

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 1</u></p> <p><u>BILL NO. 1</u></p> <p><u>PRELIMINARIES NOTES</u></p> <p><u>BUILDING AGREEMENT AND PRELIMINARIES</u></p> <p>The JBCC Principal Building Agreement (Edition 6.2 - May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>The JBCC Principal Building Agreement contract data form an integral part of this agreement</p> <p>The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these bills of quantities, amended as hereinafter described</p> <p>The contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause</p> <p>The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only</p> <p>Where any item is not relevant to this agreement such item is marked N/A signifying "not applicable"</p> <p>Where standard clauses or alternatives are not entirely applicable to this agreement such amendments, modifications, corrections or supplements as will apply are given under each relevant clause heading and such amendments, modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the abovementioned documents</p> <p><u>PREAMBLES FOR TRADES</u></p>			
	<p style="text-align: right;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>		R	

<p style="text-align: right;">Brought Forward</p> <p><u>User note</u></p> <p><i>The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated descriptions utilised in these bills of quantities by inter alia referring to SANS construction standards. Where such preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the Standard System of Measuring Building Work (seventh edition) for works within South Africa or the Standard Method of Measuring Building Work for Africa 2015 (first edition) for works elsewhere in Africa, represent the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</i></p> <p><i>Note that the text of the Standard System of Measuring Building Work (seventh edition) and that of the Standard Method of Measuring Building Work for Africa 2015 (first edition) is the same</i></p> <p><i>The latest version of the General Preambles for Trades should be referred to should the General Preambles for Trades 2017 be revised in future</i></p> <p>The General Preambles for Trades 2017 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 General Preambles will be entertained</p> <p>Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles</p> <p>The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications</p>		R	
<p style="text-align: right;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>		R	

	Brought Forward		R	
	<p><u>STRUCTURE OF THIS PRELIMINARIES BILL</u></p> <p>Section A : A recital of the headings of the individual clauses in the aforementioned JBCC Principal Building Agreement</p> <p>Section B : A recital of the headings of the individual clauses in the aforementioned JBCC General Preliminaries</p> <p>Section C : Any special clauses to meet the particular circumstances of the project</p> <p><u>PRICING OF PRELIMINARIES</u></p> <p>Should the contractor select Option A in the contract data for the adjustment of preliminaries, the amounts entered against the relevant items in these preliminaries are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)</p> <p><u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u></p> <p><u>Interpretation (A1-A7)</u></p> <p>1/1/1 Clause 1.0 - Definitions and interpretation</p> <p>Pricing of bills of quantities</p> <p>The contractor is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this agreement. Value Added Tax (VAT) is to be separately stated on the summary page of these bills of quantities</p>			
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	Brought Forward		R	
	<p>Items left unpriced will be deemed to be covered in prices against other items throughout these bills of quantities and no claim for any extras arising out of the contractor's omission to price any item will be entertained</p> <p>Prices for all construction equipment, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary</p> <p>Abbreviated descriptions</p> <p>The items in these bills of quantities utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the contractor shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of international best practice</p> <p>Legal status of contractor</p> <p>If the contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then:</p> <ol style="list-style-type: none"> 1. These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement 2. These persons shall notify the employer of their leader who has assigned authority to bind the contractor and each of these persons 3. The contractor shall not alter its composition or legal status without the prior written consent of the employer <p>F:..... V:..... T:.....</p>			
1/1/2	Clause 2.0 - Law , regulations and notices	Item		
	Carried Forward		R	
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	Brought Forward		R	
	F:..... V:..... T:.....	Item		
1/1/3	Clause 3.0 - Offer and acceptance			
	F:..... V:..... T:.....	Item		
1/1/4	Clause 4.0 - Cession and assignment			
	F:..... V:..... T:.....	Item		
1/1/5	Clause 5.0 - Documents			
	Value Added Tax			
	Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT)			
	? Priced document as specification			
	Clause 5.4 is deemed to be deleted			
	The principal agent shall decide which portion of the priced document may be used as a specification of materials and goods or methods, if any ?			
	F:..... V:..... T:.....	Item		
1/1/6	Clause 6.0 - Employer's agents			
	? Delegated authority			
	The authority of the principal agent to issue contract instructions [17.1] and perform duties for specific aspects of the works is delegated to agents as follows [6.2]. This does not preclude the principal agent from issuing such contract instructions : ?			
	? 1. Architect			
	<i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i>			
	Carried Forward		R	
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<p style="text-align: center;">Brought Forward</p> <p>1.1 Duties [6.2] :</p> <p>The architect is responsible for the architectural design, functional design and quality inspection of the works</p> <p>1.2 Contract instructions [6.2; 17.1] :</p> <p>1.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement</p> <p>1.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>1.2.3 The site [13.0]</p> <p>1.2.4 Compliance with the law, regulations and bylaws [2.1]</p> <p>1.2.5 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>1.2.6 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>1.2.7 Removal or re-execution of work</p> <p>1.2.8 Removal or substitution of any materials and goods</p> <p>1.2.9 Protection of the works</p> <p>1.2.10 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>1.2.11 Rectification of defects [21.2]</p>			R
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			R

	Brought Forward		R	
1.2.12	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion			
1.2.13	Expenditure of budgetary allowances , prime cost amounts and provisional sums			
1.2.14	Appointment of a subcontractor [14.0; 15.0]			
1.2.15	Work by direct contractors [16.0]			
1.2.16	On suspension or termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0] ?			
? 2. <u>Quantity surveyor</u>				
2.1 Duties [6.2] :				
The quantity surveyor is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works				
2.2 Contract instructions [6.2; 17.1] :				
2.2.1 No contract instructions delegated to the quantity surveyor ?				
? 3. <u>Civil and structural engineer</u>				
<i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i>				
3.1 Duties [6.2] :				
The civil and structural engineer is responsible for all aspects of civil and structural engineering design and quality inspection of the works				
	Carried Forward		R	
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	Brought Forward		R	
3.2	Contract instructions [6.2; 17.1] :			
3.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement			
3.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works			
3.2.3	The site [13.0]			
3.2.4	Compliance with the law , regulations and bylaws [2.1]			
3.2.5	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works			
3.2.6	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]			
3.2.7	Removal or re-execution of work			
3.2.8	Removal or substitution of any materials and goods			
3.2.9	Protection of the works			
3.2.10	Making good physical loss and repairing damage to the works [23.2.2]			
3.2.11	Rectification of defects [21.2]			
3.2.12	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion			
3.2.13	Expenditure of budgetary allowances , prime cost amounts and provisional sums ?			
?	4. <u>Mechanical engineer</u>			
	Carried Forward		R	
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<p style="text-align: center;">Brought Forward</p> <p><i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i></p> <p>4.1 Duties [6.2] :</p> <p>The mechanical engineer is responsible for all aspects of mechanical engineering design and quality inspection of the works ? and, where appointed by the employer for quantity surveying services in respect of the mechanical installations, for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions</p> <p>4.2 Contract instructions [6.2; 17.1] :</p> <p>4.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement</p> <p>4.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>4.2.3 Compliance with the law, regulations and bylaws [2.1]</p> <p>4.2.4 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>4.2.5 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>4.2.6 Removal or re-execution of work</p> <p>4.2.7 Removal or substitution of any materials and goods</p> <p>4.2.8 Protection of the works</p> <p>4.2.9 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>4.2.10 Rectification of defects [21.2]</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>		R	

	Brought Forward		R	
4.2.11	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion			
4.2.12	Expenditure of budgetary allowances , prime cost amounts and provisional sums ?			
?	5. <u>Electrical engineer</u>			
	<i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i>			
5.1	Duties [6.2] :			
	The electrical engineer is responsible for all aspects of electrical engineering design and quality inspection of the works ? and, where appointed by the employer for quantity surveying services in respect of the electrical installations, for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions			
5.2	Contract instructions [6.2; 17.1] :			
5.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement			
5.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works			
5.2.3	Compliance with the law , regulations and bylaws [2.1]			
5.2.4	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works			
5.2.5	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]			
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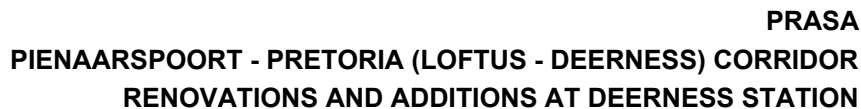
	Brought Forward		R	
5.2.6	Removal or re-execution of work			
5.2.7	Removal or substitution of any materials and goods			
5.2.8	Protection of the works			
5.2.9	Making good physical loss and repairing damage to the works [23.2.2]			
5.2.10	Rectification of defects [21.2]			
5.2.11	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion			
5.2.12	Expenditure of budgetary allowances, prime cost amounts and provisional sums ?			
	? 6. <u>Wet services engineer</u>			
	<i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i>			
	6.1 Duties [6.2] :			
	The wet services engineer is responsible for all aspects of wet services engineering design and quality inspection of the works			
	6.2 Contract instructions [6.2; 17.1] :			
6.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement			
6.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works			
	Carried Forward		R	
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<p style="text-align: center;">Brought Forward</p> <p>6.2.3 Compliance with the law, regulations and bylaws [2.1]</p> <p>6.2.4 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>6.2.5 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>6.2.6 Removal or re-execution of work</p> <p>6.2.7 Removal or substitution of any materials and goods</p> <p>6.2.8 Protection of the works</p> <p>6.2.9 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>6.2.10 Rectification of defects [21.2]</p> <p>6.2.11 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>6.2.12 Expenditure of budgetary allowances, prime cost amounts and provisional sums ?</p> <p>? 7. <u>Fire consultant</u></p> <p><i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i></p> <p>7.1 Duties [6.2] :</p> <p>The fire consultant is responsible for all aspects of rational fire design and quality inspection of the works</p> <p>7.2 Contract instructions [6.2; 17.1] :</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>		R	

	Brought Forward		R	
7.2.1	Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement			
7.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works			
7.2.3	Compliance with the law , regulations and bylaws [2.1]			
7.2.4	Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works			
7.2.5	Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]			
7.2.6	Removal or re-execution of work			
7.2.7	Removal or substitution of any materials and goods			
7.2.8	Protection of the works			
7.2.9	Making good physical loss and repairing damage to the works [23.2.2]			
7.2.10	Rectification of defects [21.2]			
7.2.11	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion , a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion			
7.2.12	Expenditure of budgetary allowances, prime cost amounts and provisional sums ?			
? 8. <u>Health and safety consultant</u>				
	Carried Forward		R	
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	Brought Forward		R	
	<p>8.1 Duties [6.2] :</p> <p>The health and safety consultant is responsible for all aspects of health and safety of the works. Without derogating from the generality thereof, the health and safety consultant will perform the following specific functions and duties in respect of the health and safety aspects of the works. He shall:</p> <p>8.1.1 Act as the employer's agent in terms of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended</p> <p>8.1.2 Prepare and update the health and safety specification for the works</p> <p>8.1.3 Agree with the contractor the health and safety plan for the works</p> <p>8.1.4 Carry out regular audits to ensure adherence to the safety plan and compliance with the act and regulations</p> <p>8.1.5 Stop the execution of the works where the agreed specification or plan is not adhered to?</p> <p>F:..... V:..... T:.....</p>			
1/1/7	<p>Clause 7.0 - Design responsibility</p> <p>F:..... V:..... T:.....</p>	Item		
	<p><u>Insurances and securities (A8-A11)</u></p>			
1/1/8	<p>Clause 8.0 - Works risk</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/9	<p>Clause 9.0 - Indemnities</p> <p>F:..... V:..... T:.....</p>	Item		
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	Brought Forward		R	
1/1/10	<p>Clause 10.0 - Insurances</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/11	<p>Clause 11.0 - Securities</p> <p>? Guarantee for payment</p> <p>The employer shall provide to the contractor a guarantee for payment in the amount of ?.....Rand (R.....) ? [11.5.1]. The contractor shall consequently waive his lien or right of continuing possession of the works [11.10]?</p> <p>? Extension of waiver of lien</p> <p>The contractor shall ensure that a waiver of lien is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [11.10] ?</p> <p>F:..... V:..... T:.....</p> <p><u>Execution (A12 - A17)</u></p>	Item		
1/1/12	<p>Clause 12.0 - Obligations of the parties</p> <p>? Office accommodation</p> <p>The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18] ?</p>			
	Carried Forward		R	
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	Brought Forward		R	
1/1/16	<p>Clause 16.0 - Direct contractors</p> <p>Attendance on direct contractors</p> <p>In respect of direct contractors the contractor shall:</p> <ol style="list-style-type: none"> 1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials 2. Allow the use of personnel welfare facilities, where provided 3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation 4. Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right, while it remains erected on the site [16.1] <p>F:..... V:..... T:.....</p>	Item		
1/1/17	<p>Clause 17.0 - Contract instructions</p> <p>? Site instructions</p> <p>Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor ?</p> <p>F:..... V:..... T:.....</p> <p>Completion (A18 - A24)</p>	Item		
1/1/18	Clause 18.0 - Interim completion	N/A		
1/1/19	<p>Clause 19.0 - Practical completion</p> <p>F:..... V:..... T:.....</p>	Item		
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	Brought Forward		R	
1/1/20	<p>Clause 20.0 - Completion in sections</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/21	<p>Clause 21.0 - Defects liability period and final completion</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/22	<p>Clause 22.0 - Latent defects liability period</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/23	<p>Clause 23.0 - Revision of the date for practical completion</p> <p>Substitution of materials and goods</p> <p>The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [17.1.8; 23.1 & 2]</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/24	<p>Clause 24.0 - Penalty for late or non-completion</p> <p>F:..... V:..... T:.....</p> <p>Payment (A25 - A27)</p>	Item		
1/1/25	<p>Clause 25.0 - Payment</p>			
	Carried Forward		R	
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	Brought Forward		R	
	<p>Prices submitted</p> <p>Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/26	<p>Clause 26.0 - Adjustment of the contract value and final account</p> <p>? Fluctuations in costs</p> <p>All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [26.9.5] ?</p> <p>? Tenant installation/user requirements delayed</p> <p>There is a possibility that certain works related to tenant installation/user requirements may have to be delayed and may consequently not be executed prior to practical completion</p> <p>Should the contractor be instructed to do so he shall execute this work under the conditions pertaining to this agreement on the basis that a separate amount for preliminaries appurtenant to this work (if applicable) is agreed to between the contractor and the principal agent and on condition that instruction to proceed with such work is given to him within a period of three (3) calendar months after the date of practical completion of the works</p> <p>The employer reserves the right to omit such work without compensation to the contractor for loss of profit or any other loss which the contractor may suffer as a result of such omission ?</p>			
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
	<p>Cost of claims</p> <p>All costs incurred by the contractor in the preparation of claims shall be borne by the contractor. This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this agreement [30.6 & 7] from making a determination on costs</p> <p>Claims from subcontractors</p> <p>The contractor shall review, assess and adjudicate any claims received by him from any subcontractor and thereafter submit same to the principal agent with a recommendation in order to assist the principal agent in adjudicating the claim [26.6]</p> <p>F:..... V:..... T:.....</p>			
1/1/27	<p>Clause 27.0 - Recovery of expense and/or loss</p> <p>F:..... V:..... T:.....</p>	Item		
		Item		
1/1/28	<p><u>Suspension and termination (A28 - A29)</u></p> <p>Clause 28.0 - Suspension by the contractor</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/29	<p>Clause 29.0 - Termination</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/30	<p><u>Dispute resolution (A30)</u></p> <p>Clause 30.0 - Dispute resolution</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/31	<p><u>Agreement</u></p>			
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	Brought Forward		R	
	<p>The required information of the parties and the amount of the contract sum shall be inserted in the agreement for signature of the agreement by the parties</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/32	<p><u>Contract data</u></p> <p>Tenderer's selections</p> <p>Before submission of his tender the contractor is to complete the tenderer's selections in the contract data</p> <p>F:..... V:..... T:.....</p> <p><u>SECTION B: GENERAL PRELIMINARIES</u></p> <p><u>User note</u></p> <p><i>Amendments, modifications, corrections or supplements to the General Preliminaries in Section B should be recorded in the contract data</i></p> <p><i>Should it be necessary to expand on any of the General Preliminaries clauses, the user should list the appropriate General Preliminary clause number and heading and insert the relevant provision under a suitable heading in bold as may be necessary</i></p> <p><u>Definitions and interpretation (B1)</u></p>	Item		
1/1/33	<p>Clause 1.1 - Definitions</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/34	<p>Clause 1.2 - Interpretation</p> <p>F:..... V:..... T:.....</p>	Item		
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
	<u>Documents (B2)</u>			
1/1/35	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item		
1/1/36	Clause 2.2 - Provisional bills of quantities ? Multiple procurement These bills of quantities are in multiple procurement format ie the "wet trades" - earthworks, concrete, formwork and reinforcement, precast concrete, masonry, waterproofing and sub-surface drainage - are provisionally (fully?) measured and the subsequent trades are budgetary allowances and/or provisional sums ? F:..... V:..... T:.....	Item		
1/1/37	Clause 2.3 - Availability of construction information F:..... V:..... T:.....	Item		
1/1/38	Clause 2.4 - Ordering of materials and goods F:..... V:..... T:.....	Item		
	<u>Previous work and adjoining properties (B3)</u>			
1/1/39	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item		
1/1/40	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item		
1/1/41	Clause 3.3 - Inspection of adjoining properties F:..... V:..... T:.....	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries			

Brought Forward			R	
	<u>The site (B4)</u>			
1/1/42	Clause 4.1 - Handover of site in stages F:..... V:..... T:.....	Item		
1/1/43	Clause 4.2 - Enclosure of the works F:..... V:..... T:.....	Item		
1/1/44	Clause 4.3 - Geotechnical and other investigations F:..... V:..... T:.....	Item		
1/1/45	Clause 4.4 - Encroachments F:..... V:..... T:.....	Item		
1/1/46	Clause 4.5 - Existing premises occupied F:..... V:..... T:.....	Item		
1/1/47	Clause 4.6 - Services - known F:..... V:..... T:.....	Item		
	<u>Management of contract (B5)</u>			
1/1/48	Clause 5.1 - Management of the works F:..... V:..... T:.....	Item		
1/1/49	Clause 5.2 - Progress meetings F:..... V:..... T:.....	Item		
1/1/50	Clause 5.3 - Technical meetings F:..... V:..... T:.....	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries			

Brought Forward			R	
	<u>Samples, shop drawings and manufacturer's instructions (B6)</u>			
1/1/51	Clause 6.1 - Samples of materials F:..... V:..... T:.....	Item		
1/1/52	Clause 6.2 - Workmanship samples F:..... V:..... T:.....	Item		
1/1/53	Clause 6.3 - Shop drawings F:..... V:..... T:.....	Item		
1/1/54	Clause 6.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item		
	<u>Deposits and fees (B7)</u>			
1/1/55	Clause 7.1 - Deposits and fees F:..... V:..... T:.....	Item		
	<u>Temporary services (B8)</u>			
1/1/56	Clause 8.1 - Water F:..... V:..... T:.....	Item		
1/1/57	Clause 8.2 - Electricity F:..... V:..... T:.....	Item		
1/1/58	Clause 8.3 - Ablution and welfare facilities F:..... V:..... T:.....	Item		
Carried Forward			R	
Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries				



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	Brought Forward		R	
	<p><i>It is important to note that general attendance only requires the contractor to "permit the subcontractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right while it remains erected on the site" (refer to 12.2.13 of the JBCC n/s subcontract agreement). Many n/s subcontractors qualify their tenders to exclude scaffolding and/or hoisting facilities. Especially scaffolding could be an expensive item and it may be necessary in order to avoid claims to require the contractor to provide for the extended use of scaffolding for specific subcontracts within a description of "special attendance" in the applicable bill</i></p> <p>F:..... V:..... T:.....</p> <p><u>General (B11)</u></p>	Item		
1/1/63	<p>Clause 11.1 - Protection of the works</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/64	<p>Clause 11.2 - Protection/isolation of existing works and works occupied in sections</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/65	<p>Clause 11.3 - Security of the works</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/66	<p>Clause 11.4 - Notice before covering work</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/67	<p>Clause 11.5 - Disturbance</p>			
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
	<p>Disturbance</p> <p>? All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever ?</p> <p>F:..... V:.....T:.....</p>	Item		
1/1/68	<p>Clause 11.6 - Environmental disturbance</p> <p>? Controlling all forms of pollution</p> <p>The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due inter alia to noise, artificial light, wind-blown sand, dust, deposits of mud, etc</p> <p>The contractor is to ensure that all roads which border the site and are used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works ?</p> <p>? Environmental management plan</p> <p>The employer has prepared an environmental management plan (EMP) (refer to Annexure ? for a copy of the relevant plan). The contractor shall price opposite this item for compliance with all the requirements of such EMP ?</p> <p>F:..... V:.....T:.....</p>	Item		
1/1/69	<p>Clause 11.7 - Works cleaning and clearing</p> <p>F:..... V:..... T:.....</p>	Item		
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
1/1/70	<p>Clause 11.8 - Vermin</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/71	<p>Clause 11.9 - Overhand work</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/72	<p>Clause 11.10 - Tenant installations</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/73	<p>Clause 11.11 - Advertising</p> <p>F:..... V:..... T:.....</p>	Item		
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>			
1/1/74	<p>Warranties for materials and workmanship</p> <p>Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract</p> <p>The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so</p> <p>The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor</p> <p>F:..... V:..... T:.....</p>	Item		
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
1/1/75	<p>Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the employer</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/76	<p>Cooperation of the contractor for cost management</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 contract value does not exceed the budget</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/77	<p>Overloading</p> <p>The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works eg scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc to the principal agent for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agent's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole expense</p> <p>F:..... V:..... T:.....</p>	Item		
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
1/1/78	<p>Propping of floors below</p> <p>The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/79	<p>Testing of flat roof waterproofing for watertightness</p> <p>Flat roof waterproof areas shall be flooded and kept "ponded" for at least forty eight (48) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/80	<p>Health and safety</p> <p>Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended. It is specifically stated that the employer shall prepare a documented health and safety specification for the works 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 specification [2.1]</p>			
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
	<p>Health and safety</p> <p>Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended. It is specifically stated that the employer shall prepare a documented health and safety specification for the works (refer to Annexure ? for a copy of the relevant specification) and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the provisions of the aforementioned health and safety specification [2.1]</p> <p>The contractor shall:</p> <ol style="list-style-type: none"> 1. Comply with the health and safety specification for the works 2. Prepare and agree with the health and safety consultant the health and safety plan for the works 3. Cooperate with the health and safety consultant in all respects 4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification 5. Conform to the conditions contained in the employer's health and safety specification <p>F:..... V:..... T:.....</p>			
1/1/81	<p>Green star building certification</p> <p><u>User note</u></p> <p><i>Insert the provisions called for by the relevant green star consultant should it be a requirement that the project be submitted for green star certification</i></p> <p>F:..... V:.....T:.....</p>	Item		
		Item		
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

	Brought Forward		R	
1/1/82	<p>Broad based black economic empowerment (BBBEE)</p> <p>Tenders submitted will be evaluated taking into account their empowerment rating</p> <p>The employer will be monitoring the broad based black economic empowerment (BBBEE) status of the contractor throughout the execution of the works</p> <p>The contractor is to submit to the principal agent on an annual basis a schedule of spend, split into vendors engaged as subcontractors and suppliers indicating their BBBEE rating including proof of the said rating</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/83	<p>Advertising rights</p> <p>The employer may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The contractor shall not prevent such an arrangement and will assist in the facilitation of same. The position and type of advertising structure to be agreed with the principal agent so as not to hinder the contractor in meeting his obligations under this agreement</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/84	<p>Confidentiality</p> <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		
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p>			

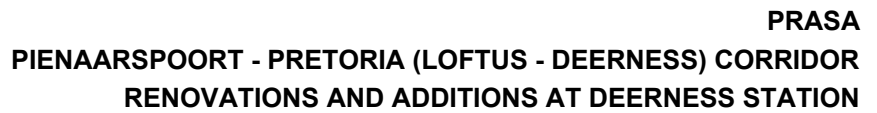


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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 1</u></p> <p><u>DEMOLITIONS AND ALTERATIONS</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>Existing structures</u></p> <p>In taking down and removing existing work, the utmost care shall be taken to prevent any structural or other damage to the remaining portions on the building and the Contractor shall provide all shoring, needling, strutting, etc. to ensure the stability of all structures during the alteration work, Any damage to the structure and/or building as well as the rectification of same will be for the contractor's account</p> <p><u>Services</u></p> <p>Special care shall be exercised during the progress of the work to ensure that electrical installation, water supply pipes, telephone and other services which may be encountered are not interfered with and notice shall be given to the Representative/Agent if any disconnection or alterations become necessary.</p> <p><u>Dust and noise</u></p> <p>The Contractor is to take all necessary precautions to the satisfaction of the Representative/Agent to prevent any nuisance from the dust and /or noise whilst carrying out the work.</p>			
	<p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 1 Demolitions and Alterations</p>		R	

<p style="text-align: right;">Brought Forward</p> <p><u>Disposal of debris</u></p> <p>The Contractor shall be responsible for the removal from site of all materials, debris and rubbish resulting from the work which removal is deemed to be included in the rates unless otherwise stated.</p> <p>Rates 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>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><u>Temporary support to openings through existing walls</u></p> <p>Making openings, altering openings in existing walls and removing lintels above existing openings shall be done with the utmost care to prevent any structural damage. All necessary supports, propping, shoring, needling, strutting, turning pieces, etc. to walls openings is deemed to be included in the contractor's rates.</p> <p><u>Electrical and Mechanical</u></p> <p>Where items include for taking down electrical and mechanical fittings the disconnection and making safe electrically is deemed to be included.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p>		R	
<p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 1 Demolitions and Alterations</p>		R	

Brought Forward				R
<u>REMOVAL OF EXISTING WORK</u>				
<u>Breaking down and remove concrete</u>				
2/1/1	Breakdown concrete bench	m2	3	
2/1/2	Ramp	m2	56	
<u>Breaking down and removing brickwork etc</u>				
2/1/3	Half brick wall	m2	10	
2/1/4	One brick wall	m2	4	
2/1/5	Internal skin of external brick wall	m2	4	
<u>Taking out and removing doors, windows, etc including thresholds, sills, etc (building up openings elsewhere)</u>				
2/1/6	Timber single door frame not exceeding 2,5m2	No	2	
2/1/7	Steel single door frame not exceeding 2,5m2	No	2	
2/1/8	Steel window size 500 x 680mm high	No	3	
2/1/9	Steel window size 1020 x 680mm high	No	3	
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, tc</u>				
2/1/10	Gypsum plasterboard ceilings including cornices, timber bandering, etc	m2	58	
2/1/11	Timber trusses and purlins	m2	67	
2/1/12	Corrugated roof sheeting	m2	67	
<u>Hacking up/off and removing porcelain tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes</u>				
2/1/13	600 x 600mm Tiles to floors	m2	31	
2/1/14	600 x 600mm Tiles to walls	m2	127	
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 1 Demolitions and Alterations				



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 2</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>NOTES</u></p> <p><u>Nature of ground</u></p> <p>A geotechnical investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured</p> <p><u>Carting away of excavated material</u></p> <p>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</p>			
	<p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 2 Earthworks</p>		R	

Brought Forward			R
<p><u>Filling</u></p> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p>Excavations measured in successive depths of 2m.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>SITE CLEARANCE ETC</u></p> <p><u>Site clearance</u></p> <p>2/2/1 Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc m2 5</p> <p><u>EXCAVATIONS</u></p> <p><u>Excavation in earth not exceeding 2m deep</u></p> <p>2/2/2 Trenches for strip footings m3 3</p> <p>2/2/3 Bases m3 1</p> <p>2/2/4 Bulk excavations m3 1</p> <p><u>Extra over excavations in earth to trenches and holes for</u></p> <p>2/2/5 Excavation in soft rock m3 0.3</p> <p>2/2/6 Excavation in hard rock m3 0.2</p>			
Carried Forward			R
<p>Section No. 2 BUILDING WORK Bill No. 2 Earthworks</p>			

Brought Forward			R
<u>CARTING AWAY OF EXCAVATED MATERIAL</u>			
<u>Note:</u>			
Description 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.			
2/2/7	Extra over all excavation for carting away surplus material from excavation and / or stockpile on site to a dumping site to be located by the Contractor	m3	3
<u>RISK OF COLLAPSE OF EXCAVATIONS</u>			
<u>Risk of collapse to side of excavation in earth not exceeding 1,5m deep</u>			
2/2/8	Trench and holes	m2	15
<u>KEEPING EXCAVATIONS FREE FROM WATER</u>			
2/2/9	Keeping excavations free of all water other than subterranean water		Item
<u>FILLING, ETC.</u>			
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u>			
2/2/10	Backfilling to trenches, holes, etc	m3	1
<u>Filling supplied by the Contractor under floors, trenches, etc.</u>			
2/2/11	Sub-base filling (G5) from excavations under solid floors, steps, etc. compacted to 95% modified AASHTO density in layers not exceeding 150mm thick	m3	2
<u>COMPACTION OF SURFACES</u>			
2/2/12	Prepare ground surface by scarifying sub-grade, rip and re - compact 150mm to 93% modified AASHTO density	m2	15
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 2 Earthworks			



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 3</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7, "Tests" of SANS 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><u>Formwork</u></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. 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 style="text-align: right;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 3 Concrete, Formwork and Reinforcement</p>		R	

<p style="text-align: center;">Brought Forward</p> <p>Formwork to soffits of solid slabs, etc. shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described. Formwork to soffits of slabs, beams, etc. shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described.</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>The Tenderer is to note that for the "off-shutter" concrete finish shall be in accordance with the architectural specification 616 CON-140: Smooth + fair finish:-</p> <ul style="list-style-type: none"> · Degree of accuracy: I · Finish: Smooth and even · Form facing material to produce a smooth, hard, uniform texture on the concrete · Steel faced formwork. Joints grout-tight. · Panels shall be as large as practicable and arranged in a regular pattern as a feature of the surface · Formwork tie holes: to the approval of the architect · Repair imperfections: not allowed. Tie bolt holes shall be patched · Not permitted: blowholes, small fins, bulges, irregularities, voids, honeycombing, segregation and other large defects. · Concrete surfaces: No further treatment to form a smooth finish of uniform texture, appearance and colour <p>Structural Concrete</p> <p>Tenderers are referred to the Structural Engineer's - Standard Specifications which should be read before pricing this trade in particular, but also the other trades. The use of extenders, fly-ash, etc. are clearly described on this drawing.</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 3 Concrete, Formwork and Reinforcement</p>		R	

Brought Forward			R
<u>GENERAL NOTES TO TENDERERS</u>			
General notes, described in Bill No.1, shall equally apply to this Bill.			
Definition of locations as used in the bills of quantities			
[A8] - Deerness: Ablutions			
[B8] - Deerness: Brick Seating Structure			
[P8] - Deerness: Platform			
[S8] - Deerness: Steel Seating Structure (curved roof)			
[T8] - Deerness: Ticket Booth			
[Z] - Provisional Sums			
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
<u>Grade 15Mpa/19mm Concrete</u>			
2/3/1	Blinding	m3	0.3
<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACE</u>			
<u>Grade 25MPa/19mm Concrete:</u>			
2/3/2	Strip footings	m3	2
<u>REINFORCED CONCRETE CAST AGAINST WATERPROOFING</u>			
<u>Grade 30MPa/19mm Concrete</u>			
2/3/3	Ground beams	m3	2
2/3/4	Surface beds cast in panels	m3	4
<u>REINFORCED CONCRETE CAST IN FORMWORK</u>			
<u>Grade 25MPa/19mm Concrete:</u>			
2/3/5	Slabs including beams and inverted beams	m3	10
2/3/6	Ramps	m3	76
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 3 Concrete, Formwork and Reinforcement			

Brought Forward			R
<u>TEST BLOCKS</u>			
<u>Notes:</u>			
Concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Regional Representative. Only successful tests will be paid for (Provisional)			
2/3/7	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	1
<u>SUNDRIES TO CONCRETE</u>			
<u>Finishing top surfaces of concrete smooth with a power float</u>			
2/3/8	Finishing top surfaces of concrete smooth with a power float to surface beds, slabs, etc	m2	65
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Rough formwork to sides</u>			
2/3/9	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	176
2/3/10	Sloping and stepped outer edges of stairs not exceeding 300mm high extreme	m	1
<u>Rough formwork to soffits</u>			
2/3/11	Solid slabs not exceeding 250mm thick propped up exceeding 1.5m and not exceeding 3.5m high	m2	65
<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Smooth formwork to sides</u>			
2/3/12	Ramps	m2	56
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 3 Concrete, Formwork and Reinforcement			

Brought Forward			R
<u>MOVEMENTS JOINTS ETC.</u>			
<u>Saw cuts Joints</u>			
2/3/13	6 x 15mm In saw cut joints in floors	m	2
<u>Expansion joints with 10mm softboard between vertical concrete and brick surfaces</u>			
2/3/14	10mm Joints not exceeding 300mm high	m	2
<u>REINFORCEMENT (PROVISIONAL)</u>			
2/3/15	Bar reinforcement in various diameters	t	8
<u>Fabric reinforcement:</u>			
2/3/16	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m2	22
Carried Forward to Summary of Section No.			
Section No. 2			
BUILDING WORK			
Bill No. 3			
Concrete, Formwork and Reinforcement			

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 4</u></p> <p><u>PRECAST CONCRETE</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>WINDOW SILLS</u></p> <p><u>Precast concrete window sill, installed as per manufacturer's specification</u></p>			
2/4/1	195 x 70mm high, bedded and jointed in Class II mortar and pointed on all exposed surfaces	m	2	
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 4 Precast Concrete			



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 5</u></p> <p><u>MASONRY</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Sizes in descriptions</u></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><u>Hollow walls etc</u></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. 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 "Brickseal" bitumen emulsion waterproofing coating.</p> <p><u>Face bricks</u></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
	Carried Forward		R	
	<p>Section No. 2 BUILDING WORK Bill No. 5 Masonry</p>			

Brought Forward			R
<p><u>Pointing</u></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>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>BRICKWORK IN FOUNDATION</u></p> <p><u>Brickwork in 73mm burnt clay masonry units class NFP in Class II mortar laid in stretcher bond with 10mm flush joints</u></p>			
2/5/1	One brick wall	m2	6
<p><u>SUPERSTRUCTURE BRICKWORK</u></p> <p><u>Brickwork of NFP brick in class II mortar laid in stretcher bond with 10mm flush joints</u></p>			
2/5/2	One brick wall	m2	49
2/5/3	Half brick wall	m2	7
<p><u>BRICKWORK SUNDRIES</u></p> <p><u>Brickwork reinforcement</u></p>			
2/5/4	150mm Wide reinforcement built in horizontally.	m	160
2/5/5	75mm Wide reinforcement built in horizontally	m	21
<p><u>Precast concrete prestressed fabricated lintels</u></p>			
2/5/6	100 x 70mm Lintels in lengths not exceeding 3m	m	3
Carried Forward			R
<p>Section No. 2 BUILDING WORK Bill No. 5 Masonry</p>			



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 6</u></p> <p><u>WATERPROOFING</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>DAMP PROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 375 micron embossed damp proof course</u></p> <p>2/6/1 Under walls m2 10</p> <p>2/6/2 Under cills, etc. m2 2</p> <p><u>One layer of 250 micron waterproof sheeting sealed at laps with approved tape</u></p> <p>2/6/3 Under surface beds m2 22</p> <p>Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 6 Waterproofing</p>			
			R	

Brought Forward				R
<u>JOINTS SEALANTS, ETC.</u>				
<u>Mastic grey polysulphide sealing compound including raking out of joints filler as necessary</u>				
2/6/4	6 x 15mm In saw cut joints in floors	m	9	
2/6/5	10mm Isolation Joints between surface bed concrete and brick wall	m	2	
<u>Approved two-part polyurethane sealing compound including backing cord, bond breaker, primer, etc</u>				
2/6/6	6 x 15mm in saw cut joints in floors	m	9	
<u>WATERPROOFING TO ROOFS, BASEMENT, ETC</u>				
<u>4mm fully bonded waterproofing, applied in accordance with manufacturer's recommendations.</u>				
2/6/7	On roof slabs	m2	27	
2/6/8	Additional membrane 250mm girth at turn-ups including flashing strip 250mm girth and sealing top edge into groove with mastic	m	39	
<u>Two coats of liquid acrylic waterproofing and waterproofing membrane, with min 50mm overlaps, applied as per manufacturer's recommendations</u>				
2/6/9	On roof ridges	m2	40	
Carried Forward to Summary of Section No.				R
Section No. 2				
BUILDING WORK				
Bill No. 6				
Waterproofing				

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 7</u></p> <p><u>ROOF COVERINGS</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>ROOF SHEETING</u></p> <p><u>Concealed fix interlocking 0.58mm thick heavy industrial Z275 spelter galvanised steel sheeting with factory finish (Colour: Fish Eagle White) to one side and (Colour: Grey) to other side and accessories, fixed to purlins using approved clips and fasteners, installation and fixing must be in accordance with manufacturer's recommendations and specifications.</u></p>			
2/7/1	Roof sheeting pitch not exceeding 25 degrees	m2	41	
2/7/2	Ridge capping 450mm girth	m	6	
	Carried Forward			
	Section No. 2 BUILDING WORK Bill No. 7 Roof Coverings			



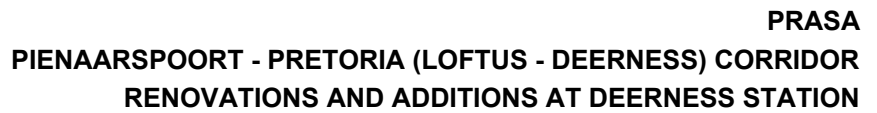
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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 8</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Joinery</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p><u>Fixing</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>Timber</u></p> <p>All softwood to be South African Pine</p>			
	Carried Forward		R	
	<p>Section No. 2 BUILDING WORK Bill No. 8 Carpentry and Joinery</p>			

	Brought Forward		R	
	<p><u>Descriptions</u></p> <p>Items described as "bolted" shall be deemed to exclude the bolts and include the holes unless otherwise described.</p> <p>Where the fixing of members is not stated it shall mean the nailing of one timber member to another.</p> <p>The term "planted on" shall mean the nailing of one timber member to another</p> <p>The term "screwed on" shall mean the countersunk screwing of one timber member to another.</p> <p>The term "screwed on and pelleted" shall mean the screwing of one timber member to another with the heads of screw sunk and pelleted.</p> <p>The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete.</p> <p>The term "plugged and pelleted" shall mean the screwing of a timber member to and including plastic plugs in brickwork or concrete with heads of screw sunk and pelleted.</p> <p>Shelving, etc. described as screwed to steel must be fixed from underside and prices are to include for countersunk drilling through the steel for screw fixing.</p> <p>Descriptions of floors, ceilings, joinery, etc. shall be deemed to include for all square cutting</p> <p>Descriptions of items given in linear metre shall be deemed to include for mitres, stopped ends, fitted intersections, etc.</p> <p>Descriptions of rounded angles, rebates, grooves, chamfers, moulded edges, etc. shall be deemed to include for angles, ends, etc.</p> <p>Definition of locations as used in the bills of quantities</p>			
	Carried Forward		R	
	<p>Section No. 2 BUILDING WORK Bill No. 8 Carpentry and Joinery</p>			

	Brought Forward			R	
	<p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>ROOFS, ETC</u></p> <p><u>Plate nailed timber roof truss construction</u></p> <p>The following is applicable in respect of roof trusses:</p> <p>All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.</p> <p>Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.</p> <p>All joints to be close fitted butt joints.</p> <p>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</p> <p>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabrication commences.</p> <p>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</p> <p><u>Roof trusses</u></p>				
2/8/1	<p>Design, supply, take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gang boarding, temporary and permanent bracing all in accordance with architectural drawings and specifications, etc (measured on plan)</p>	m2	88		
	Carried Forward			R	
	<p>Section No. 2 BUILDING WORK Bill No. 8 Carpentry and Joinery</p>				

Brought Forward			R
<u>Sawn softwood</u>			
2/8/2	38 x 114mm Wall plates	m	79
<u>Sundries</u>			
2/8/3	Two coats creosote on sawn timbers	m2	60
<u>EAVES, VERGES, ETC</u>			
<u>Fibre cement</u>			
2/8/4	300 x 12mm thick plain medium density ungrooved fibre cement fascia boards compliant with SANS 803, fixed to support battens between rafters at max 900mm centres, with aluminium H-profile fascia joiner between boards and aluminium H-profile fascia corner joiners at board ends	m	79
2/8/5	330 x 250mm moulded Barge boards, fixed to trimmer purlin, with aluminium H-profile barge board joiners between boards and at roof apex	m	10
<u>DOORS ETC</u>			
<u>Solid laminated external quality flush doors</u>			
2/8/6	44mm Door 813 x 2032mm high	No	3
2/8/7	44mm Door 813 x 2032mm high, undercut 70mm high	No	2
<u>DOOR FRAMES</u>			
<u>Hardwood timber door frames to sides only, bolted with and including 4x lugs/bolts min 150mm long</u>			
2/8/8	96 x 50 x 2100mm high	No	3
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 8 Carpentry and Joinery			



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 9</u></p> <p><u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Fixing</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere.</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p><u>Ceilings & Bulkheads</u></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><u>Steel components</u></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p>			
	<p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 9 Ceilings,Partitions and Access Flooring</p>		R	

	Brought Forward			R	
	<p><u>Proprietary suspended ceilings</u></p> <p>Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations</p> <p>Where electrical light fittings, diffusers, panels etc are units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)</p> <p><u>Suspension systems</u></p> <p>Where suspensions of ceilings require a sub-grid, the tenderer should include in his rates for the sub-grid. The design of the sub-grid support is not specified, the tenderer is to obtain the necessary requirements and recommendations for a safe installation from the board and suspension system manufacturer to the satisfaction of the structural engineer.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>SUSPENDED CEILING</u></p> <p><u>Flush plaster gypsum ceiling fixed to pre-painted concealed tee suspension system including main and cross tees, necessary hangers, grids, etc</u></p>				
2/9/1	Ceilings suspended not exceeding 1m below concrete soffits	m2	73		
	<p><u>CORNICES</u></p> <p><u>Plasterboard cornices</u></p>				
2/9/2	75mm Coved cornice plugged to brickwork	m	122		
	Carried Forward			R	
	<p>Section No. 2 BUILDING WORK Bill No. 9 Ceilings,Partitions and Access Flooring</p>				



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 10</u></p> <p><u>IRONMONGERY</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish, etc.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>IRONMONGERY FIXED TO DOORS, etc.</u></p> <p><u>HINGES, BOLTS, ETC</u></p>			
2/10/1	Grade 304 SS Paraplegic toilet cubicle Indicator bolt, fixed to surface with matching stainless steel screws	No	1	
2/10/2	SS Toilet cubicle Indicator bolt and lock set	No	1	
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 10 Ironmongery			

	Brought Forward			R	
	<u>LOCKS</u>				
2/10/3	Stainless Steel Cylinder Lock (Q04)	No	2		
2/10/4	Grade 304 SS narrow style roller catch and deadbolt with 35mm back set, Euro profile Mortice, fore end to be SS	No	2		
2/10/5	60mm Grade 304 SS Euro profile Double with 6 pin and Master keyed	No	1		
	<u>HANDLES</u>				
2/10/6	Stainless Steel Lever Handle on a Backplate (Q01)	No	4		
2/10/7	Grade 304 SS round D bolt through pull handle 19 x 300mm	No	1		
2/10/8	Grade 304 SS round D pull handle 19 x 200mm back to back	No	2		
	<u>PUSH PLATES AND KICKING PLATES</u>				
2/10/9	300 x 1.2mm Thick Grade 304 brushed SS Kick plate, sized to match total width of door	No	1		
	<u>DOOR CLOSERS</u>				
2/10/10	Grade 304 SS Rack and Cam Pinion door closer with sliding track arm, non handed with a maximum 180 degree non hold opening as standard, power adjustable by spring, latching and damping action, suitable for door weight	No	1		
2/10/11	Patent fix screws M5 for door closers	No	1		
	<u>LETTERS, NAMEPLATES, ETC</u>				
2/10/12	150 x 150mm SS plate engraved with "MALE" symbol, fixed to timber doors	No	2		
2/10/13	150 x 150mm SS plate engraved with "FEMALE" symbol, fixed to timber doors	No	2		
2/10/14	150 x 150mm SS plate engraved with "UNISEX" symbol, fixed to timber doors	No	2		
	Carried Forward			R	
	Section No. 2 BUILDING WORK Bill No. 10 Ironmongery				

	Brought Forward			R	
2/10/15	150 x 150mm SS plate engraved with "PARAPLEGIC" symbol, fixed to timber doors	No	1		
	<u>BATHROOM FITTINGS</u>				
2/10/16	Satin SS toilet roll holders for 2 or 3 rolls with central shaft system and cylinder lock, plugged and screwed to the wall with SS screws (vandal resistant)	No	4		
2/10/17	Satin SS waste disposal bins with capacity of plus minus 40 litres and with a frame inside the dispenser to hold a liner, plugged and screwed to the wall with SS screws	No	3		
2/10/18	Brushed grade 304 SS dog leg grab rail 750 x 750mm overall, with 3x supports, plugged and screwed to wall with SS screws	No	1		
2/10/19	Brushed grade 304 SS Flush valve grab rail 842mm long overall, plugged and screwed to wall with SS screws	No	1		
2/10/20	Brushed grade 304 SS Cistern grab rail 842mm long overall, plugged and screwed to wall with SS screws	No	1		
	<u>SUNDRIES</u>				
2/10/21	Grade 304 SS floor mounted door stop, plugged and screwed to floor with matching SS screws	No	3		
	<u>STEEL LOCKERS</u>				
	<u>Approved</u>				
2/10/22	Steel locker size 300 x 450mm x 900mm high fixed to walls	No	4		
	<u>CUPBOARDS</u>				
	<u>Approved</u>				
2/10/23	Steel double door cupboard with shelves	No	1		
	Carried Forward to Summary of Section No.			R	
	Section No. 2				
	BUILDING WORK				
	Bill No. 10				
	Ironmongery				

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 11</u></p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>Mass:</u> The mass of all structural steelwork includes for all caps, bases and connections; is calculated nett in accordance with the mass lists of the South African Institute of Steel Construction wherein no allowance is made for rolling margins, rivets, black bolts, nuts, washers, distance pieces, packing, additional material in welding, decorative or protective treatments, nor for constructional aids, binding wire and waste. If the mass of any steel actually used exceeds the mass in the above mentioned lists this additional mass shall be entirely to the contractor's account and the masses to be used on this contract will be strictly in accordance with these lists.</p> <p><u>Prices:</u> The prices for structural steelwork are to include for all necessary cutting to lengths, shaping, holing, tapping, threading, forging, turning, welding and filing smooth as well as for cutting, for threading where necessary and for transporting to site, assembling, hoisting and fixing to the required levels. All rails, etc., described as continuous are to be in long lengths with flush welded joints. All screwed work is to have full threads. Where welding is stated this is to be continuous unless otherwise described.</p> <p>The contractor shall check all dimensions on site as he shall be held solely responsible for work manufactured to incorrect sizes.</p>			
	Carried Forward			
	<p>Section No. 2 BUILDING WORK Bill No. 11 Structural Steelwork</p>			R

	Brought Forward			R	
	<p>Structural steel shall be Grade 43, and where welding is stipulated this shall be 6mm continuous fillet welds.</p> <p>The contractor shall submit his 'Shop Drawings' to the engineer in duplicate and must receive written approval thereof before commencing with the work.</p> <p>All structural steelwork is to be mechanically wire brushed and primed with one coat of grade 1 Red Lead Primer to a dry film thickness of minimum 30 microns. After erection all damaged areas shall be wire brushed and patch primed.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No. 1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>STEEL STRUCTURE</u></p>				
2/11/1	IPE 160 x 82 x 16 x 15.80kg/m	t	3.18		
	<p><u>PAINTING</u></p> <p><u>One coat zinc phosphate metal primer, one coat universal undercoat and two coats gloss enamel paint (Colour: PRASA Blue, ref. code: T01)</u></p>				
2/11/2	Surfaces of structural steel	m2	123		
	<p><u>BOLTS, etc.</u></p> <p><u>Holding down bolts:</u></p>				
2/11/3	Provide the Provisional Amount of R6 000.00 (Six Thousand) for bolts, fasteners, etc.	Item			6 000.00
	<p style="text-align: right;">Carried Forward to Summary of Section No.</p> <p>Section No. 2 BUILDING WORK Bill No. 11 Structural Steelwork</p>			R	

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 12</u></p> <p><u>METALWORK</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>ALUMINIUM</u></p> <p>The contractor is to make due allowance in his prices for complying with the following requirements.</p> <p><u>SPECIFICATIONS</u></p> <p>User Note:</p> <p><u>Glazing</u></p> <p>All Safety glazing material (individual panes) are to conform to all standards as stipulated in SANS 10400 Part N and SANS 10137 and any additional Engineer Specifications or relevant SANS glazing regulations not stipulated in this document. All tenderers are referred to the drawings for the glazing specification.</p> <p><u>Schedules and Drawings</u></p> <p>Windows and shopfronts are as per architect's schedules and drawings annexed to these Bills of Quantities.</p>			
	Carried Forward		R	
	<p>Section No. 2 BUILDING WORK Bill No. 12 Metalwork</p>			

<p style="text-align: center;">Brought Forward</p> <p><u>Ironmongery</u></p> <p>All rates for windows, shopfronts and doors etc. must include for the taking, delivery or/and installation of the ironmongery to be specified.</p> <p><u>Actuators</u></p> <p>All rates for shopfronts with actuators to include for the supply and installation of actuators as specified</p> <p><u>Scaffolding</u></p> <p>All scaffolding should be provided by the contractor and no claims/ qualifications will be accepted.</p> <p><u>Protection</u></p> <p>With this tender, the glazing sub-contractor must supply a statement concerning protection that will be provided to finishes and components until Practical Completion. This to include specific references to the method of removal of such protection. All tenderers to include cost of protection in tender price.</p> <p><u>Installation</u></p> <p>All measurements to be checked on site prior to ordering and manufacturing.</p> <p>Aluminium sections and shop drawings to be accepted by Architect prior to manufacturing.</p> <p>Allow for water and weather proof polysulphide sealant to approved specifications all around frame junctions to plaster and other materials.</p> <p><u>Profiles</u></p> <p>Tenderers to provide typical details of proposed aluminium section to be used in the design.</p> <p><u>Structural Silicone</u></p> <p>Tenderers to allow a 10 year guarantee on all powdercoating.</p>			R
<p style="text-align: center;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 12 Metalwork</p>			R

<p style="text-align: right;">Brought Forward</p> <p><u>Preliminary and Shop Drawings:</u></p> <p>The contractor shall submit preliminary design drawings showing basic system sections for the Architect's approval.</p> <p>After approval and prior to fabrication detailed shop drawings shall be prepared and submitted to the Architect for approval.</p> <p><u>Fixing:</u></p> <p>The contractor is to take special note of all fixing details of all aluminium elements and must allow in his price for properly securing the aluminium sections to the structure with and including all necessary steel brackets, rails, timber grounds and sub-frames, including all necessary holing and bolting, etc. This fixing is to be adequately spaced and securely fixed to ensure total stiffness of the door frames, windows, etc. as no sagging causing improper functioning of the windows and doors will be accepted.</p> <p><u>Deflection of structure:</u></p> <p>The contractor is advised to make adequate provision for the design deflection of the structure.</p> <p><u>Tolerances:</u></p> <p>Sizes are approximate only and measurements on site must be taken before fabrication. Due allowance must be made for tolerances in accordance with the Architect's details.</p> <p><u>Protection:</u></p> <p>The contractor will be required to protect his work during the course of construction, which protection shall be adequate for the purpose and to the full approval of the Architect.</p> <p>Such protection shall only be removed after a written instruction from the Architect.</p>		R	
<p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BUILDING WORK Bill No. 12 Metalwork</p>		R	

Brought Forward			R
<p><u>Cleaning:</u></p> <p>All work must be cleaned down upon completion. Glazing as installed will not be accepted as clean glass and the contractor must allow for polishing glass as and when instructed by the Architect.</p> <p>Note: All windows and doors should be read in conjunction with window and door schedules</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>WELDED SCREENS, GATES, ETC</u></p> <p><u>Screens and gates to window openings</u></p> <p>2/12/1 Burglar screen 500 x 800mm high, fixed into brickwork or concrete No 1</p> <p>2/12/2 Burglar screen 600 x 800mm high, fixed into brickwork or concrete No 1</p> <p>2/12/3 Burglar screen 600 x 1200mm high, fixed into brickwork or concrete No 1</p> <p><u>Screens and gates to door openings</u></p> <p>2/12/4 Single gate 900 x 2100mm high with locking mechanism No 6</p> <p><u>Cage around ablution duct</u></p> <p>2/12/5 Size 1500 x 300 x 1360mm overvall protective cage No 1</p> <p><u>Screens for crowd control</u></p> <p>2/12/6 Screen 1800m high, as per Architect's detail m 1</p> <p><u>PRESSED STEEL DOOR FRAMES</u></p>			
Carried Forward			R
<p>Section No. 2 BUILDING WORK Bill No. 12 Metalwork</p>			



Brought Forward

1.6mm Double rebated frames suitable for one brick walls

2/12/7	Frame for door 813 x 2032mm high
--------	----------------------------------

No

2

R

Carried Forward

R

Section No. 2
BUILDING WORK
Bill No. 12
Metalwork

Brought Forward			R
<u>PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>			
2/12/8	Door 905 x 2440mm high with louvred ventilation panel as sized by manufacturer and rebated frame suitable for one brick wall (Door type: AW)	No	1
<u>WINDOW FRAMES, ETC</u>			
<u>Standard steel window frame (with brass fittings), burglar bars to opening and fixed sections, consisting of 20 x 5mm mild steel flat sections to standard NBP2 pattern welded at intersections and window frames as per the architects' specification</u>			
2/12/9	Steel Window 500 x 680mm high	No	3
2/12/10	Steel window size 1020 x 680mm high	No	6
<u>ALUMINIUM WINDOWS, DOORS, ETC</u>			
<u>Natural anodised aluminium windows glazed with clear glass compliant with AAAMSA specifications and plugged to brickwork or concrete</u>			
2/12/11	Window 600 x 800mm high	No	1
2/12/12	Window 600 x 800mm high	No	1
2/12/13	Window 600 x 600mm high	No	1
2/12/14	Window 800 x 800mm high	No	1
2/12/15	Window 900 x 500mm high	No	1
2/12/16	Window 600 x 1200mm high	No	1
2/12/17	Window 1500 x 1000mm high	No	1
2/12/18	Window 3000 x 800mm high	No	1
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 12 Metalwork			

Brought Forward			R
	<u>Natural anodised aluminium door glazed with clear glass compliant with SANS 10160, SANS 10137, SANS 10400 (Part N of Section 3), SANS 1263 AAAMSA specifications, plugged to brickwork or concrete, ironmongery measured elsewhere</u>		
2/12/19	Door 810 x 2030mm high	No	1
	<u>PLATFORM FURNITURE</u>		
2/12/20	Single side bench 1.8m long with straight leg with galvanised and polyurethane painted finish (Colour: PRASA Mid Grey), set into concrete bed	No	3
2/12/21	Steel litter bin size 400mm Ø x 750mm high / 72-litre capacity with steel ash tray, galvanised with a polyurethane paint (Colour: PRASA Mid Grey)	No	1
	<u>BALUSTRADE</u>		
	<u>1000mm steel balustrade, as per Architect's detail</u>		
2/12/22	Balustrade, horizontal	m	1
2/12/23	Balustrade, horizontal and circular on plan	m	1
2/12/24	Balustrade, raking	m	72
	<u>850mm high steel balustrade, as per Architect's detail</u>		
2/12/25	Balustrade, horizontal	m	1
	Carried Forward		
	Section No. 2 BUILDING WORK Bill No. 12 Metalwork		



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 13</u></p> <p><u>PLASTERING</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p>			
	Carried Forward		R	
	<p>Section No. 2 BUILDING WORK Bill No. 13 Plastering</p>			

Brought Forward			R
<u>SCREEDS</u>			
<u>Self levelling screed, or similar approved, screed to floors that receive vinyl sheeting/tile as per manufacturers recommendations and architects approval</u>			
2/13/1	4mm thick on floors and landing	m2	31
<u>INTERNAL PLASTER</u>			
<u>Two coat plaster with steel trowel finish</u>			
2/13/2	On brick walls	m2	209
2/13/3	On brick walls, in narrow widths	m2	6
<u>EXTERNAL PLASTER</u>			
<u>Two coat plaster with steel trowel finish</u>			
2/13/4	On brick walls	m2	46
2/13/5	On brick walls, in narrow widths	m2	10
Carried Forward to Summary of Section No.			R
Section No. 2			
BUILDING WORK			
Bill No. 13			
Plastering			

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 14</u></p> <p><u>TILING</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>Pricing</u></p> <p>Prices are to included for the following: Cutting, handling, labour, adhesive etc.</p> <p><u>Fixing</u></p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat.</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed, grouted and pointed with suitable adhesives and grouts, as recommended by the Architect. Costs are hereby deemed to include the cost of this requirement.</p> <p>Payment for work that is deemed measurable, in respect of the conditions of contract, and which comprises cutting, leaving, or forming, rectangular holes and notches through tiling is hereby deemed to apply only to holes and notches that do not exceed 600mm girth. Those exceeding 600mm in girth are hereby deemed to be "square cutting", which is hereby deemed to be part of the work description for that type of tiling and is not measurable as a separate item of work.</p> <p><u>Wastage</u></p> <p>Tile wastage in excess of 10% will be for the tenderer's account.</p>			
	Carried Forward		R	
	<p>Section No. 2 BUILDING WORK Bill No. 14 Tiling</p>			

Brought Forward			R
<u>GENERAL NOTES TO TENDERERS</u>			
General notes, described in Bill No. 1, shall equally apply to this Bill.			
<u>Note</u>			
All scaffolding should be provided by the contractor and no claims/qualifications will be accepted.			
Definition of locations as used in the bills of quantities			
[A8] - Deerness: Ablutions			
[B8] - Deerness: Brick Seating Structure			
[P8] - Deerness: Platform			
[S8] - Deerness: Steel Seating Structure (curved roof)			
[T8] - Deerness: Ticket Booth			
[Z] - Provisional Sums			
<u>WALL TILING</u>			
<u>600 x 600mm matt Full bodied porcelain tiles (Colour: Ivory Polished) fixed to internal wall plaster with approved tile adhesive mixed with approved bonding liquid in lieu of water, with continuous 3mm joints in both directions and grouted with approved tile grout (Colour: Mushroom) (PC allowance of R 120.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing</u>			
2/14/1	On walls	m2	127
2/14/2	On narrow widths	m2	13
<u>FLOOR TILING</u>			
<u>600 x 600 x10mm min R9 preferably R10 slip rated matt Full bodied porcelain tiles (Colour: Light Grey) fixed to internal floor screed with approved tile adhesive mixed with approved bonding liquid in lieu of water, with diagonal joints continuous in both directions and grouted with approved tile grout (Colour: Dove Grey) (PC allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing</u>			
2/14/3	On floors and landings	m2	20
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 14 Tiling			

	Brought Forward			R	
	<p><u>600 x 600 x10mm min R9 preferably R10 slip rated matt Full bodied porcelain tiles (Colour: Dark Grey) fixed to internal floor screed with approved tile adhesive mixed with approved bonding liquid in lieu of water, with diagonal joints continuous in both directions and grouted with approved tile grout (Colour: Dove Grey) (PC allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing</u></p>				
2/14/4	On floors and landings	m2	31		
	<p><u>300 x 300 x 30mm cement based Stair tread paver (Colour: Grey base with White stone aggregate) laid externally to 1:50 falls, with 5mm joints grouted with suitable grout, bedded on bedded on 20-30mm thick river sand bed, on base course and subgrade, conforming to SANS 1200 MJ Degree Of Accuracy I (PC allowance of R 88.00/m excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing</u></p>				
2/14/5	On treads of nosing tiles with stretcher course tiles behind	m	5		
	<p><u>600 x 600 x10mm min R9 preferably R10 slip rated matt Full bodied porcelain tiles (Colour: Dark Grey) fixed to internal floor screed with approved tile adhesive mixed with approved bonding liquid in lieu of water, with diagonal joints continuous in both directions and grouted with approved tile grout (Colour: Dove Grey) (PC allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing</u></p>				
2/14/6	Skirting 300mm high	m	69		
	<u>SUNDRIES</u>				
	<u>Stainless steel trims</u>				
2/14/7	SS 28 x 10mm interior Square edge trim on tile corners, bedded in adhesive while tiles are laid	m	12		
2/14/8	SS 28 x 10mm interior Straight edge trim on tile edges, securely bedded in adhesive while tiles are laid	m	69		
	Carried Forward			R	
	Section No. 2 BUILDING WORK Bill No. 14 Tiling				

	Brought Forward			R	
	<u>Aluminium trims</u>				
2/14/9	27 x 10 x 10mm interior Square trim with Mill finish on porcelain tile corners, securely bedded in adhesive, including all necessary external corner pieces	m	3		
2/14/10	21 x 10mm interior Straight edge trim with Mill finish on porcelain tile edges, securely bedded in adhesive	m	3		
	<u>ATTIC STOCK</u>				
2/14/11	600 x 600mm matt Full bodied porcelain tiles (Colour: Ivory Polished)	m2	13		
2/14/12	600 x 600 x10mm min R9 preferably R10 slip rated matt Full bodied porcelain tiles (Colour: Light Grey)	m2	8		
2/14/13	600 x 600 x10mm min R9 preferably R10 slip rated matt Full bodied porcelain tiles (Colour: Dark Grey)	m2	3		
Carried Forward to Summary of Section No.				R	
Section No. 2					
BUILDING WORK					
Bill No. 14					
Tiling					

Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 15</u></p> <p><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>uPVC pipes and fittings:</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p><u>Excavations:</u></p> <p>No claim for excavation in material other than "earth" will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling, and has obtained, in writing , authorised classification thereof.</p> <p>"Intermediate material" and " hard rock" shall be as defined in "Earthworks".</p> <p>Quantities of all excavations, carting away excavated material and backfilling are calculated on the nett extent to be formed, or filled, in accordance with drawings and specifications, and the Contractor is to allow in his prices for any bulking.</p> <p>Classes of excavation shall be as S.A.B.S 1200D clause 3.1.2.</p>			
	Carried Forward		R	
	<p>Section No. 2</p> <p>BUILDING WORK</p> <p>Bill No. 15</p> <p>Plumbing and Drainage</p>			

Brought Forward				R
<p><u>Laying, backfilling, bedding, etc., of pipes:</u></p> <p>Pipes shall be laid and bedded, and trenches shall be carefully backfilled, in accordance with the specific instructions</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p> <p>[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums</p> <p><u>RAINWATER DISPOSAL</u></p> <p><u>Commercial/industrial square profile aluminium seamless gutter, 0.9mm thick coated internally and externally with factory finish in colour "Fish Eagle White" including cut and mitred angles covered with a mitre strip externally, stop ends riveted and all sealed on the inside with silicone sealant, secured to fibre cement fascia with 20 x 3mm dual-purpose brackets at 600mm centres using aluminium peeled rivets, including a 50 x 20mm high overflow spigot</u></p>				
2/15/1	150 x 140mm Eaves gutters	m	54	
2/15/2	Extra over 150 x 140mm eaves gutter for stopped end	No	20	
2/15/3	Extra over 150 x 140mm eaves gutter for angle	No	4	
2/15/4	Extra over 150 x 140mm eaves gutter for corner	No	4	
2/15/5	Extra over 150 x 1140mm eaves gutter for outlet for 100 x 100mm pipe	No	22	
Carried Forward				R
<p>Section No. 2 BUILDING WORK Bill No. 15 Plumbing and Drainage</p>				

Brought Forward				R
<u>0.6mm thick galvanised downpipe with factory finish (Colour: Fish Eagle White), fixed to wall with straps at 1500mm centres using nail plugs, with downpipes riveted and silicone sealed to gutter outlets</u>				
2/15/6	100 x 100mm Rainwater pipes	m	88	
2/15/7	Extra over 100 x 100mm rainwater pipe for bend	No	4	
2/15/8	Extra over 100 x 100mm rainwater pipe for shoe	No	22	
2/15/9	Extra over 100 x 100mm rainwater pipe for offset	No	22	
<u>SANITARY FITTINGS</u>				
<u>Sinks</u>				
2/15/10	Grade 304 18/10 polished SS double end bowl inset Sink, overall size 1160 x 460mm wide with 2x 340 x 370 x 150mm deep bowls, fitted onto cupboard (measured elsewhere) including 38mm waste fitting and PVC traps (waste fitting and trap measured elsewhere)	No	2	
<u>Wash hand basins</u>				
2/15/11	Vandal resistant wall-mounted Wash hand basin	No	3	
2/15/12	Basin fixing mir/head screw (set of 2), size 100 x 10 x 10mm	No	3	
<u>Water closets</u>				
2/15/13	Vandal resistant WC	No	3	
2/15/14	Vandal resistant Paraplegic WC	No	1	
<u>Urinals</u>				
2/15/15	Vitreous china 565 x 275 x 310mm wall mounted back inlet Urinal, with 38mm CP domical grating and CP back inlet spreader, fixed on and including 2x hanger brackets	No	2	
<u>WASTE UNIONS ETC</u>				
2/15/16	38mm Bath or sink waste union	No	3	
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 15 Plumbing and Drainage				

Brought Forward			R
<u>TRAPS ETC</u>			
<u>uPVC:</u>			
2/15/17	40mm Deep seal "P" trap	No	3
2/15/18	40 x 300mm Sink combination for double bowl with deepseal "P" trap	No	1
<u>Chromium plated</u>			
2/15/19	CP 40mm bottle trap, size 225 x 175 x 146mm, with 75mm deep re-seal and adjustable telescopic pipe, with 1 1/4" female inlet and with 1 1/4" male outlet	No	2
<u>Brass</u>			
2/15/20	40mm rough brass Shower P trap with shallow seal and chrome plated square grating	No	1
<u>SANITARY PLUMBING</u>			
<u>Extra over uPVC pipes for fittings</u>			
2/15/21	110mm Pan connector	No	4
<u>TAPS, VALVES, ETC</u>			
<u>Taps</u>			
2/15/22	CP Medical elbow action Pillar tap with raised nose, SANS 226 TYPE 2 compliant	No	1
2/15/23	CP Pillar type self-closing push button with metering spout, with non-hold open feature and flow time of 6 - 9 sec, compliant with SANS 1808-8	No	2
<u>Flushing valves</u>			
2/15/24	CP exposed flush valve, size 130 x 60 x 113mm, connected to urinal flush pipe	No	2
2/15/25	Brass parallel nipple, size 20 x 100mm	No	2
2/15/26	CP offset urinal flush pipe, size 215mm long x 15mm outlet with 27mm offset, and with inlet adaptor for urinal flush valves	No	2
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 15 Plumbing and Drainage			

Brought Forward			R
<u>TESTING</u>			
2/15/27	Testing water pipe system	Item	
<u>SLEEVES</u>			
<u>Plastic sleeves for pipes not exceeding 100mm diameter</u>			
2/15/28	Pipes not exceeding 100mm external diameter, not exceeding 250mm long	No 1	
2/15/29	Pipes exceeding 100mm but not exceeding 200mm external diameter, not exceeding 250mm long	No 1	
Carried Forward to Summary of Section No.			R
Section No. 2			
BUILDING WORK			
Bill No. 15			
Plumbing and Drainage			



Carried Forward



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 2</u></p> <p><u>BILL NO. 17</u></p> <p><u>PAINTWORK</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>PREPARATORY WORK TO EXISTING WORK</u></p> <p><u>Previously painted plastered surfaces</u></p> <p>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</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>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</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No. 1, shall equally apply to this Bill.</p> <p>Definition of locations as used in the bills of quantities</p>			
	Carried Forward		R	
	<p>Section No. 2</p> <p>BUILDING WORK</p> <p>Bill No. 17</p> <p>Paintwork</p>			

Brought Forward			R
[A8] - Deerness: Ablutions [B8] - Deerness: Brick Seating Structure [P8] - Deerness: Platform [S8] - Deerness: Steel Seating Structure (curved roof) [T8] - Deerness: Ticket Booth [Z] - Provisional Sums			
<u>PAINTWORK ETC TO PREVIOUSLY PAINTED WORK</u>			
<u>ON BRICKS OR QUARRY TILES</u>			
<u>Two coats brick dressing</u>			
2/17/1	On flush pointed faced walls	m2	5
2/17/2	On recessed pointed faced walls	m2	10
<u>ON FLOATED PLASTER</u>			
<u>One coat professional plaster primer and two coats pure acrylic emulsion sheen paint, with finish TBC (Colour: PRASA Dark Grey Blue, ref. code: P01)</u>			
2/17/3	On external walls	m2	10
<u>One coat professional plaster primer and two coats pure acrylic emulsion sheen paint, with finish TBC (Colour: PRASA Dark Grey Blue, ref. code: P02)</u>			
2/17/4	On external walls	m2	210
<u>One coat professional plaster primer and two coats pure acrylic emulsion sheen paint, with finish TBC (Colour: PRASA Light Grey, ref. code: P03)</u>			
2/17/5	On external walls	m2	150
<u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA Dark Grey Blue, ref. code: P02)</u>			
2/17/6	On internal walls	m2	174
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 17 Paintwork			

Brought Forward			R	
	<p><u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA Light Grey, ref. code: P03)</u></p>			
2/17/7	On internal walls	m2	107	
	<p><u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA White, ref. code: P10)</u></p>			
2/17/8	On ceilings and beams	m2	22	
	<u>ON PLASTERBOARD</u>			
	<p><u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA White, ref. code: P10)</u></p>			
2/17/9	On ceilings and cornices	m2	5	
	<u>ON FIBRE-CEMENT</u>			
	<p><u>One coat priming with bonding liquid and two coats acrylic emulsion low sheen paint (Colour: PRASA Blue, ref. code: P01)</u></p>			
2/17/10	On fascias and barge boards	m2	10	
	<u>ON METAL</u>			
	<p><u>One coat waterprime, one coat of universal undercoat and two coats gloss enamel paint (Colour: PRASA Blue, ref. code: P01)</u></p>			
2/17/11	On handrails	m2	5	
	<p><u>One coat waterprime, one coat of universal undercoat and two coats gloss enamel paint (Colour: PRASA Dark Grey Blue, ref. code: P02)</u></p>			
2/17/12	On welded MS balustrades	m2	5	
	<p><u>One coat zinc phosphate metal primer, one coat universal undercoat and two coats gloss enamel paint (Colour: PRASA Deep Grey, ref. code: P05)</u></p>			
2/17/13	On internal door frames	m2	3	
Carried Forward			R	
Section No. 2 BUILDING WORK Bill No. 17 Paintwork				

	Brought Forward			R	
	<u>One coat zinc phosphate metal primer, one coat universal undercoat and two coats gloss enamel paint (Colour: PRASA White, ref. code: P10)</u>				
2/17/14	On external door frames	m2	3		
	<u>One coat zinc phosphate metal primer, one coat universal undercoat and two coats gloss enamel paint (Colour: PRASA Roof Grey, ref. code: P09)</u>				
2/17/15	On troughed/ribbed/corrugated iron roof sheeting accessories (measured on flat)	m2	3		
	<u>One coat zinc phosphate metal primer, one coat universal undercoat and two coats gloss enamel paint (Colour: PRASA Blue, ref. code: T01)</u>				
2/17/16	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m2	2 701		
	<u>One coat approved primer, and two coats of galvanised paint</u>				
2/17/17	On steel bins	No	9		
2/17/18	On steel bench	No	9		
	<u>ON WOOD</u>				
	<u>PAINTWORK ETC TO NEW WORK</u>				
	<u>ON FLOATED PLASTER</u>				
	<u>One coat professional plaster primer and two coats pure acrylic emulsion sheen paint, with finish TBC (Colour: PRASA Dark Grey Blue, ref. code: P01)</u>				
2/17/19	On external walls	m2	10		
	<u>One coat professional plaster primer and two coats pure acrylic emulsion sheen paint, with finish TBC (Colour: PRASA Dark Grey Blue, ref. code: P02)</u>				
2/17/20	On external walls	m2	26		
	Carried Forward				
	Section No. 2 BUILDING WORK Bill No. 17 Paintwork				

Brought Forward				R	
	<u>One coat professional plaster primer and two coats pure acrylic emulsion sheen paint, with finish TBC (Colour: PRASA Light Grey, ref. code: P03)</u>				
2/17/21	On external walls	m2	17		
	<u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA Dark Grey Blue, ref. code: P02)</u>				
2/17/22	On internal walls	m2	130		
	<u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA Light Grey, ref. code: P03)</u>				
2/17/23	On internal walls	m2	79		
	<u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA White, ref. code: P10)</u>				
2/17/24	On ceilings and beams	m2	1		
	<u>ON PLASTER BOARD</u>				
	<u>One coat professional plaster primer and two coats acrylic emulsion low sheen paint (Colour: PRASA White, ref. code: P10)</u>				
2/17/25	On ceilings and cornices	m2	82		
	<u>ON FIBRE-CEMENT</u>				
	<u>One coat priming with bonding liquid and two coats acrylic emulsion low sheen paint (Colour: PRASA Blue, ref. code: P01)</u>				
2/17/26	On fascias and barge boards	m2	67		
	<u>ON METAL</u>				
	<u>One coat zinc phosphate metal primer, one coat universal undercoat and two coats gloss enamel paint (Colour: PRASA Deep Grey, ref. code: P05)</u>				
2/17/27	On door frames	m2	2		
	Carried Forward			R	
	Section No. 2 BUILDING WORK Bill No. 17 Paintwork				



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	Brought Forward			R	
	<u>PLATFORM MARKINGS</u>				
	<u>Suitable paint on concrete, plaster or tarmacadam and SABS compliant for road paint, with all markings directional</u>				
2/17/35	Line 600mm wide (Colour: Red), painted perpendicular to platform edge, extended up platform wall or MS board, where applicable, with distance from platform end to be advised by PRASA	m	24		
2/17/36	Line 100mm wide (Colour: white), painted along entire length of platform edge	m	550		
2/17/37	2600 x 2600mm hatched block, consisting of alternating 100mm wide black and yellow lines, hatched diagonal at 45 degrees, mirrored on opposite platform, set 1200mm from 600mm wide tactile tiles and stretching towards platform edge, set at 600mm c/c or 8820mm c/c dependent on location of wording	No	88		
2/17/38	Letters 195mm high (Colour: Yellow) in 'Arial' font, in sentence case, in centre alignment of the following wording: No standing beyond the yellow line Wording to be at 21620mm c/c, set offset 300mm from 600mm wide tactile line, set centred between black and yellow painted diagonals, mirrored on opposite platform	No	29		
2/17/39	Letters (Colour: Red), with height and font to be confirmed, in upper case, of the following wording: MIND THE GAP Wording to be at every 50m, set centred between white line at platform edge and 600mm wide tactile line, set centred between black and yellow painted diagonals, mirrored on opposite platform	No	15		
	Carried Forward to Summary of Section No.			R	
	Section No. 2				
	BUILDING WORK				
	Bill No. 17				
	Paintwork				

Bill No	SECTION SUMMARY	Page No	Amount
2/1	Demolitions and Alterations	38	
2/2	Earthworks	42	
2/3	Concrete,Formwork and Reinforcement	47	
2/4	Precast Concrete	49	
2/5	Masonry	52	
2/6	Waterproofing	54	
2/7	Roof Coverings	56	
2/8	Carpentry and Joinery	61	
2/9	Ceilings,Partitions and Access Flooring	64	
2/10	Ironmongery	67	
2/11	Structural Steelwork	69	
2/12	Metalwork	77	
2/13	Plastering	79	
2/14	Tiling	83	
2/15	Plumbing and Drainage	88	
2/16	Glazing	90	
2/17	Paintwork	97	
Section No. 2 BUILDING WORK		Carried to Final Summary	R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 3</u></p> <p><u>BILL NO. 1</u></p> <p><u>PROVISIONAL SUMS</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill</p> <p><u>Note</u></p> <p>The items described hereunder cover work which is not fully defined at tender date and which is intended to be executed by the contractor and/or his subcontractors. The amounts shown shall be used as directed by the principal agent and shall be deducted in all or in part if not required.</p> <p><u>SIGNAGE AND FITTINGS</u></p> <p>3/1/1 Allow an amount of R318 278.40 (Three Hundred and Eighteen Thousand Two Hundred and Seventy Eight and Forty) for provision of Signage and Fittings</p> <p>3/1/2 Attendance</p> <p>3/1/3 Profit</p> <p><u>COMMUNITY LIAISON OFFICER</u></p> <p>3/1/4 Allow an amount of R140 000.00 (One Hundred and Forty Thousand) for provision of CLO</p> <p>3/1/5 Attendance</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 3 PROVISIONAL SUMS & BUDGETARY ALLOWANCES Bill No. 1 Provisional Sums</p>			
		Item		318 278.40
			%	
			%	
		Item		140 000.00
			%	
			R	



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Item No		Quantity	Rate	Amount
	<p><u>SECTION No. 3</u></p> <p><u>BILL NO. 2</u></p> <p><u>BUDGETARY ALLOWANCES</u></p> <p><u>PREAMBLES</u></p> <p>NOTE : Tenderers are advised to study the Association of South African Quantity Surveyors "General Preambles for Trades 2017" before pricing this bill.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>Provisional amounts</u></p> <p>The work covered under the following provisional amounts shall be executed by the contractor and shall be measured and valued by the quantity surveyor in terms of clause 32 of the Principal Building Agreement</p> <p><u>GENERAL NOTES TO TENDERERS</u></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Note</u></p> <p>The items described hereunder cover work which is not fully defined at tender date and which is intended to be executed by the contractor and/or his subcontractors. The amounts shown shall be used as directed by the principal agent and shall be deducted in all or in part if not required.</p> <p><u>BUILDERS WORK RELATED TO ELECTRICAL AND MECHANICAL WORKS</u></p>			
3/2/1	<p>Allow the amount of R50 000.00 (Fifty Thousand) for Builder's works related to Electrical and Mechanical works</p>	Item		50 000.00
	<p>Carried Forward to Summary of Section No.</p> <p>Section No. 3</p> <p>PROVISIONAL SUMS & BUDGETARY ALLOWANCES</p> <p>Bill No. 2</p> <p>Budgetary Allowance</p>		R	

Bill No	SECTION SUMMARY	Page No		Amount
3/1	Provisional Sums	100		
3/2	Budgetary Allowance	101		

Section No	<u>FINAL SUMMARY</u>	Page No		Amount
1	PRELIMINARIES	33		
2	BUILDING WORK	98		
3	PROVISIONAL SUMS & BUDGETARY ALLOWANCES	102		
	Sub Total		R	
	PART B _ ELECTRICAL WORK	Item		
	PART C _ CIVIL WORK	Item		
	PART D _ MECHANICAL WORK	Item		
	Sub Total		R	
	CONTINGENCY ALLOWANCE (5%) - TO BE USED AT THE DISCRETION OF THE CLIENT	Item		
	Sub Total		R	
	VAT @ 15%		R	
	Carried to Form of Tender		R	

**PIENAARSPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PART B_ ELECTRICAL WORK				
	SECTION NO. 1				
	BILL NO. 1				
	LV RETICULATION				
	PREAMBLES				
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
	SUPPLEMENTARY PREAMBLES				
	Tenderers are advised to study the Prasa Norms, Guidelines and Standards (NGS) for Station Facilities and Part B of the Prasa Specifications before pricing this bill				
	LV RETICULATION				
	The Supply, delivery and installation of SABS approved material, accessories and equipment as specified.				
	ARMoured CABLES				
	Supply and Install 600/1000V grade PVC/SWA/PVC insulated stranded copper conductors drawn into conduit, laid in ground, sleeves or cable tray.				
1	4mm ² 3 core PVC / SWA / PVC	m	872		
2	4mm ² 4 core PVC / SWA / PVC	m	56		
3	6mm ² 4 core PVC / SWA / PVC	m	142		
4	10mm ² 4 core PVC / SWA / PVC	m	26		
	CABLE TERMINATIONS(PVC/SWA/PVC)				
	Supply and Install cable terminations complete including lugs, glands, shrouds, ferrules				
5	4mm ² 3 core PVC / SWA / PVC	No	34		
6	4mm ² 4 core PVC / SWA / PVC	No	2		
7	6mm ² 4 core PVC / SWA / PVC	No	2		
8	10mm ² 4 core PVC / SWA / PVC	No	2		
	BARE COPPER EARTH WIRE				
	Supply and Install cable terminations complete including lugs, glands, shrouds, ferrules				
9	2,5mm ² BCEW	m	56		
10	4mm ² BCEW	m	142		
11	6mm ² BCEW	m	26		
	TERMINATIONS- BARE COPPER EARTH WIRE				
	Supply and Install cable terminations complete including lugs, glands, shrouds, ferrules				
12	2,5mm ² BCEW	No	2		
13	4mm ² BCEW	No	2		
14	6mm ² BCEW	No	2		
	LV DISTRIBUTION BOARDS				
	Supply and install al distribution boards as per specifications.				
	Specified equipment installed and connected, prewired main bursbar of HCHD copper main switch rating, all metal work, frames, doors, panels, covers shall be pre-coated as specified in the single line diagram layouts, Legend cards, gland plates, etc shall be as specified, including connections, internal wiring, terminations, testing and commissioning;				

**PIENAARSPPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
15	Floor Standing Metering Kiosk - Next to Entrance Ticket Check Booth; Metering kiosks c/w Kwh meter and outgoing circuits - As per specification. Pre-Powder coated Light Brown, complete with cover plates and pad-locakable doors	No	1		
16	Surface Mounted Pre-wired 8-Way Distribution Board (DB-SC)	No	2		
	SUNDRIES				
	The Supply, delivery and installation of SABS approved material, accessories and equipment as specified.				
17	50mm dia uPVC sleeves	m	662		
18	110mm dia uPVC sleeves	m	138		
19	Draw wires drawn into sleeves	m	812		
20	Cable warning tape placed above cables in excavations	m	802		
21	600x500x500mm Deep manhole for electrical cables complete with water-tight steel cover	No	2		
22	400x450x440mm Deep manhole for v/d & electronic services complete with water-tight steel cover	No	1		
	EXCAVATIONS AND BACKFILLING				
	Excavate, backfill and soil compaction cable trenches 400mm wide x 800mm deep in the following soil conditions:				
23	600 Deep x 400 wide trench in pickable soil	m3	144		
24	600 Deep x 400 wide trench in pickable soil	m3	61		
25	600 Deep x 400 wide trench in soft rock	m3	47		
26	600 Deep x 400 wide trench in hard rock	m3	21		
	TESTING AND COMMISSIONING				
27	Testing and commissioning for this part of the electrical works	Sum	1		
	Sub Total				
	SECTION NO. 1				
	BILL NO. 2				
	SMALL POWER & LIGHTING INSTALLATION				
	PREAMBLES				
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
	SUPPLEMENTARY PREAMBLES				
	Tenderers are advised to study the Prasa Norms, Guidelines and Standards (NGS) for Station Facilities and Part B of the Prasa Specifications before pricing this bill				
	SMALL POWER AND LIGHTING INSTALLATIONS				
	The Supply, delivery and installation of SABS approved material, accessories and equipment as specified.				
	Draw Wires				
28	Supply and install a 0,6mm diameter galvanised draw wire in conduit for power & data conduit work installations	m	1086		
	Galvanised Conduit				
29	20mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	1034		
30	25mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	278		

**PIENAARSPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	Conduit Work				
	Supply, delivery and installation of SABS approved PVC Conduits completed with all required conduit accessories.				
	Built, Chase into brick or concrete work and Ceiling mounted:				
31	20mm PVC Conduit	m	389		
32	25mm PVC Conduit	m	158		
33	32mm PVC Conduit	m	44		
	Conduit Boxes				
	Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.				
34	100 x 100 x 50mm	No	38		
35	100 x 50 x 50mm	No	27		
36	60mm Round outlet box	No	76		
37	60mm Diameter cover plate	No	67		
38	100 x 100 Blank cover plates	No	18		
39	100 x 50 Blank cover plates	No	19		
	PVC INSULATED GENERAL PURPOSE CONDUCTORS				
	Conductors drawn into conduit or installed in wiring channel				
40	1.5mm ²	m	1184		
41	2.5mm ²	m	688		
42	4mm ²	m	342		
	Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage.				
43	1.5mm ²	m	668		
44	2.5mm ²	m	171		
	Light Switches				
	Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas				
45	1 Lever 1 way	No	7		
46	2 Lever 1 way	No	2		
47	2 Lever 2 way	No	2		
48	Photocell (Daylight Switch)	No	5		
	Light Fittings				
	Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories.				
49	Type S1 - Surface Mounted Tamper Proof 1200mm 46W LED Luminaire	No	2		
50	Type S2 - Surface Mounted Batten complete with 32W LED luminaire	No	1		
51	Type B1 Recessed Ceiling mount downlighter 23W LED round - complete with White Trim	No	10		
52	Type B2 Wall & Ceiling mount Industrial Bulkhead 47W LED luminaire - IP66 waterproof	No	19		

**PIENAARSPORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
53	Type - Highmast streetlight 144W LED luminaire complete with 12m Octagonal Mid-Hinged Steel pole & Galvanised side-entry spigot with CB mounting clip	No	12		
	Socket Outlets				
	Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.				
	Flush switched sockets type:				
54	Combination Socket Outlet c/w 16A Single Socket Outlet & Euro-Plug with earth pin socket outlet	No	6		
55	16A, 3-Pin flush mounted switched socket outlet, [double] mounted on brickwork / floor duct	No	3		
56	20A double pole isolator c/w box	No	2		
57	30A Three phase isolator c/w box	No	1		
	TRUNKING				
	Supply and installation of trunking channel as per specification and drawings complete with mounting brackets, hangers, cover plates, splices,				
58	P9000 Trunking [pre-galvanised]	m	34		
59	P9000 cross overs	No	2		
60	P9000 90 deg. Bends	No	2		
61	P9000 "T" pieces	No	1		
62	P9000 end caps	No	4		
	APPLIANCE CONNECTIONS				
	Supply and installation of flexible steel connections complete with adaptors, locknuts, bushes, labeling, etc. not exceeding 2 meters or approved termination kit				
63	600 x 600 x 150 Deep flush draw-boxes with timber backing and lockable doors	No	1		
	EARTHING AND BONDING				
64	Allow for earthing and bonding of the entire electrical installation as required by the Code of Practice	Sum	1		
	ELECTRICAL TESTS				
65	Making provision for the required inspection, tests and the commissioning of the small power & lighting installation and the issuing of the required certificate of compliance (CoC)	Sum	1		
	Sub Total				
	SECTION NO. 1				
	BILL NO. 3				
	CONDUIT INSTALLATION WORK FOR ELECTRONIC SERVICES				
	PREAMBLES				
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
	SUPPLEMENTARY PREAMBLES				
	Tenderers are advised to study the Prasa Norms, Guidelines and Standards (NGS) for Station Facilities and Part B of the Prasa Specifications before pricing this bill				
	CONDUIT INSTALLATION WORK FOR ELECTRONIC SERVICES				
	The Supply, delivery and installation of SABS approved material, accessories and equipment as specified.				
	Draw Wires				

**PIENAARSPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
66	Supply and install a 0,6mm diameter galvanised draw wire in conduit for power & data conduit work installations	m	488		
	Galvanised Conduit				
67	20mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	1		
68	25mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	442		
	Conduit Work				
	Supply, delivery and installation of SABS approved PVC Conduits completed with all required conduit accessories.				
	Built, Chase into brick or concrete work and Ceiling mounted:				
69	20mm PVC Conduit	m	1		
70	25mm PVC Conduit	m	206		
71	32mm PVC Conduit	m	1		
	Conduit Boxes				
	Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.				
72	100 x 100 x 50mm	No	11		
73	100 x 50 x 50mm	No	9		
74	60mm Round outlet box	No	16		
75	60mm Diameter cover plate	No	16		
76	100 x 100 Blank cover plates	No	11		
77	100 x 50 Blank cover plates	No	9		
78	Expansion joint draw box with cover	No	2		
	Socket Outlets				
	Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.				
	Flush switched sockets type:				
79	5A, 3 Pin surface mounted unswitched socket outlet, complete with 100x50 box	No	6		
	Sub Total				
	SECTION NO. 2				
	BILL NO. 1				
	FIRE DETECTION AND PROTECTION				
	PREAMBLES				
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
	SUPPLEMENTARY PREAMBLES				
	Tenderers are advised to study the Prasa Norms, Guidelines and Standards (NGS) for Station Facilities and Part B of the Prasa Specifications before pricing this bill				
	FIRE DETECTION				

**PIENAARSPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	The Supply, delivery and installation of SABS approved material, accessories and equipment as specified.				
	Draw Wires				
80	Supply and install a 0,6mm diameter galvanised draw wire in conduit for power & data conduit work installations	m	362		
	Galvanised Conduit				
81	20mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	1		
82	25mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	342		
	Conduit Work				
	Supply, delivery and installation of SABS approved PVC Conduits completed with all required conduit accessories.				
	Built, Chase into brick or concrete work and Ceiling mounted:				
83	20mm PVC Conduit	m	1		
84	25mm PVC Conduit	m	172		
85	32mm PVC Conduit	m	1		
	Conduit Boxes				
	Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.				
86	100 x 100 x 50mm	No	8		
87	100 x 50 x 50mm	No	5		
88	60mm Round outlet box	No	13		
89	60mm Diameter cover plate	No	8		
90	100 x 100 Blank cover plates	No	7		
91	100 x 50 Blank cover plates	No	3		
92	Expansion joint draw box with cover	No	1		
	FIRE DETECTION SYSTEM				
93	16 Zone/ loop Addressable Fire Detection Panel complete with internal power supply.	No	1		
94	Batteries for fire panel	No	1		
95	Optical Smoke Detectors	No	11		
96	Heat sensitive detectors	No	1		
97	Standalone Room Sounder Red	No	2		
98	addressable red analogue breakglass callpoint c/w EN54 marking	No	2		
99	Resettable Element for callpoint	No	3		
100	Fire Retardant Cabling	m	248		
101	Bases White (90 dBA)	No	9		
	TESTING & COMMISSIONING				
102	Test & Commission the entire Fire Detection system	Sum	1		
	Sub Total				
	SECTION NO. 3				
	BILL NO. 1				

**PIENAARSPPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	LIGHTNING PROTECTION & STRUCTURAL EARTHING				
	PREAMBLES				
	Tenderers are refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
	SUPPLEMENTARY PREAMBLES				
	Tenderers are advised to study the Prasa Norms, Guidelines and Standards (NGS) for Station Facilities and Part B of the Prasa Specifications before pricing this bill				
	LIGHTNING PROTECTION				
	The Supply, delivery and installation of SABS approved material, accessories and equipment as specified.				
	Draw Wires				
103	Supply and install a 0,6mm diameter galvanised draw wire in conduit for power & data conduit work installations	m	277		
	Galvanised Conduit				
104	20mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	1		
105	25mm - Galvanised conduit including bending, short lengths, draw boxes, cutting, bands, jointing, couplings, saddles and wastage as per SABS 1065. Fixed to surface or laid in or flush	m	286		
	Conduit Work				
	Supply, delivery and installation of SABS approved PVC Conduits completed with all required conduit accessories.				
	Built, Chase into brick or concrete work and Ceiling mounted:				
106	20mm PVC Conduit	m	1		
107	25mm PVC Conduit	m	68		
108	32mm PVC Conduit	m	1		
	Conduit Boxes				
	Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.				
109	100 x 100 x 50mm	No	12		
110	100 x 50 x 50mm	No	4		
111	60mm Round outlet box	No	14		
112	60mm Diameter cover plate	No	14		
113	100 x 100 Blank cover plates	No	11		
114	100 x 50 Blank cover plates	No	4		
115	Expansion joint draw box with cover	No	1		
	LIGHTNING PROTECTION & STRUCTURAL EARTHING SYSTEM				
116	Earth/Soil resistivity tests	No	1		
117	10mm ² earth wire	m	248		
118	10mm ² earth wire ends lugs	No	8		
119	10mm ² earth wire ends clamped at earth rods	No	8		
120	1,5m x M16 Copper plated steel earth spikes	No	8		
121	Aluminium stand-off bracket incl PVC backing fixed to structure	No	8		

**PIENAARSPORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
122	Conductor joints	No	8		
123	Bonding earth wire to building structures, roofs, gutters etc	m	6		
124	500 x 50 x3mm Earthbar complete with accessories	m	1		
125	Testing,commisioning of the lightning protection installations and Issue of test certificates	Sum	1		
	Sub Total				
	SECTION NO. 4				
	BILL NO. 1				
	PROVISIONAL SUMS				
	PREAMBLES				
	Tenderers are to refer to the Model Preambles for Trades (Latest Edition) and Supplementary Preambles for further description and amplification of work in this section				
	SUPPLEMENTARY PREAMBLES				
	Notes: 1.Tenderers are advised to study the Prasa Norms, Guidelines and Standards (NGS) for Station Facilities and Part B of the Prasa Specifications before pricing this bill				
	The Contractor's attention is drawn to the fact that the indicated individual sums may consist of a number of Specialist Contracts, all of which will be executed by seperate contractors. The Contractor must therefore allow in his tender for any cost implication this may bring about, as no claims in this regard will be entertained				
	Profit on Specialist Contractors Specialist Contracts will be submitted directly to the Consultant by the Specialist Contractor. The Contractor may allow for profit, if required, under the item "Allow for profit" following each Specialist Contractor's sum.				
	MAINS POWER RE-CONNECTION TO CoT MUNICIPALITY				
	Allow a sum of R243,540.09 (Two Hundred Forty-Three thousand, Five Hundred and Forty Rand and Nine Cents) for the Mains Power Supply re-connection contributions, deposits & other attributed costs to City Of Tshwane Municipality	Sum	1	243 540,09	
126		Item	10%	24 354,01	
127	Allow for profit if required				
	OVERHEAD TRANSFORMER CONNECTION				
	Allow a sum of R375,000.00 (Three Hundred Seventy-five thousand Rands) for the Supply and	Sum	1	375 000,00	
128	Installaton of Overhead Transformer connected to the 11kV Overhead Transmission Line	Item	10%	37 500,00	
129	Allow for profit if required				
	Sub-Total				
	LV RETICULATION				
	SMALL POWER & LIGHTING INSTALLATION				
	CONDUIT INSTALLATION WORK FOR ELECTRONIC SERVICES				
	FIRE DETECTION AND PROTECTION				
	LIGHTNING PROTECTION & STRUCTURAL EARTHING				
	PROVISIONAL SUMS				
	SUB TOTAL				

**PIENAARSPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PART C _ CIVIL WORK				
	SECTION NO. 1	H1	0		
	BILL NO. 1	H1	0		
	EARTHWORKS				
	Site Clearance/ Cleaning				
1	Clearing Site of rubbish, debris, vegetation, headges, shrubs, bush, etc	m ²	3990,00		
2	Stripping of top soil to depth of 150mm	m ³	35,00		
	Material				
3	Cut to Spoil	m ³	14,00		
4	Cut available to fill	m ³	2,50		
5	Soft excavation	m ³	18,50		
6	Hard/ Rock excavation	m ³	5,50		
7	Keeping excavation free of water	Item	1,00		
8	Risk of collapse	Item	1,00		
9	Imported fill	m ³	75,00		
	Retaining Walls				
10	Construction of Loffelstein retaining wall - Block L350	m ²	120,00		
	SECTION NO. 1				
	BILL NO. 2				
	STORMWATER				
	Stormwater Channels				
11	450 x 140mm Concrete V-Drain Channel in 500mm long panels	m	150,00		
12	Drilling up to 100mm - Concrete Cores 0-150mm	No.	6,00		
	Provisional Sums				
13	Pressure jet cleaning and testing of Stormwater System	Item	1,00		
14	Replace portions of existing Stormwater System	Item	1,00		
	SECTION NO. 1				
	BILL NO. 3				
	SEWER RETICULATION				
	Pipework. Supply, Handle, Lay, Joint, Bed the following Sewer Pipes:				
15	uPVC 160mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	100,00		
16	uPVC 160mm Connector	No	8,00		
17	uPVC 160mm Access bend	No	6,00		
18	uPVC 160mm Rodding eye	No	4,00		

**PIENAARSPORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
19	Manhole, 900mm diameter and exceeding 750mm and not exceeding 1250mm deep internally on 100mm 20MPa/20mm concrete bottom with 125mm thick precast concrete cover slab finished on exposed surfaces in untinted cement paving with angles rounded with three 900 x 900 x 125mm thick precast adaptor slabs with a 560mm diameter opening, with rebated opening for 450 x 600mm cast iron cover and frame; the bottom benched up 1:12 in fine concrete to uPVC channels, all rendered smooth in 1:1 cement plaster	No.	4,00		
20	Replacement of Sewer Manhole Covers (600mm x 900mm) on existing Sewer Manholes	No.	2,00		
	PROVISIONAL SUMS				
21	Pressure jet cleaning and testing of Sewer Reticulation System	Item	1,00		
22	Replace portions of existing Sewer Reticulation System	Item	1,00		
23	Provide the Provisional Amount for the connection to the sewer main to be carried out by the Municipal Authorities	Item	1,00		
	SECTION NO. 1				
	BILL NO. 4				
	WATER RETICULATION				
	Excavate, Supply, Lay, Bed & Backfill, not exceeding 600mm				
24	75mm Dia	m	100,00		
	Valves, Chambers & Hydrants				
25	75mm Dia	m	6,00		
	Provisional Sums				
26	Pressure jet cleaning and testing of Water Reticulation System	Item	1,00		
27	Replace portions of existing Water Reticulation System, expose, excavate and tie into existing water line	Item	1,00		
28	Provide the Provisional Amount for the combined fire and water connections to the water main to be carried out by the Municipal Authorities	Item	1,00		
	SECTION NO. 1				
	BILL NO. 5				
	PLATFORM REHABILITATION				
	Excavation for Platform Damages				
29	Cut to Spoil (off-site)	m ³	80,00		
	Platform Layerworks				
30	150mm Pavement layers (R&R)	m ³	80,00		
31	150mm G7	m ³	40,00		
32	150mm C4	m ³	80,00		
33	150mm G4	m ³	40,00		
34	60mm Paving Blocks	m ²	200,00		
	Soil Poisoning				
35	Removal of existing paving for Soil Poisoning and reinstatement; To bottoms and sides of trenches, platforms, etc	m ²	3120,00		
	Tactile Tiles				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
36	400X400mm full body yellow porcelain or concrete, with thickness of 60mm to be approved by Civil Engineer. The "warning" blocks with the round raised dots indicate edges, corners or other places where greater care or caution is required. So, these tactile cues help everyone stay clear of train platform edges, crosswalk drop offs, and other related hazards.	No.	2000,00		
	SECTION NO. 1				
	BILL NO. 6				
	PROVISIONAL SUM				
37	Allow an amount of R150 000.00 (One Hundred and Fifty Thousand) for provision of walkways and concrete ramps	Sum	1,00	R 150 000,00	
	Sub Total	ST	0		

**PIENAARSPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PART D _ MECHANICAL WORK				
	SECTION NO. 1	H1	0		
	BILL NO. 1	H1	0		
	PRELIMINARIES NOTES	H1	0		
	FIRE DETECTION & PROTECTION All Fire Detection systems to comply with SANS 10139 All Fire Protection systems to comply with SANS 10400 - Parts T and W				
	INTERNAL WET SERVICES All internal wet services to comply with SANS 10400. All internal wet services are to be installed by qualified and competent workmen. All Wet services are to be fully tested and certified prior to handover.				
	EXTERNAL WET SERVICES All external wet services are to comply with the requirements of SANS 10400. All surface and subterranean services are to be flushed and pressure tested prior to handover.				
	ADDITIONAL MECHANICAL WORKS				
	SECTION NO. 2				
	BILL NO. 1				
	FIRE DETECTION & PROTECTION				
	Smoke Detection Control and Alarm Panel Complete detection and alarm system inclusive of documentation, testing and commissioning and handover training.				
1	Smoke Detection Control and Alarm Panel	Each	1		
2	Smoke Detectors - fixed to ceilings and soffit	Each	4		
	Appliances				
3	4.5kg D.C.P. Fire Extinguisher in Approved Enclosure	Each	2		
4	9kg DCP Extinguishers in Approved Enclosure	Each	2		
	Signage - As Specified and Approved				
5	E1 - Illuminated RH Designated Escape Route indicator	Each	4		
6	E2 - Illuminated LH Designated Escape Route indicator	Each	4		
7	E3 - Illuminated Escape Door indicator	Each	2		
8	E6 - Illuminated Exit Door indicator	Each	2		
9	F4 - Extinguisher & Hose Location Sign	Each	2		
10	F5 - Extinguisher & Hose LH Direction Sign	Each	2		
11	F6 - Extinguisher & Hose RH Direction Sign	Each	2		
12	F22 - Portable Extinguisher & Hose Reel Location Sign	Each	2		
13	F45 - Fire Exit Warning Sign	Each	2		
	INTERNAL WET SERVICES				
	460/2 Class 2 - Medium Walled Half Hard Tube.				

**PIENAARSPOORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	Supply and install 460/2 Class 2 Copper piping C_w capillary soldered joints and fittings in locations as indicated in Drawings. Piping to be laid in cut channels and encased in floor screed before tile finish.				
	Straight Pipe				
14	15mm Nominal Tube Diameter	m	46		
15	22mm Nominal Tube Diameter	m	8		
16	28mm Nominal Tube Diameter	m	2		
	Copper Capillary Fittings Supply and install capillary soldered joints and fittings to Class 2 Copper Pipes . DO NOT use Resin or Acid Core Solders Avoid solders containing lead as, apart from being a health hazard, they have a low shear strength				
	STRAIGHT COUPLERS - Type 601M C x C Capillary				
17	601M 15mm x 15mm	Each	6		
18	601M 22mm x 22mm	Each	2		
19	601M 28mm x 28mm	Each	1		
	REDUCING COUPLERS - Type 601M C x C Capillary				
20	601M 22mm x 15mm	Each	6		
	90° ELBOWS - Type 601M C x C Capillary				
21	601M 15mm x 15mm	Each	11		
22	601M 22mm x 22mm	Each	5		
	STRAIGHT COUPLERS - Copper Capillary to Male Iron				
23	604M C x MI - 15mm x 1/2"	Each	11		
24	604M C x MI - 22mm x 3/4"	Each	0		
	REDUCING TEE PIECES - Type 611M C x C x C Capillary				
25	611M C x C x C - 22mm x 15mm x 22mm	Each	4		
	INLINE & SHUTOFF VALVES				
26	Inline Ball Valve - 22mm	Each	2		
27	One Way Angle Valve - 1/2" x 15mm	Each	9		
	ACCESSORIES & ANCILLARIES				
28	Braided Flexi Hose - 1/2" x 1/2" 600mm long	Each	9		
29	Single Bowl Plumbing Kit	Each	4		
30	400kPa Pressure Reducing Valve	Each	1		
	WASTE WATER PIPES & CONNECTIONS Class 16 PVC Piping and Accessories. Built into chased floor channels and terminated on external face of building. Internal finish to be screed covering with trafficable tiles over. Final connection to underground soil waste pipes by others.				
	Concrete Gullies & Collection				
31	Concrete Drain Gully	Each	2		

**PIENAARSPORT - PRETORIA (LOFTUS - DEERNESS) CORRIDOR
RENOVATIONS AND ADDITIONS AT DEERNESS STATION**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	Heavy Duty PVC and Fittings				
32	ø50 Rigid PVC Pipe	m	26		
33	ø110 Rigid PVC Pipe	m	18		
34	ø50mm x ø50mm x ø50mm 135° PVC Branch	Each	8		
35	ø50mm 90° PVC Bend	Each	12		
36	ø50mm 45° PVC Bend	Each	7		
37	ø110mm 45° PVC Bend	Each	5		
38	ø50mm 90° PVC Inspection Elbow	Each	8		
39	ø50mm PVC "P" Trap	Each	4		
40	ø110mm PVC "P" Trap	Each	2		
	ADDITIONAL MECHANICAL SERVICE				
	Disabled Persons Access				
41	Lighted directional indication signage as SANS 10400 Part S	Each	12		
42	Allow an amount of R940 000.00 (Nine Hundred and Forty Thousand) for provision of Single Chair/Person chairlift from Station Access to North & South Bound Platforms, Inclusive of safety locks and retention barriers.	Item	Sum	R	940 000,00
43	Attendance	Item	5%	R	47 000,00
44	Profit	Item	5%	R	47 000,00
45	Allow an amount of R300 000.00 (Three Hundred Thousand) for provision of Polyplex or similar Weatherproof chairlift covers from Station Access to North & South Bound Platforms.	Item	Sum	R	300 000,00
46	Attendance	Item	5%	R	15 000,00
47	Profit	Item	5%	R	15 000,00
	Sub Total	ST	0		