

**UNIVERSITY OF JOHANNESBURG**  
**DFC - QK BUILDING WATER PIPES REPLACEMENT**  
**BILL OF QUANTITIES**

Item No		Quantity	Rate	Amount
	<b><u>SECTION 1: PRELIMINARIES</u></b>			
	<b><u>BILL NO. 1 : PRELIMINARIES AND GENERAL</u></b>			
	<b><u>BUILDING AGREEMENT AND PRELIMINARIES</u></b>			
	<p>The JBCC Series 2000 Minor Works Agreement (March 2014 edition 5.1) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>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</p> <p>Contractors are referred to the abovementioned documents for the full intent and meaning of each clause thereof</p> <p>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</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</p>			
	<b><u>PREAMBLES FOR TRADES</u></b>			
	<p>The Model Preambles for Trades (2017 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</p>			
	<b>Carried Forward</b>			
	<p>Section No. 1</p> <p>Bill No. 1</p> <p>Preliminaries and General</p>		R	

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<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>PRICING OF PRELIMINARIES</u></b></p> <p>Should the contractor select Option A in terms of subclause 3.2.1 in the Contract Data - Contractor to Employer (CE) for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T)</p> <p><b><u>GENERAL</u></b></p> <p>The contractor's prices for all items throughout these bills of quantities must take into account SANS 10400-F:2010 Edition 3 part F site operations available of SABS.</p> <p>SUMMARY OF CATEGORIES</p>			
1	Category : Fixed 10%.....	Item	
2	Category : Value 15%.....	Item	
3	Category : Time 75%.....	Item	
<b>Carried to Final Summary</b>		R	
<p>Section No. 1  Bill No. 1  Preliminaries and General</p>			

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Item No	Quantity	Rate	Amount
<b><u>SECTION 1 : BUILDING WORKS</u></b>			
<b><u>BILL NO. 1 : ALTERATIONS</u></b>			
For preambles see "Model Preambles for Trades"			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>View site</u>			
Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials salvageable from the alterations. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
<u>General</u>			
It may be necessary to remove loose articles of furniture to execute the work and the contractor should allow therefore.			
All work must be done in position as shown and to the approval of principal agent.			
The Contractor shall carry out the whole of the work with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their residents. The contractor shall provide proper protection and remove when directed.			
Making good of finishes shall be deemed to include making good of the partitioning surfaces onto which the new finishes are applied, where necessary.			
The Contractor will be required to take all dimensions affecting the existing building on the site and the Contractor will be held solely responsible for the accuracy of all such dimensions.)			
<b>Carried Forward</b>		R	
Section No. 2 Bill No. 1 Alterations			

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<b>Brought Forward</b>			R
<p>In taking down and removing existing work the utmost care shall be observed to prevent any structural or other damage to remaining portions of the building. The Contractor shall ensure the stability of all structures during alteration work.</p> <p>The Contractor shall be responsible for the removal from the site of all materials, debris and rubble resulting from the alterations. The Contractor shall further ensure that the existing water channels and drains are kept free from any such materials during the demolitions of existing structures, and throughout the duration of the contract.</p> <p>The cost of removing rubble from site shall include transportation of rubble to an appropriate Municipal dumping site.</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><b><u>REMOVAL OF EXISTING WORK</u></b></p> <p><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 complete</u></p>			
1	40mm Galvanised pipe	m	180
2	50mm Galvanised pipe	m	270
3	75mm Galvanised pipe	m	325
4	40mm Non-return valves	No	39
5	40mm Shut-off valves	No	39
<b>Carried Forward to Summary of Section No. 2</b>			R
Section No. 2			
Bill No. 1			
Alterations			

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.2: BUILDING WORKS</u></b>			
<b><u>BILL NO.2 : PLUMBING AND DRAINAGE</u></b>			
<b><u>PREAMBLES</u></b>			
<p>For preambles see "Model Preambles for Trades (2017 Edition)" and applicable supplementary preambles as specified in the Trades. The said Model and Supplementary Preambles apply to all work described in this document. Tenderers are therefor referred to these documents for the full meaning and intention of all descriptions as no claims of any kind whatsoever will be entertained in this regard.</p> <p>Tenderers are however also referred to the drawings and additional specifications. If same are in conflict with the above, the drawings and specifications shall take preference.</p>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Wire gratings</u>			
<p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p>			
<u>Stormwater channels</u>			
<p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc, and disposal of surplus material on site</p>			
<u>Sealing of edges</u>			
<p>Outer edges of fittings are to be sealed against adjacent surfaces with approved silicone</p>			
<u>High density polyethylene (HDPE) pipes and fittings</u>			
<p>Unless otherwise stated all pipes shall be of the type and class specified by the Engineer. HDPE pipes and compression fittings shall be jointed and sealed in accordance with the Engineer's specifications.</p>			
<b>Carried Forward</b>		R	
<p>Section No. 2  Bill No. 2  Plumbing and Drainage</p>			

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<b>Brought Forward</b>	R
<p><u>Reducing fittings</u></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><u>Fixing of pipes</u></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>All straight couplers and fittings other than those specifically measured as extra over shall be deemed included in the pipe rates.</p> <p><u>Disinfection of stainless steel pipework</u></p> <p>Stainless steel pipework is to be disinfected at completion in accordance with SABS 1200L as well as the manufacturer and the Engineer's specifications and guidelines.</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturer and Engineer's instructions and trenches shall be carefully backfilled.</p>	
<b>Carried Forward</b>	R
<p>Section No. 2</p> <p>Bill No. 2</p> <p>Plumbing and Drainage</p>	

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<b>Brought Forward</b>	R
<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><u>General</u></p> <p>The quantities are provisional and will be re-measured upon completion of the works. The Contractor shall not use these quantities for ordering of materials. The Contractor must immediately notify the Quantity Surveyor if discrepancies are found between the quantities and/or descriptions in these Bills of Quantities and the Contractor's quantities measured from construction drawings and specifications.</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> <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>	
<b>Carried Forward</b>	R
<p>Section No. 2  Bill No. 2  Plumbing and Drainage</p>	

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<b>Brought Forward</b>			R
<u>As-built drawings</u>			
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.			
<b><u>WATER SUPPLIES</u></b>			
<u>Class 6 uPVC pipes SABS/SANS approved</u>			
1	Supply and install 40mm uPVC pipe	m	180
2	Supply and install 50mm uPVC pipe	m	270
3	Supply and install 75mm uPVC pipe	m	325
4	40mm Non-return valve	No	39
5	40mm Shut-off valve	No	39
<u>SUNDRIES</u>			
6	Supply and install 75 to 100mm flange to the water tank	Item	
<b><u>TESTING</u></b>			
7	Allow for testing of system and issue of Coc	Item	
<b>Carried Forward to Summary of Section No. 2</b>			R
Section No. 2			
Bill No. 2			
Plumbing and Drainage			

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Bill No	<u>SECTION SUMMARY - SECTION 2: BUILDING WORKS</u>	Page No	Amount
1	Alterations	4	
2	Plumbing and Drainage	8	
Section No. 2		Carried to Final Summary	
		R	

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Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	SECTION 1: PRELIMINARIES	2	
2	SECTION 2: BUILDING WORKS	9	
	Sub Total		R
	<u>CONTINGENCY</u>		
	Allow a contingency amount at 10% of the contract amount to be used as directed by the Principal Agent.	%	
	Sub-total		R
	Add: Value Added Tax (VAT)		R
	Carried to Form of Tender		R