

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|---|------|----------|------|--------|
| | <p><u>BILL NO. 1 PRELIMINARIES</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 above mentioned 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 above mentioned documents</p> <p><u>PREAMBLES FOR TRADES</u></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> <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> | | | | |

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| 1 | <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>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> <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> <p>1. These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement</p> | | | | |

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| | <p>2. These persons shall notify the employer of their leader who has assigned authority to bind the contractor and each of these persons</p> <p>3. The contractor shall not alter its composition or legal status without the prior written consent of the employer</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 2 | <p>Clause 2.0 - Law, regulations and notices</p> <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 Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993. 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> | | | | |
| 3 | <p>Clause 3.0 - Offer and acceptance</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 4 | <p>Clause 4.0 - Cession and assignment</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 5 | <p>Clause 5.0 - Documents</p> <p>Value Added Tax</p> <p>Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT)</p> <p>Electronic issue of drawings All drawings for this project will be issued electronically and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically [5.6]</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 6 | <p>Clause 6.0 - Employer's agents</p> <p>1. Architect and Landscape Architect</p> <p>1.1 Duties [6.2] : 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> | | | | |

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| | 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 | | | | |
| | 1.2.3 The site [13.0] | | | | |
| | 1.2.4 Compliance with the law, regulations and bylaws [2.1] | | | | |
| | 1.2.5 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works | | | | |
| | 1.2.6 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2] | | | | |
| | 1.2.7 Removal or re-execution of work | | | | |
| | 1.2.8 Removal or substitution of any materials and goods | | | | |
| | 1.2.9 Protection of the works | | | | |
| | 1.2.10 Making good physical loss and repairing damage to the works [23.2.2] | | | | |
| | 1.2.11 Rectification of defects [21.2] | | | | |
| | 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. Quantity surveyor | | | | |
| | 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. Civil and structural engineer | | | | |
| | 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 | | | | |

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| | <p>3.2 Contract instructions [6.2; 17.1] :</p> <p>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</p> <p>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</p> <p>3.2.3 The site [13.0]</p> <p>3.2.4 Compliance with the law, regulations and bylaws [2.1]</p> <p>3.2.5 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>3.2.6 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>3.2.7 Removal or re-execution of work</p> <p>3.2.8 Removal or substitution of any materials and goods</p> <p>3.2.9 Protection of the works</p> <p>3.2.10 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>3.2.11 Rectification of defects [21.2]</p> <p>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</p> <p>3.2.13 Expenditure of budgetary allowances, prime cost amounts and provisional sums</p> <p>4. Health and safety consultant</p> <p>4.1 Duties [6.2] : 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>4.1.1 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>4.1.2 Prepare and update the health and safety specification for the works</p> <p>4.1.3 Agree with the contractor the health and safety plan for the works</p> <p>4.1.4 Carry out regular audits to ensure adherence to the safety plan and compliance with the act and regulations</p> | | | | |

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| | 4.1.5 Stop the execution of the works where the agreed specification or plan is not adhered to F:..... V:..... T:..... | Item | 1 | | - |
| 7 | Clause 7.0 - Design responsibility F:..... V:..... T:..... | Item | 1 | | - |
| <u>Insurances and securities (A8-A11)</u> | | | | | |
| 8 | Clause 8.0 - Works risk F:..... V:..... T:..... | Item | 1 | | - |
| 9 | Clause 9.0 - Indemnities F:..... V:..... T:..... | Item | 1 | | - |
| 10 | Clause 10.0 - Insurances F:..... V:..... T:..... | Item | 1 | | - |
| 11 | Clause 11.0 - Securities | | | | |
| 12 | Clause 11.2.1 A variable or fixed guarantee is not required by the employer A payment reduction shall apply as per Clause 11.4.1 in lieu of a fixed or variable guarantee F:..... V:..... T:..... | Item | 1 | | - |
| 13 | Clause 11.2.2 An advance payment guarantee will be required by the employer where an advance payment is required by the contractor F:..... V:..... T:..... | Item | 1 | | - |
| 14 | Clause 11.5 The employer shall provide the contractor a guarantee for payment F:..... V:..... T:..... | Item | 1 | | - |
| <u>Execution (A12 - A17)</u> | | | | | |
| 15 | Clause 12.0 - Obligations of the parties Notice board The contractor shall erect in a position approved by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer, the contractor and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for such notice boards to be erected [12.2.18] Statutory and other notices | | | | |

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| | <p>The contractor shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the works by the contractor. The contractor shall pay all deposits or fees in this regard</p> <p>It is, however, specifically recorded that the employer shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 16 | <p>Clause 13.0 - Setting out</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 17 | <p>Clause 14.0 - Nominated subcontractors</p> <p>F:..... V:..... T:.....</p> | Item | | | - |
| 18 | <p>Clause 15.0 - Selected subcontractors</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 19 | <p>Clause 16.0 - Direct contractors</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 20 | <p>Clause 17.0 - Contract instructions Site instructions Site Instructions are to be issued electronically and recorded in the minutes</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| | <u>Completion (A18 - A24)</u> | | | | |
| 21 | <p>Clause 18.0 - Interim completion</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 22 | <p>Clause 19.0 - Practical completion On the morning of the date of Practical Completion, the building will be handed over to the Engineer ready for use by the Employer. The Works shall look at first glance entirely complete and there shall be no work being undertaken at the time, The Works shall be clean and tidy with all services operational. The Principal Agent will inspect the Works for Practical Completion and will issue a Final Completion List that shall not comprise more than 50 items.</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 23 | <p>Clause 20.0 - Completion in sections</p> <p>F:..... V:..... T:.....</p> | Item | | | - |
| 24 | <p>Clause 21.0 - Defects liability period and final completion</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 25 | <p>Clause 22.0 - Latent defects liability period</p> | | | | |

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| | F:..... V:..... T:..... | Item | 1 | | - |
| 26 | Clause 23.0 - Revision of the date for practical completion Substitution of materials and goods 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] | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| 27 | Clause 24.0 - Penalty for late or non-completion | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Payment (A25 - A27)</u> | | | | |
| 28 | Clause 25.0 - Payment | | | | |
| | Prices submitted 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 | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| 29 | Clause 26.0 - Adjustment of the contract value and final account | | | | |
| | Fluctuations in costs 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] | | | | |
| | Cost of claims 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 | | | | |
| | Claims from subcontractors 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] | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| 30 | Clause 27.0 - Recovery of expense and/or loss | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Suspension and termination (A28 - A29)</u> | | | | |
| 31 | Clause 28.0 - Suspension by the contractor | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |

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| 32 | Clause 29.0 - Termination F:..... V:..... T:..... <u>Dispute resolution (A30)</u> | Item | 1 | | - |
| 33 | Clause 30.0 - Dispute resolution F:..... V:..... T:..... <u>Agreement</u> | Item | 1 | | - |
| 34 | 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 F:..... V:..... T:..... <u>Contract data</u> Tenderer's selections Before submission of his tender the contractor is to complete the tenderer's selections in the contract data F:..... V:..... T:..... | Item | 1 | | - |
| <u>SECTION B: GENERAL PRELIMINARIES</u> | | | | | |
| <u>Definitions and interpretation (B1)</u> | | | | | |
| 35 | Clause 1.1 - Definitions F:..... V:..... T:..... | Item | 1 | | - |
| 36 | Clause 1.2 - Interpretation F:..... V:..... T:..... Documents (B2) | Item | 1 | | - |
| 37 | Clause 2.1 - Checking of documents F:..... V:..... T:..... | Item | 1 | | - |
| 38 | 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, roof coverings, structural steelwork, - are provisionally measured and the other trades are budgetary allowances and/or provisional sums | | | | |
| 39 | F:..... V:..... T:..... | Item | 1 | | - |
| 40 | Clause 2.3 - Availability of construction information | | | | |

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| | F:..... V:..... T:..... | Item | 1 | | - |
| 41 | Clause 2.4 - Ordering of materials and goods | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Previous work and adjoining properties (B3)</u> | | | | |
| 42 | Clause 3.1 - Previous work - dimensional accuracy | | | | |
| | F:..... V:..... T:..... | Item | | | - |
| 43 | Clause 3.2 - Previous work - defects | | | | |
| | F:..... V:..... T:..... | Item | | | - |
| 44 | Clause 3.3 - Inspection of adjoining properties | | | | |
| | F:..... V:..... T:..... | Item | | | - |
| | <u>The site (B4)</u> | | | | |
| 45 | Clause 4.1 - Handover of site in stages | | | | |
| | F:..... V:..... T:..... | Item | | | - |
| 46 | Clause 4.2 - Enclosure of the works Skuifraam 2 site must be secured and cordoned off with site fencing by the contractor to avoid damage to the ruin fabric. | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| 47 | Clause 4.3 - Geotechnical and other investigations | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| 48 | Clause 4.4 - Encroachments | | | | |
| | F:..... V:..... T:..... | Item | | | - |
| 49 | Clause 4.5 - Existing premises occupied | | | | |
| | F:..... V:..... T:..... | Item | | | - |
| 50 | Clause 4.6 - Services - known | | | | |
| | F:..... V:..... T:..... | Item | | | - |
| | <u>Management of contract (B5)</u> | | | | |
| 51 | Clause 5.1 - Management of the works | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |
| 52 | Clause 5.2 - Progress meetings | | | | |
| | F:..... V:..... T:..... | Item | 1 | | - |

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| 53 | Clause 5.3 - Technical meetings F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Samples, shop drawings and manufacturer's instructions (B6)</u> | | | | |
| 54 | Clause 6.1 - Samples of materials F:..... V:..... T:..... | Item | 1 | | - |
| 55 | Clause 6.2 - Workmanship samples F:..... V:..... T:..... | Item | 1 | | - |
| 56 | Clause 6.3 - Shop drawings F:..... V:..... T:..... | Item | 1 | | - |
| 57 | Clause 6.4 - Compliance with manufacturer's instructions F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Deposits and fees (B7)</u> | | | | |
| 58 | Clause 7.1 - Deposits and fees F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Temporary services (B8)</u> | | | | |
| 59 | Clause 8.1 - Water F:..... V:..... T:..... | Item | 1 | | - |
| 60 | Clause 8.2 - Electricity F:..... V:..... T:..... | Item | 1 | | - |
| 61 | Clause 8.3 - Ablution and welfare facilities F:..... V:..... T:..... | Item | 1 | | - |
| 62 | Clause 8.4 - Communication facilities F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Prime cost amounts (B9)</u> | | | | |
| 63 | Clause 9.1 - Responsibility for prime cost amounts F:..... V:..... T:..... | Item | 1 | | - |
| | <u>Attendance on subcontractors (B10)</u> | | | | |

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| 64 | <p>Clause 10.1 - General attendance General attendance is defined as being the duties of the contractor in terms of clause 12.2 of the JBCC n/s subcontract agreement</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 65 | <p>Clause 10.2 - Special attendance</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| <u>General (B11)</u> | | | | | |
| 66 | <p>Clause 11.1 - Protection of the works Refer to Bill No 6 Provisional Amounts Item 177</p> <p>Before commencing with construction of the canopy the contractor is to ensure that both the Skuifraam 1 archaeological ruin and Skuifraam 2 sites have been boxed in for protection to avoid damage to the ruin fabric. No imported material, plant etc is to be placed or stored in the area between Skuifraam 1 and Skuifraam 2 - refer to Annexure C - No-Go Areas</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 67 | <p>Clause 11.2 - Protection/isolation of existing works and works occupied in sections</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 68 | <p>Clause 11.3 - Security of the works The contractor shall provide 24 hour on-site security for the duration of the project</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 69 | <p>Clause 11.4 - Notice before covering work</p> <p>F:..... V:..... T:.....</p> | Item | 1 | | - |
| 70 | <p>Clause 11.5 - DisturbanceAll 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 | | - |
| 71 | <p>Clause 11.6 - Environmental disturbance</p> <p>Controlling all forms of pollution 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> | | | | |

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| | 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 F:..... V:..... T:..... | Item | 1 | | - |
| 72 | Clause 11.7 - Works cleaning and clearing F:..... V:..... T:..... | Item | 1 | | - |
| 73 | Clause 11.8 - Vermin F:..... V:..... T:..... | Item | 1 | | - |
| 74 | Clause 11.9 - Overhand work F:..... V:..... T:..... | Item | 1 | | - |
| 75 | Clause 11.10 - Tenant installations F:..... V:..... T:..... | Item | | | - |
| 76 | Clause 11.11 - Advertising F:..... V:..... T:..... | Item | 1 | | - |
| | <u>SECTION C: SPECIFIC PRELIMINARIES</u> | | | | |
| 77 | Warranties for materials and workmanship 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 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 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 F:..... V:..... T:..... | Item | 1 | | - |
| 78 | Overtime 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 F:..... V:..... T:..... | Item | 1 | | - |
| 79 | Cooperation of the contractor for cost management 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 F:..... V:..... T:..... | Item | 1 | | - |

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|---|--|------|----------|------|--------|
| 80 | <p>Overloading 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 | 1 | | - |
| 81 | <p>Confidentiality 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 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 | 1 | | - |
| <p><u>SUMMARY OF CATEGORIES</u></p> | | | | | |
| <p>Category : Fixed R..... Category : Value R..... Category : Time R.....</p> | | | | | |
| <p>TOTAL BILL NO. 1 PRELIMINARIES C/F</p> | | | | | |
| <p><u>CONTRACT DATA</u></p> | | | | | |
| <p><u>1 CONTRACTING AND OTHER PARTIES</u></p> | | | | | |
| <p>1. Employer:</p> | | | | | |
| <p>TRANS-CALEDON TUNNEL AUTHORITY</p> | | | | | |
| <p>Physical Address: 1st Floor Stinkhout Wing Tuinhof Building 265 West Road Centurion 0157</p> | | | | | |
| <p>Tel 012 683 1239</p> | | | | | |
| <p>E-mail nmsezane@tcta.co.za</p> | | | | | |
| <p>1.2 Principal Agent</p> | | | | | |
| <p>DAVID ELSTON & ASSOCIATES</p> | | | | | |
| <p>Postal address: 4 Lovers Walk Rondebosch 7700</p> | | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|------|--------|
| | <p>Tel +27 82 565 7416</p> <p>E-mail david.elston@dea.co.za</p> <p>1.3 Agent 1</p> <p>Cape Archaeological Survey (CAS) Projects</p> <p>Postal address: 5 Cornwall Place Wynberg 7800</p> <p>Tel +44 74 841 17420</p> <p>E-mail mary@casprojects.co.za</p> <p>1.4 Agent 2</p> <p>DAVID ELSTON & ASSOCIATES</p> <p>Agents Service: STRUCTURAL & CIVIL ENGINEERS</p> <p>Postal address: 4 Lovers Walk Rondebosch 7700</p> <p>Tel +27 82 565 7416</p> <p>E-mail david.elston@dea.co.za</p> <p>1.5 Agent 3</p> <p>ANN ROESE QUANTITY SURVEYORS</p> <p>Agents service: QUANTITY SURVEYING</p> <p>Postal address: 7 MILNER ROAD OBSERVATORY 7925</p> <p>Tel +27 21 447 2710</p> <p>E-mail ann@arqs.co.za</p> <p>1.6 Agent 4</p> <p>ARCON ARCHITECTURAL & HERITAGE CONSULTANTS</p> <p>Agents service: HERITAGE ARCHITECT</p> <p>Postal address: 8 Fontein Street Darling</p> | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|------|--------|
| | <p>7345</p> <p>Tel +27 22 492 3329</p> <p>E-mail arcon@megaserve.co.za</p> <p>1.6 Agent 5</p> <p>TERRA LANDSCAPE ARCHITECTS</p> <p>Agents service: LANDSCAPE ARCHITECT</p> <p>Postal address: 5 Saint Catherine Road Plumstead 7800</p> <p>Tel +21 762 3370</p> <p>E-mail david@davidgibbs.co.za</p> <p><u>2 CONTRACT AND SITE INFORMATION</u></p> <p>2.1 The law applicable to this agreement shall be that of: Republic of South Africa</p> <p>2.2 Works Identification: The construction of a curved canopy on a steel structure over the archaeological site knowns as ‘Skuifraam Ruin ’. Construction of a freestanding gabion wall. Construction of paths from the public parking to and around the ruins. The supply and installation of steel frames for 14 story boards along a pathway from the dam wall down to the archaeological ruins, Skuifraam 1 and a sister archaeological site known as ‘Skuifraam 2’. Soft and hard landscaping. Refer Arcon Drawing Franschberg/SR/01</p> <p>2.3 Site Description:The site is located below the Berg River Dam wall alongside the road to the Berg River Dam pump station</p> <p>2.4 Date on which possession of the site is intended to be given: TBC</p> <p>2.5 Period for the commencement of the works after the contractor takes possession of the site Ten (10) working days</p> <p>2.6 Waiver of the Contractors lien or right of continuing possession is required No</p> <p>2.7 Existing premises will be occupied No</p> <p>2.8 Features to be protected by the contractor Before commencing with construction of the canopy the contractor is to ensure that both the Skuifraam 1 and Skuifraam 2 archaeological ruin sites have been boxed in for protection to avoid damage to the ruin fabric. No imported material, plant etc is to be placed or stored in the area between Skuifraam 1 and Skuifraam 2 - refer to Annexure C - No-Go Areas</p> | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|------|--------|
| 2.9 | Geotechnical Investigation of the site has taken place No | | | | |
| 2.10 | Existing Premises will be occupied No | | | | |
| 2.11 | SERVICES | | | | |
| | Water, power, ablutions and telecommunications must all be provided by the contractor as the site is unserved | | | | |
| | 3 INSURANCES | | | | |
| 3.1 | Contract works insurance to be effected by: Contractor: Contract Sum + 25% . | | | | |
| 3.2 | Supplementary/Special insurance to be effected Contractor:Contract Sum + 25%. | | | | |
| 3.3 | Public liability insurance to be effected by: Contractor: For the Sum of R10million | | | | |
| 3.4 | Support insurance is required No | | | | |
| | 4 PRACTICAL COMPLETION DATES AND PENALTIES | | | | |
| 4.1 | Intended date of practical completion and the penalty per calendar day for the works as a whole | | | | |
| | The contract period is 6 months from site handover | | | | |
| | The penalty is R2,000 per calendar day | | | | |
| | 5 DOCUMENTS | | | | |
| 5.1 | Number of construction document copies to be supplied to the contractor free of charge: Three copies | | | | |
| 5.2 | On acceptance of the tender construction programme is to be submitted within 7 calendar days | | | | |
| | 5.3 Details of changes made to the provision of JBCC standard documentation: | | | | |
| | A Payment reduction shall apply as per Clause 11.4.1 in lieu of a fixed or variable guarantee | | | | |
| | Clause 11.4.1 | | | | |
| | Hand over the site to the contractor and withhold an amount in interim payment certificates to the contractor until the total amount withheld is equal to tender per cent (10%) of the contract sum. The amount withheld shall be reduced at practical completion to two and a half per cent (2.5%) of the contract sum and to zero per cent (0%) in the final payment certificate | | | | |
| | Interest shall not apply to the 10% payment reduction | | | | |
| | 5.4 Work to be undertaken by direct contractors The ruins will be repaired and restored in a separate direct contract after the completion of this project. The boxed-in ruins are to be protected from damage at all times. | | | | |
| | 5.5 Interim Payment certificate to be issued by: 27th | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|---|------|----------|------|--------|
| | <p>6 DRAWINGS - REFER ANNEXURE A</p> <p><u>6.1 ENGINEER'S DRAWINGS</u></p> <p>David Elston and Associates CAS1-02</p> <p>AP100 Rev A Layout Plan AP101 Rev A Roof Structure AP102 Rev A Elevations AP103 Rev A Bases and Columns AP104 Rev C Column and Roof AP106 Rev A Bending Schedules AP107 Rev A Curved Roof Beams</p> <p><u>6.2 ARCHITECT'S DRAWINGS</u></p> <p>ARCON Architecture and Heritage Consultants</p> <p>Franschberg</p> <p>SR/01 Location and Site Plan SR/02 Plans SR/03 Elevations SR/04 Iso and Side Elevations</p> <p><u>6.3 LANDSCAPE ARCHITECT'S DRAWINGS</u></p> <p>DAVID GIBBS Landscape Architect</p> <p>DG SKF-WS3-LSP-301 Rev B Landscape Context DG SKF-WS3-LSP-302 Landscape Site Plan DG SKF-WS3-LSP-303 Rev B Planting Plan</p> <p><u>BILL NO 2</u></p> <p><u>EARTHWORKS</u></p> <p>For preambles see "Model Preambles for Trades"</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock".</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><u>Filling</u></p> | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|------|--------|
| | 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 necessary multiple handling of material | | | | |
| | <u>Testing</u> | | | | |
| | Prices for filling are to include for all necessary density tests in accordance with SABS 1200D | | | | |
| | <u>SITE CLEARANCE</u> | | | | |
| | <u>Site clearance</u> | | | | |
| 82 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth | m2 | 1750 | | - |
| | <u>FOOTINGS AND BASES</u> | | | | |
| | <u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u> | | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | | |
| 83 | Trenches | m3 | 20 | | - |
| 84 | Holes | m3 | 104 | | - |
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | | |
| 85 | Soft rock | m3 | 12 | | - |
| 86 | Hard rock | m3 | 16 | | - |
| | <u>SUNDRIES</u> | | | | |
| | <u>Extra over all excavations for carting away</u> | | | | |
| 87 | Surplus material from excavations and/or stock piles spread around the site | m3 | 124 | | - |
| | <u>Risk of collapse of excavations</u> | | | | |
| 88 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 157 | | - |
| | <u>Keeping excavations free of water</u> | | | | |
| 89 | Keeping excavations free of water | Item | 1 | | - |
| | <u>FILLING</u> | | | | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 100% Mod AASHTO density</u> | | | | |
| 90 | Backfilling to trenches, holes, etc | m3 | 53 | | - |
| | <u>ROADS AND PATHS</u> | | | | |
| | <u>PATHWAY FROM PUBLIC PARKING TO RUINS</u> | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|---|------|----------|------|--------|
| | <u>Compaction of surfaces</u> | | | | |
| 91 | Compaction of existing subgrade (installed in a previous project) breaking down oversize material, adding suitable material where necessary and compacting to 100% Mod AASHTO density | m2 | 420 | | - |
| | <u>G7 sub-base supplied by the contractor, compacted to 100% Mod AASHTO density</u> | | | | |
| 92 | Under floors, steps, pavings, etc | m3 | 28 | | - |
| | <u>Kaytech Bidim Type A2 filter fabric blanket with 150mm laps</u> | | | | |
| 93 | Horizontally under pathways | m2 | 420 | | - |
| | <u>Brown crusher dust with cement stabilisation at the rate of 50kg/m3 compacted to 100% Mod AASHTO density</u> | | | | |
| 94 | 2m Wide pathway average 160mm thick laid to falls in two directions | m3 | 45 | | |
| | <u>Sandstone Kerbs</u> | | | | |
| 95 | Kerb stones along path edges comprising approximately 400mm diameter rocks obtained from the edge of the dam approximately 1km distance away from the site | No | 700 | | - |
| 96 | 500mm wide x 100mm high mass concrete haunching under kerb stones | m | 280 | | - |
| | <u>PERMEABLE PAVING AROUND RUINS</u> | | | | |
| | <u>Compaction of surfaces</u> | | | | |
| 97 | Compaction of existing subgrade breaking down oversize material, adding suitable material where necessary and compacting to 100% Mod AASHTO density | m2 | 569 | | - |
| | <u>BERA Gravel Fix Pro soft fully permeable finish with a 60mm layer of 3-9mm diameter crushed sandstone aggregate installed as per manufacturers instructions</u> | | | | |
| 98 | 60mm Thick pathways | m2 | 569 | | - |
| 99 | 200mm B Edge Pro XL black edging installed to a slow curve | m | 170 | | - |
| | <u>GABION STRUCTURES</u> | | | | |
| | <u>See Provisional sum - Bill No 6</u> | | | | |
| | <u>FILTER FABRIC</u> | | | | |
| | <u>Kaytech Bidim Type A2 filter fabric blanket with 150mm laps</u> | | | | |
| 100 | Vertically against concrete strip footings | m2 | 13 | | - |
| 101 | Vertically behind stone filled gabion retaining walls | m2 | 31 | | - |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|---|------|----------|------|--------|
| 102 | Vertically behind stone filled gabion walls and on top and sides of concrete strip footings | m2 | 47 | | - |
| | TOTAL BILL NO 2 EARTHWORKS C/F | | | | |
| | <u>BILL NO 3</u> | | | | |
| | <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> | | | | |
| | For preambles see "Model Preambles for Trades" | | | | |
| | Structural Engineer's drawings- refer to Annexure A | | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | | |
| | <u>Cost of tests</u> | | | | |
| | The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured separately) | | | | |
| | <u>Formwork</u> | | | | |
| | 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 | | | | |
| | 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" | | | | |
| | <u>UNREINFORCED CONCRETE</u> | | | | |
| | <u>20MPa/19mm concrete</u> | | | | |
| 103 | Surface blinding under footings and bases | m3 | 6 | | - |
| | <u>UNREINFORCED CONCRETE PLACED, PACKED AND SHAPED BY HAND</u> | | | | |
| | <u>20MPa/19mm concrete</u> | | | | |
| 104 | Irregular shaped packing around 550mm diameter concrete column, curved from the bottom to the top, exceeding 250mm high and not exceeding 500mm high refer Drawing AP-103 | No | 5 | | - |
| 105 | Irregular shaped packing around 550mm diameter concrete column, curved from the bottom to the top, exceeding 500mm high and not exceeding 750mm high - refer Drawing AP-103 | No | 3 | | - |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|-----------|-----------|
| | <u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u> | | | | |
| 106 | Strip footings <u>30MPa/19mm concrete</u> | m3 | 22 | | - |
| 107 | Bases <u>30MPa/19mm concrete</u> | m3 | 49 | | - |
| | <u>REINFORCED CONCRETE</u> | | | | |
| | <u>30MPa/19mm concrete</u> | | | | |
| 108 | Stub columns in foundations (Provisional) | m3 | 2 | | - |
| 109 | Stub columns | m3 | 1 | | - |
| 110 | Columns | m3 | 1 | | - |
| | <u>TEST CUBES</u> | | | | |
| 111 | Making and testing 150 x 150 x 150mm concrete strength test cubes | No | 36 | | - |
| | <u>ROUGH FORMWORK (DEGREE OF ACCURACY III)</u> | | | | |
| | <u>Rough formwork to sides in foundations (Provisional)</u> | | | | |
| 112 | Strip footings | m2 | 38 | | - |
| 113 | Bases | m2 | 61 | | - |
| 114 | 550mm Diameter column exceeding 500mm and not exceeding 750mm high | No | 2 | | - |
| 115 | 550mm Diameter column exceeding 750mm and not exceeding 1 000mm high | No | 5 | | - |
| 116 | 550mm Diameter column exceeding 1 000mm and not exceeding 1 250mm high <u>Rough formwork to sides</u> | No | 1 | | - |
| 117 | 550mm Diameter column exceeding 250mm and not exceeding 500mm high | No | 5 | | - |
| 118 | 550mm Diameter column exceeding 500mm and not exceeding 750mm high | No | 3 | | - |
| | <u>REINFORCEMENT</u> | | | | |
| 119 | Various diameter bars | t | 3,35 | | - |
| 120 | Various diameter galvanised bars | t | 1 | | - |
| | <u>CONCRETE SUNDRIES</u> | | | | |
| 121 | Budgetary Allowance of R40 000,00 for Concrete sundries | Item | 1 | 40 000,00 | 40 000,00 |
| | TOTAL BILL NO 3 CONCRETE, FORMWORK & REINFORCEMENT C/F | | | | |
| | <u>BILL NO 4</u> | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|-----------|-----------|
| | <p><u>ROOF COVERINGS</u></p> <p>For preambles see "Model Preambles for Trades"</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Straight cutting</u></p> <p>Descriptions of all roof coverings are deemed to include for all straight cutting</p> <p><u>Multiwall installation instructions</u></p> <p>Refer to Annexure B for installation instructions</p> <p><u>MULTIWALL SHEETING AND ACCESSORIES</u></p> <p><u>DURO Multiwall 10 Opal translucent polycarbonate panels with and including proprietary fixings on steel purlins</u></p> | | | | |
| 122 | Curved roof covering with pitches not exceeding 25 degrees | m2 | 469 | | - |
| | <p><u>ROOFING SUNDRIES</u></p> | | | | |
| 123 | Allow the Budgetary Allowance of R30 000,00 for Roofing sundries | Item | 1 | 30 000,00 | 30 000,00 |
| | <p>TOTAL BILL NO 4 ROOF COVERINGS C/F</p> <p><u>BILL NO 5</u></p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p><u>Rates</u></p> <p>The rates for structural steel shall be deemed to include for workshop drawings, assembling of various components, workshop applied painting, storing, transporting, delivery to site, erection, etc.</p> <p><u>Shop drawings and other specifications</u></p> | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|------|--------|
| | <p>Only once steel contractor shop drawings are approved by the Engineer may manufacturing commence Full assembly of the structure is to take place at the contractor's works to ensure final fit (cutting, drilling, etc) After assembling, disassemble and hot dip galvanize all steel components Return to works for any re-jigging to correct possible distortions during galvanizing Before transporting to site, ensure that the Skuifraam 1 archaeological site is boxed in for protection and the Skuifraam 2 site secured and cordoned off with site fencing to avoid damage to the ruin fabric, and keep it clear of imported elements including construction-related materials and equipment Transport to site for erection</p> <p><u>Engineer's Structural Steel Drawings - Refer Annexure A</u></p> <p>David Elston and Associates CAS1-02</p> <p>AP100 Rev A Layout Plan AP101 Rev A Roof Structure AP102 Rev A Elevations AP103 Rev A Bases and Columns AP104 Rev C Column and Roof AP107 Rev A Curved Roof Beams</p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>HOT DIPPED GALVANISED STEEL COLUMNS AND BEAMS GRADE S355</u></p> <p><u>Base plates</u></p> <p>770 x 680mm Overall diagonally between opposite corners x 16mm thick flat section rhombus shaped base plate with rounded corners, curved sides and 420 x 350mm overall diagonally between opposite corners cut out with rounded corners, twice holed for bolts As per drawings AP-103 Rev A</p> | | | | |
| 124 | <p><u>8 x welded and bolted column sets each comprising 4 x curved channel branch sections with reinforced concrete filling (elsewhere measured) each 300mm x 150mm x 10mm rolled to a fixed radius and with straight (bottom, vertical) length below curve, and straight (top) length determined by the requirements of the base plate level and the roof structure fixing point (Drawing AP-104)</u></p> | No | 8 | | - |
| 125 | Column 4 452mm high overall mass 0.369 ton | No | 1 | | - |
| 126 | Column 4 697mm high overall mass 0.394 ton | No | 1 | | - |
| 127 | Column 3 920mm high overall mass 0.351 ton | No | 1 | | - |
| 128 | Column 4 165mm high overall mass 0.352 ton | No | 1 | | - |
| 129 | Column 3 414mm high overall mass 0.309 ton | No | 1 | | - |
| 130 | Column 3 659mm high overall mass 0.330 ton | No | 1 | | - |
| 131 | Column 3 678mm high overall mass 0.331 ton | No | 1 | | - |
| 132 | Column 3 923mm high overall mass 0.338 ton | No | 1 | | - |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|------|--------|
| 133 | Column 3 793mm high overall mass 0.332 ton | No | 1 | | - |
| 134 | Column 4 038mm high overall mass 0.356 ton | No | 1 | | - |
| 135 | Column 4 049mm high overall mass 0.356 ton | No | 1 | | - |
| 136 | Column 4 294mm high overall mass 0.360 ton | No | 1 | | - |
| 137 | Column 3 670mm high overall mass 0.323 ton | No | 1 | | - |
| 138 | Column 3 915mm high overall mass 0.345 ton | No | 1 | | - |
| 139 | Column 3 410mm high overall mass 0.316 ton | No | 1 | | - |
| 140 | Column 3 655mm high overall mass 0.322 ton | No | 1 | | - |
| 141 | Column 5 755mm high overall mass 0.446 ton | No | 1 | | - |
| 142 | Column 6 000mm high overall mass 0.483 ton | No | 1 | | - |
| 143 | Column 5 223mm high overall mass 0.434 ton | No | 1 | | - |
| 144 | Column 5 468mm high overall mass 0.429 ton | No | 1 | | - |
| 145 | Column 4 717mm high overall mass 0.387 ton | No | 1 | | - |
| 146 | Column 4 962mm high overall mass 0.416 ton | No | 1 | | - |
| 147 | Column 4 981mm high overall mass 0.416 ton | No | 1 | | - |
| 148 | Column 5 226mm high overall mass 0.415 ton | No | 1 | | - |
| 149 | Column 5 096mm high overall mass 0.409 ton | No | 1 | | - |
| 150 | Column 5 341mm high overall mass 0.441 ton | No | 1 | | - |
| 151 | Column 5 352mm high overall mass 0.442 ton | No | 1 | | - |
| 152 | Column 5 597mm high overall mass 0.437 ton | No | 1 | | - |
| 153 | Column 4 973mm high overall mass 0.400 ton | No | 1 | | - |
| 154 | Column 5 218mm high overall mass 0.432 ton | No | 1 | | - |
| 155 | Column 4 713mm high overall mass 0.401 ton | No | 1 | | - |
| 156 | Column 4 958mm high overall mass 0.399 ton | No | 1 | | - |
| | <u>Welded beams in single lengths with flat section bearer and connection plates including welding, holes, slotted holes, bolts and bolting</u> | | | | |
| 157 | IPE200 Beam | t | 2,58 | | - |
| 158 | IPE200 Curved beam to 37.7m, 59.8m and 92.5m radius | t | 4,91 | | - |
| | <u>Bolts to columns, beams, etc</u> | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|---|------|----------|------------|------------|
| 159 | M16 Chemical anchor bolts cast in exact position in top of concrete | No | 16 | | - |
| 160 | High tensile bolts (dome head nuts and bolts) | kg | 1 | | - |
| | <u>HOT DIPPED GALVANISED PURLINS, GIRTS, BRACING, ETC</u> | | | | |
| | <u>Purlins and girts plates including welding, holes, slotted holes, bolts and bolting</u> | | | | |
| 161 | IPE100 AA Purlins | t | 3,33 | | - |
| | <u>STAINLESS STEEL</u> | | | | |
| | <u>Bracing</u> | | | | |
| 162 | 8mm Cables | m | 74 | | - |
| 163 | 12mm Eye bolt including nut and washers | No | 24 | | - |
| | <u>STEELWORK SUNDRIES</u> | | | | |
| 164 | Allow the Budgetary Allowance of R50 000,00 for steelwork sundries and connections | Item | 1 | 50 000,00 | 50 000,00 |
| | TOTAL BILL NO 5 STRUCTURAL STEEL C/F | | | | |
| | <u>BILL NO 6</u> | | | | |
| | <u>PROVISIONAL AMOUNTS</u> | | | | |
| | <u>PREAMBLES</u> | | | | |
| | For preambles refer to "Model Preambles for Trades" | | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | | |
| | <u>General</u> | | | | |
| | NOTE: The following Provisional Amounts are for work to be carried out by selected subcontractors in terms of Clause 21 of the Principal Building Agreement | | | | |
| | NOTE: Tenderers are referred to the definition of general attendance on nominated or selected sub-contractors given in Clause B9.1 of the preliminaries | | | | |
| | NOTE: All Provisional and Prime Cost Amounts are NET i.e.: there is no cash discount | | | | |
| | <u>PROVISIONAL SUMS FOR NOMINATED/SELECTED SUBCONTRACT WORKS</u> | | | | |
| | <u>Construction of gabion walls and signboard supports</u> | | | | |
| 165 | Provide the sum of R500 000 (five hundred thousand rand) for stone gabion walls and signboard supports | Item | 1 | 500 000,00 | 500 000,00 |
| 166 | Add for profit and general attendance on sub contractor | % | | | - |
| | <u>Landscaping</u> | | | | |
| 167 | Provide the sum of R400 000 (four hundred thousand rand) for landscaping | Item | 1 | 400 000,00 | 400 000,00 |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|---|------|----------|------------|------------|
| 168 | Add for profit and general attendance on sub contractor | % | | | |
| | <u>Directional Signage</u> | | | | |
| 169 | Provide the sum of R250,000.00 (two hundred and fifty thousand rand) for signage | Item | 1 | 250 000,00 | 250 000,00 |
| 170 | Add for profit and general attendance on sub contractor | % | | | - |
| | <u>Metal Frames for Interpretive Displays</u> | | | | |
| 171 | Provide the sum of R300,000.00 (three hundred thousand rand) for metal frames for Interpretative Displays | Item | 1 | 300 000,00 | 300 000,00 |
| 172 | Add for profit and general attendance on sub contractor | % | | | - |
| | <u>Design, transport and installation of the Interpretive Displays</u> | | | | |
| 173 | Provide the sum of R300,000.00 (three hundred thousand rand) for the design, transporting and mounting of the Interpretative Displays | Item | 1 | 300 000,00 | 300 000,00 |
| 174 | Add for profit and general attendance on sub contractor | % | | | - |
| | <u>Construction of an access road for deliveries from the road to the building site</u> | | | | |
| 175 | Provide the sum of R100,000.00 (one hundred thousand rand) for the construction of a temporary access road | Item | 1 | 100 000,00 | 100 000,00 |
| 176 | Add for profit and general attendance on sub contractor | % | | | - |
| | <u>Boxing in and protection of the archaeological ruins</u> | | | | |
| 177 | Provide the sum of R80,000.00 (eighty thousand rand) for the boxing in of the archaeological ruins | Item | 1 | 80 000,00 | 80 000,00 |
| 178 | Add for profit and general attendance on sub contractor | % | | | - |
| | TOTAL BILL NO 6 PROVISIONAL AMOUNTS C/F | | | | |
| 1 | PRELIMINARIES | | | | |
| 2 | CONTRACT DATA | | | | |
| 3 | EARTHWORKS | | | | |
| 4 | CONCRETE, FORMWORK AND REINFORCEMENT | | | | |
| 5 | ROOF COVERINGS | | | | |
| 6 | STRUCTURAL STEELWORK | | | | |
| 7 | PROVISIONAL AMOUNTS | | | | |
| | SUB-TOTAL | | | | |

| ITEM NO | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---------|--|------|----------|------|--------|
| | CONTINGENCY 10% | | | | |
| | SUB-TOTAL | | | | |
| | VAT @ 15% | | | | |
| | TOTAL INCLUDING VAT CARRIED TO FORM OF TENDER | | | | |

| BILL TOTALS |
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BILL TOTALS

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BILL TOTALS

30 000,00

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BILL TOTALS

50 000,00

| BILL TOTALS |
|---------------------|
| 205 000,00 |
| 2 255 000,00 |
| 338 250,00 |
| 2 593 250,00 |