 2, complete	No	24	
5	1529 x 1336mm High window type 3, complete	No	8	
<b>Carried Forward to Summary of Section No. 3</b>				R
Bill No. 9 Metalwork (Provisional)				



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and the Supplementary Preambles which are incorporated in this Bill of Quantities			
	<b><u>SCREEDS</u></b>			
	<b><u>Screeds wood floated, on concrete</u></b>			
1	25mm Thick on floors and landings	m2	247	
2	Average 25mm thick on floors with upper surface to falls	m2	5	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>Cement plaster steel trowelled, on brickwork</u></b>			
3	On walls	m2	971	
4	On narrow widths	m2	30	
	<b>Carried Forward to Summary of Section No. 3</b>			R
	Bill No. 10 Plastering (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 11</u></b>			
	<b><u>TILING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Fixing</u></b>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat			
	Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts from the "Tal Professional" range of products as recommended by the manufacturer of the tiles			
	<b><u>WALL TILING</u></b>			
	<b><u>200 x 200 x 5mm Johnson white wall tiles fixed with adhesive to plaster (plaster elsewhere)</u></b>			
1	On walls	m2	387	
2	On narrow widths not exceeding 300mm	m2	7	
	<b><u>FLOOR TILING</u></b>			
	<b><u>600 x 600 x 5mm Salt and pepper non-slip ceramic floor tiles fixed with adhesive to plaster (plaster elsewhere)</u></b>			
3	On floors and landings	m2	247	
	<b>Carried Forward</b>			R
	Bill No. 11 Tiling (Provisional)			

**DEVELOPMENT BANK OF SOUTHERN AFRICA**  
**KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME**  
**MALANDELA PUBLIC SECONDARY SCHOOL**

Brought Forward			R
4	Skirting 100mm high	m	246
	<u>Mosaic tiles (P.C. Amount R1500.00 /m2) fixed with adhesive to screed (screed elsewhere) and flush pointed with tinted grout</u>		
5	On shower floors	m2	5
Carried Forward to Summary of Section No. 3			R
Bill No. 11			
Tiling (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 12</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>French drains</u></b>			
	Descriptions of french drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, "Bidim" geofabric filter blanket over stone, 300mm earth filling over and disposal of surplus material on site			
	<b><u>Septic tanks</u></b>			
	Descriptions of proprietary type septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, cover slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions and disposal of surplus material on site			
	<b><u>PVC-U pipes and fittings</u></b>			
	Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings			
	Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings			
	<b><u>PVC-U pressure pipes and fittings</u></b>			
	Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings			
	Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints			
	<b>Carried Forward</b>		R	
	Bill No. 12 Plumbing and Drainage (Provisional)			

<b>Brought Forward</b>	R
<p><b><u>Copper pipes</u></b></p> <p>Pipes shall be hard drawn and half hard "Maksal" pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half hard), Class 2 (half hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" or other equally and approved type. Capillary solder fittings shall comply with ISO 2016.</p> <p>Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition.</p> <p><b><u>Reducing fittings</u></b></p> <p>Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given.</p> <p><b><u>Fixing of pipes</u></b></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level.</p> <p><b><u>Paper wrapping to pipes</u></b></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><b><u>Disinfection of water pipework</u></b></p> <p>Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere)</p>	
<b>Carried Forward</b>	R
<p>Bill No. 12 Plumbing and Drainage (Provisional)</p>	

<b>Brought Forward</b>				R
<b><u>Laying, backfilling, bedding, etc of pipes</u></b>				
Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled				
Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium-pressure pipelines SABS 1200LD: Sewers SABS 1200LE: Stormwater drainage				
<b><u>General</u></b>				
Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends				
Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc and to steel pipes (adaptors for connections to copper pipes, etc are given separately)				
Descriptions of WC pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors are separately measured)				
<b><u>As-built drawings</u></b>				
Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere)				
<b><u>RAINWATER DISPOSAL</u></b>				
<b><u>"Marley Streamline or equally approved" PVC-U gutters and rainwater pipes</u></b>				
1	110 x 75mm Roof gutters with beaded front edge fixed to fascia brackets at maximum 1000mm centres	m	182	
2	75 x 75mm Rainwater pipes fixed to pipe clips at 1000mm centres	m	48	
<b>Carried Forward</b>				R
Bill No. 12 Plumbing and Drainage (Provisional)				

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward			R
3	Extra over rainwater pipe for bend	No	16	
4	Extra over gutter for outlet for 75 x 75mm downpipe	No	16	
5	Extra over gutter for stopped end	No	16	
6	Extra over rainwater pipe for shoe	No	16	
	<b><u>SOIL DRAINAGE</u></b>			
	<b><u>Heavy duty (Class 34) PVC-U sewer and drain pipes</u></b>			
7	110mm Ribbed pipes laid in trenches, not exceeding 1m deep	m	48	
8	110mm Perforated pipes laid in trenches, not exceeding 1m deep	m	24	
	<b><u>French drains</u></b>			
9	French drain, overall size 5000 x 600 x 1000mm deep, with 19mm crushed stone dressing, including excavations, cart away, etc. complete	No	4	
	<b><u>Septic tanks</u></b>			
10	Atlas Plastics rotomoulded polyethylene 1550 litre black digester tank (Code: 677AP), size 1485mm x 1250mm diameter with 50mm UPVC outlet pipe including 350mm diameter lid and secondary tank fitted below ground including excavation and back filling	No	4	
	<b><u>SANITARY FITTINGS</u></b>			
	<b><u>"Atlas Plastics (Pty) Ltd" or other approved</u></b>			
11	Atlas Plastics "Christy" (Code 945AP) wash hand basin with splashback, colour Granite, overall size 570 x 400mm wide with 2 tap holes and 40mm waste outlet, plugged and screwed to wall with galvanised screws and brackets	No	8	
12	Atlas "VIP 200" (code 222AP) pedestal with footpiece complete with seat and lid screwed in precast slab including inlet funnel (code 224AP) riveted to shaft.	No	8	
	<b>Carried Forward</b>			R
	Bill No. 12 Plumbing and Drainage (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward			R
	<b><u>"Franke"</u></b>			
13	"Franke" Cascade CDX 611 Stainless steel sink and drainer size 925 x 500mm with single end bowl including drip tray, 90mm waste fittings, plug and chain and integral overflow, holed for sink mixer	No	8	
	<b><u>"Lion Concrete" or other approved</u></b>			
14	685 x 550mm Wide single bowl concrete wash trough with legs	No	8	
	<b><u>WASTE UNIONS ETC</u></b>			
	<b><u>"Cobra Watertech"</u></b>			
15	Cobra Watertech 32mm chrome plated slotted basin waste (Code: 303) with 62mm diameter flange, 80mm long shank and plug	No	8	
	<b><u>TRAPS, ETC</u></b>			
	<b><u>"Cobra Watertech"</u></b>			
16	40 x 40mm Flexible rubber re-seal 'P' or 'S' - traps	No	8	
17	50mm Rough brass shower 'P'-trap BSP as 'Cobra Watertech' Ref. No. 373 or other equal and approved with chromium plated grating jointed to PVC	No	8	
	<b><u>SANITARY PLUMBING</u></b>			
	<b><u>uPVC soil and vent pipes</u></b>			
18	50mm Pipes	m	160	
19	110mm Pipes	m	80	
	<b><u>Extra over uPVC soil and vent pipes for fittings</u></b>			
20	50mm Bend	No	96	
21	50mm Access bend	No	32	
22	50mm Junction	No	32	
	<b>Carried Forward</b>			R
	Bill No. 12 Plumbing and Drainage (Provisional)			



## Brought Forward

R

23	50mm Access junction	No	32
----	----------------------	----	----

24	50mm Sewer stack two-way vent valve	No	8
----	-------------------------------------	----	---

25	110mm bend	No	16
----	------------	----	----

26	110mm Access bend	No	8
----	-------------------	----	---

27	110mm Access junction	No	8
----	-----------------------	----	---

28	110mm Sewer stack two-way vent valve	No	8
----	--------------------------------------	----	---

29	110mm bent Access pan connector	No	8
----	---------------------------------	----	---

## WATER SUPPLIES AND FIRE SERVICES

### Class 2 copper piping

30	15mm Pipe fixed to walls, ceilings, roofs or floors	m	40
----	---	---	----

31	22mm Pipe fixed to walls, ceilings, roofs or floors	m	40
----	---	---	----

**Extra over Class 2 copper pipes for capillary fittings**

32	15mm Fitting	No	80
----	--------------	----	----

33	22mm Fitting	No	80
----	--------------	----	----

**Extra over Class 2 copper pipes for compression fittings**

34	15mm Fitting	No	80
----	--------------	----	----

35	22mm Fitting	No	80
----	--------------	----	----

## TAPS, VALVES, ETC

## "Cobra Watertech"

36	15mm Star one tap hole sink mixer with overarm swivel outlet, mounting kit and angle valves (Code: 296 and S-041/10), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412)	No	8
----	--	----	---

**Carried Forward**

R

Bill No. 12  
Plumbing and Drainage (Provisional)

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward		R
37	15mm Chromium plated shower cubicle set as 'Cobra Watertech' Ref. No. 431 or other equal and approved comprising shower arm with fascia Ref. No. 127,1 'Concorde' shower rose Ref. No. 068BJ and one pair undertile stoptaps Ref No. 128,1, manufactured in accordance with SANS 226:2004 Type 1 (BS 5412)	No 8	
38	15mm Star pillar tap with flanged backnut (Code: 211-15), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412)	No 16	
39	15m Stop tap as 'Cobra Watertech' Ref. No. 131-15 or other equal and approved with couplings for copper	No 8	
40	15mm 'Kwikot' drain cock	No 8	
41	22mm ball-o-stops valves, etc	No 8	
<b><u>ELECTRICAL WATER HEATER</u></b>			
<b><u>"Kwikot"</u></b>			
42	Kwikot 100L SuperLine 400 Dual electric water heater (Code: DSG-100-5) complying with SABS 151-2002, overall size 937 x 538mm high, operating at 400kPa with temperature and pressure safety relief valve including 20mm female draincock with inlet compression. Geyser to be wall mounted vertically using supplied wall mounting brackets (Code: BKT-21) with 620 x 560mm wide polyethylene drip tray with union and back nut connected to 20mm PVC overflow pipe taken out at eaves (Code: GSTP-760) and 15mm pipe work including two 15mm vacuum breakers (Code: KHN4-150CX) installed on hot and cold water supply. Installation to include a 15mm 400kPa Kwikot Multi control and expansion relief valve (Code: KHN3-204), all in accordance with SANS 10254, connected to single phase electrical power supply with isolator 1m away from connection on geyser	No 8	
<b><u>TESTING</u></b>			
43	Allow for testing the whole of the plumbing and drainage installation to the approval of the Principal Agent	Item	
<b>Carried Forward to Summary of Section No. 3</b>			R
Bill No. 12 Plumbing and Drainage (Provisional)			

Item No		Quantity	Rate	Amount
<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>				
<b><u>BILL NO. 13</u></b>				
<b><u>GLAZING (PROVISIONAL)</u></b>				
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<b><u>Float glass</u></b>				
The term "float glass" is used for monolithic annealed glass				
<b><u>Laminated glass</u></b>				
<b><u>GLAZING TO STEEL WITH PUTTY</u></b>				
<b><u>6mm Thick clear safety glass</u></b>				
1	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	10	
2	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	23	
<b><u>6mm Thick obscured safety glass</u></b>				
3	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup>	m2	2	
4	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	6	
<b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u></b>				
<b><u>6mm Silvered float glass copper backed mirrors with polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u></b>				
5	Mirror 300 x 400mm high	No	8	
<b>Carried Forward to Summary of Section No. 3</b>				R
Bill No. 13 Glazing (Provisional)				

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3 NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 14</u></b>			
	<b><u>PAINTWORK (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>PREPARATORY WORK TO EXISTING WORK</u></b>			
	<b><u>Previously painted plastered surfaces</u></b>			
	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			
	<b><u>Previously painted metal surfaces</u></b>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<b><u>Previously painted wood surfaces</u></b>			
	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			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>"DULUX" OR OTHER EQUAL AND APPROVED</u></b>			
	<b><u>ON INTERNAL FLOATED PLASTER SURFACES</u></b>			
	<b><u>Two coats premium quality highly washable and stain resistant acrylic emulsion paint</u></b>			
1	Walls	m2	621	
	<b>Carried Forward</b>		R	
	Bill No. 14 Paintwork (Provisional)			

Brought Forward			R
<b><u>ON INTERNAL PLASTERBOARD SURFACES</u></b>			
<b><u>One coat trade alkali resistant plaster primer and two coats luxurious silk paint for interior use</u></b>			
2	Ceilings and cornices	m2	255
<b><u>ON FIBRE-CEMENT BOARD SURFACES</u></b>			
<b><u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint</u></b>			
3	Fascias and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	42
<b><u>ON METAL SURFACES</u></b>			
<b><u>One coat alkyd based zinc phosphate primer and two coats "Cashmere" paint, on steel. Colour: to match matt charcoal (code: ANP 3055)</u></b>			
4	Door frames	m2	68
5	Windows with burglar bars	m2	2
<b><u>ON WOOD SURFACES</u></b>			
<b><u>One coat primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u></b>			
6	Doors	m2	142
<b>Carried Forward to Summary of Section No. 3</b>			R
Bill No. 14			
Paintwork (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3: NEW STAFF QUARTERS</u></b>			
	<b><u>BILL NO. 15</u></b>			
	<b><u>EXTERNAL WORKS (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Nature of ground</u></b>			
	A soils investigation has been carried out on the site by the Engineer and the report is annexed to these Bills of Quantities			
	<b><u>Working space</u></b>			
	Working space for formwork will only be paid for where specifically required and instructed in writing by the Engineer.			
	In the case of column base and pile cap excavations, where the dimensions between the column face and the excavation face is less than 500mm, working space has been measured for the width of the column face from the commencing level of excavation to the top of the column base or pile cap only where the top of the column base or pile cap exceeds 1.5m below the commencing level of excavation.			
	No separate item for working space is provided or will be considered where the face of the measured excavation is 750mm or more away from the finished face of the structure. Separate items for working space for the building of brick foundation walls on ordinary concrete wall footings will not be considered.			
	<b><u>Carting away of excavated material</u></b>			
	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			
	<b>Carried Forward</b>		R	
	Bill No. 15 External Work (Provisional)			

<b>Brought Forward</b>				R
<b><u>Filling</u></b>				
References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter				
<b><u>Testing</u></b>				
Prices for filling are to include for all necessary density and other tests				
<b><u>APRONS, V-DRAINS, ETC</u></b>				
<b><u>Excavation in earth not exceeding 2m deep</u></b>				
1	Not exceeding 2m deep over site between buildings, retaining walls, etc to reduce levels and dispose in prescribed stock piles on site	m3	68	
<b><u>Extra over all excavations for carting away</u></b>				
2	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	68	
<b><u>Keeping excavations free of water</u></b>				
3	Keeping excavations free of all water other than subterranean water		Item	
<b><u>Compaction of surfaces</u></b>				
4	Compaction of ground surface under floors etc including scarifying for a depth of 200mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	206	
<b><u>Soil insecticide in accordance with SANS 5859</u></b>				
5	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	206	
<b>Carried Forward</b>				R
Bill No. 15 External Work (Provisional)				

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Prescribed density tests on filling</u></b>			
6	"Modified AASHTO Density" test	No	12
<b><u>25MPa/19mm Reinforced concrete</u></b>			
7	Surface beds cast in panels	m3	46
<b><u>25MPa/19mm Reinforced concrete</u></b>			
8	Surface blinding under aprons	m3	10
<b><u>Test cubes</u></b>			
9	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	12
<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>			
10	Surface beds, slabs, etc	m2	206
<b><u>Rough formwork to sides</u></b>			
11	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	27
<b><u>Fabric reinforcement</u></b>			
12	Type 617 fabric reinforcement in concrete surface beds etc	m2	250
<b>Carried Forward to Summary of Section No. 3</b>			R
Bill No. 15			
External Work (Provisional)			



DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Bill No	<u>SECTION SUMMARY</u>	Page No	Amount	
1	Earthworks (Provisional)	56		
2	Concrete, Formwork and Reinforcement (Provisional)	59		
3	Masonry (Provisional)	61		
4	Waterproofing (Provisional)	62		
5	Roof Coverings (Provisional)	64		
6	Carpentry and Joinery (Provisional)	67		
7	Ceilings, Partitions and Access (Provisional)	69		
8	Ironmongery (Provisional)	71		
9	Metalwork (Provisional)	72		
10	Plastering (Provisional)	73		
11	Tiling (Provisional)	75		
12	Plumbing and Drainage (Provisional)	82		
13	Glazing (Provisional)	83		
14	Paintwork (Provisional)	85		
15	External Work (Provisional)	88		
Carried to Final Summary			R	

Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>Nature of ground</u></b>			
A soils investigation has been carried out on the site by the Engineer and the report is annexed to these Bills of Quantities			
<b><u>Working space</u></b>			
Working space for formwork will only be paid for where specifically required and instructed in writing by the Engineer			
In the case of column base and pile cap excavations, where the dimensions between the column face and the excavation face is less than 500mm, working space has been measured for the width of the column face from the commencing level of excavation to the top of the column base or pile cap only where the top of the column base or pile cap exceeds 1.5m below the commencing level of excavation			
No separate item for working space is provided or will be considered where the face of the measured excavation is 750mm or more away from the finished face of the structure. Separate items for working space for the building of brick foundation walls on ordinary concrete wall footings will not be considered			
<b><u>Carting away of excavated material</u></b>			
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			
<b>Carried Forward</b>		R	
Bill No. 1 Earthworks (Provisional)			

Brought Forward			R
<b><u>Filling</u></b>			
References such as "G1", "G2", etc and "C1", "C2", etc in descriptions of filling and layer work materials refer to corresponding references in the document "Guidelines for Road Construction Materials. TRH 14 : 1985" compiled by the Committee of State Road Authorities and the properties set out therein for each kind shall be applicable to the respective materials described hereinafter			
<b><u>Testing</u></b>			
Prices for filling are to include for all necessary density and other tests			
<b><u>SITE CLEARANCE</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m2	29
<b><u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u></b>			
<b><u>EXCAVATIONS ETC</u></b>			
<b><u>Excavation in earth not exceeding 2m deep</u></b>			
2	To reduce levels under floors etc	m3	35
3	Thickening under surface beds	m3	7
<b><u>Extra over trench and hole excavations in earth for excavation in</u></b>			
4	Soft rock	m3	4
5	Hard rock	m3	2
<b><u>Extra over all excavations for carting away</u></b>			
6	Surplus material from excavations and/or stock piles on site, to a dumping site to be located by the contractor	m3	42
Carried Forward			R
Bill No. 1 Earthworks (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Risk of collapse of excavations</u></b>			
7	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	16
<b><u>Keeping excavations free of water</u></b>			
8	Keeping excavations free of all water other than subterranean water.	Item	
<b><u>FILLING ETC</u></b>			
<b><u>Filling of 'G6' material supplied and carted onto site by the Contractor, compacted to a density of at least 98% Mod. AASHTO maximum density in layers not exceeding 200mm</u></b>			
9	Under floors, pavings, etc	m3	21
<b><u>Filling of 'G7' material supplied and carted onto site by the Contractor, compacted to a density of at least 98% Mod. AASHTO maximum density in layers not exceeding 200mm</u></b>			
10	Under floors, pavings, etc	m3	14
<b><u>Compaction of surfaces</u></b>			
11	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO density	m2	29
<b><u>WEED KILLERS, INSECTICIDES, ETC</u></b>			
<b><u>Soil insecticide in accordance with SANS 5859</u></b>			
12	Under floors etc including forming and poisoning shallow furrows against foundation walls etc. filling in furrows and ramming	m2	29
13	To bottoms and sides of trenches etc	m2	23
<b><u>TESTS</u></b>			
Carried Forward			R
Bill No. 1 Earthworks (Provisional)			

**DEVELOPMENT BANK OF SOUTHERN AFRICA**  
**KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME**  
**MALANDELA PUBLIC SECONDARY SCHOOL**

Brought Forward			R
<b><u>Prescribed density tests on filling</u></b>			
14	"Modified AASHTO Density" test	No	1
15	"Field Density" test including "Optimum Moisture Content" (four readings per test)	No	1
Carried Forward to Summary of Section No. 4			R
Bill No. 1 Earthworks (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Cost of tests</u></b>			
	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 principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent (Test cubes are measured separately)			
	<b><u>Formwork</u></b>			
	Descriptions 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			
	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			
	<b>Carried Forward</b>			
	Bill No. 2 Concrete, Formwork and Reinforcement (Provisional)		R	

Brought Forward			R
<p>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"</p> <p>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"</p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>15MPa/19mm concrete</u></b></p>			
1	Surface blinding under footings and bases	m3	1
<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm concrete</u></b></p>			
2	Surface beds including thickening	m3	6
<b><u>TEST CUBES</u></b>			
3	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	3
<b><u>CONCRETE SUNDRIES</u></b>			
<b><u>Finishing top surfaces of concrete smooth with a power float</u></b>			
4	Surface beds, slabs, etc	m2	29
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u></b>			
Carried Forward			R
Bill No. 2 Concrete, Formwork and Reinforcement (Provisional)			

Brought Forward			R
<b><u>Rough formwork to sides</u></b>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	23
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<b><u>High tensile steel reinforcement to structural concrete work</u></b>			
6	Bars in various diameters	t	0.2
<b><u>Fabric reinforcement</u></b>			
7	Type 617 fabric reinforcement in concrete surface beds etc	m2	36
<b>Carried Forward to Summary of Section No. 4</b>			R
Bill No. 2			
Concrete, Formwork and Reinforcement (Provisional)			



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Sizes in descriptions</u></b>			
	Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick			
	<b><u>Face bricks</u></b>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<b><u>Pointing</u></b>			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	<b><u>BRICKWORK IN SUPERSTRUCTURE</u></b>			
	<b><u>Brickwork of COROBRICK COMMONS bricks in cement mortar</u></b>			
1	One brick walls	m2	65	
	<b><u>BRICKWORK SUNDRIES</u></b>			
	<b><u>Cement wash of 1:3 liquid cement and sand mixture applied with a brush</u></b>			
2	On brick walls, piers, etc	m2	65	
	<b>Carried Forward</b>		R	
	Bill No. 3 Masonry (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>2.5mm Galvanised brickwork reinforcement</u></b>			
3	150mm Wide reinforcement built in horizontally	m	344
<b><u>Prestressed concrete fabricated lintels</u></b>			
4	110 x 75mm Lintels in lengths not exceeding 3m	m	5
<b><u>Turning pieces:</u></b>			
5	110mm Wide turning piece to lintels, etc	m	5
<b><u>Galvanised hoop iron cramps, ties, etc</u></b>			
6	30 x 1,6mm Roof tie 1,5m long with one end built into brickwork and other end fixed to timber	No	216
<b><u>Air bricks etc</u></b>			
7	229 x 152mm Clay vermin proof air brick	No	4
<b><u>FACE BRICKWORK</u></b>			
<b><u>"Corobrik Firelight Satin FBX" imperial face bricks pointed with recessed horizontal and vertical joints</u></b>			
8	Extra over brickwork for face brickwork	m2	65
9	Extra over brickwork for brick-on-edge header course lintel	m	4
<b><u>Brick-on-edge header course copings, sills, etc of "Corobrik Travertine FBA" face bricks, with ruled joints and perpends</u></b>			
10	230mm Wide sill set sloping and slightly projecting	m	3
<b>Carried Forward to Summary of Section No. 4</b>			R
Bill No. 3 Masonry (Provisional)			

Item No		Quantity	Rate	Amount
<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>				
<b><u>BILL NO. 4</u></b>				
<b><u>WATERPROOFING (PROVISIONAL)</u></b>				
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<b><u>Waterproofing</u></b>				
Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
<b><u>One layer 375 micron embossed polyethylene damp-proof course (SANS 952-1985 type B)</u></b>				
1	In walls	m2	13	
<b><u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape</u></b>				
2	Under surface beds.	m2	29	
<b><u>Two coats "ABE Brixéal" bitumen emulsion waterproof coating</u></b>				
3	On bagged brick walls	m2	65	
Carried Forward to Summary of Section No. 4				R
Bill No. 4 Waterproofing (Provisional)				

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Corrugated metal sheeting and accessories</u></b>			
	Roof sheeting systems are to be manufactured in strict accordance with the supplier's specifications.			
	Fixing of all roof sheeting is to be in accordance with the manufacturer's approved instruction book.			
	The manufacturer shall comply with ISO9002 Quality Management System.			
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
	<b><u>"Global Roofing Solutions" or other equal and approved, 0.53mm thick 686mm cover IBR 686 profile Supergalum AZ150 spelter G550, Egret White finish top coat and standard backing coat to other side, fixed to timber purlins and fixed strictly in accordance with the manufacturer's instructions</u></b>			
1	Roof covering with pitch not exceeding 25 degrees	m2	88	
	<b><u>0.53mm AZ150 spelter supergalum steel sheet accessories to preceding roof covering</u></b>			
2	Roll-top type ridge capping 550mm girth, including dressing edges into corrugations of roof covering on both sides	m	18	
3	IBR pattern polyclosures to underside of ridge capping	m	4	
	<b><u>ROOF AND WALL INSULATION</u></b>			
	<b>Carried Forward</b>			R
	Bill No. 5 Roof Coverings (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
	<u>"Sisalation FR405" or other equal and approved multi-layered reinforced double-sided aluminium foil sheeting</u>		
4	Insulation sheeting laid taut over purlins and fixed concurrent with roof covering with minimum 150mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	29
	<u>"Isover " or other equal and approved, 50mm Thick Factorylite non combustible light weight fibreglass glasswool thermal roof insulation</u>		
5	Insulation blanket fixed to rafters (at approximately 750mm centres) with 150mm stapled laps including galvanised steel straining wires at not exceeding 400mm centres and doublesided tape at edges where required	m2	29
Carried Forward to Summary of Section No. 4			R
Bill No. 5			
Roof Coverings (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>CARPENTRY AND JOINERY (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition).			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Fixing</u></b>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere			
	<b><u>Joinery</u></b>			
	Descriptions of frames shall be deemed to include frames, transomes, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include sinking and pelleting heads and nuts of bolts			
	<b>Carried Forward</b>		R	
	Bill No. 6 Carpentry and Joinery (Provisional)			

Brought Forward			R
<b><u>PREFABRICATED TIMBER ROOF TRUSSES, ETC</u></b>			
<b><u>NOTE:</u></b>			
Timber roof trusses are to comply with SABS Code of Practice 0243. (The design, manufacture and erection of timber trusses, including nail-plated and bolted trusses with lapped members)			
The following is applicable in respect of roof trusses:			
Trusses are at maximum 1200mm centres. Roof covering is IBR profiled metal sheeting colour one side on 50 x 76mm purlins. Ceilings are nailed fibre cement on brandering			
The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained from site before design or fabrication commences			
<b><u>Design, supply and install nailed roof truss system complete in accordance with the Standard Building Regulations, including cross battens at hips, valleys, etc. fixed to trusses with and including ring shank nails, hurricane clips at exposed sections and at ridges, temporary and permanent bracing, etc. to suit:</u></b>			
1	Roof area approximate size <b>68m<sup>2</sup> (on flat floor area inclusive of overhangs)</b>	No	4
2	Allowance for the issue of TR1 and TR2 certificates after completion of entire roof installation, signed by a competent person	Item	
<b><u>STRUCTURAL TIMBERWORK ETC</u></b>			
<b><u>Wrought softwood</u></b>			
3	38 x 114mm Bearers bolted to roof trusses	m	8
<b><u>EAVES. VERGES, ETC</u></b>			
<b><u>High density plain fibre-cement fascias and barge boards</u></b>			
4	225 x 12mm Fascia's boards, including galvanised steel H-profile jointing strips	m	35
<b><u>DOORS, ETC.</u></b>			
Carried Forward			R
Bill No. 6 Carpentry and Joinery (Provisional)			

<b>Brought Forward</b>			R
<u><b>Wrought meranti</b></u>			
<u><b>The Tenderer is referred to the door schedules attached to these Bills of Quantities for details.</b></u>			
<u><b>Refer to Architect's Drawings No. 5101</b></u>			
5	44mm Framed and ledged batten solid core single door 813 x 2032mm high, comprising of top rail, stiles, middle ledge and bottom ledge, filled in with tongued and grooved V-jointed one side vertical boarding with tongued and grooved joints to top rail and stiles and with inner edges of framing and abutting edges of boarding chamfered to form V-joint, hung to steel frames	No	1
<b>Carried Forward to Summary of Section No. 4</b>			R
Bill No. 6 Carpentry and Joinery (Provisional)			



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 7</u></b>			
	<b><u>CEILINGS, PARTITIONS AND ACCESS FLOORING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and the Supplementary Preambles which are incorporated into this Bill of Quantities			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Fixing</u></b>			
	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			
	<b><u>Ceilings</u></b>			
	Unless otherwise described ceilings shall be deemed to be horizontal			
	<b><u>NAILED-UP CEILINGS</u></b>			
	<b><u>4mm "Nutech" fibre cement or similar approved</u></b>			
1	Ceilings including standard steel brandering in one direction only, joined with joiner sections and hung with suspension brackets including standard steel perimeter angles fixed to walls etc	m2	24	
2	Extra over ceiling for 600 x 600mm trap door with wrought softwood rebated framing hinged to open 180 degrees onto ceiling	No	1	
	<b><u>CORNICES, ETC.</u></b>			
	<b>Carried Forward</b>		R	
	Bill No. 7 Ceilings, Partitions and Access (Provisional)			

Brought Forward			R
	<u>Fibre cement cornices</u>		
3	75mm Coved cornices	m	21
Carried Forward to Summary of Section No. 4			R
Bill No. 7			
Ceilings, Partitions and Access (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 8</u></b>			
	<b><u>FLOOR COVERINGS, WALL LININGS, ETC (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Fixing</u></b>			
	Floor coverings, wall linings, etc shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc			
	<b><u>FLOOR COVERINGS</u></b>			
	<b><u>Supply and install vinyl floor tiles (P.C. Amount R200.00 /m2), installed with suitable adhesive, all in accordance with SANS 10186:2010, the code of practice for textile floor coverings</u></b>			
1	On floors	m2	24	
	<b><u>POLISH, SEALERS, ETC</u></b>			
	<b><u>Two coats wax polish</u></b>			
2	On floors	m2	24	
	<b>Carried Forward to Summary of Section No. 4</b>			R
	Bill No. 8			
	Floor Coverings, Wall Linings, etc			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 9</u></b>			
	<b><u>IRONMONGERY (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document General Preambles for Trades (2017 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Proprietary items</u></b>			
	Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items			
	Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered			
	On request returnable samples are to be provided to the principal agent for consideration			
	<b><u>HINGES, BOLTS, ETC</u></b>			
	<b><u>"Union" or other equal and approved</u></b>			
1	Stainless steel two ball bearing butt hinge EN1935GRD13 (Code: JH-BB-STD-2-SS)	Pairs	1.0	
	<b><u>LOCKS</u></b>			
	<b><u>"Union" or other equal and approved</u></b>			
2	E/P Cylinder upright lock (Code: L-2215-78SS/SL)	No	1	
	<b><u>HANDLES</u></b>			
	<b>Carried Forward</b>			R
	Bill No. 9 Ironmongery (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward			R
	<u>"Union" or other equal and approved</u>			
3	Stainless steel E/Profile Cylinder lever handle on backplate (Code: SS6SG01-44-05SS)	No	1	
	<b><u>SUNDRIES</u></b>			
	<u>"Union" or other equal and approved</u>			
4	Stainless steel floor mounted door stop (Code: 87001SS)	No	1	
Carried Forward to Summary of Section No. 4				R
Bill No. 9				
Ironmongery (Provisional)				

Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>METALWORK (PROVISIONAL)</u></b>			
The Tenderer is referred to the relevant Clauses in the separate document General Preambles for Trades (2017 Edition)			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>Descriptions of bolts, anchors, etc.</u></b>			
Descriptions of bolts shall be deemed to include nuts and washers			
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete			
Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres			
<b><u>GALVANISED STEEL WINDOWS, DOORS, ETC</u></b>			
<b><u>1,2mm Double rebated frames suitable for one brick walls with two 100mm butt hinges</u></b>			
1	Frame for door 813 x 2032mm high	No 1	
<b><u>Purpose made windows with 10mm diameter burglar bars to opening sashes</u></b>			
2	880x460mm High window type 1	No 8	
<b>Carried Forward to Summary of Section No. 4</b>			R
Bill No. 10 Metalwork (Provisional)			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 11</u></b>			
	<b><u>PLASTERING (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition) and the Supplementary Preambles which are incorporated in this Bill of Quantities			
	<b><u>SCREEDS</u></b>			
	<b><u>Screeds wood floated, on concrete</u></b>			
1	25mm Thick on floors and landings	m2	24	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>Cement plaster steel trowelled, on brickwork</u></b>			
2	On walls	m2	142	
3	On narrow widths	m2	1	
	<b>Carried Forward to Summary of Section No. 4</b>			R
	Bill No. 11 Plastering (Provisional)			

Item No		Quantity	Rate	Amount
<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>				
<b><u>BILL NO. 12</u></b>				
<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>				
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)				
<b><u>RAINWATER DISPOSAL</u></b>				
<b><u>"Marley Streamline or equally approved" PVC-U gutters and rainwater pipes</u></b>				
1	110 x 75mm Roof gutters with beaded front edge fixed to fascia brackets at maximum 1000mm centres	m	8	
2	75 x 75mm Rainwater pipes fixed to pipe clips at 1000mm centres	m	6	
3	Extra over rainwater pipe for bend	No	2	
4	Extra over gutter for outlet for 75 x 75mm downpipe	No	2	
5	Extra over gutter for stopped end	No	2	
6	Extra over rainwater pipe for shoe	No	2	
<b>Carried Forward to Summary of Section No. 4</b>				R
Bill No. 12 Plumbing and Drainage (Provisional)				



Bill No. 13  
Glazing (Provisional)

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4: NEW STORE ROOM</u></b>			
	<b><u>BILL NO. 14</u></b>			
	<b><u>PAINTWORK (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>PREPARATORY WORK TO EXISTING WORK</u></b>			
	<b><u>Previously painted plastered surfaces</u></b>			
	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			
	<b><u>Previously painted metal surfaces</u></b>			
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
	<b><u>Previously painted wood surfaces</u></b>			
	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			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>"DULUX" OR OTHER EQUAL AND APPROVED</u></b>			
	<b><u>ON INTERNAL FLOATED PLASTER SURFACES</u></b>			
	<b><u>Two coats premium quality highly washable and stain resistant acrylic emulsion paint</u></b>			
1	Walls	m2	52	
	<b>Carried Forward</b>		R	
	Bill No. 14 Paintwork (Provisional)			

Brought Forward			R
<b><u>ON INTERNAL PLASTERBOARD SURFACES</u></b>			
<b><u>One coat trade alkali resistant plaster primer and two coats luxurious silk paint for interior use</u></b>			
2	Ceilings and cornices	m2	24
<b><u>ON FIBRE-CEMENT BOARD SURFACES</u></b>			
<b><u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint</u></b>			
3	Fascias and barge boards not exceeding 300mm girth, including priming metal jointing strips	m2	8
<b><u>ON METAL SURFACES</u></b>			
<b><u>One coat alkyd based zinc phosphate primer and two coats "Cashmere" paint, on steel. Colour: to match matt charcoal (code: ANP 3055)</u></b>			
4	Door frames	m2	2
<b><u>ON WOOD SURFACES</u></b>			
<b><u>One coat primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u></b>			
5	Doors	m2	4
<b>Carried Forward to Summary of Section No. 4</b>			R
Bill No. 14			
Paintwork (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Bill No	<u>SECTION SUMMARY</u>	Page No	Amount	
1	Earthworks (Provisional)	93		
2	Concrete, Formwork and Reinforcement (Provisional)	96		
3	Masonry (Provisional)	98		
4	Waterproofing (Provisional)	99		
5	Roof Coverings (Provisional)	101		
6	Carpentry and Joinery (Provisional)	104		
7	Ceilings, Partitions and Access (Provisional)	106		
8	Floor Coverings, Wall Linings, etc	107		
9	Ironmongery (Provisional)	109		
10	Metalwork (Provisional)	110		
11	Plastering (Provisional)	111		
12	Plumbing and Drainage (Provisional)	112		
13	Glazing (Provisional)	113		
14	Paintwork (Provisional)	115		
Carried to Final Summary			R	

## **SECTION NO. 5: EXISTING BLOCKS, NEW STAFF QUARTERS AND NEW STOREROOM**

## **BILL NO. 1**

## ELECTRICAL INSTALLATION (PROVISIONAL)

### BILL OF QUANTITIES : NOTES

Tenderers are to note that the sum included in the amount column for this section of the Bill of Quantities should be the total of all priced items in the Electrical Installation Bill of Quantities as detailed hereafter

**Proprietary items or materials**

Proprietary items or materials where specified are to be of the brand specified - or equal approved - by the Engineer prior to tender closing

### Specifications, drawings, etc

Tenders are referred to the specifications and drawings for these bills of quantities for the electrical work, for full description of the following items which are to be read and priced in conjunction with the said specifications and drawings

### Distribution boards, etc

Rates for the distribution boards etc are to include for busbars, jumpers, neutral bars, internal wiring and connections, circuit identification markers, control gear labels, circuit legend cards and working drawings

## Switches, socket outlets, etc

Rates for light fittings are to include for hanging, fixing and connecting and for lamp holders and fluorescent tubes and lamps for the type and wattage described

## PRELIMINARY AND GENERAL

**Carried Forward**

R

Bill No. 1  
Electrical Installation (Provisional)

	<b>Brought Forward</b>		R	
	<u>Allow for the following items as described in the project specifications</u>			
1	<b>Scheduled Fixed-Charge and Value Related Items:</b> Block Value related Preliminary and General Charges <b>Scheduled Time Related Items:</b> Time Related Preliminary and General General Charges <b>Certificate of compliance</b> Issue a certificates of compliance (COC) for the complete installation <b>Additional Tests</b> Additional Tests required by the Engineer <b>As Built Drawings</b> Provide a marked up set of "as installed drawings" <b>OHSA Specification</b> Value Time Fixed	Item		Not Priced
	<b><u>SECTION 5.1: DISTRIBUTION BOARDS</u></b>			
	<u>Distribution boards as described in the specification,depicted on the schematic layouts,equiped with circuit breakers,wired for the maximum number of circuit breakers. Supply and install in position the following Distribution Boards, each complete with trays, architraves, internal busbars, wiring, lacing, bilingual labelling and legends, equipment as indicated on the drawings, conduit terminations as required by the number and type of circuits (minimum one conduit per circuit) along with at least two 20 mm diameter spare conduits per board to roof space, and all other necessary items.</u>			
2	Main reticulation DB Flush mounted	No	1	
3	Distribution DB	No	16	
	<b><u>SECTION 5.2: LOW VOLTAGE CABLE INSTALLATIONS</u></b>			
	<u>Supply and installation of 600/1000V PVC PVC SWA PVC cables with copper conductors and Bare Copper Earth Wire (E.C.C.) including cable lables at each end and including all trenching, backfilling, compacting to regulation.</u>			
	<b>Carried Forward</b>		R	
	Bill No. 1 Electrical Installation (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward			R
<b><u>Supply and Install Cabling ECC</u></b>			
4	10mm <sup>2</sup> x 2 core PVC/SWA/PVC Cu ECC	m	1 854
<b><u>Termination of LV cable as specified including connection of conductors, cable lugs, captive glands, shrouds, etc. for the following cable sizes</u></b>			
5	10mm <sup>2</sup> x 2 core PVC/SWA/PVC Cu	No	26
<b><u>SECTION 5.3: LIGHTING INSTALLATION</u></b>			
<b><u>Supply and Install Luminaires</u></b>			
6	Type B Round Bulkhead (18W 4K IP65 LED )	No	116
7	Type F (LED TRI-PROOF 1.2M IP65 4K 0.3M CABLE NON DIM DRIV)	No	53
<b><u>Supply and Install Light Switches Flush Mounted, including cover plates excluding switchboxes</u></b>			
8	16 Amp, 1 Lever, 1 Way	No	24
9	16 Amp, 2 Lever, 1 Way	No	33
10	Daylight sensitive Photo switch with wall bracket	No	8
<b><u>Supply and install Socket outlets/Plug points</u></b>			
11	Switched socket outlet, Euro Combination 1xSA, 1x Eu	No	44
12	5 Amp Unswitched plug unit for installation in 60mm dia conduit box	No	169
13	60 mm dia conduit boxes (irrespective of no.of entries) in roofspace or flush in concrete slab	No	169
<b><u>20 mm dia Conduit as specified (PVC): Including all couplings,bends, t-and end -pieces, (spacer) saddles, nails etc.</u></b>			
14	In wall, concrete, roofspace or surface mounted	m	1 429
<b><u>Wiring (Cu Conductors), all colours drawn into conduit or channel</u></b>			
15	1.5 mm <sup>2</sup> PVC Insulated	m	4 227
Carried Forward			R
Bill No. 1 Electrical Installation (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

	Brought Forward	R
16	2.5 mm² PVC Insulated m 2 030	
17	6 mm² PVC Insulated m 396	
	<b><u>Drawwire</u></b>	
18	Drawn into conduits 1.5mm² m 1 331	
	<b><u>SECTION 5.4: SMALL POWER &amp; FIXED APPLIANCES</u></b>	
	<b><u>Supply and Install PVC Sleeves, including all trenching, preperation, backfilling and compaction, manholes with all accesories, etc</u></b>	
19	2 x 50mm m 1 854	
	<b><u>P.A System</u></b>	
20	(PAH030) 100V 30W Horn Speaker No 16	
21	PA Amplifier 500W Mp3/BT/FM 100V line 4 zones No 1	
22	2 X Handheld UHF Fixed Frequency Cordless Microphone System No 1	
23	(MIC401) Desktop microphone No 1	
24	(CAB105) Cabtyre 0.5mm 2core Black 100M No 8	
25	Installation Labour Charge Item 2 500.00	
	<b><u>School Bell System</u></b>	
26	SIRENCO Soleniod 220V AC BELL GREY No 4	
27	TP019 DIGITAL TIMER + PUSHBUTTON No 1	
28	(CAB110) Cabtyre 1mm 3core Black 100M No 1	
29	Installation Labour Charge Item 2 500.00	
	<b><u>SECTION 5.5: EARTHING, BONDING &amp; LIGHTNING PROTECTION</u></b>	
	<b>Carried Forward</b>	<b>R</b>
	Bill No. 1 Electrical Installation (Provisional)	



**DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL**

Brought Forward		R
<b><u>Supply and Install Earthing and Bonding</u></b>		
30	Distribution Boards	SUM
31	Water Pipes (cold and hot water)	SUM
32	Gutters and Roof	SUM
33	General Earthing and Bonding of items not included above	SUM
34	Testing of the Earth Installation by a Specialist Contractor	SUM
<b><u>Design, Supply and Install Lightning Protection</u></b>		
35	Main building (including testing by specialist incl SABS certificate)	SUM
36	Additional points ( lightning protection)	SUM
<b>Carried to Final Summary</b>		R
Bill No. 1 Electrical Installation (Provisional)		

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>			
	<b><u>BILL NO. 1</u></b>			
	<b><u>PROVISIONAL SUMS AND BUDGETARY ALLOWANCES</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>General</u></b>			
	Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances			
	Prime cost amounts and provisional sums are NET. Prime cost amounts include for delivery to site of all articles concerned			
	Provisional sums are for material and equipment supplied and installed complete by firms of specialists			
	<b><u>Profit</u></b>			
	Where stated, the contractor may allow for profit if required			
	<b><u>General attendance on nominated/selected subcontractors</u></b>			
	The item "Attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors, the following:			
	1 General attendance comprising of access to the site, the provision of water, electric power and an area for establishment, the use of erected scaffolding, etc.			
	2 Making good in all trades and cleaning down and removal of rubbish on completion			
	<b>Carried Forward</b>		R	
	Bill No. 1 Provisional Sums and Budgetary Allowances (Provisional)			

DEVELOPMENT BANK OF SOUTHERN AFRICA  
KZN INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE PROGRAMME  
MALANDELA PUBLIC SECONDARY SCHOOL

Brought Forward		R	
<p><b>Note:</b> Tenderers are to note that the allowances listed here under are for work to be executed by the appointed principal contractor. Tenderers are to allow in their overall Preliminaries costs for this scope of work as no additional Preliminaries will be entertained once this scope of work is realised. The Employer reserves the right to execute this work in part or in whole or omit the entire scope</p> <p><b><u>PROVISIONAL SUMS FOR SELECTED/NOMINATED SUB-CONTRACT WORKS</u></b></p> <p><b><u>Community liaison officer</u></b></p>			
1	Provide the sum of R 120 000.00 (One Hundred and Twenty Thousand Rand) for Community Liaison Officer	Item	120 000.00
2	Profit	Item	
3	Attendance	Item	
<p><b><u>BUDGETARY ALLOWANCES</u></b></p> <p><b><u>The following budgetary allowances are for work to be executed either by the contractor or any nominated / selected sub-contractor as instructed by the principal agent and priced at bill rates to be agreed in terms of the contract. Tenderers are to allow in their overall Preliminaries costs for this scope of work as no additional Preliminaries will be entertained should this work proceed. The Employer reserves the right to execute this work in part or in whole or omit the entire scope.</u></b></p> <p><b><u>Restoration of sewer network lines including septic tank</u></b></p>			
4	Provide the sum of R 1 130 000.00 (One Million One Hundred and Thirty Thousand Rand) for the Restoration of Sewer Network Lines including Septic Tank	Item	1 130 000.00
<p><b><u>Suspended timber floors</u></b></p>			
5	Provide the sum of R 2 700 000.00 (Two Million Seven Hundred Thousand Rand) for Suspended Timber Floors including all associated structural works	Item	2 700 000.00
Carried to Final Summary			
Bill No. 1			
Provisional Sums and Budgetary Allowances (Provisional)			

[illegible]