SAIAB
SOUTH AFRICAN INSTITUTE FOR AQUATIC BIODIVERSITY

TENDER DOCUMENT

VOLUME 1 OF 3:
TENDERING PROCEDURES
for

COMPLETION OF THE FIRST FLOOR COLLECTION FACILITY AT THE SOUTH AFRICAN INSTITUTE FOR AQUATIC BIODIVERSITY:

BUILDING ALTERATIONS

TENDER REFERENCE: NRF/SAIAB/2016-004
SAIAB
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TENDER REFERENCE: NRF/SAIAB/2016-004
NOTES:

1. The agreement is to be the JBCC Series 2000 Principal Building Agreement prepared by the Joint Building Contracts Committee, March 2005 edition.

2. The preliminaries are to be the JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee, May 2005 and shall be deemed to be incorporated herein.

3. Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary.

4. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading.

5. Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable").

6. If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time.
SECTION A : PRINCIPAL BUILDING AGREEMENT

Definitions (A1)

1 Definitions and Interpretation (clause 1)
F:................... V:............... T:.............

Objective And Preparation (A2 - A14)

2 Offer, Acceptance and Performance Obligations (clause 2)
F:................... V:............... T:.............

3 Documents (clause 3)
F:................... V:............... T:.............

4 Design Responsibility (clause 4)
F:................... V:............... T:.............

5 Employer's Agents (clause 5)
F:................... V:............... T:.............

6 Site Representative (clause 6)
F:................... V:............... T:.............

7 Compliance with Laws and Regulations (clause 7)
F:................... V:............... T:.............

8 Works Risk (clause 8)
F:................... V:............... T:.............

9 Indemnities (clause 9)
F:................... V:............... T:.............

10 Works Insurances (clause 10)
F:................... V:............... T:.............

11 Liability Insurances (clause 11)
F:................... V:............... T:.............

Carried to Collection R

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>F</th>
<th>V</th>
<th>T</th>
<th>Item</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Effecting Insurances (clause 12)</td>
<td>F:.......................</td>
<td>V:.......................</td>
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<td>Item</td>
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<td>No Clause (clause 13)</td>
<td>N/A</td>
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<td>3</td>
<td>Security (clause 14)</td>
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<td>4</td>
<td>Preparation for and Execution of the Works (clause 15)</td>
<td>Item</td>
<td>Item</td>
<td>Item</td>
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<td>5</td>
<td>Access to the Works (clause 16)</td>
<td>Item</td>
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<tr>
<td>6</td>
<td>Contract Instructions (clause 17)</td>
<td>Item</td>
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<td>7</td>
<td>Setting out of the Works (clause 18)</td>
<td>Item</td>
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<td>8</td>
<td>Assignment (clause 19)</td>
<td>Item</td>
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<td>9</td>
<td>Nominated Subcontractors (clause 20)</td>
<td>Item</td>
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<td>10</td>
<td>Selected Subcontractors (clause 21)</td>
<td>Item</td>
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<td>11</td>
<td>Employer's Direct Contractors (clause 22)</td>
<td>Item</td>
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<td>12</td>
<td>Contractor's Domestic Subcontractors (clause 23)</td>
<td>Item</td>
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BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
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<th>Completion (A24 - A30)</th>
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<tbody>
<tr>
<td>1 Practical Completion (clause 24)</td>
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<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
<tr>
<td>2 Works Completion (clause 25)</td>
<td></td>
</tr>
<tr>
<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
<tr>
<td>3 Final Completion (clause 26)</td>
<td></td>
</tr>
<tr>
<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
<tr>
<td>4 Latent Defects Liability Period (clause 27)</td>
<td></td>
</tr>
<tr>
<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
<tr>
<td>5 Sectional Completion (clause 28)</td>
<td></td>
</tr>
<tr>
<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
<tr>
<td>6 Revision of Date for Practical Completion (clause 29)</td>
<td></td>
</tr>
<tr>
<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
<tr>
<td>7 Penalty for Non-completion (clause 30)</td>
<td></td>
</tr>
<tr>
<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
</tbody>
</table>

**Payment (A31 - A35)**

<table>
<thead>
<tr>
<th>8 Interim Payment to the Contractor (clause 31)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Notwithstanding this or any other clause:-</td>
<td></td>
</tr>
<tr>
<td>a) interim payment certificates shall be paid within 14 days of date of issue subject to the presentation of valid invoice to the employer by the contractor;</td>
<td></td>
</tr>
<tr>
<td>b) materials and goods stored off site shall not be included in the amount authorised for payment.</td>
<td></td>
</tr>
<tr>
<td>F:................... V:............... T:...............</td>
<td>Item</td>
</tr>
</tbody>
</table>

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Carried to Collection

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
1 Adjustment to the Contract Value (clause 32)

Notwithstanding the provisions of clause 32.13 or any other clause all fluctuations in costs shall be for the account of the contractor. See also clause 41.4.6.

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

2 Recovery of Expense and Loss (clause 33)

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

3 Final Account and Final Payment (clause 34)

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

4 Payment to Other Parties (clause 35)

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

Cancellation (A36 - A39)

5 Cancellation by Employer - Contractor's Default (clause 36)

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

6 Cancellation by Employer - Loss and Damage (clause 37)

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

7 Cancellation by Contractor - Employer's Default (clause 38)

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

8 Cancellation - Cessation of the Works (clause 39)

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

Dispute (A40)

9 Dispute settlement (clause 40)

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

State Provisions (A41)

10 State Substitutions (clause 41)

N/A

Carried to Collection R
Contract Variables (A42)

The Schedule : Pre-tender information (clause 42)

Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder

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

42.1.1 **Employer**

_**S.A. Institute For Aquatic Biodiversity**_
Private Bag 1015, Grahamstown, 6140  
Tel: (046) 603 5816 & Fax: (046) 622 2403

42.1.2 **Principal Agent**

_**KWMH.QS**_
P O Box 12496, Centrahil, Port Elizabeth, 6006  
Tel: (041) 585 8374 & Fax: (041) 585 9046

42.1.3 **Architect**

_**Moors Milne & Kievit Architects**_
P O Box 12019, Centrahil, 6006  
Tel: (041) 585 1575 & Fax: (041) 585 7797

42.1.4 **Quantity Surveyor**

_**KWMH.QS**_
P O Box 12496, Centrahil, Port Elizabeth, 6006  
Tel: (041) 585 8374 & Fax: (041) 585 9046

42.1.5 **Structural & Civil Engineer**

_Nil_

42.1.6 **Mechanical Engineer / Electrical Engineer**

_**Clinkscales Maughan-Brown (PE) cc**_
P O Box 12615, Centrahil, Port Elizabeth, 6006  
Tel. (041) 585 9731 & Fax. (041) 585 5733

42.1.7 **Arbitrator**

A person as nominated by the Chairman of the South African Institute of Arbitrators, and acceptable to both parties.
42.2 **Contract Details**

42.2.1 **Works Description:**

The works comprise alterations to portions of the existing ground and first floors of the SAIAB Collection building and also to a portion of the first floor of the existing SAIAB Administration building.

42.2.2 **Site Description:**

The site is located off Somerset Street at the existing SAIAB buildings in Grahamstown. Tenderers are to note the limited site access conditions.

42.2.3 **Work or installation by direct contractors:**

- Security Installation
- Data Cabling Installation
- Equipment Installation

42.2.4 **This agreement is for a State contract:** No

42.2.5 **Date on which possession of the site is intended to be given:**

**TO BE ARRANGED**

42.2.6 **Period for the commencement of the works after the contractor takes possession of the site:**

1 (one) working days

42.2.7 **Completion of the works as a whole:**

**Date For Practical Completion:**

5 months after site handover

**Penalty:**

R7,500-00 (Seven Thousand Five Hundred Rand) per calendar day

42.2.8 **Completion of the work in sections:**

No

42.2.9 **The law applicable to this agreement shall be that of:**

South Africa

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

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**Carried to Collection** R

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
42.3 **Insurances**

1 42.3.1 Contract works insurance to be effected by:
   
   **Client**
   
   F:.................. V:................. T:.................

2 42.3.2 Supplementary insurance required:
   
   No
   
   F:.................. V:................. T:.................

3 42.3.3 Public liability insurance to be effected by:
   
   **Client**
   
   F:.................. V:................. T:.................

4 42.3.4 Support insurance to be effected by the Employer:
   
   **Nil**
   
   F:.................. V:................. T:.................

42.4 **Documents**

42.4.1 Waiver of the contractor's lien or right of continuing possession is required:
   
   Yes

42.4.2 Construction document copies to be supplied to the Contractor free of charge:
   
   Three (3)

42.4.3 Bills of Quantities are drawn up in accordance with the Standard System of Measuring Building Work, 6th Edition.

42.4.4 Number of days for submission of priced documents:
   
   Fourteen (14)

42.4.5 JBCC Engineering General Conditions are to be included in the contract documents:
   
   No
42.4.6 Contract value is to be adjusted using escalation indices:

No: N/A : Fixed Price Contract

42.4.7 Details of changes made to the provision of JBCC standard documentation:

Clauses 32 and 42.4.6

Notwithstanding the provisions of clause 32.13 or any other clause all fluctuations in costs shall be for the account of the contractor.

SECTION B : PRELIMINARIES

Definitions And Interpretation (B1)

1 Definition and interpretation (B1.1 - B1.4.6)

The items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Standard Preambles And Descriptions of Materials and Workmanship to All Trades as set out in the bills of quantities, and no claim arising from brevity of description of items fully described in the said Standard Preambles for Trades will be entertained.

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

Documents (B2)

2 Checking of Documents (B2.1)

Tenderer to check that these bills of quantities contain pages and annexures as indexed on the flyleaf.

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

3 Provisional Bills of Quantities (B2.2)

F:............... V:.............. T:.............. N/A

4 Availability of Construction Documentation (B2.3)

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

5 Interests of Agents (B2.4)

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

6 Priced Documents (B2.5)

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

Carried to Collection R

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
Tender Submission (B2.6)

Notwithstanding anything contained in this clause tenders shall be valid for a period of ninety (90) days from the closing date of tenders.

The Site (B3)

Defined Works Area (B3.1)

Geotechnical Investigation (B3.2)

Inspection of the Site (B3.3)

No claims for extras arising from the contractor having failed to comply with this clause will be entertained.

Existing Premises Occupied (B3.4)

Previous Work - Dimensional Accuracy (B3.5)

Previous Work - Defects (B3.6)

Services - Known (B3.7)

All existing services and points of connection will be pointed out on the site by the Architect and/or Engineer.

Services - Unknown (B3.8)
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>F:</th>
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<tr>
<td>1</td>
<td>Protection of Trees (B3.9)</td>
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<td>2</td>
<td>Articles of Value (B3.10)</td>
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<td>3</td>
<td>Inspection of Adjoining Properties (B3.11)</td>
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<td>4</td>
<td>Management of Contract (B4)</td>
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<td>Item</td>
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<td>5</td>
<td>Management of the Works (B4.1)</td>
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<td>6</td>
<td>Programme for the Works (B4.2)</td>
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<td>7</td>
<td>Progress Meetings (B4.3)</td>
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<td>8</td>
<td>Technical Meetings (B4.4)</td>
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<td>9</td>
<td>Labour and Plant Records (B4.5)</td>
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<td>10</td>
<td>Samples, Shop Drawings And Manufacturer's Instructions (B5)</td>
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<td>Samples of Materials (B5.1)</td>
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<td>Workmanship Samples (B5.2)</td>
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</table>

**Management Of Contract (B4)**

The contract shall be programmed by the contractor in accordance with Alternative A.

The contractor's programme shall be submitted to the principal agent within two weeks of the site handover.

**Samples, Shop Drawings And Manufacturer's Instructions (B5)**

**Carried to Collection**
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<th>Item</th>
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<td>Shop Drawings (B5.3)</td>
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<td>2</td>
<td>Compliance with Manufacturer's Instructions (B5.4)</td>
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<td>3</td>
<td>Temporary Works And Plant (B6)</td>
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<tr>
<td>4</td>
<td>Deposits and Fees (B6.1)</td>
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<tr>
<td>5</td>
<td>Enclosure of the Works (B6.2)</td>
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<tr>
<td>6</td>
<td>Advertising (B6.3)</td>
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</tr>
<tr>
<td>7</td>
<td>Plant, Equipment, Sheds and Offices (B6.4)</td>
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<td>8</td>
<td>Main Notice Board (B6.5)</td>
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<td></td>
<td>Subcontractors Notice Board (B6.6)</td>
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<table>
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<td><strong>Temporary Services (B7)</strong></td>
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<td>1. Location (B7.1)</td>
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<td>F:................... V:................. T:................... Item</td>
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<td>2. Water (B7.2)</td>
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<td>F:................... V:................. T:................... Item</td>
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<td>3. Electricity (B7.3)</td>
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<td>F:................... V:................. T:................... Item</td>
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<td>4. Telecommunication Facilities (B7.4)</td>
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<td>F:................... V:................. T:................... Item</td>
</tr>
<tr>
<td>5. Ablution Facilities (B7.5)</td>
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<td>F:................... V:................. T:................... Item</td>
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<tr>
<td><strong>Prime Cost Amounts (B8)</strong></td>
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<tr>
<td>6. Responsibility for Prime Cost Amounts (B8.1)</td>
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<td>F:................... V:................. T:................... Item</td>
</tr>
<tr>
<td><strong>Attendance On N/S Subcontractors (B9)</strong></td>
</tr>
<tr>
<td>7. General Attendance (B9.1)</td>
</tr>
<tr>
<td>F:................... V:................. T:................... Item</td>
</tr>
<tr>
<td>8. Special Attendance (B9.2)</td>
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<td>F:................... V:................. T:................... Item</td>
</tr>
<tr>
<td>9. Commissioning - Fuel, Water and Electricity (B9.3)</td>
</tr>
<tr>
<td>F:................... V:................. T:................... Item</td>
</tr>
</tbody>
</table>

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors

Carried to Collection: R
Financial Aspects (B10)

1 Statutory Taxes, Duties and Levies (B10.1)

All tenders submitted will be taken as being inclusive of Value Added Tax in accordance with the Value Added Tax Act of 1991 or any amendments thereto.

All rates inserted in these Bills of Quantities are to be nett rates (i.e. exclusive of Value Added Tax).

The amount for Value Added Tax (VAT) shall be provided for only on the Final Summary page of these bills of quantities at the current rate of 14% (fourteen percent).

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

2 Payment of Preliminaries (B10.2)

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

3 Adjustment of Preliminaries (B10.3)

Preference of adjustment of preliminaries must be indicated on the tender form.

In addition to the exclusions mentioned in the third paragraph of this clause it shall be deemed that "dayworks" be added as a fourth exclusion.

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

4 Payment Certificate Cash Flow (B10.4)

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

General (B11)

5 Protection of the Works (B11.1)

Existing trees, shrubs, roads, sidewalks, buildings, etc., are to be protected from damage. Any damage caused to the Client's property by the contractor shall be repaired at the contractor's expense.

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

6 Protection/Isolation of Existing/Sectionally Occupied Works (B11.2)

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

Carried to Collection R

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
1 Security of the Works (B11.3)

Security may not be compromised during the contract. The contractor's staff are to be clearly identified. No access to the existing facilities by the contractor's staff will be permitted.

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

2 Notice Before Covering Work (B11.4)

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

3 Disturbance (B11.5)

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

4 Environmental Disturbance (B11.6)

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

5 Works Cleaning and Clearing (B11.7)

The site shall be kept clean with all rubble removed daily.

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

6 Vermin (B11.8)

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

7 Overhand Work (B11.9)

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

8 Instruction Manuals and Guarantees (B11.10)

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

9 As Built Information (B11.11)

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

10 Tenant Installations (B11.12)

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

Carried to Collection R

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
### Schedule Of Preliminaries Variables (B12)

1. **Pre-tender information (B12.1)**
   
   Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that either no details or specific requirements are available or that the clause is not relevant to this specific contract.

<table>
<thead>
<tr>
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<th>V</th>
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</table>

12.1.1 **Provisional bills of quantities (B2.2)**

   The quantities are provisional: No

12.1.2 **Availability of construction documentation (B2.3)**

   Construction documentation is complete: Yes

12.1.3 **Interest of agents (B2.4)**

12.1.4 **Defined works area (B3.1)**

   Tenderers may occupy the full portion of the site as pointed out at the Site Inspection meeting for Tenderers. It is an express requirement that the existing access roads and parking be kept clear for client access at all times.

12.1.5 **Geotechnical investigation (B3.2)**

   Nil

12.1.6 **Existing premises occupied (B3.4)**

   Tenderers are advised that the balance of the building facilities outside of the works areas will be in use for the duration of the contract. Particular care will be required to maintain security, access and general cleanliness of the site No access to the balance of the building or site by the contractor or sub-contractor’s personnel will be permitted.

12.1.7 **Previous work - dimensional accuracy (B3.5)**

12.1.8 **Previous work - defects (B3.6)**

12.1.9 **Services - known (B3.7)**

   Existing services and points of connection are shown on the site plan and all work associated with these services is measured under the relevant trades.

12.1.10 **Protection of trees (B3.9)**

   Carried to Collection
12.1.11 Inspection of adjoining properties (B3.11)

12.1.12 Enclosure of the works (B6.2)

The construction areas are to be signposted and blocked from public access at all times.

12.1.13 Offices (B6.4.3)

A meeting room in the existing building will be provided for all site meetings.

12.1.14 Main notice board (B6.5):

A notice board is required: Yes

12.1.15 Subcontractor’s notice board (B6.6)

A notice board is required: No

12.1.16 Water (B7.2)

Alternative selected: A

12.1.17 Electricity (B7.3)

Alternative selected: A

12.1.18 Telecommunications (B7.4)

Alternative selected: A

12.1.19 Ablution facilities (B7.5)

Alternative selected: A

12.1.20 Protection of existing/sectionally occupied works (B11.2)

12.1.21 Special attendance (B9.2)

12.1.22 Protection of the works (B11.1):

Protection is required: Yes

12.1.23 Disturbance (B11.5)

12.1.24 Environmental disturbance (B11.6)
1 Post tender information (B12.2)

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

12.2.1 Payment of preliminaries (B10.2)

Alternative selected: (A or B):

.............

12.2.2 Adjustment of preliminaries (B10.3)

Alternative selected: (A or B):

.............

12.2.3 Additional agreed preliminaries items

................................................................-
................................................................-
................................................................-

SECTION C : SPECIFIC PRELIMINARIES

2 Proprietary Branded Products

The contractor shall take delivery of, handle, store, use apply and/or fix all proprietary branded products in strict accordance with the manufacturers’ instruction after consultation with the manufacturer’s authorised representative. No substitutes for proprietary branded products will be allowed.

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

3 Application For Certificate

The contractor must complete and sign a cession form with respect to any claim for materials on site, and submit same to the quantity surveyor for inclusion in the monthly certificate. Failure to submit the signed cession form will preclude unfixed materials on site from being included in the certificate.

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

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors

Carried to Collection R
1 **Placing Orders For Materials**

The contractor is warned to place all orders for materials or special articles as early as possible, failing which he will be held solely responsible for any delay in the delivery of such goods.

Should any specified item, having been timeously ordered by the contractor, prove to be unobtainable, the contractor shall immediately advise the principal agent who will then decide on alternative substitutes.

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

2 **Overtime**

In any instance the contractor shall request permission to work outside normal working hours.

Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.

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

3 **Site Instructions**

Site instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor.

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

4 **Labour Record**

At the end of each month the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day.

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

5 **Plant Record**

At the end of each month the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.

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

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**SAIAB - First Floor Collection Facility**
**Project No. PE 544**

**BILL NO. 1**
**MODEL PRELIMINARIES**
**KWMH.QS Quantity Surveyors**

-19-
1 **Non Cession Of Monies**

The contractor shall not cede nor assign his rights or claims to any monies due or to become due under this contract.

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

2 **As Built Drawings**

The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the architect and the structural engineer for their records.

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

3 **Health And Safety Specification And Regulations For Contractors**

Contractors are to comply with the Health and Safety Regulations for Contractors and the Health and Safety Specification as set out in Annexure B included in the back of these Bills of Quantities.

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

BILL NO. 1  
MODEL PRELIMINARIES  
KWMH.QS Quantity Surveyors  

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BILL NO. 1
MODEL PRELIMINARIES

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Carried to Final Summary

BILL NO. 1
MODEL PRELIMINARIES
KWMH.QS Quantity Surveyors
NOTE:

The Standard Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.

Tenderers are advised to visit the site and to inspect the works in conjunction with the drawings in order to ascertain the exact nature and extent of the work to be done.

The Contractor will be held solely responsible for checking all floor levels and dimensions in the existing building in order that the new extensions may be correctly lined up. Should any discrepancies be found in the Architect's drawings he should be asked for a decision before continuing with the work.

The Contractor will be held solely responsible for any damage to persons and property, for the safety of the new and existing structure throughout the whole of the contract and must make good at his own expense any damage that may occur.

Old materials described as "carefully take out, set aside for re-use and later refix in new position" are to be carefully removed, stored and protected from injury, made good as required and if broken or damaged through taking out, removing, storage, etc, are to be replaced by the Contractor at his own expense. Tenderers are advised to inspect these materials to ascertain their condition and allow accordingly for this in their pricing.

Old materials, which are to become the property of the Contractor as they are pulled down, together with all building debris from any cause whatsoever, are to be immediately carted away and the site left clean and unencumbered. Allow for watering the works sufficiently to prevent nuisance from dust.

Allow for giving notice to local or other authorities for disconnecting electric light, water and drainage mains and removing telephone wires, etc, and pay all fees in connection therewith and afford every facility to the workmen carrying out this work.

<table>
<thead>
<tr>
<th>Item No</th>
<th>BILL No. 2 ALTERATIONS (PROVISIONAL)</th>
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<tbody>
<tr>
<td>Quantity</td>
<td>Rate</td>
</tr>
<tr>
<td>BILL NO. 2 ALTERATIONS (PROVISIONAL) KWMH.QS Quantity Surveyors</td>
<td>Carried to Collection R</td>
</tr>
</tbody>
</table>
All materials in this section are measured as new except where old material is specifically mentioned as being re-used.

Old materials, if sound and suitable and approved by the Architect, may be re-used in the new structure. This applies particularly to timber which may be re-used for joists, brading, fittings, etc and broken bricks and other similar material which may be used as filling and hardcore.

Wherever old materials are used instead of the new materials measured, an adjustment will be made by the Quantity Surveyor in the final settlement of accounts by deducting the net cost of the new materials and crediting the Contractor with the amount, if any, allowed by him for the old materials.

When pricing, Tenderers are to allow as follows:

Where door and window openings, etc, are specified to be filled in, or where jambs, cills, etc are specified to be built up, brickwork shall be of hard burnt clay stock bricks in 5.1 cement mortar unless otherwise specified, cut, toothed and bonded into existing brickwork and pinned up as required with slates or other hard materials. Brickwork built to fair face or in facings is to be of bricks and pointed to match existing. Plaster is to be 5.1 cement plaster unless otherwise specified.

Where lintols are specified as reinforced concrete the prices are to include for breaking out brickwork over for and inserting cement concrete (20MPa) lintol with 230mm bearing on each end and 254mm deep and reinforced with and including one 12mm diameter mild steel rod for each half brick thickness of wall and including formwork. The steel rods are to be hooked at ends and embedded 25mm up from bottom of lintols. Lintols exceeding 1370mm span to be similarly reinforced but with 20mm diameter mild steel rods.

Where lintols are specified as precast concrete the prices are to include for breaking out brickwork over for and inserting precast prestressed cement concrete (30MPa) lintol with 230mm bearing on each end size 108 x 75mm deep for each half brick thickness of wall.

The term "take out" includes all work taken out, taken up, taken down, taken off, etc.; the term "break up" includes all work broken up, broken down, broken off, etc and the term "hack off" includes all work hacked off, hacked up, hacked down, etc.

The term "make good" is to include all labour and material required to match existing work.

Carried to Collection

BILL NO. 2
ALTERATIONS (PROVISIONAL)
KWMH.QS Quantity Surveyors
The terms "take out and remove door", "take out and remove window", "carefully take out, set aside for re-use and later refix window in new position", etc are to include all materials connected with such door or window such as doors, windows, fanlights, frames, ironmongery, glass, architraves, beads, fillets, cramps, dowels, etc.

The terms "take out and remove sink unit", "take out and remove lavatory basin", "carefully take out, set aside for re-use and later refix W.C. suite in new position", etc are to include all materials connected with such sanitary fittings such as brackets, cisterns, taps, traps, flushing valves, flush pipes, etc and are to include for the cutting back and stopping off of supply and waste pipes.

<table>
<thead>
<tr>
<th>Take Out And Remove</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Timber door not exceeding 2.5m² and make good existing frame to be fitted with new door (elsewhere measured).</td>
</tr>
<tr>
<td>2 Timber door exceeding 2.5m² and not exceeding 5m² and make good existing frame to be fitted with new door (elsewhere measured).</td>
</tr>
<tr>
<td>3 Steel door frame exceeding 2.5m² and not exceeding 5m² from wall to be demolished (door elsewhere taken down for re-use).</td>
</tr>
</tbody>
</table>

**Carefully Take Out, Set Aside For Re-Use And Later Refix In New Position**

| 4 Extractor fan (Forming opening elsewhere measured). | No 1 |
| 5 X Ray room sliding door type E, including ironmongery and fixed to new wall (New wall elsewhere measured). | No 1 |
| 6 Two hour fire rated double door type C, including ironmongery and fixed to new frame complete with hinges (New frame elsewhere measured). | No 1 |
| 7 Fire hose reel and connecting up to water supply, etc. (New pipework elsewhere measured). | No 1 |

**Break Out/Up And Remove**

| 8 Concrete in ramps. | m³ 1 |

**Carried to Collection**

BILL NO. 2
ALTERATIONS (PROVISIONAL)
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>One brick wall.</td>
<td>m2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Hack Off And Remove&lt;br&gt;Screed 45mm thick to floors.</td>
<td>m2</td>
<td>285</td>
</tr>
<tr>
<td>3</td>
<td>Vinyl tiles or sheeting and prepare screed to receive self levelling screed (New screed elsewhere measured).</td>
<td>m2</td>
<td>34</td>
</tr>
<tr>
<td>4</td>
<td>Preparatory Work&lt;br&gt;Cut toothings and new to existing brick wall.</td>
<td>m2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Forming New Openings In Existing Walls&lt;br&gt;Accurately saw-cut through existing 45mm screed to facilitate breaking out screed on one side.</td>
<td>m</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>Cut through 230mm solid brick wall for door opening size 813 x 2032mm high, insert precast concrete lintol over and make good to plaster head and reveals all round, all to match existing.</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Cut through 230mm solid brick wall for plain opening size 1955 x 2100mm high, insert precast concrete lintols over and make good to plaster head and reveals all round, all to match existing.</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Cut through 230mm solid brick wall for window opening size 1500 x 900mm high, insert precast concrete lintol over and make good to plaster head, cills and reveals all round, all to match existing.</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Cut through 230mm solid brick wall for lift door opening and form opening size 900 x 2125mm high, insert precast concrete lintol over and make good to plaster head and reveals all round, all to match existing.</td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Cut through 270mm cavity brick wall for existing extractor fan&lt;br&gt;(removing elsewhere measured) and form opening size 1400 x 1400mm high, including setting aside and cleaning existing face bricks for re-use in cill and lintol externally, precast concrete lintol internally, build up solid all around and make good to face brick externally and plaster and paint internally, all to match existing. (Face brick cill and lintol to exterior of opening elsewhere measured).</td>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

**Carried to Collection**

BILL NO. 2
ALTERATIONS (PROVISIONAL)
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>Alterations To Existing Openings</th>
</tr>
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<tbody>
<tr>
<td>1 Prepare existing extractor fan opening (extractor fan elsewhere removed) size 1400 x 1400mm high in 270mm cavity wall, for new aluminium window (elsewhere measured) size 1400 x 1400mm high overall, including make good facebrick externally and plaster internally.</td>
</tr>
</tbody>
</table>

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BILL NO. 2  
ALTERATIONS (PROVISIONAL)  

**COLLECTION**

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BILL NO. 2  
ALTERATIONS (PROVISIONAL)  
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td><strong>BILL No. 3</strong></td>
<td><strong>CONCRETE, FORMWORK AND REINFORCEMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONCRETE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Set of three concrete test cubes size 150 x 150 x 150mm overall including testing.</td>
<td>Sets</td>
<td>1</td>
</tr>
<tr>
<td><strong>Cement Concrete (25MPa) In</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ramps.</td>
<td>m3</td>
<td>2</td>
</tr>
<tr>
<td><strong>CONCRETE SUNDRIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Steel floated top of concrete finished to falls.</td>
<td>m2</td>
<td>12</td>
</tr>
</tbody>
</table>

Carried to Final Summary

BILL NO. 3
CONCRETE FORMWORK AND REINFORCEMENT
KWMH.QS Quantity Surveyors
Note:

Tenderers are advised to study the drawings issued with the Bills of Quantities to fully appraise themselves to the detailing and setting out requirements, in order that they may price the scope of work accurately.

Tenderer’s are referred to the detail drawings as indicated in the relevant descriptions, and issued with these Bills Of Quantities, for full details when pricing.

**BRICKWORK**

*Brickwork In Clay Bricks In Cement Mortar In*

<table>
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<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Half brick wall.</td>
<td>m²</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Half brick wall in lining to existing brick wall and grouting up solid.</td>
<td>m²</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>One brick wall.</td>
<td>m²</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>One brick fire wall in roofs.</td>
<td>m²</td>
<td>42</td>
<td></td>
</tr>
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**Precast Prestressed Vibrated Cement Concrete (30MPa) Lintols Including Moulds, Reinforcement, Propping, Etc.**

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<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>Lintol 110mm wide x 75mm deep in lengths not exceeding 3000mm.</td>
<td>m</td>
<td>17</td>
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</table>

**Brick Reinforcement (Provisional)**

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<tr>
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<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Brick reinforcement 80mm wide.</td>
<td>m</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Brick reinforcement 160mm wide.</td>
<td>m</td>
<td>388</td>
<td></td>
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</tbody>
</table>

**Ties, Cramps, Etc.**

<table>
<thead>
<tr>
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<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2 x 30mm Galvanised hoop iron door frame cramp 450mm long with one end twice screwed to timber frame and other end built into brickwork and turned up into joint.</td>
<td>No</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

**Carried to Collection**
1. 2 x 30mm Galvanised hoop iron tie 500mm long with one end shot nailed to side of concrete and other end bent and built into joint in brickwork.  

**FACE BRICKWORK**

*Recycle Existing Brown Face Bricks All To Match Existing Pointed With Ruled-In Vertical And Horizontal Joints*

2. Extra over forming opening for brick-on-edge lintol including pointing to face and soffit.  
   | m   | 1  |

3. Extra over forming opening for cut brick-on-edge cill 150mm wide set sloping and projecting including fair splay cutting under and pointing to top, edge and soffit.  
   | m   | 1  |

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BILL NO. 4  
MASONRY  
KWMH.QS Quantity Surveyors
BILL NO. 4
MASONRY

**COLLECTION**

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BILL NO. 4
MASONRY
KWMH.QS Quantity Surveyors
## BILL No. 5
### WATERPROOFING

### JOINT SEALANTS

<table>
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<th>Description</th>
<th>Unit</th>
<th>Rate (R)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Seal and point around existing extractor fan.</td>
<td>m</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Seal and point around aluminium window and door frames.</td>
<td>m</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Carried to Final Summary

---

BILL NO. 5
WATERPROOFING
KWMH.QS Quantity Surveyors
**CARPENTRY AND JOINERY**

**JOINERY**

Note:

All joinery unless otherwise specified, is to be wrot on all surfaces and prices are to include for this, including leaving clean, smooth, free from tool marks and for rounded arrises.

The sizes of all timbers for joinery are to hold to the full sizes specified.

Commercial veneer shall refer to veneer to be painted. South African Pine shall be referred to as Pine.

**************

**DOORS, ETC.**

**Red Meranti**

1 44mm Framed, ledged and braced batten double door in two equal leaves with rebated meeting stiles, finished flush on internal face with 3mm Sapele veneered plywood, (Hung) size 1830 x 2135mm fixed to existing frame.

<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FLUSH DOORS**

Note:

References in the following refer to Swartland or other approved products.

**Heavy Duty Solid Core Flush Doors Finished On Both Faces With Hard Board Facing**

2 40mm Door, (Hung) size 813 x 2032mm.

<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Solid Core Flush Doors Finished On Both Faces With Commercial Veneer**

3 40mm Door, (Hung) size 813 x 2032mm.

<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Carried to Collection**

BILL NO. 6
CARPENTRY AND JOINERY
KWMH.QS Quantity Surveyors
1. 40mm Double door in two leaves with rebated meeting stiles, (Hung) size 1511 x 2032mm.

2. Extra for forming opening for glazed panel size 300 x 400mm (glazing elsewhere measured) including additional framing around opening.

### FRAMES AND LININGS (FRAMED)

**Selected Wrot Meranti**

3. 69 x 69mm Rebated and angle rounded frame.

   - **Note:**
   - References in the following refer to Swartland or other approved products.

4. 70 x 90mm Frame type SK1/813.

---

**Carried to Collection**

**BILL NO. 6**
**CARPENTRY AND JOINERY**
**KWMH.QS Quantity Surveyors**
BILL NO. 6
CARPENTRY AND JOINERY

**COLLECTION**

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<tr>
<td>-34-</td>
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</tbody>
</table>

Carried to Final Summary

BILL NO. 6
CARPENTRY AND JOINERY
KWMH.QS Quantity Surveyors
### FITTINGS

**General**

The following cupboard fittings have been measured as complete units i.e. the components of the units have been not separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, gluing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc.

The references given in the descriptions are to the respective types of fittings detailed on the Architect's drawing annexed to these bills of quantities for tender purposes.

---

**The Following In Cupboards And Worktops To Genetics Labs (Drawing 1826/200).**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>U-shaped floor cupboards and tops size 8023mm extreme girth overall x 750mm wide x 900mm high, including table legs, etc.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The Following In Cupboards And Worktops To X-Ray Room (Drawing 1826/201).**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Floor cupboards and work tops size 2530mm long x 600mm wide x 760mm high.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The Following In Cupboards And Worktops To PCR Room (Drawing 1826/02).**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Floor cupboard unit size 750mm long x 600mm wide x 820mm high.</td>
<td>No 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Lab bench size 1700mm long x 750mm wide x 900mm high.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lab bench size 1800mm long x 750mm wide x 900mm high.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lab bench size 1900mm long x 750mm wide x 900mm high.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Carried to Collection**

BILL NO. 7

JOINERY FITTINGS

KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L-shaped work tops size 4600mm extreme girth overall x 750mm wide x 900mm high.</td>
<td>No 1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Work tops size 3000mm long x 750mm wide x 900mm high.</td>
<td>No 1</td>
<td></td>
</tr>
</tbody>
</table>
BILL NO. 7
JOINERY FITTINGS

**COLLECTION**

<table>
<thead>
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Carried to Final Summary

BILL NO. 7
JOINERY FITTINGS
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>BILL No. 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEILINGS, PARTITIONS AND ACCESS FLOORING</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NAILED UP CEILINGS**

9.5mm RhinoCeil Or Other Approved Flush Jointed Taper-Edge Plasterboard Sheets With Taped Joints And Surface Of Ceiling Finished With Rhinoglide or other approved Plaster To A Smooth Even Surface

1 Horizontal ceilings fixed to and including 38 x 50mm sawn Pine brandering at 400mm centres in one direction only and with additional brandering at outer edges of rooms and along joints of ceiling plates. m2 632

**SUSPENDED CEILINGS**

Note:

The following must be erected by a firm who specialise in this type of work, which firm must be approved by the Architect before the work is put in hand.

-------------------

Gyproc DonnCeil Or Other Approved Celotex White Vinyl Pre-Finished Fine Fissured Mineral Fibre Acoustic Ceiling Tiles Size 600 x 1200 x 15mm Thick With Square Edge Laid On And Including Donn Or Other Approved SQ/T38 White Powder Coated Galvanised Steel Exposed T-System Grid Complete With Main And Cross Tees, Reinforced Splines, Galvanised Angle Hangers At Centres Not Exceeding 1200mm, Etc. All In Strict Accordance With The Manufacturer’s Instructions, Fixed At A Floor To Ceiling Height Not Exceeding 5000mm High

2 Horizontal ceilings suspended not exceeding 1000mm below timber trusses. m2 83

3 Horizontal ceilings suspended not exceeding 1000mm below concrete slabs, shot nailed. m2 34

Carried to Collection

BILL NO. 8
CEILINGS, PARTITIONS AND ACCESS FLOORING
KWMH.QS Quantity Surveyors
CORNICES, TRIMS, ETC.

Donn Powder Or Other Approved Coated Aluminium

1 Plaster trim for plasterboard 9.5mm thick ceiling plugged to walls. m 138

2 SM2.5 Shadowline wall angle trim plugged to walls. m 123

BULKHEADS

Note:

Tenderer’s are referred to the detail on drawing 1826/01 issued with these Bills Of Quantities for full details when pricing this item.

9.5mm RhinoCeil Or Other Approved Flush Jointed Rhinoboard Sheets Screwed To Donn Or Other Approved Concealed T-System, With 63mm Wide Strips Of Wire Scrim Nailed Over Joints, Surface Of Ceiling Finished With Rhinoglide Or Other Approved, To A Smooth Even Surface, Fixed At A Floor To Ceiling Height Exceeding 5000mm High

3 L-shaped bulkhead 525mm high x 1500mm wide with a girth of 2025mm overall fixed to suspended ceiling tiles with and including Donn or other approved SM2.5 shadowline wall angle trim and fixed to plastered concrete soffits with and including Donn plaster trim. (Detail section 01). m 68

Carried to Collection

BILL NO. 8
CEILINGS, PARTITIONS AND ACCESS FLOORING
KWMH.QS Quantity Surveyors
BILL NO. 8
CEILINGS, PARTITIONS AND ACCESS FLOORING

**COLLECTION**

<table>
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</table>

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Carried to Final Summary

BILL NO. 8
CEILINGS, PARTITIONS AND ACCESS FLOORING
KWMH.QS Quantity Surveyors
# Item No

**BILL No. 9**  
**FLOOR COVERINGS, WALL LININGS, ETC.**

**NOTE:**  
Floor coverings are laid on screeded surfaces unless otherwise described.

## FLOOR COVERINGS

**Marley Or Other Approved Floorworx Superflex Fully**  
**Flexible Vinyl Floor Sheeting 2.5mm Thick Of Specified Colours Laid With Adhesive With Welded Joints**

<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>m²</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>m²</td>
<td>84</td>
<td></td>
</tr>
</tbody>
</table>

## SUNDRIES

**Marley Or Other Approved Floorworx Extruda Black Vinyl Accessories Fixed With Adhesive**

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>MCF35 Coved cover fillet 26mm high, fixed at junction of screed and wall.</td>
<td>m</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>6 x 35mm Capping strip, fixed to top of vinyl turn-ups.</td>
<td>m</td>
<td>109</td>
<td></td>
</tr>
</tbody>
</table>

## Vinyl Sealing

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Clean down vinyl surfaces with one coat water based floor stripper and apply three coats non-slip acrylic emulsion dressing buffed to an approved finish. <strong>(Provisional)</strong></td>
<td>m²</td>
<td>119</td>
<td></td>
</tr>
</tbody>
</table>

## M-Trim Natural Anodised Aluminium Edge Strips, Cover Strips, Etc

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>ATC290.NA and ATB100C Transition cover and base over different floor finishes.</td>
<td>m</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carried to Final Summary</th>
<th>R</th>
</tr>
</thead>
</table>

**BILL NO. 9**  
**FLOOR COVERINGS, WALL LININGS, ETC**  
**KWMH.QS Quantity Surveyors**
**BILL No. 10
IRONMONGERY**

**IRONMONGERY TO DOORS, FRAMES, ETC.**

**NOTE:**
Ironmongery is fixed to timber doors and frames unless otherwise described.

Each lock must be supplied with three keys and tags.

**Hinges, Etc.**

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dorma or other approved DBB-SS-009 102x75x3mm stainless steel two ball bearing butt hinge.</td>
<td>No 9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Bolts, Etc.**

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Dorma or other approved DFB-SC-180/150 150mm satin chrome flush bolt with heel.</td>
<td>No 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**En-Suite Locks**

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Cisa or other approved C2000 0G300-10-12 65mm grand masterkeyed, double cylinder, EN1303 Security Grade 3, nickel finish.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Dorma or other approved D036S euro-profile cylinder sash lock SS.</td>
<td>No 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Dorma or other approved D037D euro-profile cylinder dead lock SS.</td>
<td>No 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Dorma or other approved D038R Rebate conversion kit for euro-profile locks SS.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Dorma or other approved DKC056501 nickel plated 65mm five pin euro-profile knob cylinder.</td>
<td>No 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Dorma or other approved DSC054201 nickel plated 43mm five pin euro-profile single cylinder.</td>
<td>No 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Dorma or other approved DCE-002 stainless steel euro profile escutcheon.</td>
<td>No 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Carried to Collection**

BILL NO. 10
IRONMONGERY
KWMH.QS Quantity Surveyors

-43-
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dorma or other approved TH120 stainless steel lever handles on rose without escutcheons set.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Handles, Etc.</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dorma or other approved CB30 lever handle on rectangular Euro-cylinder backplate, 61mm centres.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Stops, Holders, Hooks, Etc.</strong></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Dorma or other approved DDS-SS-017 stainless steel floor stop.</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Halstead or other approved 166 cabin hook 150mm (Sat Chrome).</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Wrot meranti block to be provided to fix cabin hook 75x75x20mm.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Push Plates</strong></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Dorma or other approved DKP-22-164 300x150x1.2mm blank polished stainless steel push plate.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Door Closers, Floor Springs, Etc.</strong></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Dorma or other approved BTS75R/EN2-5 double action hold open floor spring set complete with stainless steel cover plate 7421 bottom strap and 8062 top centre for timber doors.</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Dorma or other approved BTS75R/EN2-5 double action non hold open floor spring set complete with stainless steel cover plate 7421 bottom strap and 8062 top centre for timber doors.</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Dorma or other approved TS83 BC/EN2-6 hold open arm door closer - pull side fitting.</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Dorma or other approved 2300 sealing compound to be applied to floor spring cement box.</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Sundries</strong></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Saunderson or other approved security emergency fire key holder FR05.</td>
<td>1</td>
</tr>
</tbody>
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**Carried to Collection**

BILL NO. 10
IRONMONGERY
KWMH.QS Quantity Surveyors
BILL NO. 10
IRONMONGERY

**COLLECTION**

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IRONMONGERY
KWMH.QS Quantity Surveyors
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</thead>
<tbody>
<tr>
<td>BILL No. 11 METALWORK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRE DOORS AND HOT DIP GALVANISED PRESSED STEEL FRAMES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teckentrup Or Other Approved E60/120/240-2 HS - BS Pre-Glazed Fire Doors And Frames, Complete With 1.5mm Thick Double Rebated Frame With Silicon Compression Seal, Pyran S Fire Resistant Glass Panel To Door Leaf Or Fanlights, Heavy Duty Butts (Balance Of Ironmongery Elsewhere Measured), And Including Setting Up, Building In, Filling Back Of Frame With Cement Mortar, Etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Suite 230mm Thick Walls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Frame for existing door, size 1510 x 2032mm.</td>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

Carried to Final Summary

BILL NO. 11 METALWORK
KWMH.QS Quantity Surveyors
BILL No. 12
ALUMINIUM DOORS AND WINDOWS

NOTES:

Drawings

Tenderer’s are referred to the drawing issued with these Bills Of Quantities for full details when pricing this section.

Ironmongery

All ironmongery is measured elsewhere with the exception of hinges and casement catches. All opening sections shall be hung on hinges supplied and fitted by the manufacturer. All casements shall be fitted with catches.

Certificates

Prior to the commencement of any site work, the following certificates should be provided:-

1. A copy of relevant AAMSA Performance Certificate from the manufacturer/contractor supplying the architectural aluminium product.

2. A Certificate of Conformance confirming that all anodizing or powder coating has been processed in strict accordance with SABS 999:1998 and SABS 1976:2001 respectively.

3. A Powder Guarantee of no less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process and may only be applied by an approved powder applicator.

4. A Certificate of Conformance that glazing has been installed in accordance with SABS 0137 ensuring that safety glass glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing material has been permanently marked.

Carried to Collection

BILL NO. 12
ALUMINIUM DOORS AND WINDOWS
KWMH.QS Quantity Surveyors
5. A Warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units warranting the products against delamination and colour degradation for a period of not less than 5 years.

**Powder Coating**

All powder coating shall be colour Matt Dark Umber Grey (ANP 3057). All powder coating shall be executed only by applicators approved by the powder manufacturers and shall be executed strictly in conformance with SABS 1796.

**General**

Glazing shall be executed in strict conformance with glass manufacturer's recommendations and all in accordance with the National Building Regulations, Part N, SABS 0137, SABS 1263 and AAAMSA selection guide for safety glazing materials. All glazing shall furthermore be able to withstand a minimum windload of 1250Pa.

**Structural Glazing**

In case of structural glazing, written proof is to be provided that all stages of fabrication and installation have been executed with disciplined quality assurance in accordance with the relevant parts of SABS ISO 9000.

**Safety Glazing**

All safety glazing materials (individual panes) shall be permanently marked. Such marking to be visible after glazing.

**POWDER COATED ALUMINIUM WINDOWS**

**Glazed Aluminium Windows Manufactured On The Sheerline Sheersash 36 System Per Specification, Complete With Double Strength Stainless Steel Extension Hinges, Casement Catches, 6.38mm Thick Intruderprufe Laminated Safety Glazing, Neoprene Gaskets And Including Setting Up, Building In, Filling Back Of Frame With Cement Mortar, Etc. (Silicone Pointing To Frame Elsewhere Measured)**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Window Type A size 1400 x 1400mm high overall.</td>
</tr>
</tbody>
</table>

Carried to Collection

BILL NO. 12
ALUMINIUM DOORS AND WINDOWS
KWMH.QS Quantity Surveyors
**Glazed Aluminium Windows Manufactured On The Sheerline Sheerfront CL System Per Specification,**
Complete With 6.38mm Intruderprufe Laminated Safety Butt Jointed Glazing, Neoprene Gaskets And Including Setting Up, Building In, Filling Back Of Frame With Cement Mortar, Etc. (Silicone Pointing To Frame Elsewhere Measured)

1. Window Type B size 1500 x 900mm high overall.   No 3

**POWDER COATED ALUMINIUM DOORS AND SHOPFRONTS**

**Glazed Aluminium Doors Manufactured On The Sheerline Sheerfront CL System Per Specification, Complete With 6.38mm Intruderprufe Laminated Safety Butt Jointed Glazing, Neoprene Gaskets And Including Setting Up, Building In, Filling Back Of Frame With Cement Mortar, Etc. (Silicone Pointing To Frame Elsewhere Measured)**

2. Glazed door Type F, size 810 x 2030mm high overall fixed to existing timber frame.   No 4

3. Glazed door and frame Type G, size 810 x 2030mm high overall.   No 1

**IRONMONGERY TO DOORS, FRAMES, ETC.**

**Hinges, Etc.**

4. S.A. Sliding Systems 403A natural anodised aluminium sinkless hinges.   No 15.0

**Bolts, Etc.**

**En-Suite Locks**

5. Dorma or other approved D037D euro-profile cylinder dead lock SS.   No 5

6. Dorma or other approved DDC056501 nickel plated 65mm five pin euro-profile double cylinder.   No 5

7. Dorma or other approved DCE-002 stainless steel euro profile escutcheon.   No 10

---

**SAIAB - First Floor Collection Facility**
Project No. PE 544

**BILL NO. 12**
ALUMINIUM DOORS AND WINDOWS
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>Handles, Etc.</th>
<th>No</th>
<th>10.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dorma or other approved DPH215 350x32mm stainless steel “D” shaped offset back-to-back pull handles.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stops, Holders, Hooks, Etc.</th>
<th>No</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Dorma or other approved DDS-SS-017 stainless steel floor stop.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Door Closers, Floor Springs, Etc.</th>
<th>No</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Dorma or other approved TS91B/EN3-RF slide channel door closer- hold open function.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Carried to Collection

BILL NO. 12
ALUMINIUM DOORS AND WINDOWS
KWMH.QS Quantity Surveyors
BILL NO. 12
ALUMINIUM DOORS AND WINDOWS

COLLECTION

Total Brought Forward from Page No.

Carried to Final Summary

BILL NO. 12
ALUMINIUM DOORS AND WINDOWS
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>m2</td>
<td>191</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>m2</td>
<td>84</td>
<td></td>
</tr>
</tbody>
</table>

**SCREED**

Cement Screed On Concrete

1. 45mm Thick on floors.
2. 65mm Thick on floors.

**SELF LEVELLING SCREED**

Prepare Screed, Scarify And Clean, Apply TAL
Screedmaster Or Other Approved Self Levelling Screed
With Notched Trowel, In Accordance With Manufacturer's
Instructions On

3. Existing screeded floors.
4. Screeded floors.

**INTERNAL PLASTER**

Note:

No skimming has been measured to achieve an approved
smooth plaster wall finish - any costs to rectify sub-standard
finish will be to the Contractor's account.

Cement Plaster On Brickwork On

5. Walls.
6. Narrow widths.

Carried to Final Summary

BILL NO. 13
PLASTERING
KWMH.QS Quantity Surveyors
**NOTE:**

All tiling is to be fixed unless otherwise described to screeded or plastered surfaces which are elsewhere measured.

All tile bedding and grouting is to be done with an approved Tylon or other approved adhesive/grout suitable for either the porcelain or ceramic tiles as specified.

**WALL TILING**

*Johnson Or Other Approved White Glazed Ceramic Wall Tiles Size 200 x 200 x 5mm Thick In Approved Patterns, Fixed With Adhesive And Jointed And Pointed With Flush Joints In Grout On Plaster (Elsewhere Measured)*

Note:

Prices shall include for fitting all external corner junctions of wall tiling with Tylon or other approved extruded PVC corner protection pieces.

<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>On walls.</td>
<td>m2</td>
<td>33</td>
</tr>
<tr>
<td>2</td>
<td>On isolated panels, splashbacks, etc to plastered walls not exceeding 1m2.</td>
<td>m2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Carried to Final Summary**

BILL NO. 14
TILING
KWMH.QS Quantity Surveyors
### BILL No. 15
**PLUMBING AND DRAINAGE (PROVISIONAL)**

#### SANITARY PLUMBING

**Rigid PVC Socketed Soil, Waste Or Vent Piping (SABS 967)**

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40mm Pipe and fixing to walls, falls, in concrete, etc.</td>
<td>m</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>40mm Pipe including chasing, etc.</td>
<td>m</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>50mm Pipe and fixing to walls, falls, in concrete, etc.</td>
<td>m</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Extra For</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>50mm Reducer.</td>
<td>No</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>40mm Bend.</td>
<td>No</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>50mm Bend.</td>
<td>No</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>50mm Access bend.</td>
<td>No</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Bernco Or Other Approved Laboratory Fittings**

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>W681 Vulcatheine or other approved recovery trap including joints to outlets of bowls including adaptors and end of pipe.</td>
<td>No</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

#### SANITARY FITTINGS

**Note:**

All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealer to the Architect’s satisfaction.

---

**Carried to Collection**

BILL NO. 15
PLUMBING AND DRAINAGE (PROVISIONAL)
KWMH.QS Quantity Surveyors
### Stainless Steel Sinks, Drainers And Urinals, Etc.

**Quality (18/10) Type 304**

**1.2mm Thick**

1. Franke or other approved 1.2mm Grade 304 18/10 stainless steel S1 catering sink (code: 353102), size 1200x650x1050mm high with 500x500x230mm deep right hand pressed bowl, 150mm high integral splashback to rear and right, 50 x 10mm turndown and 40mm waste outlet, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on Grade 304 (18/10) stainless steel square gallows brackets with detachable front leg (product code: 352654), size 40x40x1.2mm thick, fitted with chrome plated adjustable flanged foot pieces.

   | No | 4 |

2. Purpose made Franke or other approved sink unit size 2950 x 900 x 1050mm high overall with single end bowl size 700 x 500 x 230mm deep right hand pressed bowl, including 40mm waste outlet, fitted with stainless steel plated adjustable flanged foot pieces.

   | No | 1 |

**Sundries**

3. Floor mounted body/eye emergency shower. (Art. No. 1100/680) from Berco or other approved.

   | No | 1 |

---

**Carried to Collection**

BILL NO. 15
PLUMBING AND DRAINAGE (PROVISIONAL)
KWMH.QS Quantity Surveyors
HOT AND COLD WATER SUPPLY

Preamble Note:

All hot and cold water copper piping shall comply with SABS 460. Only tubing manufactured by Copper Tubing Africa or Maksal will be accepted by the Engineer.

Jointing will be capillary type fittings with 97/3 tin/copper solder with approved water soluble flux. Conex or capillary union fittings shall be used only where connections are made onto taps, valves, pumps or the like, the use thereof by the Contractor in any other areas will be at his own expense. Only Class 2 piping may be bent.

Only holderbats which are screwed around pipes will be accepted, plastic push in type such as "masterbat" will be rejected.

Pipes over 28mm diameter are to be secured using Sikla or Hilti holderbats.

All material shall be rust resistant and any steel shall be insulated from copper pipes using PVC or rubber inserts. Pipe support centres shall not exceed 1200mm for 15mm diameter, 1500mm for 22mm diameter, 1800mm for 28mm diameter, 1200mm for 35mm diameter and 2400mm for 42mm diameter pipes.

**Class 1 Medium Copper Pipes**

1 35mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (chases elsewhere measured), in concrete, etc. m 9

Extra For Copcal Capillary Type Fittings With Soldered Joints

2 35mm Straight reducer. No 1

**Class 2 Medium Copper Pipes**

3 15mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in concrete, etc. m 30

4 15mm Pipe and fixing to walls including chasing etc. m 54

5 22mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (chases elsewhere measured), in concrete, etc. m 12

6 22mm Pipe and fixing to walls including chasing etc. m 24

Carried to Collection

BILL NO. 15
PLUMBING AND DRAINAGE (PROVISIONAL)
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (chases elsewhere measured), in concrete, etc.</td>
<td>m</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>28mm Pipe and fixing to walls including chasing etc.</td>
<td>m</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Extra For Copcal Capillary Type Fittings With Soldered Joints</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>15mm Fittings.</td>
<td>No</td>
<td>36</td>
</tr>
<tr>
<td>4</td>
<td>22mm Fittings.</td>
<td>No</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>28mm Fittings.</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Extra For Conex Brass Compression Type Fittings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>15mm Fittings.</td>
<td>No</td>
<td>48</td>
</tr>
<tr>
<td>7</td>
<td>22mm Fittings.</td>
<td>No</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>28mm Fittings.</td>
<td>No</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Brass Fittings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>15mm Stopcock with couplings to copper as Cobra or other approved 131.</td>
<td>No</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>28mm Stopcock with couplings to copper as Cobra or other approved 131.</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Chromium Plated Brass Fittings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Wall Mounted Mixer Tap (Code: XL1400-0) from Bernco.</td>
<td>No</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Cobra Watertech or other approved wall mounted elbow action chrome plated bibtap (Code: 500-21B), manufactured in accordance with SANS 226:2009 Type 2 with Cobra Watertech or other approved 75mm long extension piece (Code: 058-15) and 60mm long extension piece with sliding wall flange (Code: 059-15).</td>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

**Carried to Collection**

BILL NO. 15
PLUMBING AND DRAINAGE (PROVISIONAL)
KWMH.QS Quantity Surveyors
### HOT WATER CYLINDERS

**Kwikot**

1. 50 Litre white enamelled Kwikot or other approved Megaflo high pressure horizontal wall mounted type electric hot water cylinder with 20mm connections and fitted with 3 kilowatt monel metal electrical element complete with vacuum breaker, pressure reducing valve and relief valve including all joints to copper pipes and hoisting into position and fixing to wall with four 10 x 76mm expanding bolts in mortice in wall and connecting up.  

   No 2

**0.60mm Galvanised Sheet Iron**

2. 1250 x 750mm Drip tray with 100mm high upstand with top edge bent over all round including connecting into 50mm diameter overflow pipe (overflow pipe elsewhere measured) in roof space.  

   No 2

**Sundries**

3. 50mm Polythene overflow and fixing to falls to roof timbers.  

   m 20

4. 50mm Bent coupling.  

   No 4

### FIRE SUPPLY INTERNALLY

**Galvanised Mild Steel Medium Grade Screwed And Socketed Pipes Including Plain Sockets Complying With SABS 62**

5. 25mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (chases elsewhere measured), in concrete, etc.  

   m 5

6. 25mm Pipe and fixing to walls including chasing etc.  

   m 7

7. 50mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (chases elsewhere measured), in concrete, etc.  

   m 2

8. 100mm Pipe and fixing to walls, floors, in roofs, soffit of concrete slab, in chases (chases elsewhere measured), in concrete, etc.  

   m 1

   **Extra For Fittings**

9. 25mm Elbow.  

   No 4

10. 50mm Elbow.  

    No 3

---

**Carried to Collection**

BILL NO. 15
PLUMBING AND DRAINAGE (PROVISIONAL)
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>No.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100mm Elbow.</td>
<td>No 1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>50mm Reducing Tee.</td>
<td>No 2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>100mm Reducing Tee.</td>
<td>No 1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>25mm Angle stop valve.</td>
<td>No 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sundries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0-1600 KPA Glycerene filled pressure gauge and joints to 25mm galvanised pipe.</td>
<td>No 1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4.5kg Dry chemical type fire extinguisher complete with bracket</td>
<td>No 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and meranti board, fixed to wall with expanding bolts and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>including mortices in brickwork.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TESTING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Allow for testing all drains, sanitary plumbing, water supplies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and fire service to the satisfaction of the Architect and to Municipal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>requirements. All defective work is to be taken out and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>replaced at the Contractor’s expense.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BUILDER’S WORK TO PLUMBER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Cut Hole For Pipe Not Exceeding 100mm Diameter And Make Good Through</td>
<td>No 3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Cut Hole For Pipe Exceeding 100mm And Not Exceeding 200mm Diameter And Make</td>
<td>No 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good Through</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Carried to Collection</strong></td>
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<td>BILL NO. 15</td>
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<td></td>
<td>PLUMBING AND DRAINAGE (PROVISIONAL)</td>
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</tr>
<tr>
<td></td>
<td>KWMH.QS Quantity Surveyors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PAINTING**

Prepare And Apply One Coat Zinc Chromate Primer, One Undercoat And Two Coats Plascon Or Other Approved Velvaglo On Copper Surfaces

1 On pipe not exceeding 300mm girth. \[m\] \[10\]

Prepare And Apply One PVC Primer And Two Coats Plascon Or Other Approved Velvaglo On PVC Surfaces

2 On pipe exceeding 300mm girth. \[m^2\] \[1\]

Carried to Collection

BILL NO. 15
PLUMBING AND DRAINAGE (PROVISIONAL)
KWMH.QS Quantity Surveyors
**BILL NO. 15**

**PLUMBING AND DRAINAGE (PROVISIONAL)**

**COLLECTION**

Total Brought Forward from Page No.

<table>
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<td>-54-</td>
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<td>-55-</td>
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<td>-59-</td>
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<tr>
<td>-60-</td>
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</tbody>
</table>

Carried to Final Summary

**BILL NO. 15**

**PLUMBING AND DRAINAGE (PROVISIONAL)**

**KWMH.QS Quantity Surveyors**

-61-
**NOTE:**

Panes are in rectangular shapes unless described as irregular shaped.

**TO WOOD WITH BEADS (ELSEWHERE MEASURED) AND PUTTY**

6,38mm GSA Intruderproof Clear Laminated Safety Glass

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>BILL No. 16 GLAZING</td>
<td>1</td>
<td>Panes exceeding 0,1m² and not exceeding 0,5m².</td>
<td>m²</td>
</tr>
</tbody>
</table>

Carried to Final Summary

BILL NO. 16
GLAZING
KWMH.QS Quantity Surveyors
<table>
<thead>
<tr>
<th>Item No</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>BILL No. 17 PAINTWORK</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:

All concrete surfaces have a rough formwork finish unless otherwise described. Prices are to allow for rubbing down before painting.

All surfaces of walls are internal unless otherwise described.

All plaster surfaces are smooth (float) unless otherwise described.

No skimming has been measured to achieve an approved smooth plaster wall finish - any costs to rectify sub-standard finish will be to the Contractor's account.

**PAINT ON PLASTER, FIBRE REINFORCED CEMENT, ETC.**

*Prepare And Apply One Coat Plascon Plaster Or Other Approved Primer And Two Coats Plascon Or Other Approved Polvin Super Acrylic PVA On*

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plastered rhinoboard ceilings.</td>
<td>m2</td>
<td>632</td>
</tr>
<tr>
<td>2</td>
<td>Plastered rhinoboard ceiling bulkheads.</td>
<td>m2</td>
<td>137</td>
</tr>
</tbody>
</table>

*Prepare And Apply One Plascon Or Other Approved Plaster Primer And Two Coats Plascon Or Other Approved Wall And All On*

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Plastered walls.</td>
<td>m2</td>
<td>260</td>
</tr>
</tbody>
</table>

**REDECORATION OF PREVIOUSLY PAINTED PLASTER, FIBRE REINFORCED CEMENT, ETC.**

*Clean Down And Remove All Loose And Flaking Paint, Prepare Previously Painted Surfaces, Stop And Apply One Coat Plaster Primer And Two Coats Plascon Or Other Approved Wall & All On*

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Plastered walls.</td>
<td>m2</td>
<td>819</td>
</tr>
</tbody>
</table>

Carried to Collection

BILL NO. 17 PAINTWORK
KWMH.QS Quantity Surveyors
**PAINT ON METAL**

Remove All Traces Of Protective Coating From Galvanised Surfaces With Galvanised Iron Cleaner, Prepare And Apply One Coat Plascon Or Other Approved Super Universal Under Coat And Two Coats Plascon Or Other Approved Super Universal Enamel On

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Steel door frames - Fire doors.</td>
<td>m2</td>
<td>1</td>
</tr>
</tbody>
</table>

**PAINT ON WOOD**

Prime Or Oil

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Backs of frames or linings not exceeding 300mm girth.</td>
<td>m</td>
<td>26</td>
</tr>
<tr>
<td><strong>Prepare, Stop And Apply One Coat Plascon Or Other Approved Wood Primer And Two Coats Plascon Or Other Approved Velvaglo On</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Doors.</td>
<td>m2</td>
<td>28</td>
</tr>
<tr>
<td>4 Frames and linings not exceeding 300mm girth.</td>
<td>m</td>
<td>26</td>
</tr>
</tbody>
</table>

**REDECORATION OF PREVIOUSLY PAINTED WOOD**

Remove All Loose And Flaking Paint, Lightly Sand, Touch Up Bare Patches With Plascon Or Other Approved Wood Primer And Apply Two Coats Plascon Or Other Approved Velvaglo On

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Frames and linings not exceeding 300mm girth.</td>
<td>m</td>
<td>23</td>
</tr>
</tbody>
</table>

Carried to Collection

BILL NO. 17
PAINTWORK
KWMH.QS Quantity Surveyors
## BILL NO. 17

**PAINTWORK**

**COLLECTION**

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<tr>
<th>Page No</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>-63-</td>
<td></td>
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<tr>
<td>-64-</td>
<td></td>
</tr>
</tbody>
</table>

Carried to Final Summary

BILL NO. 17
PAINTWORK
KWMH.QS Quantity Surveyors
SAIAB - First Floor Collection Facility
Project No. PE 544

BILL No. 18
EXTERNAL WORKS (PROVISIONAL)

NOTES:

Model Preambles Note

The Model Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.

Specification

All civil work is to comply with the relevant section of SABS 1200 Specification with particular reference to:-

SABS 1200 D : Earthworks
SABS 1200 DM : Subgrade
SABS 1200 - L : Stormwater pipeline
SABS 1200 LB : Bedding
SABS 1200 ME : Base course and subbase
SABS 1200 MK : Kerbing

None of the "Measurement and Payment" clauses on the above shall, however, apply.

Maintenance Period

All roadworks in this section will be subject to a 12 month maintenance period.

Grids, Etc.

The Contractor shall allow in his prices for executing a detailed grid both prior to and after all earthworks. This grid shall be checked by the Engineers and this cost shall be borne by the Contractor.

Carried to Collection

BILL NO. 18
EXTERNAL WORKS (PROVISIONAL)
KWMH.QS Quantity Surveyors
**SITE PREPARATION**

**Hack Up and Remove**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Concrete in ramps.</td>
<td>m3</td>
</tr>
<tr>
<td>2</td>
<td>80mm Thick interlocking precast concrete paving.</td>
<td>m2</td>
</tr>
</tbody>
</table>

**CONCRETE RAMPS**

Note:

Any defects which may become evident due to bad workmanship or materials within twelve (12) months of completion shall be made good by the Contractor at his own expense.

**EARTHWORKS**

**Excavations, Filling, Etc.**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>Excavate in soft material to reduce levels under ramps not exceeding 2000mm deep and cart away.</td>
<td>m3</td>
</tr>
<tr>
<td>4</td>
<td>Approved G5 filling, selected and supplied by the Contractor, deposited, watered and consolidated in 150mm thick sub-base course under ramps compacted to 98% modified AASHTO density.</td>
<td>m3</td>
</tr>
<tr>
<td>5</td>
<td>20mm Finished thickness layer of clean sand/crusher run mix to receive concrete.</td>
<td>m3</td>
</tr>
<tr>
<td>6</td>
<td>Rip, scarify, mix, shape and consolidate top 150mm of subgrade to 95% modified AASHTO density.</td>
<td>m2</td>
</tr>
</tbody>
</table>

**Testing**

<p>| | | |</p>
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<tr>
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<tbody>
<tr>
<td>7</td>
<td>Provide and have filling compaction check tested by a Consulting Engineer's Laboratory and deliver the results to the Engineer within 24 hours of the tests being completed.</td>
<td>No</td>
</tr>
</tbody>
</table>

**CONCRETE**

**Cement Concrete (25MPa) In**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Ramps.</td>
<td>m3</td>
</tr>
</tbody>
</table>

**Carried to Collection**

BILL NO. 18
EXTERNAL WORKS (PROVISIONAL)
KWMH.QS Quantity Surveyors
**CONCRETE SUNDRIES**

1. Wood floated and broom swept top of concrete finished to falls.  m2  15

**REINFORCEMENT (PROVISIONAL)**

**Fabric Reinforcement To Concrete Work**

2. High tensile steel mesh Ref. 193 to concrete surface beds, slabs, etc.  m2  15

Carried to Collection

BILL NO. 18
EXTERNAL WORKS (PROVISIONAL)
KWMH.QS Quantity Surveyors
BILL NO. 18
EXTERNAL WORKS (PROVISIONAL)

**COLLECTION**

<table>
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<th>Page No</th>
<th>Amount</th>
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<tr>
<td>-66-</td>
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<tr>
<td>-67-</td>
<td></td>
</tr>
<tr>
<td>-68-</td>
<td></td>
</tr>
</tbody>
</table>

Total Brought Forward from Page No.

Carried to Final Summary

BILL NO. 18
EXTERNAL WORKS (PROVISIONAL)
KWMH.QS Quantity Surveyors
## NOMINATED SUB-CONTRACTS

**Note**

The following nominated sub-contract amounts are for work to be carried out by nominated sub-contractors in terms of Clause 20 of the Principal Building Agreement.

The following Provisional Sums are net and do not include any discount for the Main Contractor.

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide the sum of R705,000.00 (Seven Hundred And Five Thousand Rand) for Electrical Installation supplied and fixed complete.</td>
<td>Item</td>
<td>705 000 00</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Allow for general attendance on ditto.</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Allow for profit if required.</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Provide the sum of R2,020,000.00 (Two Million and Twenty Thousand Rand) for Air Conditioning and Ventilation installation supplied and fixed complete.</td>
<td>Item</td>
<td>2 020 000 00</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Allow for general attendance on ditto.</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Allow for profit if required.</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Provide the sum of R500,000.00 (Five Hundred Thousand Rand) for Fire Protection (Sprinklers) installation supplied and fixed complete.</td>
<td>Item</td>
<td>500 000 00</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Allow for general attendance on ditto.</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Allow for profit if required.</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Provide the sum of R600,000.00 (Six Hundred Thousand Rand) for Service Lift installation supplied and fixed complete.</td>
<td>Item</td>
<td>600 000 00</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Allow for general attendance on ditto.</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Allow for profit if required.</td>
<td>Item</td>
<td></td>
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</table>

**Carried to Collection**

<table>
<thead>
<tr>
<th>BILL NO. 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROVISIONAL SUMS</td>
</tr>
</tbody>
</table>

**KWMH.QS Quantity Surveyors**
1. Provide the sum of R550,000.00 (Five Hundred and Fifty Thousand Rand) for Mobile Shelving installation supplied and fixed complete.

2. Allow for general attendance on ditto.

3. Allow for profit if required.

**DIRECT CONTRACTS**

*Note:*

The following direct sub-contract works will be undertaken by the Client or his agents during the course of the Building Contract. The Contractor will be responsible for programming and co-ordinating their activities into the overall construction programme, and has the opportunity to price for attendance on direct sub-contracts in the following items.


**PROVISIONAL SUMS**

*The Following Provisional Sums Are Allowances For Work To Be Carried Out By The Main Contractor*

*Note:*

The following Provisional Sums are to be priced at Bill rates or negotiated as the case may be.

5. Provide the sum of R20,000.00 (Twenty Thousand Rand) for signage installation.

6. Provide the sum of R450,000.00 (Four Hundred And Fifty Thousand Rand) for Contingencies, to be deducted in whole or part if not required.

BILL NO. 19

PROVISIONAL SUMS

KWMH.QS Quantity Surveyors

Carried to Collection

R
BILL NO. 19
PROVISIONAL SUMS

**COLLECTION**

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Carried to Final Summary

BILL NO. 19
PROVISIONAL SUMS
KWMH.QS Quantity Surveyors
### FINAL SUMMARY

<table>
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<tr>
<th>Bill No</th>
<th>Description</th>
<th>Page No</th>
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<tbody>
<tr>
<td>1</td>
<td>MODEL PRELIMINARIES</td>
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<td>2</td>
<td>ALTERATIONS (PROVISIONAL)</td>
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<td></td>
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<tr>
<td>3</td>
<td>CONCRETE FORMWORK AND REINFORCEMENT</td>
<td>-28-</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>MASONRY</td>
<td>-31-</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>WATERPROOFING</td>
<td>-32-</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>CARPENTRY AND JOINERY</td>
<td>-35-</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>JOINERY FITTINGS</td>
<td>-38-</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CEILINGS, PARTITIONS AND ACCESS FLOORING</td>
<td>-41-</td>
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<tr>
<td>9</td>
<td>FLOOR COVERINGS, WALL LININGS, ETC</td>
<td>-42-</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>IRONMONGERY</td>
<td>-45-</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>METALWORK</td>
<td>-46-</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>ALUMINIUM DOORS AND WINDOWS</td>
<td>-51-</td>
<td></td>
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<tr>
<td>13</td>
<td>PLASTERING</td>
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<td>14</td>
<td>TILING</td>
<td>-53-</td>
<td></td>
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<tr>
<td>15</td>
<td>PLUMBING AND DRAINAGE (PROVISIONAL)</td>
<td>-61-</td>
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<td>16</td>
<td>GLAZING</td>
<td>-62-</td>
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<tr>
<td>17</td>
<td>PAINTWORK</td>
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<tr>
<td>18</td>
<td>EXTERNAL WORKS (PROVISIONAL)</td>
<td>-69-</td>
<td></td>
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<tr>
<td>19</td>
<td>PROVISIONAL SUMS</td>
<td>-72-</td>
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<table>
<thead>
<tr>
<th></th>
<th>SUB TOTAL</th>
<th>R</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>VALUE ADDED TAX (14%)</td>
<td>R</td>
</tr>
</tbody>
</table>

**CARRIED TO FORM OF TENDER**  
KWMH.QS Quantity Surveyors
T1 : TENDERING PROCEDURES

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<td>Background to the National Research Foundation And South African Institute for Aquatic Biodiversity (SAIAB)</td>
<td>2</td>
</tr>
<tr>
<td>T1.2</td>
<td>Tender Notice and Invitation to Tender</td>
<td>2 - 7</td>
</tr>
<tr>
<td>T1.3</td>
<td>Tender Data</td>
<td>7 - 12</td>
</tr>
</tbody>
</table>
T1.1 : BACKGROUND TO THE NATIONAL RESEARCH FOUNDATION AND THE SOUTH AFRICAN INSTITUTE FOR AQUATIC BIODIVERSITY

The National Research Foundation (NRF) is a juristic person established in terms of section 2 of the National Research Foundation Act, Act 23 of 1998 and a schedule 3A public entity in terms of the Public Finance Management Act. The NRF is the government's national agency responsible for promoting and supporting research and human capital development through funding, the provision of National Research Facilities and science outreach platforms and programs to the broader community in all fields of science and technology, including natural science, engineering, social science and humanities.

The South African Institute for Aquatic Biodiversity (SAIAB), based in Grahamstown, is a National Research Facility of the National Research Foundation. SAIAB is an internationally recognised centre for the study of aquatic biodiversity.

The SAIAB Collections Building was constructed adjacent to the existing Administration building in 2007 for the purpose of housing the extensive collection of aquatic biological specimens curated by SAIAB as a research platform for scientists, researchers and students. The new building addressed the pressing need for additional space for offices and laboratories in the Administration building as well as the separation of the operational and storage areas. This is essential in order to mitigate health and safety risks inherent in managing an alcohol-based collection. The Collection building was designed and built specifically for this purpose, with specialised systems for air control, ventilation and fire prevention. The Collection building was constructed with two floors, with the upper level left unfitted for future development. This tender is for the completion of the interior of the first floor.

T1.2 : TENDER NOTICE AND INVITATION TO TENDER

PROJECT NAME : SOUTH AFRICAN INSTITUTE FOR AQUATIC BIODIVERSITY (SAIAB) : GRAHAMSTOWN - COLLECTION CENTRE BUILDING ALTERATIONS
TENDER No. NRF/SAIAB/2016-004

Tenders are hereby invited for the completion of the second floor of the SAIAB Collection building from suitably experienced and skilled Principal Building Contractors.

Note: A compulsory clarification meeting will be held at SAIAB at 10:00 on Tuesday, 26 July 2016 on site. Tenderers are to meet at SAIAB in Somerset Street, Grahamstown at the Main Entrance gate to the SAIAB Collection Centre, whereafter they will be taken to the site. Prospective tenderers are required to attend this meeting, failure to attend this meeting will result in the tender not being considered.

Tender documents will be available as from Friday, 08 July 2016 during office hours (08:00-17:00) at the offices of the KWMH Quantity Surveyors, 4 Lawrence Street, Central, Port Elizabeth, 6001 on payment of a compulsory cash non-refundable levy of R500.00 per document. No cheques will be accepted. Documents are to be collected prior to the compulsory clarification meeting. No documents will be issued at the compulsory clarification meeting

One original copy of the completed tender document in a sealed envelope endorsed: “NRF/SAIAB/2016-004 - COLLECTION CENTRE” must be deposited in the Tender Box in the Reception Area at SAIAB not later than 11:00 on Wednesday, 10 August 2016 when
tenders will be opened in public.

**Tenderers shall take note of the following conditions**:–

- Electronic or faxed tenders will not be considered.
- The lowest or any tenders need not necessarily be accepted.
- Late tenders will not be accepted
- Failure to complete all supplementary information and the RETURNABLE SCHEDULES will result in the tender being deemed null and void (eliminated)
- Tenders may only be submitted on the tender documentation issued.
- The Employer reserves the right to request additional information over and above that which is provided by the Tenderer should he deem it necessary to complete his evaluation of the Tenderer

**Tender Evaluation**

Tenders will be in assessed in four stages, namely:

- **Stage 1**: Eligibility
- **Stage 2**: Responsiveness
- **Stage 3**: Functionality
- **Stage 4**: Financial Offer and Preference Evaluation (in accordance with Method 2 of the CIDB Standard Tender Evaluation Methods)

**Stage 1: Eligibility**

A Tenderer will not be eligible to submit a Tender if:

(a) the Contractor submitting the Tender is under restrictions or has principals who are under restriction to participate in the Employer's procurement due to corrupt or fraudulent practices.

(b) The Contractor submitting the Tender is insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of the foregoing;

(c) The Contractor submitting the Tender, or any of its directors, are listed on the Register of Tender Defaulters as a person prohibited from doing business with the public sector.

(d) The Contractor submitting the Tender tenders an unduly high or unduly low price (offers of either 10 % below or 10 % above the Professional Quantity Surveyors estimate) will not be considered.

A Tenderer will be eligible to submit a Tender if they are registered with the CIDB and they are:

(a) contractors who have a contractor grading designation equal to or higher than 6GB determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations; and

(b) Joint ventures where every member of the joint venture is registered with the CIDB and each member has a contractor grading designation equal
to or higher than 6GB.

Stage 2: Responsiveness

Over and above the test for responsiveness as described under F3.8 of the Standard Conditions of Tender, failure of the Tenderer to submit the following will result in immediate disqualification:

(i) Proof of attendance of Tender briefing and visit to the site – Form T2.2.1. Signing of the Attendance Register will be regarded as sufficient proof that the Tenderer has attended the Tender briefing. However, the Tenderer must sign Form T2.2.1 regardless of whether the employer’s representative has counter signed same.

(ii) Certificate of authority for signatory (Schedule T2.2.2)

(iii) Certified copies of Company/CC/Trust/Partnership registration certificates as well as signed agreements and power of attorney for Joint Venture/Consortium if applicable, Identity Documents (Refer to Schedule T2.2.3)

(iv) Joint Venture Agreement or Joint Venture/Consortium Disclosure Form (Schedule T2.2.4) and Power of attorney in case of Joint Ventures.

(v) Valid original Tax Clearance Certificate or Declaration by the South African Revenue Services that tax matters of the Tendering company/association or Joint Venture parties are in order. Refer Schedule T2.2.5.

(vi) Proof of CIDB contractor grading designation equal to or higher than 6GB – refer F2.1 of the Tender Data and Schedule T2.2.6. CRS number also to be provided.

(vii) Proof of Workmen’s Compensation Registration (or proof of payment of contributions in terms of the Compensation for Occupational Injuries and Diseases Act No 130 of 1993) (Form T2.2.7) and signing of the Health and Safety Declaration (Form T2.5.2).

(viii) Declaration of Interest (Form T2.2.8).

(ix) Declaration of Tenderers Past Supply Chain Management Practices (Form T2.2.9).

(x) Certificate of Independent Tender Determination (Form T2.2.10).

(xi) Related Experience of Tenderer (Form T2.2.11)

(xii) List of Key Personnel (Form T2.2.12)

(xiii) Curriculum Vitae Contracts Manager (Form T2.2.13)

(xiv) Curriculum Vitae Site Agent (Form T2.2.14)

(xv) Curriculum Vitae Foreman (Form T2.2.15)

Stage 3: Functionality

Functionality of responsive Tenders submitted is evaluated according to the predetermined criteria described below, taking into account, among other factors, the quality, reliability and the technical capacity and ability of a Tenderer. A Tender will be disqualified if it fails to meet the minimum threshold for functionality which has been set at 70% for this project.

Tenderer’s will be evaluated on the following factors, with points weighting as shown:

Project References : 65 points
Number of Years in Operation : 10 points
Comparable Project Nature : 10 Points
In order for the evaluation reports to be prepared by the Professional Team, the Tenderer is obliged to provide comprehensive information on forms T2.2.11 to T2.2.15 in the tender documents. Failure to provide the said forms will cause the tender to be declared non-responsive and removed from any further consideration. The Employer reserves the right to request additional information over and above that which is provided by the Tenderer on said forms. The information must be provided by the Tenderer within the stipulated time as determined by the Principal Agent, failing which the tender offer will *mutatis mutandis* be declared nonresponsive.

**Project References**
The Tenderer must provide references from the Employer or Principal Agent for at least five different projects, which **must be multi-disciplined and have a project value of at least R5 million each**. The references must be from five different Employers or Principal Agents. The information must be completed on forms T2.3.1 to T2.3.5 included in these tender documents.

Each Employer or Principal Agent of the projects referred to will be required to evaluate the Tenderer’s performance on the following criteria:

Criterion 1: Project performance/ time management/ programming
Criterion 2: Quality of workmanship
Criterion 3: Resources: Personnel
Criterion 4: Resources: Plant
Criterion 5: Financial management/ payment of subcontractors/ cash flow etc.
Criterion 6: Occupational Health & Safety: Compliance

The Employer or Principal Agent on each project referred to will score each of the above criterion on the following basis:

Very poor = 1
Poor = 2
Fair = 3
Good = 4
Excellent = 5

**Any tenderer not achieving a minimum score of three or more for each criterion will be declared non-responsive and removed from further evaluation as the tenderer would present an unacceptable risk to the Employer.**

**Number of Years in Operation**
The Tenderer must provide additional information on the Principal Building Contractor with respect to Years in Operation and Local Office. This information must be completed on form T2.3.6 included in these tender documents.

Each of the above criterion will be scored on the following basis:
SAIAB – First Floor Collection Facility
Project No. NRF/SAIAB/2016-004

0 – 4 Years in Operation = 0
4 – 5 Years in Operation = 1
5 – 6 Years in Operation = 2
6 – 7 Years in Operation = 3
7 – 8 Years in Operation = 4
9 – 10 Years in Operation = 5
10 plus Years in Operation = 10

**Comparable Project Nature**

The Tenderer must provide additional information on the Principal Building Contractor with respect to Comparable Project Experience on a successfully completed project. This information must be completed on form T2.3.7 included in these tender documents. This criteria will be scored on 10 points and will be evaluated on the basis of the Tenderer’s ability to show experience on the co-ordination of a similar project with a large number of specialist sub-contract disciplines. Tenderer’s must demonstrate experience on a project with a minimum value of R5,000,000 and a building area of over 750m², and that had a number of specialist sub-contractors.

Each of the above criterion will be scored on the following basis:

- Project value below R5,000,000 = 0 points
- Project value above R5,000,000 = 4 points

- 0 – 3 Specialist sub-contractors = 0 points
- 3 – 5 Specialist sub contractors = 3 points
- 5 or more specialist sub contractors = 8 points

- Building area below 750m² = 0 points
- Building area over 750m² = 3 points

**Stage 4: Financial Offer and Preference Evaluation**

All responsive Tenders that qualify by meeting the minimum thresholds for functionality are then evaluated on the basis of price and preference in accordance with the Preferential Procurement Regulations 2011 (Government Gazette No. 34350 dated 8 June 2011). The points scored for functionality are not carried over or considered in the calculation of the Financial and Preference evaluation.

All responsive Tenders that have achieved the minimum qualification score for functionality shall be evaluated further in terms of the preference point system prescribed in regulation 5 and 6 of the Preferential Procurement Regulations 2011 (Government Gazette No. 34350 dated 8 June 2011) i.e.:
For Tenders with a Rand Value above R1,0 million (90/10)

(1) The following formula must be used to calculate the points for price in respect of Tenders with a Rand value above R1 000 000 (all applicable taxes included):

\[ Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}}\right) \]

Where

- \( P = \) Points scored for comparative price of Tender or offer under consideration;
- \( Pt = \) Comparative price of Tender or offer under consideration; and
- \( P_{min} = \) Comparative price of lowest acceptable Tender or offer.

(2) Subject to sub-regulation (3) below, points must be awarded to a Tenderer for attaining their B-BBEE status level of contributor in accordance with the table below:

<table>
<thead>
<tr>
<th>B-BBEE STATUS LEVEL OF CONTRIBUTOR</th>
<th>NUMBER OF POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
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<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Non-compliant contributor</td>
<td>0</td>
</tr>
</tbody>
</table>

(3) A maximum of 10 points may be allocated in accordance with sub-regulation (2) above.

(4) The points scored by a Tenderer in respect of the level of B-BBEE contribution contemplated in sub-regulation (2) above shall be added to the points scored for price as calculated in accordance with sub-regulation (1) above.

(5) The contract shall be awarded to the Tenderer who scores the highest total number of points.
### Technical Enquiries can be addressed to:
Mr Peter May  
Tel: 041-585 8374  
E-mail: pm-kwmh@mweb.co.za

### Bidding Procedure Enquiries can be addressed to:
Ms Wendy Sweetman  
Tel: 0466035820 / 083 313 5954  
E-mail: W.Sweetman@saiab.ac.za

### COMPILED BY:

<table>
<thead>
<tr>
<th>Peter May</th>
<th>KWMH Quantity Surveyors</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

### T1.3 : TENDER DATA

#### GENERAL

The Conditions of Tender applicable to this contract are the Standard Conditions of Tender as contained in Annexure F of the ClDB Standard for Uniformity in Construction Procurement (28 May 2010) as published in Government Gazette No. 33239, Board Notice 86 of 2010.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this Tender. Data shall have preference in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of Tender Data given below is cross-referenced to the relevant clause in the Standard Conditions of Tender to which it mainly applies.

All references to the terms : “Tender” and “Tenders” and/or “Tenderer” and “Tenderers” in these documents and the Conditions of Tender shall have the same meaning as each other and shall be of equal force.

#### F.1.1 Actions

The Employer for this Contract is the South African Institute for Aquatic Biodiversity – hereafter SAIAB.
### F.1.2 Tender Documents

(a) The Tender Document issued by the Employer comprises of the following:

<table>
<thead>
<tr>
<th>THE TENDER</th>
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</thead>
<tbody>
<tr>
<td>T1</td>
<td>: Tender Procedures (Volume 1 of 3)</td>
<td></td>
</tr>
<tr>
<td>T1.1</td>
<td>Background to the National Research Foundation and the South African Institute for Aquatic Biodiversity (SAIAB)</td>
<td></td>
</tr>
<tr>
<td>T1.2</td>
<td>: Tender Notice and Invitation to Tender</td>
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<tr>
<td>T1.3</td>
<td>: Tender Data</td>
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<tr>
<td>T2</td>
<td>Returnable Documents (Volume 2 of 3)</td>
<td></td>
</tr>
<tr>
<td>T2.1</td>
<td>Forms, Certificates and Schedules required for Tender Evaluation Purposes : Stage 1 : Eligibility</td>
<td></td>
</tr>
<tr>
<td>T2.2</td>
<td>Forms, Certificates and Schedules required for Tender Evaluation Purposes : Stage 2 : Responsiveness</td>
<td></td>
</tr>
<tr>
<td>T2.3</td>
<td>Forms, Certificates and Schedules required for Tender Evaluation Purposes : Stage 3 : Functionality</td>
<td></td>
</tr>
<tr>
<td>T2.4</td>
<td>Forms, Certificates and Schedules required for Tender Evaluation Purposes : Stage 4 : Financial Offer and Preference Evaluation</td>
<td></td>
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<tr>
<td>T2.5</td>
<td>Forms, Certificates and Schedules required for Tender Evaluation Purposes</td>
<td></td>
</tr>
<tr>
<td>T2.6</td>
<td>Other Forms, Certificates and Schedules that will be Incorporated into the Contract Documentation</td>
<td></td>
</tr>
</tbody>
</table>

| THE TENDER (Volume 3 of 3) |                      |                      |
| T3.1       | Agreements and Contract Data |                      |
| T3.1.1     | Conditions of Contract |                      |
| T3.2       | Pricing Data |                      |
| T3.2.1     | Pricing Instructions |                      |
| T3.2.2     | Bill of Quantities |                      |
| T3.3       | Scope of Work |                      |
| T3.3.1     | Description of the Works |                      |
| T3.3.2     | OHS Specification |                      |
| T3.4       | Annexures |                      |
| T3.4.1     | Drawings |                      |
The Tender Document and the drawings shall be obtained from the Employer or his authorised representative at the physical address stated in the Tender Notice, upon payment of the amount stated in the Tender Notice.

The following documents are relevant to this Tender and Tenderers are advised to obtain their own copies thereof:

(b) “Standardized Specifications for Civil Engineering Construction” SANS 1200.
(c) “Code of Practice for the application of the National Building Regulations” SABS 0400-1990
(e) In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations and standards referred to in the this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies and participation of targeted enterprise and labour.

**F.1.4 Employer’s Agent**

The Employer’s agent is: Botha Shelver CC T/A KWMH Quantity Surveyors

Address: 4 Lawrence Street

Central

PORT ELIZABETH

6001

Contact: Peter May 041-5858374

E-Mail: kwmhqspe@mweb.co.za
F.2.7 Site visit and clarification meeting
See Notice and Invitation to Tender T1.1

F.2.12 Alternative Tender offers
No alternative offers will be considered.

F.2.13 Submitting a Tender Offer
Tender offers shall be submitted as an original copy of the compulsory returnable schedules.

F.2.13.5 Delivery of Tender
The Employer’s address for delivery of Tender offers and identification details to be shown on each Tender offer package are as per the Notice and Invitation to Tender T1.1.

F.2.13.6 Two Envelope System
A two envelope system will be followed.

F.2.15 Closing time
The closing time for submission of Tender Offers is as per the Notice and Invitation to Tender T1.1.

F.2.16 Tender offer validity
The Tender offer validity period is 90 days from the closing time for submission of Tenders.

F.2.19 Inspections, tests and analyses
Access shall be provided for inspections and testing by personnel acting on behalf of the Employer.

F.2.23 Certificates
All required documents and certificates expressly requested must be provided with the Tender:

F.3.4 Opening of Tender Submissions
Time and location for opening of the tender offers are as per the Notice and Invitation to Tender T1.1.

F.3.11 Evaluation of Tender Offers
The procedure for the evaluation of responsive tenders is method 2 of the CIDB Standard Tender Evaluation Method.

F.3.17 Copies of contract
The number of paper copies of the signed contract to be provided by the Employer is ONE.
LIST OF RETURNABLE DOCUMENTS

Tenderers to complete this checklist to ensure that all information in the Tender Document is completed included and read by the Tenderer.

<table>
<thead>
<tr>
<th>Page</th>
<th>Ref</th>
<th>Description</th>
<th>Completed/Included/Read</th>
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<tbody>
<tr>
<td></td>
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<td>All pages requiring signatures signed by the Tenderer (Authorised Person)</td>
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<tr>
<td></td>
<td></td>
<td><strong>T2.1</strong> Forms, Certificates and Schedules required for Tender evaluation purposes: Stage 1: Eligibility</td>
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<tr>
<td>4 - 10</td>
<td>T2.1.1</td>
<td>Form of Offer and Acceptance</td>
<td></td>
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<tr>
<td>11</td>
<td>T2.1.2</td>
<td>Proof of Registration with CIDB</td>
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<td>12</td>
<td>T2.1.3</td>
<td>Proof of Registration with CSD</td>
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<td>13</td>
<td>T2.2</td>
<td><strong>Forms, Certificates and Schedules required for Tender evaluation purposes: Stage 2: Responsiveness</strong></td>
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<td>14</td>
<td>T2.2.1</td>
<td>Tender Briefing / Site Inspection Certificate</td>
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<td>15 - 18</td>
<td>T2.2.2</td>
<td>Certificate of Authority for Signatory</td>
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<tr>
<td>19</td>
<td>T2.2.3</td>
<td>Registration Certificates / Agreements / Identity Documents</td>
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<td>20 - 28</td>
<td>T2.2.4</td>
<td>Joint Venture / Consortium Disclosure Form</td>
<td></td>
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<td>29</td>
<td>T2.2.5</td>
<td>Tax Clearance Requirements</td>
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<td>30</td>
<td>T2.2.6</td>
<td>Proof of Workmen's Compensation Registration</td>
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<td>31 - 34</td>
<td>T2.2.7</td>
<td>Declaration of Interest</td>
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<td>35 - 37</td>
<td>T2.2.8</td>
<td>Declaration of Tenderers past Supply Chain Management Practices</td>
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<td>38 - 41</td>
<td>T2.2.9</td>
<td>Certificate of Independent Tender Determination</td>
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<td>42</td>
<td>T2.2.10</td>
<td>Related Experience of Tenderer</td>
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<td>43</td>
<td>T2.2.11</td>
<td>List of Key Personnel</td>
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<td>44 - 45</td>
<td>T2.2.12</td>
<td>Curriculum Vitae Contracts Manager</td>
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<td>46 - 47</td>
<td>T2.2.13</td>
<td>Curriculum Vitae Site Agent</td>
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<td>48 - 49</td>
<td>T2.2.14</td>
<td>Curriculum Vitae Foreman</td>
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<td>Page Range</td>
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<td>50</td>
<td>T2.3</td>
<td>Forms, Certificates and Schedules required for Tender evaluation purposes : Stage 3 : Functionality</td>
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<tr>
<td>51 - 52</td>
<td>T2.3.1</td>
<td>Project Reference Returnable 1 of 5</td>
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<td>53 - 54</td>
<td>T2.3.2</td>
<td>Project Reference Returnable 2 of 5</td>
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<td>55 - 56</td>
<td>T2.3.3</td>
<td>Project Reference Returnable 3 of 5</td>
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<td>57 - 58</td>
<td>T2.3.4</td>
<td>Project Reference Returnable 4 of 5</td>
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<td>59 - 60</td>
<td>T2.3.5</td>
<td>Project Reference Returnable 5 of 5</td>
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<tr>
<td>61</td>
<td>T2.3.6</td>
<td>Form of Required Information</td>
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<td>62</td>
<td>T2.3.7</td>
<td>Related Experience of Tenderer</td>
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<tr>
<td>63</td>
<td>T2.4</td>
<td>Forms, Certificates and Schedules required for Tender evaluation purposes : Stage 4 : Financial Offer and Preference Evaluation</td>
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<tr>
<td>64</td>
<td>T2.4.1</td>
<td>Broad-based Black Economic Empowerment Status Level Certificate</td>
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<td>T2.5</td>
<td>Forms, Certificates and Schedules required for Tender evaluation purposes</td>
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<td>66</td>
<td>T2.5.1</td>
<td>Final Summary</td>
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<tr>
<td>67 - 69</td>
<td>T2.5.2</td>
<td>Form Concerning Fulfilment of the Construction Regulations 2003</td>
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<tr>
<td>70 - 72</td>
<td>T2.5.3</td>
<td>Contract Variables : Data to be provided by the Employer</td>
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</tr>
<tr>
<td>73 - 74</td>
<td>T2.5.4</td>
<td>Contract Variables : Data to be provided by the Contractor</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>T2.5.5</td>
<td>Construction Guarantee</td>
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<tr>
<td>76</td>
<td>T2.5.6</td>
<td>Form of Intent to provide a Performance Guarantee</td>
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</tr>
<tr>
<td>77</td>
<td>T2.5.7</td>
<td>Audited Financial Statements for the last three years</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>T2.5.8</td>
<td>Letter of Good Standing from Tenderers Banker</td>
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</tr>
<tr>
<td>79</td>
<td>T2.5.9</td>
<td>Schedule of Proposed Sub Contractors</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>T2.6</td>
<td>Other Forms, Certificates and Schedules that will be Incorporated into the Contract</td>
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</tr>
<tr>
<td>81</td>
<td>T2.6.1</td>
<td>Record of Addenda to Tender Documents</td>
<td></td>
</tr>
</tbody>
</table>
T2.1: RETURNABLE DOCUMENTS

Notes:
The Tender Document must be submitted as a whole. All forms must be properly completed as required and the document shall not be taken apart or altered in any way whatsoever.

All forms must be duly completed in black ink as required.

The list of returnable documents, which consists of forms and schedules to be completed and company specific certificates and information pages to be attached, comprise the following:

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| T2.1 | Forms, Certificates and Schedules required for Tender evaluation purposes : Stage 1 : Eligibility | 4-12 |
| T2.2 | Forms, Certificates and Schedules required for Tender evaluation purposes : Stage 2 : Responsiveness | 13-49 |
| T2.3 | Forms, Certificates and Schedules required for Tender evaluation purposes : Stage 3 : Functionality | 50-62 |
| T2.4 | Forms, Certificates and Schedules required for Tender evaluation purposes : Stage 4 : Financial Offer and Preference Evaluation | 63-64 |
| T2.5 | Forms, Certificates and Schedules required for Tender evaluation purposes | 65-79 |
| T2.6 | Other Forms, Certificates and Schedules that will be Incorporated into the Contract | 80-81 |
T2.2 : FORMS, CERTIFICATES AND SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES: STAGE 1 : ELIGIBILITY

T2.1.1 : FORM OF OFFER AND ACCEPTANCE

A. OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

SAIAB : GRAHAMSTOWN : COLLECTION FACILITY

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda hereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorized, signing of this part of this Form of Offer and Acceptance, the Tenderer offers to perform all the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

The offered total of the prices inclusive of Value Added Tax is:

R________________________ (in words____________________________________
_________________________________________________________________________)

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

Signature:(of person authorized to sign the Tender):
_____________________________________

Name :( of signatory in capitals):
_____________________________________

Capacity:(of Signatory):
_____________________________________

Name of Tenderer:(organization):
_____________________________________

Volume 2
Address: 

____________________________________________________________________________________

____________________________________________________________________________________

Telephone number: ______________________ Faxnumber: ________________________________

Witness: ______________________________

Signature: _____________________________

Name:

(In capitals): __________________________

Date: _________________________________

( Failure of a Tenderer to sign this form will invalidate the Tender)
B. ACCEPTANCE

By signing this part of the Form of Offer and Acceptance, the Employer identified below accepts the Tenderer’s Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Condition of Contract as set out in the general and Special Conditions of Contract, and identified in the Contract Data. Acceptance of the Tenderer upon the terms and conditions and contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in -

Part 1 Agreement, and Contract Data, (which include this Agreement)
Part 2 Pricing Data, including the bill of Quantities
Part 3 Scope of Work
Part 4 Site Information

and the schedules, forms, drawing and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorized representatives of both parties.

The Tenderer shall deliver the security in terms of Clause 14 of the JBCC Series 2000 Principal Building Agreement (Edition 4.1 of March 2005) within the period stated in the contract Data, and he shall, immediately after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contract the Employer’s agent (whose details are given in the Contract Data) to arrange the delivery of any other bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data, within 14 days of the date on which this Agreement comes into effect. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five days of the date of such receipt notified the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract within parties.

Signature:

______________________________
Name: (in capitals)

______________________________
Capacity:

______________________________
Name of Employer: (organization)

Address: 

Witness: 

Signature:  Name: 

Date: 

C. SCHEDULE OF DEVIATIONS

The extent of deviations from the Tender documents issued by the Employer prior to the Tender closing date is limited to those permitted in terms of the Tender Data and the Conditions of Tender.

A Tenderer’s covering letter will not necessarily be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the Tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.

Any change or addition to the Tender documents arising from the above agreements and recorded here shall also be incorporated in to the final draft of the Contract.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
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<td>5.</td>
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<tr>
<td>6.</td>
<td></td>
</tr>
</tbody>
</table>
By the duly authorized representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from the amendments to the documents listed in the Tender Data and addend thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the Tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

FOR THE TENDERER:

Signature: ________________________________

Name: ________________________________

Capacity: ________________________________

Tenderer (Name and address of organisation): ________________________________

Witness:

Signature: ________________________________

Name: ________________________________

Date: ________________________________
FOR THE TENDERER:

Signature: ___________________________________________________________

Name: ______________________________________________________________

Capacity: __________________________________________________________

Witness:

Signature: __________________________________________________________

Name: ______________________________________________________________

Date: _______________________________________________________________

T2.1.2 : PROOF OF REGISTRATION WITH CIDB

The Tenderer shall attach hereto the Contractors proof of valid registration certificate with CIDB. CRS number(s) also to be provided.

In the case of Consortium/Joint Venture Tenders, each partner shall provide their own valid CIDB registration certificate.
**T2.1.3 : PROOF OF REGISTRATION WITH CSD**

In order for a service provider / supplier to do business with the South African Institute for Aquatic Biodiversity they must be registered on the National Treasury Central Supplier Database (CSD) and provide the South African Aquatic Biodiversity with their **Supplier Unique No.** and an **Access Reference No.**
## T2.2 : FORMS, CERTIFICATES AND SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES: STAGE 2: RESPONSIVENESS

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| T2.2.2 | Certificate of Authority for Signatory | 15-18 |
| T2.2.3 | Registration Certificates/Agreements/Identity Documents | 19 |
| T2.2.4 | Joint Venture/Consortium Disclosure Form | 20-28 |
| T2.2.5 | Tax Clearance Requirements | 29 |
| T2.2.6 | Proof of Workmen's Compensation Registration | 30 |
| T2.2.7 | Declaration of Interest | 31-34 |
| T2.2.8 | Declaration of Tenderers past Supply Chain Management Practices | 35-37 |
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| T2.2.11 | List of Key Personnel | 43 |
| T2.2.12 | Curriculum Vitae Contracts Manager | 44 - 45 |
| T2.2.13 | Curriculum Vitae Site Agent | 46 - 47 |
| T2.2.14 | Curriculum Vitae Foreman | 48 - 49 |
T2.2.1 : TENDER BRIEFING / SITE INSPECTION ATTENDANCE CERTIFICATE

This is to certify that

(Tenderer)…………………………of
Address……………………………………………………………………………………………………
Telephone number…………………………………………………………………………………………
Faxnumber……………………………………………………………………………………………………
E-mailaddress………………………………………………………………………………………………

was represented by the person(s) named below at the compulsory meeting held for all Tenderers at SAIAB Collection Centre, on Tuesday, 26 July 2016 starting at 10:00

I/We hereby acknowledge that I/We visited the site and acquainted ourselves with the conditions likely to influence the work and all aspects that could influence either the cost or the construction of the services prior to determining our rates and prices.

I/We further certify that I/we are satisfied with the description of the work and explanations given at the meeting and that I/We understand adequately the work to be done, as specified and implied, in the documentation and information provided.

TENDERER’S REPRESENTATIVE(S):

Name: ……………………………Signature ……………………………
Capacity ……………………………………………………………………………………………

Name: Signature ……………………………
Capacity ……………………………………………………………………………………………

EMPLOYER’S REPRESENTATIVE:

Name: ……………………………Signature ……………………………
Capacity ……………………………Date ……………………………
# T2.2.2 : CERTIFICATE OF AUTHORITY FOR SIGNATORY

Indicate the status of the Tenderer by ticking the appropriate box hereunder. The Tenderer must complete the certificate set out below for the relevant category.

<table>
<thead>
<tr>
<th>(I) COMPANY</th>
<th>(II) CLOSE CORPORATION</th>
<th>(III) PARTNERSHIP</th>
<th>(IV) JOINT VENTURE</th>
<th>(V) SOLE PROPRIETOR</th>
</tr>
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</table>

Signatories for Companies, Close Corporations, Partnerships, Joint Ventures or Sole Proprietors must establish their authority thereto by attaching a copy of the relevant resolution of their Board of Directors, Members or Partners duly signed and dated. Examples are shown below.

(I) **CERTIFICATE FOR COMPANY**

I, ................................................................. chairperson of the Board of Directors of ................................................................., hereby confirm that by resolution of the Board (copy attached) taken on ...................... 20....... Mr/Ms .................................., acting in the capacity of ................................................................., was authorized to sign all documents in connection with the Tender for Tender No. ____________ and any contract resulting from it, on behalf of the company.

Chairman: .................................................................

As Witness:  1 .................................................................

2. .................................................................

Date: .................................................................

(II) **CERTIFICATE FOR CLOSE CORPORATION**

We, the undersigned, being the key members in the business trading as ................................................................., hereby authorise Mr/Ms ................................................................., acting in the capacity of ................................................................., to sign all documents in connection with the Tender for Tender No. ____________ and any contract resulting from it, on our behalf.
<table>
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<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>SIGNATURE</th>
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*Note: this certificate is to be completed and signed by all of the key members upon whom rests the directions of the affairs of the Close Corporation as a whole.*
(III) CERTIFICATE FOR PARTNERSHIP

We, the undersigned, being the key partners in the business trading as, 
………………………………………………………………………………………………………hereby authorize Mr/Ms 
………………………………………………………………………………………………………acting in the capacity of 
………………………………………………………………………………………………………, to sign all documents in connection with 
the Tender for **Tender No. ______________** and any contract resulting from it, on our behalf.

<table>
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<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>SIGNATURE</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Lead partner</td>
<td>________________________</td>
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*Note: This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of Partnership as a whole.*

(IV) CERTIFICATE JOINT VENTURE

We, the undersigned, are submitting this Tender offer in Joint Venture and hereby authorize Mr/Ms  …………………………………………………………….authorized signatory of the company…………………………………………………… acting in the capacity of lead partner, to sign all documents in connection with the TENDER offer for **Tender No. ______________** and any contract resulting from it, on our behalf.

This authorization is evidenced by the attached power of attorney signed by legally authorized signatories of all the partners to the Joint Venture.
### NAME OF FIRM | ADDRESS | DULY AUTHOURISED SIGNATORY
---|---|---

| Lead Partner | Signature | Name |
| CIDB Registration No. | Designation |

| Lead Partner | Signature | Name |
| CIDB Registration No. | Designation |

| Lead Partner | Signature | Name |
| CIDB Registration No. | Designation |

**Note**: *This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.*

(V) **CERTIFICATE FOR SOLE PROPRIETOR**

I, ........................................................................................................ hereby confirm that I am the sole owner of the business trading as .................................................................

*Signature* of Sole Owner: ...................................................

As Witnesses:

1. .................................................................

2. .................................................................

Date: .................................................................
T2.2.3 : REGISTRATION CERTIFICATES/AGREEMENTS / IDENTITY DOCUMENTS

Attach hereto certified copies of Registration Certificates for Companies and Closed Corporations and certified copies of Identity Documents for Partnerships and Sole proprietors as well as signed Agreements and Powers of Attorney for Joint Venture / Consortium if applicable.
T2.2.4 : JOINT VENTURE/CONSORTIUM DISCLOSURE FORM

TO BE COMPLETED ONLY IF TENDER IS SUBMITTED IN A JOINT VENTURE OR CONSORTIUM

GENERAL

i) All the information requested must be filled in the spaces provided. If additional space is required, additional sheets may be used and attached to the original documents.

ii) A copy of the joint venture agreement must be attached to this form, in order to demonstrate the Affirmable, Joint Venture Partner’s share in the ownership, control, management responsibilities, risks and profits of the joint venture, the proposed joint venture agreement must include specific details relating to:
   a) the contributions of capital and equipment
   b) work items to be performed by the Affirmable Joint Venture Partner’s own forces
   c) work items to be performed under the supervision of the Affirmable Joint Venture Partner.

iii) Copies of all written agreements between partners concerning the contract must be attached to this form including those, which relate to ownership options and to restrictions/limits regarding ownership and control.

iv) ABE partners must complete ABE Declaration Affidavits.

v) The joint venture must be formalised. All pages of the joint venture agreement must be signed by all the parties concerned. A letter/ notice of intention to formalise a joint venture once the contract has been awarded will not be considered.

vi) Should any of the above not be complied with, the joint venture will be deemed null and void and will be considered non-responsive.

1. JOINT VENTURE PARTICULARS

a) Name..............................................................................................................

b) Postal Address..................................................................................................

.......................................................... .................................................................

c) Physical address...................................................................................................

.......................................................... .................................................................

d) Telephone...........................................................................................................

.......................................................... .................................................................

e) Fax.........................................................................................................................

.......................................................... .................................................................
2. **IDENTITY OF EACH NON-AFFIRMABLE JOINT VENTURE PARTNER**

2.1(a) Name of Firm ...........................................................................................................
Postal Address ..................................................................................................................
Physical Address ..............................................................................................................
Telephone ........................................................................................................................
Fax ..................................................................................................................................
Contact person for matters pertaining to Joint Venture Participation Goal requirements
........................................................................................................................................

2.2(a) Name of Firm ..........................................................................................................
Postal Address ..................................................................................................................
Physical Address ..............................................................................................................
Telephone ........................................................................................................................
Fax ..................................................................................................................................
Contact person for matters pertaining to Joint Venture Participation Goal requirements
........................................................................................................................................

(Continue as required for further non-Affirmable Joint Venture Partners)

3. **IDENTITY OF EACH AFFIRMABLE JOINT VENTURE PARTNER**

3.1(a) Name of Firm ..........................................................................................................
Postal Address ..................................................................................................................
Physical Address ..............................................................................................................
Telephone ........................................................................................................................
Fax ..................................................................................................................................
Contact person for matters pertaining to Joint Venture Participation Goal requirements
........................................................................................................................................

3.2(a) Name of Firm ..........................................................................................................
Postal Address ..................................................................................................................
Physical Address ..............................................................................................................
Telephone ........................................................................................................................
Fax ..................................................................................................................................
Contact person for matters pertaining to Joint Venture Participation Goal requirements
........................................................................................................................................
3.3(a) Name of Firm

Postal Address

Physical Address

Telephone

Fax

Contact person for matters pertaining to Joint Venture Participation Goal requirements

(Continue as required for further Affirmable Joint Venture Partners)

4. BRIEF DESCRIPTION OF THE ROLES OF THE AFFIRMABLE JOINT VENTURE PARTNERS IN THE JOINT VENTURE

5. OWNERSHIP OF THE JOINT VENTURE
a) Affirmable Joint Venture Partner ownership percentage(s) ............... %
b) Non-Affirmable Joint Venture Partner ownership percentage(s) ............. %
c) Affirmable Joint Venture Partner percentages in respect of: *
   (i) Profit and loss sharing.................................................................
   (ii) Initial capital contribution in Rands...........................................

   (*Brief descriptions and further particulars should be provided to clarify percentages).
   (iii) Anticipated on-going capital contributions in Rands .................

   (iv) Contributions of equipment (specify types, quality, and quantities of equipment) to be provided by each partner.
6. **RECENT CONTRACTS EXECUTED BY PARTNERS IN THEIR OWN RIGHT AS PRIME CONTRACTORS OR AS PARTNERS IN OTHER JOINT VENTURES**

<table>
<thead>
<tr>
<th>NON-AFFIRMABLE JOINT VENTURE PARTNERS</th>
<th>PARTNER NAME</th>
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<td>a)</td>
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<table>
<thead>
<tr>
<th>AFFIRMABLE JOINT VENTURE PARTNERS</th>
<th>PARTNER NAME</th>
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<td>a)</td>
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7. **CONTROL AND PARTICIPATION IN THE JOINT VENTURE**

(Identify by name and firm those individuals who are, or will be, responsible for, and have authority to engage in the relevant management functions and policy and decision making, indicating any limitations in their authority e.g. co-signature requirements and Rand limits).

(a) **Joint Venture cheque signing**

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
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(b) **Authority to enter into contracts on behalf of the Joint Venture**

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
(c) Signing, co-signing and/or collateralising of loans

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

(d) Acquisition of lines of credit

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(e) Acquisition of performance bonds

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(f) Negotiating and signing labour agreements

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8. MANAGEMENT OF CONTRACT PERFORMANCE

(Fill in the name and firm of the responsible person).

(a) Supervision of field operations

........................................................................................................................................

(b) Major purchasing

........................................................................................................................................

(c) Estimating

........................................................................................................................................

(d) Technical management

........................................................................................................................................

9. MANAGEMENT AND CONTROL OF JOINT VENTURE

(a) Identify the “managing partner”, if any,

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
(b) What authority does each partner have to commit or obligate the other to financial institutions, insurance companies, suppliers, subcontractors and/or other parties participating in the execution of the contemplated works?


(c) Describe the management structure for the Joint Venture’s work under the contract

<table>
<thead>
<tr>
<th>MANAGEMENT FUNCTION / DESIGNATION</th>
<th>NAME</th>
<th>PARTNER*</th>
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* Fill in "ex Affirmable Joint Venture Partner" or "ex non-Affirmable Joint Venture Partner".

10. PERSONNEL

(a) State the approximate number of operative personnel (by trade/function/discipline) needed to perform the Joint Venture work under the Contract.

<table>
<thead>
<tr>
<th>TRADE/FUNCTION/DISCIPLINE</th>
<th>NUMBER EX AFFIRMABLE JOINT VENTURE PARTNERS</th>
<th>NUMBER EX NON-AFFIRMABLE JOINT VENTURE PARTNERS</th>
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</table>
(b) Number of operative personnel to be employed on the Contract who are currently in the employ of partners.

(i) Number currently employed by Affirmable Joint Venture Partners
.................................................................................................................................

(ii) Number currently employed by the Joint Venture
.................................................................................................................................

(c) Number of operative personnel who are not currently in the employ of the respective partner and will be engaged on the project by the Joint Venture
.................................................................................................................................

(d) Name of individual(s) who will be responsible for hiring Joint Venture employees
.................................................................................................................................
.................................................................................................................................

(e) Name of partner who will be responsible for the preparation of Joint Venture payrolls
.................................................................................................................................
.................................................................................................................................

11. CONTROL AND STRUCTURE OF THE JOINT VENTURE

Briefly describe the manner in which the Joint Venture is structured and controlled.
.................................................................................................................................
.................................................................................................................................
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.................................................................................................................................

The undersigned warrants that he/she is duly authorised to sign this Joint Venture Disclosure Form and affirms that the foregoing statements are true and correct and include all material information necessary to identify and explain the terms and operations of the Joint Venture and the intended participation of each partner in the undertaking.

The undersigned further covenants and agrees to provide the Employer with complete and accurate information regarding actual Joint Venture work and the payment therefore, and any proposed changes in any provisions of the Joint Venture agreement, and to permit the audit and examination of the books, records and files of the Joint Venture, or those of each partner relevant to the Joint Venture, by duly authorised representatives of the Employer.
T2.2.5 : TAX CLEARANCE CERTIFICATE

It is a condition of Tender that the taxes of the successful Tenderer must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the Tenderer’s tax obligations.

Tenderers’ original valid tax clearance certificate to be attached hereto.

IMPORTANT NOTES:

1. The following is an abstract from the Preferential Procurement Regulations 2011 promulgated with the Preferential Policy Framework Act No 5 of 2000:
   “Tax clearance”
   Section 14. No Tender may be awarded to any person whose tax matters have not been declared by the South African Revenue Service to be in order.”

2. The TCC001 “Application for Tax Clearance Certificate” form is available from any SARS branch office nationally or on the website www.sars.gov.za. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register for this service with SARS through the website www.sarsefiling.co.za.
   SARS will then furnish the Tenderer with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.

3. In the case of Joint Venture/Consortium Tenders, each party must submit a separate Tax Clearance Certificate of Declaration by SARS that tax matters are in order.

4. Failure of Tenderer to comply with the above will result in the invalidation of the Tender.

5. The company VAT number should also be quoted on the Tax Clearance Certificate.
T2.2.6 : PROOF OF WORKMEN’S COMPENSATION REGISTRATION

The Tenderer shall attach hereto valid proof of workmen’s compensation registration or proof of payment of contributions in terms of the compensation of occupational injuries and diseases (Act No. 4 of 2002). (Letter of Good Standing)
T2.2.7 : DECLARATION OF INTEREST

TENDERERS WHO FAIL TO DECLARE ACCURATELY AND HONESTLY SHALL BE DISQUALIFIED AND THEIR NAMES AND COMPANY DETAILS WILL BE SUBMITTED TO NATIONAL TREASURY AND PROVINCIAL TREASURY TO BE BLACK LISTED. SHOULD YOUR INTEREST BE DISCOVERED AFTER THE AWARD OF THE CONTRACT THE EMPLOYER SHALL TERMINATE YOUR CONTRACT ON THE BASIS OF THE ABOVE

1. Any legal person, including persons employed by SAIAB or the state, or persons having a kinship with persons employed by SAIAB or the state, including a blood relationship, may make an offer or offers in terms of this invitation to tender (includes a price quotation, advertised competitive Tender, limited Tender or proposal). In view of possible allegations of favouritism, should the resulting Tender, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the Tenderer or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

- the Tenderer is employed by SAIAB or the state; and/or
- the legal person on whose behalf the Tendering document is signed, has a relationship with persons/a person who are/is involved in the design, evaluation and or adjudication of the Tender(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the design, evaluation and or adjudication of the Tender.

2. In order to give effect to the above, the following questionnaire must be completed and submitted with the Tender.

2.1. Full Name of Tenderer or his or her representative:

....................................................................................................................................................................................

2.2. Identity Number:

....................................................................................................................................................................................

2.3. Position occupied in the Company (director, trustee, shareholder²):

....................................................................................................................................................................................

1. “State” means –
(a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
(b) any municipality or municipal entity;
(c) Provincial legislature;
(d) National Assembly or the National Council of Provinces; or
(e) Parliament

2. "Shareholder" means – a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.
2.4. Company Registration Number:
................................................................................................................

2.5. Tax Reference Number:
................................................................................................................

2.6. VAT Registration Number:
................................................................................................................

2.7. The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee /PERSAL numbers must be indicated in paragraph 3 below.

2.8. Are you or any person connected with the Tenderer presently employed by SAIAB or the state?  

YES / NO

2.8.1. If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member
................................................................................................................

Name of state institution at which you or the person connected to the Tenderer is employed:
................................................................................................................

Position occupied in the state institution:
................................................................................................................

2.8.2. Any other particulars:
................................................................................................................
................................................................................................................
................................................................................................................

2.8.3. If you are presently employed by SAIAB or the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector?

YES / NO

2.8.3.1. If yes, did you attached proof of such authority to the Tender document?

YES / NO

(Note: Failure to submit proof of such authority, where applicable, shall result in the disqualification of the Tender.

2.8.3.2. If no, furnish reasons for non-submission of such proof:
................................................................................................................
................................................................................................................
................................................................................................................
2.9. Did you or your spouse, or any of the company’s directors / trustees / shareholders / members or their spouses conduct business with SAIAB or the state in the previous twelve months?

YES / NO

2.9.1. If so, furnish particulars:

---------------------------------------------------------------------------------------------
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2.10. Do you, or any person connected with the Tenderer, have any relationship (family, friend, other) with a person employed by SAIAB or the state and who may be involved with the design, evaluation and or adjudication of this Tender?

YES / NO

2.10.1. If so, furnish particulars.

---------------------------------------------------------------------------------------------
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2.11. Are you, or any person connected with the Tenderer, aware of any relationship (family, friend, other) between any other Tenderer and any person employed by SAIAB or the state who may be involved with the evaluation and or adjudication of this Tender?

YES/NO

2.11.1. If so, furnish particulars.

---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------

2.12. Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are Tendering for this contract?

YES/NO

2.12.1. If so, furnish particulars:

---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
3. FULL DETAILS OF DIRECTORS / TRUSTEES / MEMBERS / SHAREHOLDERS

<table>
<thead>
<tr>
<th>FULL NAME</th>
<th>IDENTITY NUMBER</th>
<th>PERSONAL TAX REFERENCE NUMBER</th>
<th>STATE EMPLOYEE NUMBER / PERUSAL NUMBER</th>
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4. DECLARATION

I, THE UNDERSIGNED (NAME)……………………………………………………………………

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE WILL REJECT THE TENDER OR DEEM ME TO BE IN DEFAULT OF THE CONTRACT SHOULD THIS DECLARATION PROVE TO BE FALSE.

…………………………………………………………………………………………………………..
Signature

…………………………………………………………………………………………………………..
Date

…………………………………………………………………………………………………………..
Position (Print) Name of Tenderer

FAILURE TO SIGN THE DOCUMENT WILL LEAD TO DISQUALIFICATION
T2.2.8 : DECLARATION OF TENDERERS PAST SUPPLY CHAIN MANAGEMENT PRACTICES

Penalty:

Upon detecting any false claim or statement hereunder will result in the Tenderers de-registration and the Tenderer will be prevented from participation in future contracts for a period of three (3) years.

1. This Standard Tendering Document must form part of all Tenders invited.

2. It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

3. The TENDER of any Tenderer may be disregarded if that Tenderer, or any of its directors have -
   a. abused the institution’s supply chain management system;
   b. committed fraud or any other improper conduct in relation to such system; or
   c. failed to perform adequately on any previous contract.

4. In order to give effect to the above, the following questionnaire must be completed and submitted with the Tender.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Is the Tenderer or any of its directors listed on the National Treasury’s database as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the audi alteram partem rule was applied).</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

4.1.1 If so, furnish particulars:
| 4.2 | Is the Tenderer or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?  
**To access this Register enter the National Treasury's website,**  
www.treasury.gov.za, click on the icon “Register for Tender Defaulters” or submit your written request for a hard copy of the Register to facsimile number (012) 3265445. | Yes | No |
| 4.2.1 | If so, furnish particulars: |  |
| 4.3 | Was the Tenderer or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years? | Yes | No |
| 4.3.1 | If so, furnish particulars: |  |
| 4.4 | Was any contract between the Tenderer and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract? | Yes | No |
| 4.4.1 | If so, furnish particulars: |  |
CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)……………………………………………… CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.................................................. ..................................................
Signature Date

.................................................. ..................................................
Position Name of Tenderer

I confirm that I am duly authorized to sign this contract.
T2.2.9 : CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

1. This Standard Tendering Document (SBD) must form part of all Tenders invited.

2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive Tendering (or Tender rigging). Collusive Tendering is a \textit{per se} prohibition meaning that it cannot be justified under any grounds.

3. Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
   a. disregard the Tender of any Tenderer if that Tenderer, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
   b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the Tendering process or the execution of that contract.

4. This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when Tenders are considered, reasonable steps are taken to prevent any form of Tender-rigging.

5. In order to give effect to the above, the attached Certificate of Tender Determination must be completed and submitted with the Tender:

---

1. Includes price quotations, advertised competitive Tenders, limited Tenders and proposals.

2. Tender rigging (or collusive Tendering) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a Tendering process. Tender rigging is, therefore, an agreement between competitors not to compete.
CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying Tender:

CONTRACT:

________________________________________________________________________

in response to the invitation for the Tender made by:

________________________________________________________________________

(Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of:

___________________________________________________________

(Name of Tenderer)

1. I have read and I understand the contents of this Certificate;

2. I understand that the accompanying Tender will be disqualified if this Certificate is found not to be true and complete in every respect;

3. I am authorized by the Tenderer to sign this Certificate, and to submit the accompanying Tender, on behalf of the Tenderer;

4. Each person whose signature appears on the accompanying Tender has been authorized by the Tenderer to determine the terms of, and to sign the Tender, on behalf of the Tenderer;

5. For the purposes of this Certificate and the accompanying Tender, I understand that the word “competitor” shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:

   (a) has been requested to submit a Tender in response to this Tender invitation;

   (b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and

   (c) provides the same goods and services as the Tenderer and/or is in the same line of business as the Tenderer

6. The Tenderer has arrived at the accompanying Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive Tendering.

7. In particular, without limiting the generality of paragraph 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
(a) prices;
(b) geographical area where product or service will be rendered (market allocation)
(c) methods, factors or formulas used to calculate prices;
(d) the intention or decision to submit or not to submit, a Tender;
(e) the submission of a Tender which does not meet the specifications and conditions of the Tender; or
(f) Tendering with the intention not to win the Tender.

8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this Tender invitation relates.

9. The terms of the accompanying Tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official Tender opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to Tenders and contracts, Tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

3. Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
11. **N.B.:** THIS FORM MUST BE SIGNED BY THE TENDERER AND TWO WITNESSES

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Position</th>
<th>Name of Tenderer</th>
</tr>
</thead>
</table>

WITNESS (1) _________________________ NAME (PRINT) _________________________

WITNESS (2) _________________________ NAME (PRINT) _________________________
T2.2.10 : RELATED EXPERIENCE OF TENDERER

The Tenderer shall list below or in a separate schedule a statement of those works/services that are of a similar nature which they have satisfactorily completed in the past five years. The works/services should reflect a project of similar nature to this tender, and incorporate a similar degree of specialist sub-contract installations that required extensive co-ordination. Information must be provided in the format provided below. It is essential that telephone contact details of references be supplied.

**COMPARABLE PROJECT UNDERTAKEN:**

<table>
<thead>
<tr>
<th>PROJECT DESCRIPTION</th>
<th>NATURE OF WORKS / SERVICES</th>
<th>TOTAL VALUE OF WORK</th>
<th>TOTAL BUILDING AREA OF WORK</th>
<th>DATE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECIALIST SUB-CONTRACT INFORMATION</th>
<th>EMPLOYER / CONTACT PERSON / TEL NO.</th>
<th>CONSULTING ENGINEER / CONTACT PERSON / TEL NO.</th>
<th>VALUE OF SUB-CONTRACT WORKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DATE: ___________________________ SIGNATURE OF TENDERER: ___________________________
**T2.2.11 : LIST OF KEY PERSONNEL**

The Tenderer shall attach hereto a shortened CV for each key member available to work on the project in the Categories Contracts Manager, Site Agent and Site Foreman (using the template provided).

The Tenderer shall list below the key personnel to be used on this project.

<table>
<thead>
<tr>
<th>NAME</th>
<th>JOB</th>
<th>RESPONSIBILITIES AND AVAILABILITY TO PROJECT</th>
<th>QUALIFICATIONS (ATTACHED COPY)</th>
<th>EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CONTRACTS MANAGER</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SITE AGENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SITE FOREMAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**T2.2.12 : CURRICULUM VITAE CONTRACTS MANAGER**

<table>
<thead>
<tr>
<th>Responsibility or role on the project (as per table T2.3.2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name :</td>
<td>Date of birth :</td>
</tr>
<tr>
<td>Profession :</td>
<td>Nationality :</td>
</tr>
<tr>
<td>Qualifications :</td>
<td></td>
</tr>
<tr>
<td>Professional membership :</td>
<td></td>
</tr>
<tr>
<td>Name of employer (firm) :</td>
<td></td>
</tr>
<tr>
<td>Current position :</td>
<td>Years with firm :</td>
</tr>
<tr>
<td>Employment record : (List of chronological order starting with earliest work experience)</td>
<td></td>
</tr>
<tr>
<td>Experience record pertinent to required service:</td>
<td></td>
</tr>
<tr>
<td>Certification :</td>
<td></td>
</tr>
</tbody>
</table>

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience and that I will be available to execute the work for which I have been nominated.

(Signature of Person named in schedule)  Date

Attach additional pages if more space is required
SUPPLEMENTARY INFORMATION CONTRACTS MANAGER

Please attach any supporting documentation, supplementary information or Curriculum Vitae to this page.
# T2.2.13 : CURRICULUM VITAE SITE AGENT

<table>
<thead>
<tr>
<th>Responsibility or role on the project (as per table T2.3.2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name :</td>
<td>Date of birth :</td>
</tr>
<tr>
<td>Profession :</td>
<td>Nationality :</td>
</tr>
<tr>
<td>Qualifications :</td>
<td></td>
</tr>
<tr>
<td>Professional membership :</td>
<td></td>
</tr>
<tr>
<td>Name of employer (firm) :</td>
<td></td>
</tr>
<tr>
<td>Current position :</td>
<td>Years with firm :</td>
</tr>
<tr>
<td>Employment record : (List of chronological order starting with earliest work experience)</td>
<td></td>
</tr>
</tbody>
</table>

## Experience record pertinent to required service:

## Certification :

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience and that I will be available to execute the work for which I have been nominated.

(Signature of Person named in schedule)  
Date

Attach additional pages if more space is required
SUPPLEMENTARY INFORMATION SITE AGENT

Please attach any supporting documentation, supplementary information or Curriculum Vitae to this page.
## T2.2.14 : CURRICULUM VITAE FOREMAN

(Note if you propose using more than one foreman attached CV’s for all. (Copy this form)

<table>
<thead>
<tr>
<th>Responsibility or role on the project (as per table T2.3.2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name :</td>
<td>Date of birth :</td>
</tr>
<tr>
<td>Profession :</td>
<td>Nationality :</td>
</tr>
<tr>
<td>Qualifications :</td>
<td></td>
</tr>
<tr>
<td>Professional membership :</td>
<td></td>
</tr>
<tr>
<td>Name of employer (firm) :</td>
<td></td>
</tr>
<tr>
<td>Current position :</td>
<td>Years with firm :</td>
</tr>
<tr>
<td>Employment record : (List of chronological order starting with earliest work experience)</td>
<td></td>
</tr>
</tbody>
</table>

Experience record pertinent to required service:

Certification :

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience and that I will be available to execute the work for which I have been nominated.

(Signature of Person named in schedule) ___________________________ Date ___________________________

Attach additional pages if more space is required
SUPPLEMENTARY INFORMATION FOREMAN

Please attach any supporting documentation, supplementary information or Curriculum Vitae to this page.
**T2.3 : FORMS, CERTIFICATES AND SCHEDULES REQUIRED FOR TENDER VALUATION PURPOSES: STAGE 3 : FUNCTIONALITY**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2.3.1</td>
<td>Project Reference Returnable 1 of 5</td>
<td>51-52</td>
</tr>
<tr>
<td>T2.3.2</td>
<td>Project Reference Returnable 2 of 5</td>
<td>53-54</td>
</tr>
<tr>
<td>T2.3.3</td>
<td>Project Reference Returnable 3 of 5</td>
<td>55-56</td>
</tr>
<tr>
<td>T2.3.4</td>
<td>Project Reference Returnable 4 of 5</td>
<td>57-58</td>
</tr>
<tr>
<td>T2.3.5</td>
<td>Project Reference Returnable 5 of 5</td>
<td>59-60</td>
</tr>
<tr>
<td>T2.3.6</td>
<td>Form of Required Information</td>
<td>61</td>
</tr>
<tr>
<td>T2.3.7</td>
<td>Related Experience of Tenderer</td>
<td>62</td>
</tr>
</tbody>
</table>
T2.3.1 : PROJECT REFERENCE RETURNABLE 1 OF 5

NOTE: This returnable document must be completed by the person who was the Employer or Principal Agent of a multi-storey project of at least R5.0 million including VAT that was completed successfully by the tenderer.

I, ____________________________ (name and surname) of _________________________________ (company name) declare that I was the Employer/ Principal Agent on the following building construction project successfully executed by ____________________________________________ (Name of tenderer):

Project name: __________________________________________________________
Project location: __________________________________________________________
Construction period: ___________________ Completion date: ___________________
Contract value: _____________________________

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting “Yes” in the relevant box below:

<table>
<thead>
<tr>
<th></th>
<th>Very Poor 1</th>
<th>Poor 2</th>
<th>Fair 3</th>
<th>Good 4</th>
<th>Excellent 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project performance / time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>management / Programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of workmanship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Resources: Personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Resources: Plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Financial management /</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>payment of subcontractors/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cash flow/</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6. Occupational Health &amp;</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Safety : Compliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. Would you consider / recommend this tenderer again:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

C. Any other comments:
________________________________________________________________________
________________________________________________________________________

D. My contact details are:

Telephone: _______________ Cell phone: _______________ Fax: ___________
E-mail: ________________________________

Thus signed at ___________________ on this ______ day of _________ 2016

__________________________________________
Signature of Employer/ Principal Agent

NOTE:

If reference cannot be verified due to the inability to contact the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points.

__________________________________________
Name of Tenderer

__________________________________________
Signature of Tenderer Date
T2.3.2: PROJECT REFERENCE RETURNABLE 2 OF 5

NOTE: This returnable document must be completed by the person who was the Employer or Principal Agent of a Multi-Storey project of at least R5.0 million including VAT that was completed successfully by the tenderer.

I, _____________________________________________ (name and surname) of ______________________________________________________ (company name) declare that I was the Employer/Principal Agent on the following building construction project successfully executed by ____________________________ (Name of tenderer):

Project name: ____________________________________________________________

Project location: __________________________________________________________

Construction period: _______________ Completion date: _____________________

Contract value: _____________________________

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting “Yes” in the relevant box below:

<table>
<thead>
<tr>
<th></th>
<th>Very Poor 1</th>
<th>Poor 2</th>
<th>Fair 3</th>
<th>Good 4</th>
<th>Excellent 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project performance / time management / Programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of workmanship</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Resources: Personnel</td>
<td></td>
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<td></td>
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<tr>
<td>4. Resources: Plant</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5. Financial management / payment of subcontractors/ cash flow/</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>6. Occupational Health &amp; Safety : Compliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. Would you consider / recommend this tenderer again:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

C. Any other comments:

________________________________________________________________________
________________________________________________________________________

D. My contact details are:

Telephone: _______________  Cell phone: _______________  Fax: _______________
E-mail: __________________

Thus signed at __________________________ on this _______ day of ____________ 2016

________________________________________
Signature of Employer/ Principal Agent

_______________________________
COMPANY STAMP

NOTE:

If reference cannot be verified due to the inability to contact the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points.

________________________________________
Name of Tenderer

________________________________________  __________________________
Signature of Tenderer  Date
**T2.3.3 : PROJECT REFERENCE RETURNABLE 3 OF 5**

**NOTE:** This returnable document must be completed by the person who was the Employer or Principal Agent of a project of at least R5.0 million including VAT that was completed successfully by the tenderer.

I, __________________________________________________________ (name and surname) of ______________________________________________________ (company name) declare

That I was the Employer/ Principal Agent on the following building construction project successfully executed by _______________________________________________ (name of tenderer):

Project name: __________________________________________________________

Project location: __________________________________________________________

Construction period: _____________________ Completion date: ___________________

Contract value: _____________________________

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting “Yes” in the relevant box below:

<table>
<thead>
<tr>
<th></th>
<th>Very Poor 1</th>
<th>Poor 2</th>
<th>Fair 3</th>
<th>Good 4</th>
<th>Excellent 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project performance / time management / Programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of workmanship</td>
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<tr>
<td>3. Resources: Personnel</td>
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<td></td>
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<tr>
<td>4. Resources: Plant</td>
<td></td>
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<tr>
<td>5. Financial management / payment of subcontractors/ cash flow/</td>
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<tr>
<td>6. Occupational Health &amp; Safety : Compliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. Would you consider / recommend this tenderer again:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

C. Any other comments:

________________________________________________________________________
________________________________________________________________________

D. My contact details are:

Telephone: _______________   Cell phone: _______________   Fax: ___________
E-mail: ________________________________

Thus signed at ___________________ on this _______ day of ______________ 2016

_______________________________
Signature of Employer/ Principal Agent

NOTE:

If reference cannot be verified due to the inability to contact the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points.

_______________________________
Name of Tenderer

_______________________________
Signature of Tenderer            Date
T2.3.4 : PROJECT REFERENCE RETURNABLE 4 OF 5

NOTE: This returnable document must be completed by the person who was the Employer or Principal Agent of a project of at least R5.0 million including VAT that was completed successfully by the tenderer.

I, _______________________________ (name and surname) of _______________________________ (company name) declare

That I was the Employer/ Principal Agent on the following building construction project successfully executed by _______________________________ (name of tenderer):

Project name: ____________________________________________________________

Project location: __________________________________________________________

Construction period: ________________ Completion date: ________________

Contract value: _____________________________

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting “Yes” in the relevant box below:

<table>
<thead>
<tr>
<th></th>
<th>Very Poor</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project performance / time management / Programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of workmanship</td>
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<tr>
<td>3. Resources: Personnel</td>
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<tr>
<td>4. Resources: Plant</td>
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<td></td>
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<tr>
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</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
B. Would you consider / recommend this tenderer again:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

C. Any other comments:

________________________________________________________________________
________________________________________________________________________

D. My contact details are:

Telephone: _______________  Cell phone: _______________  Fax: _______________
E-mail: __________________

Thus signed at ___________________ on this ______ day of ____________ 2016

________________________________________  __________________________________
Signature of Employer/ Principal Agent  COMPANY STAMP

NOTE:

If reference cannot be verified due to the inability to contact the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points.

________________________________________
Name of Tenderer

________________________________________  ________________
Signature of Tenderer  Date

Volume 2
T2.3.5 : PROJECT REFERENCE RETURNABLE 5 OF 5

NOTE: This returnable document must be completed by the person who was the Employer or Principal Agent of a project of at least R5.0 million including VAT that was completed successfully by the tenderer.

I, __________________________ (name and surname) of __________________________ (company name) declare

That I was the Employer/ Principal Agent on the following building construction project successfully

executed by __________________________ (name of tenderer):

Project name: ________________________________________________________________

Project location: _____________________________________________________________

Construction period: ___________________ Completion date: ____________________

Contract value: __________________________

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting “Yes” in the relevant box below:

<table>
<thead>
<tr>
<th></th>
<th>Very Poor</th>
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<th>Excellent</th>
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<tbody>
<tr>
<td>1. Project performance / time</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>management / Programming</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Resources: Personnel</td>
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</tr>
<tr>
<td>4. Resources: Plant</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>5. Financial management /</td>
<td></td>
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<tr>
<td>payment of subcontractors /</td>
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<td></td>
</tr>
<tr>
<td>6. Occupational Health &amp;</td>
<td></td>
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<td>Safety : Compliance</td>
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</tbody>
</table>
B. Would you consider / recommend this tenderer again:

| YES | NO |

C. Any other comments:
________________________________________________________________________
________________________________________________________________________

D. My contact details are:

Telephone: _______________  Cell phone: _______________  Fax: ___________
E-mail: ______________________

Thus signed at ______________________ on this ______ day of ____________ 2016

________________________________________
Signature of Employer/ Principal Agent

________________________________________________________________________
Name of Tenderer

________________________________________
Signature of Tenderer          Date

NOTE:

If reference cannot be verified due to the inability to contact the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points.

________________________________________________________________________
T2.3.6 : FORM OF REQUIRED INFORMATION

THE FOLLOWING PARTICULARS MUST BE FURNISHED

NAME OF TENDERER: .................................................................................................................................

LOCAL OFFICE INFORMATION: ................................................................................................................

DATE OF COMMENCING OPERATIONS:

POSTAL ADDRESS: ....................................................................................................................................
STREET ADDRESS: ....................................................................................................................................

TELEPHONE NUMBER CODE  ..........  NUMBER ............................................................
CELLPHONE NUMBER: ............................................................................................................................

FACSIMILE NUMBER  CODE ..........  NUMBER .............................................................

SIGNATURE OF TENDERER:
DATE:
CAPACITY IN WHICH THIS TENDER IS SIGNED: .......................................................................................
### T2.3.7: RELATED EXPERIENCE OF TENDERER

The Tenderer shall list below or in a separate schedule a statement of those works/services that are of a similar nature which they have satisfactorily completed in the past five years. The works/services should reflect a project of similar nature to this tender, and incorporate a similar degree of specialist sub-contract installations that required extensive co-ordination. Information must be provided in the format provided below. It is essential that telephone contact details of references be supplied.

#### COMPARABLE PROJECT UNDERTAKEN:

<table>
<thead>
<tr>
<th>PROJECT DESCRIPTION</th>
<th>NATURE OF WORKS / SERVICES</th>
<th>TOTAL VALUE OF WORK</th>
<th>TOTAL BUILDING AREA OF WORK</th>
<th>DATE COMPLETED</th>
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</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECIALIST SUB-CONTRACT INFORMATION</th>
<th>EMPLOYER / CONTACT PERSON / TEL NO.</th>
<th>CONSULTING ENGINEER / CONTACT PERSON / TEL NO.</th>
<th>VALUE OF SUB-CONTRACT WORKS</th>
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<tbody>
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DATE: ___________________________ SIGNATURE OF TENDERER: ___________________________
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page No.</th>
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</thead>
<tbody>
<tr>
<td>T2.4.1</td>
<td>Broad-based Black Economic Empowerment Status Level Certificate</td>
<td>64</td>
</tr>
</tbody>
</table>
T2.4.1 : BROAD-BASED BLACK ECONOMIC EMPOWERMENT
STATUS LEVEL CERTIFICATE

Tenderer to attach hereto the Broad-Based Black Economic Empowerment Status Level Certificate of the Tendering Company and/or Joint Venture Partners.

a) Exempted Micro Enterprises (EME’s) with an annual total revenue of R10,000,000 or less may submit a sworn affidavit or Certificate issued by the Companies and Intellectual Properties Commission (CIPC).

b) Qualifying Small Enterprises (QSE’s) with an annual total revenue of R50,000,000 or less may submit a sworn affidavit or Certificate issued by the Companies and Intellectual Properties Commission (CIPC).

c) All other measured entities are required to submit their original and valid BBBEE status level verification certificate or a certified copy thereof, substantiating their BBBEE rating.

i) as issued prior to 17 February 2016 in accordance with the Construction and Chartered Accounting (CA) Sector Codes

ii) as issued post 17 February 2016 in accordance with the Generic Codes of Good Practice

iii) only BBBEE status level certificates issued by the following are valid:

- Verification Agencies accredited by the South African National Accreditation System (SANAS); or

- Registered Auditors approved by the Independent Regulatory Board of Auditors (IRBA) in accordance with the approval granted by the Department of Trade and Industry.

d) The submission of such certificates must comply with the requirements of instructions and guidelines issued by the National Treasury and be in accordance with notices published by the Department of Trade and Industry in the Government Gazette.

e) The BBBEE status level attained by the Tenderer must be used to determine the number of points contemplated in regulations 5 (2) and 6 (2)."
## T2.5 : FORMS, CERTIFICATES AND SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
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<td>Final Summary</td>
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<tr>
<td>T2.5.2</td>
<td>Form Concerning Fulfilment of the Construction Regulations</td>
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<td>T2.5.3</td>
<td>Contract Variables : Data to be provided by the Employer</td>
<td>70-72</td>
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<tr>
<td>T2.5.4</td>
<td>Contract Variables : Data to be provided by the Contractor</td>
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<td>T2.5.6</td>
<td>Form of Intent to provide a Performance Guarantee</td>
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<td>T2.5.7</td>
<td>Audited Financial Statements for the last three years</td>
<td>77</td>
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<tr>
<td>T2.5.8</td>
<td>Letter of Good Standing from Tenderers Banker</td>
<td>78</td>
</tr>
<tr>
<td>T2.5.14</td>
<td>Schedule of Proposed Sub Contractors</td>
<td>79</td>
</tr>
</tbody>
</table>
T2.5.1 : FINAL SUMMARY

To be signed and dated.
Page 73 (as per BOQ)
T2.5.2 : FORM CONCERNING FULFILMENT OF THE CONSTRUCTION REGULATIONS, 2003

In terms of regulation 4(3) of the Construction Regulations, 2003 (hereinafter referred to as the Regulations), promulgated on 18 July 2003 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) the Employer shall not appoint a contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her Tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

1. I confirm that I am fully conversant with the Regulations and that my company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully comply with all of the requirements of the Regulations.

(Tick)

2. Proposed approach to achieve compliance with the Regulations (Tick)

<table>
<thead>
<tr>
<th>Own resources, competent in terms of the Regulations (refer to 3 below)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Own resources, still to be hired and/or trained (until competency is achieved)</td>
<td></td>
</tr>
<tr>
<td>Specialist sub-contract resources (competent) - specify:</td>
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</table>

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YES  NO

.......................................................... ..........................................................
3. Provide details of proposed key persons, competent in terms of the Regulations, who will form part of the Contract team as specified in the Regulations (CV’s to be attached).

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4. Provide details of proposed training (if any) that will be undergone:
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5. Potential key risks identified and measures for addressing risks:
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6. I have fully included in my Tendered rates and prices (in the appropriate payment items provided in the Schedule of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period.

(Tick)

SIGNATURE OF PERSON(S) AUTHORISED TO SIGN THIS TENDER:

1. .................................................... Date....................................................
2. .................................................... Date....................................................
T2.5.3 : CONTRACT VARIABLES: DATA TO BE PROVIDED BY

THE EMPLOYER

THE SCHEDULE

42.1.1 The Employer:

[1.2] South African Institute for Aquatic Biodiversity (SAIAB)

The address of the Employer is:
Address (physical): Somerset Street, Grahamstown, 6139
Address (postal): Private Bag 1015, Grahamstown, 6140
Telephone: (046) 6035820
Facsimile: (046) 6222403

42.1.2 The Principal Agent:

[1.1, 5.1] Botha Shelver cc t/a KWMH Quantity Surveyors
Address (physical): 4 Lawrence Street, Central, Port Elizabeth 6001
Address (postal) P O Box 12496, Centrahil, 6006
Telephone: 041 585 8374
Facsimile: 041 585 9046

42.1.3 Agent (1)

[1.1, 5.2] Moors Milne Kievit Architects

Agents Service:
Architect
Postal address:P O Box 12019, Centrahil, 6006
Telephone: 041 585 1575
Facsimile: 041 585 7797

42.1.4 Agent (2)

[1.1, 5.2] Botha Shelver cc t/a KWMH Quantity Surveyors

Agents Service:
Quantity Surveyor
Postal address:P.O. Box 12496, Centrahil, 6006
Telephone: (041) 585 8374
Facsimile: (041) 585 9046
42.1.4 Agent (3)

[1.1, 5.2] Clinkscales Maughan-Brown Consulting Mechanical & Electrical Engineers

Agents Service:
Mechanical & Electrical Engineer
Postal address: P.O. Box 12615, Centrahil, 6006
Telephone: (041) 585 9731
Facsimile: (041) 585 5733

CONTRACT DETAILS

42.2.1 Works description: Refer to C3 Scope of Work

42.2.2 Site description: Refer to C4 Scope of Work

42.2.3 The Works or installations to be undertaken by direct contractors comprises

Not Applicable

42.2.4 The Employer is an organ of State: Yes / No

[41.0] • The interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999) will apply.
  • Lateral support insurance is to be effected by the contractor: No
  • Payment will be made for materials and goods: Yes
  • Dispute resolution by litigation: No
  • Extended defects liability period will apply to the following elements:

Electrical and Mechanical Installations: 12 Months

42.2.5 Possession of the site is to be given within ten days of the contractor providing the employer with construction guarantees in accordance with the provisions of 14.0 and the Contract has been signed by both parties.

42.2.6 The period for the commencement of the works after the contractor takes possession of the site is 5 working days

42.2.7 Completion:

For the works as a whole:
The date for practical completion is 5 Months from the commencement date.

The penalty per calendar day is R7,500.00

The law applicable to the agreement shall be that of the Republic of South Africa.

Contract works insurance is to be effected by the Client with a deductible in the amount of R7500. All deductibles applicable to claims to be paid by Contractor.

The supplementary insurance is required. Such insurance shall comprise a Coupon Policy for Special Risks issued by the South African Special Risk Insurance Association (SASRIA) to be effected by the Client.

Public liability insurance to be effected by the contractor for the sum of R5,000,000.00 with a deductible in an amount that the contractor deems appropriate. (Deductible to be paid by Contractor)

Support insurance: Not Applicable

A waiver of the contractor's lien or right of continuing possession is required.

Three copies of the construction document are to be supplied to the contractor free of charge.

Bills of Quantities are drawn up in accordance with: The Standard System of Measuring Building Work 1999 (sixth edition as amended)

JBCC Engineering General Conditions are **not** to be included in the contract document.

The employer will not provide advanced payments against an advanced payment guarantee

The construction guarantee is to be a fixed guarantee in accordance with the JBCC.
T2.5.4 : CONTRACT VARIABLES: DATA TO BE PROVIDED BY

THE CONTRACTOR

Clause 42.5.1:
The name of the Contractor is

________________________________________________________________________________

The legal name of the Contractor.

Clause 42.5.1 [1.2]:
The physical address of the Contractor is

________________________________________________________________________________

The postal address of the Contractor is

________________________________________________________________________________

Telephone No.:

________________________________________________________________________________

Facsimile No.:

________________________________________________________________________________

E-Mail:

________________________________________________________________________________

VAT Registration No:

________________________________________________________________________________

Clause 42.5.2
The accepted contract sum inclusive of VAT is

R ______________________________

Amount in words:

________________________________________________________________________________

________________________________________________________________________________

Clause 42.5.3 [31.3]
The latest day for the issue of an interim payment certificate: __________________________

| 14.3 Variable Construction Guarantee | Yes ☐ No ☐ |
| 14.4 Fixed Construction Guarantee     | Yes ☐ No ☐ |
Clause 14

Clause 42.5.4 [32.12]
The preliminaries amounts shall be paid in terms of: Alternative A ☐ Alternative B ☐

Clause 42.5.5 [32.12]
The preliminaries amounts shall be adjusted in terms of: Alternative A ☐ Alternative B ☐

Clause 42.5.8 [29.7.2]
The annual building holiday period after the commencement of the construction period: from Friday, 16 December 2016 to Monday, 16 January 2017.

Clause 42.6 Documents
Contract documents marked and annexed hereto:

<table>
<thead>
<tr>
<th>Priced bills of quantities:</th>
<th>Yes ☒ No ☐</th>
<th>Document marked as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantees:</td>
<td>Yes ☒ No ☐</td>
<td>Document marked as</td>
</tr>
<tr>
<td>Contract drawings:</td>
<td>Yes ☒ No ☐</td>
<td>Document marked as</td>
</tr>
</tbody>
</table>

Clause 4.8 Signatures of the Contracting Parties
Thus done and signed at ____________________ on ____________________

____________________________  for and behalf of the Employer who
Name of signatory           by signature hereof warrants
Capacity of signatory      authorization hereto
as Witness

____________________________  as Witness
Capacity of signatory

Thus done and signed at ____________________ on ____________________

____________________________  for and behalf of the Contractor who
Name of signatory           by signature hereof warrants
Capacity of signatory      authorization hereto
as Witness
T2.5.5 : CONSTRUCTION GUARANTEE

Proforma Guarantee attached Proforma Guarantee Pages 1 to 4
T2.5.6 : FORM OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE

The Tenderer must attach hereto a letter from the bank or institution with whom he has made the necessary arrangements, to the effect that the said bank or institution will be prepared to provide the required performance guarantee when asked to do so.
T2.5.7 : AUDITED FINANCIAL STATEMENTS FOR THE LAST THREE YEARS

Tenderers are to attach Audited Financial Statements for the last three financial years.
T2.5.8 : LETTER OF GOOD STANDING FROM TENDERERS BANKER

Letter to be provided by Tenderers banker regarding the tenderers' financial status.
T2.5.9 : SCHEDULE OF PROPOSED SUB-CONTRACTORS

In terms of Clause 4.4 of the Conditions of Contract for Construction, the Tenderer shall enter below the names of sub-contractors he intends to employ for work on this contract, as well as the portion and value of the work to be executed by such sub-contractors.

Based on the definition of SMME provided below the Tenderer should indicate in which category, i.e. Medium, Small, Very Small or Micro, the intended sub-contractor is categorized if applicable.

<table>
<thead>
<tr>
<th>DESCRIPTION OF PORTION OF WORK</th>
<th>APPROX. VALUE (EXCL. VAT)</th>
<th>NAME, ADDRESS AND TELEPHONE NUMBER OF SUB-CONTRACTOR/SMME</th>
</tr>
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</table>

DATE: ___________________________ SIGNATURE OF TENDERER: ___________________________

(Authorised Person)
## T2.6 : OTHER FORMS, CERTIFICATES AND SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Page</th>
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<tbody>
<tr>
<td>T2.6.1</td>
<td>Record of Addenda to Tender Documents</td>
<td>81</td>
</tr>
</tbody>
</table>
T2.6.1 : RECORD OF ADDENDA TO TENDER DOCUMENTS

I/We confirm that the following communications amending the Tender documents, received from the Employer or his representative before the closing date of submission of this Tender offer, have been taken into account in this Tender offer.

<table>
<thead>
<tr>
<th>ADD NO.</th>
<th>DATE</th>
<th>TITLE OR DETAILS</th>
</tr>
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<tbody>
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</table>

SIGNATURE: ______________________________________ DATE: ______________
(of Authorised Person)
# T3 : THE TENDER

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<td>Conditions of Contract</td>
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<td>Pricing Instructions</td>
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<td>5 (73 Pages)</td>
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T3.1 : AGREEMENT AND CONTRACT DATA

T3.1.1 : CONDITIONS OF CONTRACT


Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors (011-3154140), Master Builders Association (011-205-9000; 057-3526269) South African Association of Consulting Engineers (011-4632022) or South African Institute of Architects (051-4474909; 011-4860684; 053-8512003;)

The JBCC Principal Building Agreement makes several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the JBCC Principal Building Agreement.
**T3.2 : PRICING DATA**

**T3.2.1 : PRICING INSTRUCTIONS**

1. **BILLS OF QUANTITIES**

   The bills of quantities forms part of and must be read and priced in conjunction with all the other documents forming part of the contract documents, the Standard Conditions of Tender, Conditions of Contract, Specifications, Drawings and all other relevant documentation.

2. **VALUE ADDED TAX**

   The tender price must include for Value Added Tax (VAT). All rates, provisional sums, etc. in the bills of quantities must however be net (exclusive of VAT) with VAT calculated and added to the Total Value thereof in the Final Summary.

3. The units of measurement described in the Bills of Quantities are metric units. Abbreviations used in these Bills of Quantities are as follows:

   - % = percent
   - h = hour
   - ha = hectare
   - kg = kilogram
   - kl = kilolitre
   - km = kilometre
   - km-pass = kilometre-pass
   - kPa = kilopascal
   - kW = kilowatt
   - l = litre
   - m = metre
   - mm = millimeter
   - m² = square metre
   - m²-pass = square metre-pass
   - m³ = cubic metre
   - m³-km = cubic metre-kilometre
   - MN = meganewton
   - MN.m = meganewton-metre
   - MPa = megapascal
   - No. = number
   - Prov sum = Provisional sum
   - PC sum = Prime Cost sum
   - R/only = Rate only
   - sum = lump sum
   - t = ton (1000 kg)
   - W/day = Work day

4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.

5. The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that
may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.

6 It will be assumed that prices included in these Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards)

7 Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items

8 An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.

9 The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.

10 The Model Preambles (Latest Edition with amendments where applicable) published by the Association of South African Quantity Surveyors shall be taken to be incorporated herein.

   Tenderers are referred to the above-mentioned document for the full intent and meaning of each clause thereof.

   (Copies of the Model Preambles are obtainable from the Eastern Cape Chapter of the Association of South African Quantity Surveyors.)

11 All Prime Cost Items and Provisional Sums referred to in these Bills of Quantities are net and do not include any discount to the Main Contractor.
T3.2.2 : BILL OF QUANTITIES

The priced Bill of Quantities (BOQ's), following hereafter will form an integral part of the “Contract” between the successful appointed Contractor and the Employer.

Note: Where specific brands are referred to in the specifications, this indicates the standard of quality required. Alternatives will be accepted if they are of a similar standard and quality. Tenderers may only use alternative products where written permission has been granted by the Architect.
T3.3 : SCOPE OF WORK

T3.3.1 DESCRIPTION OF THE WORKS

1.1 Extent of the works

The works comprise:

1.1.1 the completion of the interior of the first floor of the existing SAIAB Wet Collection Centre:

a) new internal brickwork, doors, etc in creating sub-divided spaces
b) new ceilings
c) part new screeds to floors
d) a number of specialist sub-contract installations, including high density shelving, lift installation, HVAC installation, electrical installation, gas detection installation, fire detection installation, fire sprinkler installation, etc.
e) minor alterations and external works to existing buildings, etc.

1.1.2 the alteration of interior spaces on the second floor of the existing SAIAB office and laboratory building to extend the existing DNA laboratory.

1.1.3 The various Mechanical and Electrical services will be undertaken by specialist sub-contractors who will be selected by the Client and nominated to the appointed Contractor at the commencement of the project.

1.2 Existing premises

The existing buildings will be operational throughout the execution of the works. The Contractor shall execute the works with the least interference to the general routine of the occupants of the premises and shall minimize any nuisance from dust, noise and other causes.

1.3 Access to the works

Access to the site will be unhindered from the access gate onto Somerset Street. This will be identified at the site inspection on Tuesday, 26 July 2016.

Security / safety at the works: The construction site falls within existing buildings. The contractor is to maintain security and may not access existing premises outside of the areas under construction.

1.4 Occupational Health And Safety

The contractor needs to study the following documents:

- SITE OHS Doc
1.5 Local Content

It is the policy of the NRF to give preference to materials and equipment of South African manufacture. The (Service Provider) is to ensure that, wherever feasible, (designs) are based on locally manufactured equipment and materials which can meet requirements at competitive prices.

The NRF is obliged to adhere to the applicable threshold limits determined by the Department of Trade and Industry.
T3.3.2 : HEALTH AND SAFETY SPECIFICATIONS

In addition to the Standardized and Project Specifications the following Particular Specifications shall apply to this contract and are bound in hereafter.

INTERPRETATIONS

Occupational Health and Safety Act, Act 85 of 1993 shall apply to this Contract. The Construction Regulations promulgated on 7 February 2014 published in Government Gazette 37305 apply to any person involved in construction work. These regulations are hereinafter referred to as “the Construction Regulations” and the said Act as “the Act”.

PROJECT SPECIFIC OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

1. SCOPE

This health and safety specification in respect of the Alterations and Additions to the South African Institute for Aquatic Biodiversity Lab:

- Provides the overarching framework within which the Principal Contractor is required to demonstrate compliance with certain requirements for occupational health and safety established by the Occupational Health and Safety Act 85 of 1993 during construction for the Alterations and Additions of SAIAB Lab;
- Establishes the manner in which the Principal Contractor is to manage the risk of health and safety incidents during construction; and
- Establishes the manner in which the Client’s Health and Safety Agent will interact with The Principal Contractor and Sub – Contractors.

This specification establishes general requirements to enable the Principal Contractor to satisfy aspects of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations, 2014. The Principal Contractor is required to develop, implement and maintain a site specific health and safety plan. The Client is required to provide certain site specific information to the Principal Contractor or a health and safety specification for the works to enable such a plan to be formulated. Accordingly, this specification on its own cannot ensure compliance with the requirements of the aforementioned Act.

The Construction Regulations, 2014, require a Client to stop any contractor from executing construction work which is not in accordance with the contractor’s health and safety plan for the site or which poses to be a threat to the health and safety of persons.

The South African Council for the Project and Construction Management Professions has established the following specified categories of registration in terms of the Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000):

- A Construction Health and Safety Agent who may be appointed by the Client to act as his agent in terms of the Occupational Health and Safety Act of 1993 and the Construction Regulations issued in terms of that Act;
- A Construction Health and Safety Manager who may be appointed by the Client to complement his professional team or by a contractor to manage company or project health and safety performance and compliance in accordance with the Occupational Health and Safety Act and Regulations; and
- A Construction Health and Safety Officers who may be appointed by an employer to mitigate the risk on a project or by a contractor to monitor and assist on-site health and safety performance and compliance in accordance with the Occupational Health and Safety Act and Regulations and services.
2. DEFINITIONS

As per the Occupational Health and Safety Act (85 of 1993) and the relevant regulations and applicable standards.

Client: South African Institute of Aquatic Biodiversity

LIST OF ABBREVIATIONS

AIA  Approved Inspection Authority
BOQ  Bill of Quantities
CC   Compensation Commissioner
CHS  Construction Health and Safety
CHSA Construction Health and Safety Agent
CHSO Construction Health and Safety Officer
CR   Construction Regulations (Gazette 10113 of 07/02/2014)
DMR  Driven Machinery Regulations
DoL  Department of Labour
FEMA Federated Employers Mutual Association
GAR  General Administration Regulations
GSR  General Safety Regulations
HCSR Hazardous Chemical Substances Regulations
HIRA Hazard Identification Risk Assessment
H&S  Health and Safety
ER   Engineer’s Representative
LI   Labour Intensive
OH   Occupational Health
OHS  Occupational Health and Safety
OHSA Occupational Health and Safety Act No. 85 of 1993 (as amended)
OHSS Occupational Health and Safety Specification
PA   Principal Agent
PSHSS Project Specific Health and Safety Specification
PC   Principal Contractor
PPE  Personal Protective Equipment
SANS South African National Standards (Authority)
SDS  Safety Data Sheet
SMME Small, Micro, Medium Enterprise
SWP  Safe Work Procedure

KEY REFERENCES

Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)
Construction Regulations 2014.
Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)
SANS Code 10400.

3. INTERPRETATION

3.1 The Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this specification.

3.2 Compliance with the requirements of this specification does not necessarily result in compliance with the provisions of the Act.
4. Purpose of the Project Specific Health and Safety Specification (PSHSS)

The PSHSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client / Agents, Professional Service Consultants (Engineers, Quantity Surveyors and Architects), Principal Contractors and Contractors achieve an acceptable level of OHS performance. No advice, approval of any document required by the PSHSS, such as hazard identification and risk assessments, or any other form of communication from the Client shall be construed as acceptance by the Client of any obligation that absolves the Principal Contractor from achieving the required level of performance and compliance with legal requirements. Furthermore, there is no acceptance of liability by the Client, which may result from the Principal Contractor failing to comply with the PSHSS, i.e. the Principal Contractor remains responsible for achieving the required performance levels.

A Mandatory Agreement in terms of Section 37.2 of the OHSA will be signed between parties prior to any works commencing.

The PSHSS highlights the aspects to be implemented over and above the minimum requirements of current legislation. Requirements may be changed should new risks or issues are identified that could not have been foreseen during the design phase of the project, or during the construction phase. Any new legislation or standards (legislated, or determined by the Client) that are promulgated or accepted during the contract will automatically be applied.

It should be noted that this OHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations.

4.1 Implementation of the Project Specific Occupational Health and Safety Specifications (PSHSS)

The project specific H&S specification (PSHSS) forms an integral part of the Contract, and PCs are required to make it an integral part of their Contracts with Contractors and Suppliers. A PSHSS will be available for each level of Contract and Contractor, and must be complied with.

This specification must be read in conjunction with the OHSA, Regulations (as amended) and any other standards relating to work being done, and ensure compliance thereto. The information relative to the scope of the project, the works etc. are detailed in the tender, are to be considered when developing the H&S plan and associated documentation.

The OHSA S.37.2 Mandatory Agreement must be fully completed by the PC, supplied by the Client. These documents shall be deemed to form part of the returnable Contract Documents.

No work may commence without written approval of the H&S plan by the CHS Agent, or the responsible person at SAIAB.

Should there be design changes, or change in the scope of works, an amended PSHSS may be issued. Where amended PSHSSs are issued, the PC will be required to ensure a resubmission of an amended H&S plan for approval. Further to this, the PC must ensure that similar information must be provided as it applies to the works to all their Contractors, within 5 working days following notification thereof. Such design changes.

The CHS Agent will visit the project as deemed necessary by the Designer and the CHS Agent to ensure compliance and limit risk. All activities on the site and all appropriate documentation will be monitored and reported on to the Client and the Designer.

Non-conformances will be issued and penalties or work stoppage will be issued where appropriate. Communication between the CHS Agent and the PC will be through the Designer (or Client’s responsible person) as determined at the commencement of the project.
4.2 Requirements

A project specific H&S Plan in response to this PSHSS will be subject to approval by the CHS Agent. This must include all supporting documentation as required to verify the H&S system:

- A declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Occupational Health and Safety Act and its Regulations;
- A valid Letter of Good Standing.
- Incident Investigation Reports for other projects of a similar nature undertaken by the tenderer
- Claims ratio receipt from FEM or the Compensation Commissioner for the previous review period;
- Detailed technical method statements for approval by the Designer and appropriate risk assessments and safe work procedures for approval by the CHS Agent or Client:
  - Site establishment including:
    - Security Clearance and inductions.
    - Offloading of containers and equipment.
    - Exposure of services, power, telecommunication etc.;
    - Arrangements for hoarding, traffic accommodation;
  - An emergency plan indicating how and where emergencies will be handled, incorporating with the Lab’s existing plan.
  - Temporary Works.
  - Working at heights.
  - Electrical works.
  - Mechanical Installations.

Further method statements are to be submitted prior to, and during the project where changes or new work is required, and the approval of the Designer/Client is required before work on that aspect or activity can commence. The CHS Officer is to be included in production planning sessions/meetings to ensure that the appropriate risk assessments, safe work procedures and communication required are available and completed timeously. Penalties will be applied should this not be adhered to, and deemed a serious offence.

5. GENERAL REQUIREMENTS

5.1 Summary of Risks

The summary of risks provided is to point the contractor towards some risks he may not be aware of during tendering stage and while developing his formal risk assessments for the project.

The design risks and the management thereof should be included in the Principal Contractors (PC) risk assessments. Where there are other Contractors appointed to do work, the PC is to ensure that Contractors include such information in their risk assessments.

The summary is to be developed following the completion of the Design risk assessment, and to include the residual risks as they apply to the project. The items noted are for information only and must be expanded on as required by the project.

Refer to Risk Analysis

<table>
<thead>
<tr>
<th>PHASES OF THE PROJECT</th>
<th>RESIDUAL RISKS IDENTIFIED TO BE MANAGED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Clearance</td>
<td>All personnel need to be inducted by Security</td>
</tr>
<tr>
<td>Site Establishment</td>
<td>Offloading of Containers, Plant, Equipment and Material.</td>
</tr>
<tr>
<td>Demolition work</td>
<td>breaking down of existing walls and inner structures.</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Brickwork</td>
<td>Working at heights, Housekeeping, Hand tools, constructing off lift shaft.</td>
</tr>
<tr>
<td>Temporary Works</td>
<td>Building of support work, edge protection, working at heights.</td>
</tr>
<tr>
<td>Excavation</td>
<td>Excavation for the lift shaft 2.5m below ground level.</td>
</tr>
<tr>
<td>Painting</td>
<td>HCS, use of correct PPE, working at heights.</td>
</tr>
<tr>
<td>Tiling</td>
<td>Use of HCS, hand tools, housekeeping, Sharp cutting edges.</td>
</tr>
<tr>
<td>Plumbing</td>
<td>Working at heights, Hot works, vessels under pressure (soldering torch)</td>
</tr>
<tr>
<td>Electrical Work</td>
<td>Installation of electrical reticulation.</td>
</tr>
<tr>
<td>Mechanical Installations</td>
<td>Working at heights, working with lifting equipment, exposing existing services.</td>
</tr>
</tbody>
</table>

### 5.2 Specified Hazardous Chemical Substances

The following lists of products or substances are those which have been identified as likely to be used on the project. This list is not inclusive and other products may be considered. Where the PC is likely to supply the product as the product has not been specified, materials data sheets (MDSs) need to be considered prior to all selections.

<table>
<thead>
<tr>
<th>PRODUCTS/SUBSTANCES/RISKS</th>
<th>POTENTIAL HEALTH OR OTHER RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement</td>
<td>• Hand mixing may occur, 50kg bags are an ergonomic risk from handling.</td>
</tr>
<tr>
<td></td>
<td>• Pumping of concrete may occur exposure to extensive vibration, extended hours of work, and potential eye, skin and respiratory irritant from dust exposure, chromates.</td>
</tr>
<tr>
<td>Cement/Silica dust</td>
<td>Caused by cutting, grinding, sanding of any concrete/granite/tiled surface/masonry.</td>
</tr>
<tr>
<td>Petrol/diesel/lubricants</td>
<td>Potentially fuel storage on site. Fire, spillage, fumes.</td>
</tr>
<tr>
<td>Wood dusts</td>
<td>Caused by cutting, sanding, drilling wooden products treated</td>
</tr>
<tr>
<td>Adhesives</td>
<td>Possible irritation of eyes, skin damage SDS to be supplied and checked</td>
</tr>
<tr>
<td>Plaster/mortar/screeds</td>
<td>Cement dermatitis if frequent contact with cement. Dust in Lungs</td>
</tr>
<tr>
<td>Sealants/joint fillers</td>
<td>Fumes can irritate lungs and eyes. Area to be well ventilated.</td>
</tr>
<tr>
<td>Paints (PVA)</td>
<td>Possible irritation of eyes, skin damage SDS to be supplied and checked</td>
</tr>
<tr>
<td>Grouts (epoxy)</td>
<td>May be toxic area to be well ventilated. Possible irritation of eyes, skin damage SDS to be supplied and checked</td>
</tr>
<tr>
<td>PRODUCTS/SUBSTANCES/RISKS</td>
<td>POTENTIAL HEALTH OR OTHER RISKS</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>LPG Cylinders</td>
<td>Irritation of eyes, skin and lungs. Highly Flammable, Stored in Bulk</td>
</tr>
<tr>
<td>Oxygen Cylinders</td>
<td>Highly Flammable, stored under pressure, Stored in Bulk.</td>
</tr>
<tr>
<td>Solvents / cleaning detergents</td>
<td>May be toxic area to be well ventilated. Possible irritation of eyes, skin damage SDS to be supplied and checked</td>
</tr>
</tbody>
</table>

6. **OCCUPATIONAL HEALTH & SAFETY MANAGEMENT**

6.1 **Structure and Organization of H&S Responsibilities**

6.1.1 **Notification of Construction Work**

The Notification of Construction must be completed and signed by the Client, Client’s Agent and the Contractor. The Notification must be taken to the Regional Department of Labour Office for approval, the DOL will issue a conformation Letter.

**This must take place before a Site Handover meeting will be scheduled.**

It should be noted that this OHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations

7. **HEALTH AND SAFETY PLAN FRAMEWORK**

The H&S aspects related to the project outlined in the previous sections are to be taken into account when drawing up the H&S Plan. The PC is required to demonstrate competence by providing an H&S system that will address the requirements of the project.

The current legislative requirements, SANS codes, SANS 10400 and any other standards that may guide practice are to be taken into consideration. The following aspects must be addressed in the H&S Plan, as they have been identified in section 2, as playing a role in reducing the overall risk of a particular activity, or section of the project. The CHS Agent may from time to time request additions or systems as they relate to the works or legislative requirements at the time.

The PC is to prepare a site layout drawing to indicate at least the following:

- The positions of site offices of all Contractors, toilets, drinking water and worker rest areas;
- Indicate the positions of emergency personnel and equipment (fire, first aiders, first aid posts);
- Protection of plant and pedestrians, indicate parking, and
- Storage areas (materials and equipment, waste etc.)
- Access and egress to site for deliveries and intended temporary traffic management
- Emergency assembly point

Such layouts are to be updated regularly throughout the project.

7.1 **Appointment of Competent Site Personnel**

The CEO (OHSA S16.1) of the PC will take overall responsibility for the appointment of competent site staff for the duration of the project. Should the CEO not be personally involved in the project, the H&S responsibilities are to be delegated to the Site Agent (OHSA 16.2). Knowledge and training in H&S is required, and certificates indicating H&S training as well as experience to be included in CVs.
All other legal appointments are to be made with relevance to the type of work required and kept current with the project programme. The construction team is to ensure the appointed CHS Officer is kept up to date with all planned activities, to ensure all H&S requirements are met.

All construction/technical method statements are to be generated by senior site personnel, and the appropriate risk assessments developed therefrom in conjunction with the CHS Officer.

The Occupational Health and Safety Plan shall include the following, but is not limited to the following key appointments:

7.1.1 Construction Manager / Supervisors

Competent Construction Managers (CR 8.1) must be appointed to manage part or all of the works and have training and/or experience in the area of responsibility. All site supervisors must show evidence of appropriate training in H&S, and an understanding or training in areas of responsibility (i.e. risk assessments, method statements etc.). Construction Managers may be appointed where justified by the scope and complexity of the works.

Curriculum Vitae (CVs) are to be submitted for approval by the Designer, and/or Client. The Supervisor will be held responsible for the safety of working teams and subordinates, housekeeping and stacking and storage of materials.

7.1.2 Construction Health and Safety Officer

The PC will employ at least one competent, full-time CHS Officer for the duration of the contract. The CHS Officer’s CV is to be submitted for approval by the CHS Agent or the Client, at time of tender. The PC is to ensure adequate resources are provided in order to undertake all responsibilities (i.e. mobile phone, computer and internet access, vehicle etc.) Qualifications shall include at least Grade 12 SAMTRAC/NEBOSH/Diploma in H&S qualifications or similar, with exposure to civil engineering and building that is appropriate given the level of project complexity preferably in an OHS capacity. He should also have undergone training in the Act and Regulations. In the case of a contract where contractors are employed, the CHS Officer must have a competence to evaluate the Contractors Health and Safety plans.

Proof of registration or Confirmation letter as a Construction Health and Safety Officer with SACPCMP must be supplied.

This person may not hold any other position on the site staff.

The site supervisor may not act as the CHS Officer.

The Construction Manager will be held responsible for all H&S on the project. He will be assisted by the Construction health and Safety Officer

- Senior site staff and supervision, Contractors are to follow systems, instructions etc. given by the CHS Officer at all times;
- No new workers or Contractors may commence work without approval or following the H&S plan as submitted, and
- No inductions of Contractor staff until the H&S documentation is approved by the CHS Officer.
- The CHS Officer/s may not be removed or replaced without the approval of the CHS Agent, nor may the site be left unattended for more than 1 day without adequate, competent cover.

A monthly report of all H&S activities and incidents is required by the end of the first week of each month, or at a date agreed to by the CHS Agent/Client and the CHS Officer. An example of the monthly report is attached as an Annexure C.

The CHS Officer will be responsible for collating the H&S documentation at the close out of the project in electronic format. A list of the typical aspects that should be provided is available as Annexure A to this document. The PC is to ensure that all Contractors documentation follows the same requirements and closed out H&S documentation must be completed and be available with the close out of the main contract.

Failure to do so will be considered a serious offence and penalties applied.
Traffic Safety
The CHS Officer will be responsible for ensuring that daily traffic management is adequately managed.

No worker may be transported in, or on the rear of construction vehicles (bakkies included), or with plant and materials to, on, or from site. The number of passengers in any vehicle is limited to what is stated on the license disc. Vehicles used to transport workers to, from, or on site, shall have secure seats and be covered.

Where there is an interface between the works and any public thoroughfare, typical traffic accommodation drawings will be provided.

7.2 Health and Safety Representatives and H&S meetings

H&S Representatives representing workers and Contractors are to be appointed following the startup of the project, irrespective of the number of workers on site. The appointed H&S Representatives are to be actively involved with H&S and will assist the CHS Officer and site management in meeting legislative duties.

The CHS Officer shall further ensure that H&S is discussed at all internal production or progress meetings. Issues arising from the CHS Agent audits are to be discussed, as well as all H&S related issues.

Minutes are to be kept for all H&S interventions and meetings. Failure to do so will be deemed to be a moderate offence.

7.3 Appointment of Competent Contractors

The Principal Contractor is to ensure compliance with the Client’s minimum standards and all legislative requirements. The same H&S standards required of the PC are to be applied to all Contractors. An index of all Contractors and Suppliers is to be on file and kept updated at all times. The PC is to ensure there is sufficient funding for H&S compliance by each Contractor.

The following minimum aspects are applicable to any Contractor appointed:
- The CHS Officer is to ensure a Contractor’s appointment and approval of H&S documentation at least seven (7) working days prior to commencing work.
- No Contractor may work under the PC’s Compensation registration number. If required, the PC may assist SMMEs with their registration with the Compensation Commissioner. However, such Contractors will not be able to commence work until proof of registration or Letter of Good Standing has been received.
- No work may commence without Mandatary agreements between parties in place.

The following aspects are applicable to Suppliers or short-term works (surveying, repairs, servicing, deliveries etc). Cognisance is to be taken of the level of risk involved and the CHS Officer is to ensure the level of H&S documentation is appropriate:
- Mandatory agreements in place
- Letter of Good Standing
- Method statements and risk assessments
- Available information relative to:
  - Load testing and registers for cranes or lifting devices
  - Medical certificates of fitness
  - Safety data sheets (SDSs)

Failure to provide written approval of H&S documentation will be considered a serious offense, and could result in aspects of, or all the activities being stopped and penalties implemented.
8. GENERAL RISK MANAGEMENT

8.1 Health Risks and Medical Surveillance

As some products used in the building work have not been identified, the PC is to ensure the CHS Officer and all supervision is responsible for ensuring the safe use of such products, and their inclusion into method statements and risk assessment. The appropriate SDSs are to be obtained for all products and used to develop the H&S documentation as they relate to the works.

Many of the processes may be labour intensive and ergonomic risks are to be noted. All workers (including Contractors) are to be included in the medical surveillance programme.

Workers will be exposed to noise, dust, and physical risks from extended periods of work of a repetitive nature, materials specified and the general nature of the works.

Environmental monitoring results and risk assessments are to be made available to the occupational health professionals doing the medical surveillance. The use of occupational risk exposure profiling (OREPS) and job descriptions are to be used to determine specific exposures for management.

Medical surveillance will commence at pre-employment. All workers (including Contractors) are required to be in possession of a medical certificate of fitness prior to commencing work. Annual medical surveillance is required (unless identified as being required more frequently), as well as an exit medical. Arrangements for keeping medical records for the required time are to be noted. It is preferable that the PC has a medical surveillance plan. Full medical records are not to be placed in the H&S file. A procedure for managing the medical records which require safekeeping for prescribed periods are to be addressed.

Given the potential health risks the following aspects are to be included in each medical surveillance intervention:

- Full medical, surgical and occupational history;
- Full physical examination of all systems; and
- Referral if required for the management of identified health issues that may affect the worker.

Specific testing for existing conditions and limitations relative to exposure could include, but are not limited to:

- Audiometry (hearing tests); and
- Any other tests identified as relevant from chemical or specifically identified risks of exposure
- Urine test for working at heights.

Failure to do so will be considered a serious offence.

8.1.1 General Environmental Conditions

Compliance with the Environmental Regulations (as amended), among others is required. Environmental monitoring of ventilation, lighting and dusts may be deemed to be required by the Approved Inspection Authority used to measure the environment. Copies of the relevant reports and actions taken in respect of these are to be placed in the H&S file.

8.1.2 Noise Risks

All plant from plant hire companies (suppliers) or that of the PC is to be compliant with the Noise Induced Hearing Loss Regulations. Plant identified that has not been tested and marked for noise emissions will result in having to be tested at the Contractors or PCs expense. Failure to do so within a reasonable time period will result in such plant being removed from site.

Audiometric testing of all workers is noted as required in the medical surveillance programme for all permanent workers prior to work commencing. Temporary labour working in identified noise areas will require testing if the noise levels are indicated on plant or through processes as greater than 85dB. Audiometry records are to be available in the H&S file.

Suitable SANS approved hearing protective equipment shall be issued and worn. Where several items of construction plant are in operation at or near to each other, the noise zone for the combined plant should be established and suitable hearing protective equipment used within this zone.
Failure to do so will be considered a serious offence.

8.2 Emergency Procedures

An emergency plan and procedure that is appropriate to the risks is required prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow. The plan may be adapted should new information or risks are identified. An appointment of a competent emergency response co-ordinator must be made.

The procedure shall detail the response plan in relation to the works, and include at least (but are not limited to) the following key elements:

- Fire;
- Public injury, Motor vehicle accidents;
- Injury to patients moving around on the premises.
- Falls from heights;
- Labour unrest
- Serious injury to workers (medical or work-related); and
- Any other major risks identified during risk assessments.

The emergency plan is to ensure the inclusion of local service providers where possible. Such arrangements should be made with these persons prior to the commencement of the project.

Local emergency telephone numbers must be displayed and made part of the emergency procedure.

The general principals of emergency management are to be applied as it applies to the hierarchy of control and management.

The PC must consult with the Client in preparation of the emergency as buildings will be operational.

8.2.1 First Aiders and First Aid Equipment

At least 1 first aider will be trained to Level 3. First aiders shall be available and accessible on site at all times, and be able to work as a team when responding to any emergency on the project.

Contractors are expected to ensure compliance and provide/manage their own first aiders and equipment. The number of First aiders will be determined by the complexity and exposed risks of the project, not numbers of workers.

Appropriately stocked first aid kits, at least to the requirements of the Annexure to the GAR, are to be available at all times to assure continual availability and access on site.

8.2.2 Fires and Emergency Management

Attention to emergency planning and procedures is very important. The full emergency plan must form part of the supporting documentation with the H&S Plan. The CHS Agents approval of all emergency plans and procedures is required prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow. The plan may be adapted should new information or risks are identified.

First aiders shall be available in each working team, and be able to work as a team when responding to any emergency on the project.

The procedure shall detail the response plan in relation to the works, and include at least (but are not limited to) the following key elements:

- Appointment of a competent emergency response co-ordinator and wardens;
- Lists of first aiders, and
- Requirement in terms of identified risks:
  - Fire;
  - Explosions;
  - Labour unrest
  - Falls from heights, and
  - Motor vehicle accidents.

The emergency plan is to ensure the inclusion of local service providers where possible. Such arrangements
should be made with these persons prior to the commencement of the project; the emergency plan is to include the risks of fire on site and related to any specific activities where gas, welding, cutting etc. occur. Hot work permits are required for any such activities.

Fire extinguishers will be appropriate for the risk and in sufficient numbers to deal with the type of fires that could occur. All mobile plant is to have appropriate, accessible fire extinguishers.

8.2.3 Incident Management and Compensation Claims

All incidents and accidents are to be investigated. All serious incidents involving any form of disabling injury or fatality are to be reported to the Designer/Client/CHS Agent immediately. This shall be confirmed in writing following the incident. Full details are to be included in each site meeting or when the Client visits site. A summary of incidents is to be included in the monthly report.

Failure to comply with emergency provisions will be considered a serious offence, and the operation or project may be stopped if deemed inadequate for the work at the time of assessment or site inspection.

8.3 Personal Protective Equipment (PPE) and Clothing

The PC is to provide a procedure as an addendum to indicate how PPE is managed within the Company.

The wearing of the identified SANS approved PPE at all times is non-negotiable. The PC shall ensure that all workers (including Contractors) are issued with and shall wear:

- Hard hats;
- Protective footwear;
- Overalls that ensure worker visibility.
- Eye protection (if required)
- Hearing protection;
- Reflective jackets (no bibs)
- Respiratory protection (minimum of FF2), and
- Safety Harnesses with Big Hooks.
- Eye protection (if required)
- Hearing protection;
- Reflective jackets (no bibs)
- Respiratory protection (minimum of FF2), and
- Safety Harnesses with Big Hooks.
- Reflective jackets (no bibs)
- Respiratory protection (minimum of FF2), and
- Safety Harnesses with Big Hooks.
- Any other necessary PPE identified from SDSs and/or risk assessments.

Adequate quantities of PPE shall be available. This shall include necessary PPE for visitors. The procedures for managing PPE are to be in a formal procedure submitted with the H&S plan for approval.

Any person (including Client, Designers etc.) found on site without the necessary PPE will be removed from site until the PPE is supplied and worn.

Failure to comply will result in penalties being applied.

8.4 Occupational Health and Safety Signage

On-site H&S signage is required. Signage shall be posted up at fixed or temporary working areas, or other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations or SANS requirements as amended. Signage is to be noted on the site drawings indicating where fixed/temporary signage is required.

Temporary signage is to include (but not be limited to) the following:
- Multipurpose Construction sign at the site Entrance
- ‘Report to site office’/ ‘Warning: Construction Site – Keep out’ or similar;
- ‘Site office’ (if relevant);
- ‘hard hat area’ or other PPE requirements noted;
- First aid box positions (including vehicles); and
- Fire extinguishers.
- Assembly Area
Signs shall be posted at areas of work on site indicating that a construction site is being entered and that persons should take note of H&S requirements. Note should be taken that “omnibus” signs indicating that the entire site requires PPE should not be used. Any areas where PPE is mandatory must be separately designated.

Failure to comply will result in penalties being applied.

8.5 Induction of Employees and Visitors, General H&S Training

A simple, formal induction programme is to be submitted as an addendum for approval with the H&S plan. Inductions must be carried out for all workers and visitors (including Client, Designers) to the site.

Pre-task training is required to ensure workers are familiar with the risks and H&S measures of the work or tasks to be done. Such training is to be done at least daily. Records of inductions and pre-task training are to be kept in the H&S file.

Any person found on site without proof of induction in the H&S File will be removed from site until the proof is supplied and, and a penalty issued per non-compliance.

8.6 Management of Plant and Equipment

Close control of plant and equipment is required, including that of Contractors.

Daily monitoring of all plant and equipment is required prior to commencing work. Full lists of hired and own plant are to be available at the CHS Agent’s/Client audit. All daily inspection records are to be kept in the H&S file. Plant Hire and Haulage Contractors are to comply with the requirements where plant and equipment is brought onto site. Registers are not to be more than 1 week behind.

Only competent, fit plant operators are to be used. Medical certificates of fitness are required for all operators. Any plant or slings used to lift plant or material require annual load testing by an AIA, and all certificates must have the testers LMI/E number. Operators are to be adequately trained and certified to operate mobile cranes or crane trucks. Certificates and registers are to be placed in the H&S file.

Movement of plant in closures and in confined working areas is to be closely monitored and managed by the supervisors. The blind spots of plant are to be taken into account and workers and Contractors protected accordingly.

All machinery shall have moving parts adequately guarded so that no access to these is possible when the machine is working. Failure to do so will be considered a serious offence.

8.7 Excavations

Excavations should preferably not be open beyond what can be closed daily. Where excavations need to remain open, all excavations are to be properly protected. Adequate stakes with 1m high demarcation and berms/spoil are required to be a safe distance from the edge of the angle of repose. Candy tape may not be used to demarcate excavations. Cognisance is required of the surrounding area and increased levels of protection are required where work is in communities, near schools and clinics. Work will be stopped and penalties applied to any work in excavations that is not compliant.

8.8 Working at heights

A Site specific fall protection plan and Rescue Plan is to be available and supplied as an addendum to the H&S plan. The fall protection plan must be appropriate for the project. Method statements, appropriate risk assessments, safe work procedures and training are to be available prior to work commencing.

Construction drawings shall be required for all temporary structures as they relate to the project. The drawings shall be accompanied by full calculations, design loads and any relevant test results as required by the SANS code, and ensure adequate allowance for the development of appropriate documentation and training. All drawings are to be checked and signed by a competent structural engineer (registered with ECSA).
The focus for working at height shall include fall restraint systems where possible except during assembling or dismantling top components or where it is not deemed safe. The relevant SANS codes are to be applied as they apply to the works and the project, such as:

- SANS 10085
- SANS 10333 (parts 1-3)
- SANS 10087-1:2008

Should part of the works be contracted out, competent Contractors are to be appointed and submit documentation according to the project requirements. The PC is to note if such work is to be contracted to specialists in the H&S Plan. The plan is to be developed and work managed by a competent person for the duration of the project. The following aspects must be included:

- Notices to be posted
- Restrictions or stoppage when weather conditions are deemed hazardous
- Permit system for working at heights
- Prevention of falling tools or equipment
- Link to emergency plan regarding rescue

All workers are to be in possession of valid certificates of fitness that extend for the duration of the works. Note the requirements in the section relating to medical surveillance.

Registers and all relevant documentation are to be placed in the H&S file.

**Work will be stopped if any work at heights is not compliant.**

### 8.9 Cranes and lifting equipment

Should any form of lifting device or crane (fixed or mobile) be used during the project for deliveries, moving of supplies or equipment, the appropriate documentation must be made available. Method statements, risk assessments, safe work procedures and training are to be available prior to work commencing. A procedure for managing loads and lifting must be made available as an addendum to the H&S Plan.

### 8.10 Temporary Works (Scaffolding, support work, formwork)

Temporary works must be properly designed and signed off by a competent person. In these instances, a competent person is defined as a Professional Engineer or Professional Technologist (registered with ECSA) who has sufficient experience in the design of the type of temporary work in question to be able to assess the design. The appropriate competent persons are to be appointed to manage and monitor such works to the satisfaction of the Engineer and CHS Agent. Records and registers are to be properly completed and kept in the H&S file. If temporary works are to be erected by a Contractor, this must be notified to the Designer/CHS Agent. All necessary calculations and drawings of temporary works must be kept on site and available to the PA and CHSA.

### 8.11 Bulk Mixing Plants

Whichever form of bulk mixing plant is used, for mixing concrete, guards and protection of nip points, emergency stops etc. are to be appropriately managed by competent supervision. Edge protection, movement of plant and dust management are required, including disposal of cement bags. The layout of the batch plant and movement of plant is to be provided on an appropriate drawing.

The added requirement of Chest X rays for workers is to be added to pre-employment and possibly exit medicals, unless the workers are already on a system of medical surveillance.

### 8.12 Mechanical installations

All mechanical installations are to be carried out in conformity with the manufacturer’s instructions. Method statements and risk analyses must be compiled for each type of installation. A competent person must be designated to supervise the work.
8.13 Auditing

Frequency of external auditing by the CHS Agent or Client will be as agreed with the Client and Designer but will at least conform to the requirements of the Construction Regulations. The site will be inspected and the documentation audited relative to the activities and H&S plan. The CHS Officer of the PC must accompany the Client, or the CHS Agent, on all audits and inspections. Not all audits will be, or need be announced.

The PC will ensure that all their Contractors are audited at a frequency determined by the CHS Agent. Audit frequency may be increased if Contractors are not performing adequately. Audit results will be acted upon and non-conformances and penalties issued where deemed appropriate. The Client, Designer or CHS Agent may act or require further outcomes if non-compliances are noted or unsafe acts are noted on site.

Internal audits are to include site conditions as well as ensuring H&S files are appropriate, and compliant. Comprehensive audit reports are to be made available, the format of the audit reports are to be acceptable by the CHS Agent.

The audit template will be adjusted from time to time relative to the activities on site. A similar process is to be used by the PC when auditing their Contractors on site. Compliance with legislative requirements and the systems provided by the PC to manage the H&S on site will be measured. Full compliance is required. Time limits for corrective actions will be set and must be adhered to.

Failure to address findings or non-conformances will be considered a serious offence.

8.14 Communication on Site

All H&S communication during the project between the CHS Agent and the PC will be done through the Architect/Clerk of Works/Client and be in writing, including the issue and responses to non-conformances and H&S audit results.

Failure to address issues timeously will be considered a serious offence.

8.15 Care of Workers on Site (Welfare)

Adequate toilets, clean, safe drinking water and decent shelter must be afforded workers at all times. Toilets will be within reasonable distance of workers, or placed with each working team in safe, with reasonable privacy. Hand washing facilities will be provided. Arrangements made where existing facilities are shared with existing users must be made in writing and placed in the H&S file. No substances containing Formaldehyde may be used in Chemical Toilets.

Failure to ensure compliance will be considered a serious offence.

8.16 Discipline, Alcohol and Substance Abuse

All employees (management included) are to follow instructions given in the interest of H&S. Disciplinary action is to be imposed on those who do not follow such instructions or company rules or policies.

No person is allowed to work or access site if under the influence of alcohol or other substances that could impact on their own or others safety. The PC is to have a drug and alcohol policy available to manage such instances.

These requirements are applicable to any employee of any organization providing services on site. Penalties may also be applied by the Client, OHS Agent or Engineer.

8.17 Electrical Equipment

In addition to the requirements of the Electrical Machinery Regulations and the General Machinery Regulations any electrical distribution board used for construction work shall be fitted with suitable earth leakage protection. Leads must be properly and firmly connected. Plugs and sockets shall be in good and safe condition.

All electrical apparatus, other than electrical hand tools, shall have a physical “lock out” system which will prevent any operation other than that authorized by a supervisor. A “lock out” sign shall be displayed when the apparatus is not in use.
Method statements and safe work procedures will be required for all work involving electrical apparatus.

9. HEALTH AND SAFETY FILE

The documentation submitted and approved following the awarding of the contract will be used to form the H&S file. The H&S file is required to be laid out in a logical manner, and documentation filed within the file is to be easily accessible.

The following completed information shall be included (but not be limited to) as part of the index:

- The PSHSS;
- The H&S Plan and the approval by Client;
- Appointment by Client;
- Mandatory agreement with Client;
- Notification of Construction work
- A record of all working drawings, calculations and design where applicable;
- Detailed list of Contractors and Sub-Contractors with contact details, appointments, Mandatories etc., H&S specifications issued;
- Record of Competencies (CVs) and appointments;
- Training Records;
- Permits;
- Method statements;
- Risk assessments;
- Safe work procedures;
- Emergency and injury management;
- Safety data sheets
- Medical surveillance records;
- Registers; and
- Records of audits, minutes etc.
- Plant lists
- Temporary electrical installations
- Employee records (who is on site)

10. NON-CONFORMANCES

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with the Clients OHS Spec or PCs H&S Plan; neither the PC nor any other Contractor shall have a claim for extension of time or any other compensation.
ANNEXURE A
CLOSE OUT REQUIREMENTS

The H&S files for the Principal Contractors and all Contractors require closure and handover to the Client at the completion of the project. The following list is an example of what should be included, but is not exhaustive. The OHS Agent or the Client may require further information at the time of completion and the Principal Contractor is to ensure that all instructions are met. Documentation would include all records from the start of the project. Daily or monthly plant inspection records are not required unless they are related to an accident. All records to be in electronic format and submitted to the OHS agent for approval in adequately formatted lists and folders. Layout should be logical and in the same order as in the site files.

Health and Safety close out file requirements include:

a) Client H&S Specification
b) Principal Contractor's OHS Plan(s)
c) Organograms
d) Legal Appointments
e) List of all employees employed on a permanent or contractual basis over the duration of the contract
f) Letters of Good Standing for the Project
g) Full files for all Contractors as well as their close out reports
   • List of Contractors
   • All employees employed on a permanent or contractual basis over the duration of the contract
   • Letters of Approval of Contractors
   • Mandatary Agreements
   • Letters of Good Standing
   • Appointments
h) Incident Records
i) Non-Conformance records
j) Agent's Audits
k) Method Statements
l) Risk assessments
m) Safe work procedures
n) Medical surveillance certificates of fitness. Medical records are to be kept according to the OH&S Act as amended
o) All drawings for temporary structures (suspended beams/scaffolds etc.)
p) All operating manuals for any systems that require on-going maintenance
q) Copies of test results, policies and procedures for environmental monitoring (silica, noise, dusts etc.)

Defect and Liability Period
The H&S files are to be kept 'live' for the defect and liability period by the Principal Contractor, including those of their Contractors. Any work required during the defect and liability period will require an assessment of the H&S file by the OCHS Agent prior to any work commencing.
A copy drawing records for the as-builds must be placed on file by the Designers once complete.
### BILL OF QUANTITIES FOR OCCUPATIONAL HEALTH AND SAFETY (to be transferred to the main Bill of Quantities)

<table>
<thead>
<tr>
<th>ITEM NO</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
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<th>RATE</th>
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<td>Preparation of the Contractor's site specific Health and Safety Plan</td>
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<td>(c) Protective foot wear</td>
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<td>(d) Earplugs</td>
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<td>(e) Dust masks</td>
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<td>(f) Gloves</td>
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<td>(g) Ear Defenders SABS approved</td>
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<td>(h) Overall</td>
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<td>(b) Periodic and exit examinations</td>
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<td>(c) Contractor’s charges to allow for handling costs and profit in respect of sub-items 13/X.06 (a) and (b)</td>
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<td>(b) Audiograms (personnel)</td>
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T3.4 : ANNEXURES
T3.4.1 : DRAWINGS

The following drawings are referred to in the Bills of Quantities and annexed hereto:

<table>
<thead>
<tr>
<th>No</th>
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<tr>
<td>1</td>
<td>Floor Plans</td>
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<td>Genetics Lab Detail</td>
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<td>X-Ray Room Detail</td>
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<td>6</td>
<td>Window Schedule</td>
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