



THULAMELA MUNICIPALITY

BID NUMBER: 08/2023/2024

CONSTRUCTION OF GUNDANI LANDFILL CELL

CLOSING DATE: 16<sup>th</sup> AUGUST 2023

TIME: 11H00

CIDB GRADING: 4CE OR HIGHER

ISSUED BY:

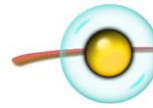
THULAMELA LOCAL MUNICIPALITY

Private Bag X5066  
Thohoyandou, 0950  
Limpopo Province

Contact Details:

Name: **Mr Madi MS**  
(015) 962 7609  
**Mr TP Mudzili**  
(015) 962 7629

PREPARED BY:



**URANUS CONSULTING ENGINEERS**  
Engineering Consultants &  
Project Managers

URANUS CONSULTING ENGINEERS

18B Park Street  
Arbor Park  
Tzaneen  
0850

Limpopo Province

Contact Details:

Name: **Mr. Francis Ziba**  
Telephone: (015) 307 6139  
Email: [info@uranusconsulting.co.za](mailto:info@uranusconsulting.co.za)

Name of Tenderer:.....

CSD Supplier Number: .....

CIDB Registration Number:..... Grade: .....

Total price inclusive of VAT: R .....

Amount in words.....

.....



**EXPANDED PUBLIC WORKS PROGRAMME**  
Creating opportunities towards human fulfillment

**THULAMELA LOCAL MUNICIPALITY**  
**CONSTRUCTION OF GUNDANI LANDFILL CELL**  
**BID NUMBER: 08/2023/2024**

**CONTENTS**

<b>Volume</b>	<b>Description</b>	<b>Heading</b>	<b>Colour</b>	<b>Page</b>
<b>1</b>	<b>TENDERING PROCEDURES</b>			<b>1-1</b>
	T1.1	Invitation to Tender	White	1-3
	T1.2	Tender Data	Pink	1-5
<b>2</b>	<b>RETURNABLE DOCUMENTS</b>			<b>2-1</b>
	T2.1	List of Returnable Documents	Yellow	2-3
	T2.2	Returnable Schedules	Yellow	2-4
	C1.1	Form of Offer and Acceptance	Yellow	2-78
	<b>Pricing Data</b>			
	C2.1	Pricing Instructions	Yellow	2-83
	C2.2	Bill of Quantities	Yellow	2-88
<b>3</b>	<b>CONTRACT</b>			<b>3-1</b>
	<b>Part 1</b>	<b>Contract Data</b>		<b>3-2</b>
	C1.2	Contract Data	White	3-3
	<b>Part 2</b>	<b>The Works</b>		<b>3-20</b>
	C2	Scope of Work	Blue	3-21
	<b>Part 3</b>	<b>Site Information</b>		<b>3-104</b>
	C3	Site Information	Green	3-104

**Note:** Documents with prefix T refer to the documents that relate to the tender.  
Documents with prefix C refer to the documents that relate to the contract.

# **VOLUME 1 TENDERING PROCEDURES**

## **CONTENTS**

<b>Section</b>		<b>Colour</b>	<b>Page</b>
T1.1	Invitation to Tender	White	1-3
T1.2	Tender Data	Pink	1-4

## T1.1 INVITATION TO TENDER



### THULAMELA LOCAL MUNICIPALITY

Thulamela Local Municipality invites capable Tenderers for the Construction of Thohoyandou Landfill Cell

Tenders are hereby invited from tenderers who can demonstrate that they will have in their employ staff which satisfy EPWP requirements during the contract validity.

- When purchasing the document, the contractor must make sure that his/her details are filled in the full on the provided register at the Municipality.
- Bidder should also fill in attendance register at site briefing and fill in their details in the attendance certificate to be attached in the bid as proof of site briefing attendance.

Bid Number	Project Description	Minimum Number of WO	Document Price	Minimum Number of Work Opportunities expected from this Project (extracted from the Business Plan or from the S-Design)	CIDB Grading	Compulsory Briefing Meeting	Closing Date	Bid Enquiries Person
<b>08/2023/2024</b>	Construction of Gundani Landfill Cell	To be inserted during construction	<b>R3.00 per page or download on website for free</b>	To be inserted during construction	<b>4CE or Higher</b>	Friday <b>08/08/2023</b> at 11H00 at Gundani Landfill Site (22° 39' 1.16"S; 30°31' 58.37"E)	Wednesday <b>16/08/2023</b> at 11H00	Mr Madi MS (015) 962 7609 Mr TP Mudzili (015) 962 7629

Bid documents will be available on the **26<sup>th</sup> July 2023** upon payment of a non-refundable fee. Please note that documents are only obtainable between 08:00 and 16:30 during the week at Thulamela Local Municipality Offices, Thulamela Municipality Offices, Old Agriven Building, Thohoyandou.

Bidders will be expected to submit the bid documents with the following compulsory requirements (full list specified in the document).

- Recent compliant CSD, JV should submit for both companies.
- COMPANY REGISTRATION DOCUMENTS (E.G. CK)
- Proof of Contractor's details CIDB rating, JVs should submit consolidated CIDB (4CE or higher)
- Companies' and/or Directors' proof of payment for the Municipal accounts (rates & taxes) in their area of jurisdiction. (Not older than Three (3) months at the bid closing date) and not in arrears for more than 90 days
- Letter of good standing

- **List of similar successfully executed projects with client contact details and contract values.**
- If the company is required by law to be audited, we need audited annual financial statement for the past three years or audited annual financial statement since the establishment of the company if the company was established during the past 3 years (if the company is not required by law to be audited, please provide us with a letter from a registered accountant stating that you are not required to be audited and the reasons why)

Where possible we also request to be provided with the company profile.

**NB: Service providers must submit their BBBEE verification certificate from verification agency accredited by South African accreditation system (SANAS) an Accounting Officer as contemplated in the corporation and BEE Rating certificate or Sworn Affidavit. (This is for preferential points only).**

Bids will be assessed under the provisions of the following Acts and its Regulations: Municipal Finance Management Act, (Act 56 of 2003); PPPFA, Supply Chain Management Policy of the municipality in accordance with the specifications and in terms of **80/20 preferential points system and functionality. The minimum threshold for functionality is 70%, bidders who score less than 70% will not be considered for further evaluation.**

	TARGETED GOALS:	WEIGHT
<b>Points for functionality</b>	Experience in Landfill Cell Construction Projects: (Demonstrated company experience in Landfill Cell Construction Projects).	<b>60</b>
	Key staff – Demonstrated experience- Qualifications and experience.	<b>20</b>
	Proof of Plant and Equipment owned by the bidder: Details of major equipment owned (please provide proof of ownership). Valid proof of license disk and registration	<b>10</b>
	Financial Reference	<b>10</b>
<b>TOTAL</b>		<b>100</b>

Bids sealed in an envelope clearly indication the bid number and the project Name and the address of the bidder should be placed in the tender box at official **Bid Box at the front of the main entrance to Thohoyandou Civic Centre, Old Agriven Building, Thohoyandou** by no later than 11h00 on, **16<sup>th</sup> August 2023** whereby all bids received will be opened in public.

The Council is not bound to accept the lowest or any Bid(s) and reserves the right to accept any part of a Bid(s). Bids must remain valid for a period of ninety (90) days after closing date of the submission thereof.

**Bids which are late, incomplete, unsigned, completed by pencil, sent by telegraph, facsimile, electronically (fax), or E-mail and without the compulsory requirements will be disqualified.**

**MUNICIPAL MANAGER**

## **T1.2 TENDER DATA**

## **T1.2 TENDER DATA**

### **CONTENTS**

<b>Item</b>	<b>Description</b>	<b>Page No.</b>
1.	Conditions of Tender	1-6
2.	Employer	1-6
3.	Tender Documents	1-6
4.	Employer's Agent	1-7
5.	Tenderer's Obligations	1-7
6.	Employer's Undertaking	1-11



## 1. **CONDITIONS OF TENDER**

The Conditions of Tender are the standard conditions of Tender as contained in Annex F of SANS 294: 2004, published by Standards South Africa, Private Bag X191, Pretoria 0001, Tel: 012 428 7911.

The standard conditions of Tender for procurements make several references to the Tender Data. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of Tender.

Where applicable, items of data given here below are cross-referenced to the sub-clause in the standard conditions of Tender to which it applies.

## 2. **EMPLOYER (Cl. F1.1)**

The “Employer” is “**Thulamela Local Municipality**”

## 3. **TENDER DOCUMENTS (Cl. F.1.2)**

The Tender document issued by the Employer is a **two (2)** part document. Book 1 (this book) and comprises the following:

### **BOOK 1:**

<b>Volume</b>	<b>Heading</b>
<b>1</b>	<b>TENDER</b> <b>TENDERING PROCEDURES</b> T1.1 Invitation to Tender T1.2 Tender Data 1. Conditions of Tender 2. Employer 3. Tender Documents 4. Employer’s Agent 5. Tenderer’s Obligations 6. Employer’s Undertaking
<b>2</b>	<b>RETURNABLE DOCUMENTS</b> T2.1 List of Returnable Documents T2.2 Returnable Schedules C1.1 Form of Offer and Acceptance C2.2 Schedules of Quantities
<b>3</b>	<b>CONTRACT</b> <b>Part 1 Agreements and Contract Data</b> C1.2 Contract Data <b>Part 2 Pricing Data</b> C2.1 Pricing Instructions <b>Part 3 The Works</b> C3 Scope of Work <b>Part 4 Site Information</b> C4 Site Information

Book 2 is an A3 size book and contains the relevant drawings.

#### **4. EMPLOYER'S AGENT (Cl. F.1.4)**

The Employer's agent is:

Uranus Consulting Engineers

Physical address:  
18B Park Street  
Arbor Park  
Tzaneen  
0850

Postal Address:  
PO Box 49  
Tzaneen  
0850

Enquiries: Mr F Ziba  
Tel.: 015 307 6139  
Fax: 086 548 5665  
E-mail: [info@uranusconsulting.co.za](mailto:info@uranusconsulting.co.za)

#### **5. TENDERER'S OBLIGATIONS**

##### **5.1 Eligibility (Cl. F.2.1)**

A Tender offer may only be submitted if the Tenderer satisfies the criteria stated in the Tender Data and if the Tenderer, or any of his principals, is not under any restriction to do business with the Employer.

Only those tenderers who can demonstrate that they will have in their employ management and supervisory staff satisfying the requirement of the scope of work for labour-intensive competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders.

##### **5.2 Site Visit and Clarification Meeting (Cl. F.2.7)**

A site visit and clarification meeting will be held on **Friday, 8<sup>th</sup> August 2023 at 11H00 at Gundani Landfill Cell Site**. Bidders will be required to fill attendance register and fill and sign **site briefing attendance certificate** which will be made available by the client.

##### **5.3 Insurance (Cl. F.2.9)**

No insurance cover will be provided by the Employer. Contractor to provide his own insurance (refer to volume 3 item 2.2.32 of the white pages).

##### **5.4 Alternative Tender Offers (Cl. F.2.12)**

Unless anything to the contrary has been determined in the Contract Data, a Tenderer may, together with his Tender for the original designs contained in the contract documents, submit alternative designs and Tender offers for consideration. All designs, calculations, drawings and Operation and Maintenance manuals shall be fully endorsed by a third party registered engineer, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor. Such alternative designs and offers shall be subject to the following conditions and requirements:

###### **5.4.1 Tenders**

An alternative offer or design will be considered only if the Tender for the original items has been fully priced and completed. The alternative Tender offer is to be submitted in **the same envelope as the main Tender offer**, together with a schedule that compares the requirements of the Tender documents with the alternative requirements the

Tenderer proposes. No alternative Tender will be considered unless a Tender free from qualifications is also submitted.

Unless the alternative offer stipulates to the contrary, it shall be assumed that the period for completion of the Works shall not be more than the original design.

Designs, calculations, drawings and a modified schedule of quantities (as determined hereafter) in respect of each alternative offer or design shall accompany the alternative Tender offer and shall be endorsed fully by a third party registered engineer, accomplished in such specific field of practice.

#### 5.4.2 Preliminary calculations

Preliminary calculations for an alternative design shall be submitted with the Tender. Such calculations shall give adequate details so as to enable an assessment to be made of the general efficacy of the design and of its principal elements, also of the degree to which the design prescriptions and codes of the Employer are being complied with. The calculations shall be clear and in a logical sequence and shall clearly reflect all the design assumptions.

#### 5.4.3 Preliminary drawings

Preliminary drawings of the alternative designs shall also be submitted with the Tender. These drawings shall comprise adequate layout plans, elevations and sections and shall clearly illustrate the general efficacy of the design and its principal elements.

#### 5.4.4 Quantities

Each alternative offer shall be accompanied by a modified priced schedule of quantities compiled in accordance with the specifications, in so far as it is applicable, which clearly shows the manner in which the price for the alternative offer has been determined and the items in the original schedule of quantities which fall away or are being changed. In addition to the schedule of quantities, a set of calculations shall be supplied to show how the quantities have been determined. All assumptions in regard to factors which will determine quantities shall be clearly and conspicuously marked by underlining or colouring, and shall indicate whether or not the assumptions have been based on information furnished in the Contract Data (with the necessary references).

#### 5.4.5 Further details

Should the Employer's Agent find that the calculations and drawings submitted for alternative designs are not complete enough for proper adjudication of the alternative designs, the Employer reserves to itself the right to call on the Tenderer to submit such further calculations and drawings as may be required. If such further details are not submitted within ten days of having been requested, the alternative designs will not be given further consideration.

#### 5.4.6 Preliminary adjudication of alternative designs

The Employer's Agent will undertake a preliminary scrutiny of any alternative designs for compliance with the specified requirements of the Employer. Should he find any mistakes or unsatisfactory aspects, he may afford the Tenderer the opportunity to rectify them within a period to be determined by the Employer's Agent. However, it is emphasized that the preliminary scrutiny of the design and Tender by the Employer's Agent, by its very nature, cannot be comprehensive, and no guarantee can be given in this regard that all the mistakes made by the Tenderer will in fact be detected. Any correction of such mistakes shall be made with the Tender price of the Tenderer being retained, and, wherever necessary, the priced schedule of quantities for the alternative design shall be adjusted accordingly.

#### **5.4.7 Acceptance of alternative design**

The Tenderer shall note that the acceptance of a Tender which includes alternative designs shall mean that the alternative designs have been approved in principle only. If the final calculations, drawings and details do not comply with the specified requirements, such alternative designs may be rejected, unless they are suitably amended by the Tenderer so as to be acceptable to the Employer.

#### **5.4.8 Final drawings and calculations and the priced schedule of quantities**

Where a Tender with an alternative design has been accepted, the Contractor shall, not less than two months before he intends starting with the construction of such design, submit to the Employer's Agent a complete set of working drawings, detailed calculations and a complete schedule of quantities, for approval. The schedule of quantities shall be based on the preliminary schedule of quantities, but with the necessary adjustments in quantities and prices and with the Tendered price for the alternative design being retained.

Within three weeks of having received the above, the Employer's Agent will indicate which drawings, calculations, quantities, prices and other particulars are acceptable to him and which not, with reasons furnished. The Contractor shall then submit to the Employer's Agent in good time any modified drawings and other particulars for approval, for which he will require two weeks. Any delay arising from the fact that the amended particulars do not meet the requirements shall be the responsibility of the Contractor.

No work which will be affected by an alternative design may be commenced, unless the drawings, schedule of quantities and prices for such alternative design have been approved. Should the Contractor fail to modify any drawings, calculations, quantities, prices or any other particulars to the satisfaction of the Employer's Agent, the alternative design will be rejected and the original design shall be constructed for the same amount as has been Tendered for the alternative design.

#### **5.4.9 Responsibility for alternative design**

The approval of a design by the Employer's Agent shall not in any way relieve the Tenderer of his responsibility to produce a design which conforms in all respects to all the specified requirements and which will be suitable for the purpose envisaged.

Should it appear later during construction or during the maintenance period that the design does not conform to the specified requirements, the Contractor only, shall be liable for any damage arising there from and he shall, at his own expense, do all the necessary work to ensure that the Works conforms to all the specified requirements.

#### **5.4.10 Indemnity**

Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Employer, its agents and assigns, against all claims howsoever arising out of the said design whether in contract or delict.

### **5.5 Submitting a Tender Offer (Cl. F2.13.1)**

#### **5.5.1 Whole of the Works (Cl. F.2.13.1)**

Tenderers shall offer to provide for the whole of the Works identified.

#### **5.5.2 Original Tender documents (Cl. F2.13.3)**

The original Tender document, issued to the Tenderer, shall be submitted in its entirety. No copies are required.

5.5.3 Marking of Tender Submissions (Cl. F.2.13.5)

The complete Tender documents shall be enclosed and sealed in a single envelope, marked:

**“BID NUMBER: 08/2023/2024: CONSTRUCTION OF GUNDANI LANDFILL CELL:**

**CLOSING DATE: 16<sup>th</sup> AUGUST 2023 AT 11H00**

The Employer’s address for delivery of Tender offers to be shown on each Tender submission package located at:

**Tender Box  
Thulamela Local Municipality,  
Old Agriven Building  
Thohoyandou**

5.5.4 Two envelope system (Cl. F.2.13.6)

A two-envelope procedure will not be followed.

5.5.5 Sub-Contracting

A minimum of 30% of the contract value (excluding, P&G’s, contingencies and professional fees) must be utilized on local sub-contractors and /suppliers for projects worth more than R30 million. **This is not applicable for this contract whose value is less than R30million.**

Local is defined as the following in order of priority:

1. Applicable Ward or wards where the project is implemented
2. The Local Municipality
3. The District Municipality

Failure to comply will result in penalties as follows:

1. Minimum Penalty – R 50 000 – for achieving less than 30% of the value
2. Maximum Penalty – 0.5 percent of the Contract value – for achieving 0% value.

“The Contractor shall not subcontract the whole of the project and not more than 51% of the contract”).

(This is derived as follows: 30% local  
30% of the remaining 70% = 21%  
Combined total = 51%)

5.5.6 Submission of Information and Data (Cl. F.2.14)

The Tenderer accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the Employer as non-responsive.

5.5.7 Closing time (Cl. F.2.15)

The closing time for submission of Tender offers is:

**At 11H00 on 16<sup>th</sup> AUGUST 2023**

Telegraphic, telephonic, telex, facsimile, e-mail, electronic and late Tender offers will not be accepted.

5.5.8 Tender offer validity (Cl. F.2.16)

The Tender offer validity period is **90 days** after Tender closing date.

5.5.9 Clarification of Tender offer after submission (Cl. F.2.17)

Delete the last part of the second sentence, commencing with the word “and”. Furthermore, delete the last two sentences of Cl. F.2.17.

Add the following sentence:

“The rates stated by the Tenderer shall be binding”.

5.5.10 Provide other Material (Cl. F.2.18.1)

Upon request by the Employer, the Tenderer shall promptly supply any other material that has a bearing on the Tender offer, the Tenderer's commercial position (including, where applicable, notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the Employer for the purpose of a full and fair assessment. Should the Tenderer not provide the information or material called for, by the time for submission stated in the Employer's request, the Employer will regard the Tender offer as being non-responsive.

The tenderer must submit to the Employer, names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy eligibility requirements.

5.5.11 Certificates (Cl. F.2.23)

The following certificates are to be provided with this Tender:

- a) Central Supplier Database (CSD)
- b) Compensation Fund registration certificate
- c) Certificate of Contractor Registration issued by the Construction Industry Development Board or a copy of the application Form for registration in terms of the Construction Industry Development Board Act (Form F006). A minimum grading of **4CE or higher** is required.

In the event of a Joint Venture submitting a Tender, every member of the joint venture must submit proof of registration with the CIDB within 10 days from the closing date for Tenders; and the lead partner must have a minimum contract grading designation in the **4CE or higher** class of construction work.

**Important Note:**

Failure to provide the required particulars as per the above listed certificates implies a non-responsive Tender and warrants rejection of the Tender on account of non-compliance with the requirements of the Tender Data.

**6. EMPLOYER'S UNDERTAKING**

**6.1 Opening of Tender submissions (Cl. F.3.4)**

The time and location for opening of the Tender offers are:

**11H00 on 16 AUGUST 2023**  
**Tender Box**  
**Thulamela Local Municipality,**  
**Old Agriven Building,**  
**Thohoyandou**

**6.2 Arithmetical errors (Cl. F.3.9)**

Delete Clause 3.9.1 and renumber Clause 3.9.2 as 3.9.5.

Insert the following new clauses:

- F.3.9.1 Check responsive Tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.
- F.3.9.2 Check the highest ranked Tender or Tenderer with the highest number of Tender evaluation points after the evaluation of Tender offers in accordance with F.3.11 for:
- a) the gross misplacement of the decimal point in any unit rate;
  - b) omissions made in completing the pricing schedule or bills of quantities; or
  - c) arithmetic errors in :
    - i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices;
    - or
    - ii) the summation of the prices
- F.3.9.3 Notify the Tenderer of all errors or omissions that are identified in the Tender offer and either confirm the Tender offer as Tender or accept the corrected total of prices.
- F.3.9.4 Where the Tenderer elects to confirm the Tender offer as Tender, correct the errors as follows:
- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
  - b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total shall govern and the tenderer will be asked to revised selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.
  - c) The tenderer will be afforded **two days**, after being requested by the Employer or Engineer, to revise selected item prices to achieve the Tendered total of the prices. The tender may be rejected if the Tenderer does not correct or accept the correction of his arithmetical errors as described above.

In renumbered Clause 3.9.5 replace the wording "F3.9.1" with "F3.9.4".

### **6.3 Evaluation of Tender offers (Cl. F3.11)**

The procedure for evaluation of responsive Tender offers is Method 4, viz. the case of a financial offer, quality and preferences.

The Employer's Preferential Procurement Policy applicable to this Tender and based on the Preferential Procurement Policy Act, 2000 (Act No. 5 of 2000) is set out here following:

#### **6.3.1 Business Registration**

Prospective Tenderers shall be registered:

- a) with the South African Revenue Services for all categories of taxes applicable to it;
  - b) with the Compensation Commissioner;
  - c) with the Construction Industry Development Board.
- A minimum grading of **4CE or higher** is required.

#### **6.3.2 Preference Point System**

Refer to form as **Preference Points Claim form in Terms of the Preferential Procurement Regulations 2011 (MBD 6.1) and Appendix A1 – Evaluation Criteria)** in the Returnable Schedules.

**Contractors must also supply copies of a joint venture, CC's or any other agreements that clearly indicates ownership and % shareholding.**

**Tenderer's tax matters will be verified through Central Supplier Database (CSD) documents.**

### **6.4 Acceptance of Tender Offer (Cl. F3.13)**

Tender offers will only be accepted if:

- a) the Tenderer has in his or her possession a latest Central Supply Database (CSD) documentation;
- b) the Tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation. A minimum grading of **4CE or higher** is required;
- c) the Tenderer or any of its principals is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and
- d) the Tenderer has not abused the Employer's Supply Chain Management System,
- e) the Tenderer has not failed to perform on any previous contract.

### **6.5 Provide copies of the Contract Document (Cl. F3.18)**

The number of paper copies of the signed Contract to be provided by the Employer to the successful Tenderer is **one**.

### **6.6 Proof of Availability of Staff with LI Competencies**

Only those tenderers who can demonstrate that they will have in their employ management and supervisory staff satisfying the requirement of the scope of work for labour-intensive



competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders.

**6.7 Requirement for submission of names of LI staff**

The tenderer must submit to the Employer, names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy eligibility requirements.

# **VOLUME 2 RETURNABLE DOCUMENTS**

## **CONTENTS**

<b><u>Item</u></b>	<b><u>Heading</u></b>	<b><u>Colour</u></b>	<b><u>Page</u></b>
T2.1	List of Returnable Documents	Yellow	2-3
T2.2	Returnable Schedules	Yellow	2-6
C1.1	Form of Offer and Acceptance	Yellow	2-79

## **T2.1 LIST OF RETURNABLE DOCUMENTS**

## 1. **GENERAL**

This section refers to documents that are returned with this single document and constitute a Tender. Whilst many of the returnables are required for the purpose of evaluating Tenders, some will form part of the subsequent contract, as they form the basis of the Tender offer. **It is therefore of paramount importance that tenderers return all information requested in items 2, 3, 4 and 5 below, duly completed as part of their tender submission.**

## 2. **RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES**

The returnable schedules, listed here below, are contained in **Volume 2** of the tender document, referenced as Returnable Schedules.

The Tenderer **must complete** the following returnable schedules:

<b>Description</b>	
MBD 1	Invitation to Tender
MBD 2	Tax Clearance
MBD 3.1	Pricing Schedule – Firm Prices
MBD 3.2	Pricing Schedule – Non-Firm Prices – Subject to Escalation
MBD 3.3	Pricing Schedule
MBD 4	Declaration of Interest
MBD 5	Declaration for Procurement above R10 Million (all applicable taxes included)
MBD 6.1	Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2011
MBD 7.1	Contract Form – Purchase of Goods/Works
MBD 7.2	Contract Form – Rendering of Services
MBD 7.3	Contract Form – Sale of Goods/Works
MBD 8	Declaration of Tenderer's Past Supply Chain Management Practices
MBD 9	Certificate of Independent Tender Determination
A1	Evaluation Criteria
A2	Certificate of Attendance at Site Clarification Meeting.
A3	Certificate of Authority of Signatory
A4	Certificate of Registration with the Construction Industry Development Board
A5	Record of Addenda to Tender Documents
A6	Form of Intent to Provide a Performance Guarantee
A7	Health and Safety Plan: Declaration by Tenderer
A8	Schedule of Proposed Sub-Contractors
A9	Quality Assurance Programme
A10	Insurance Statement
A11	Commercial Equity Declaration
A12	Financial Information of Tenderer
A13	Joint Venture Disclosure Form (where applicable)
A14	Rates of labour and Materials (Daywork Rates)
A15	Alterations by Tenderer
A16	Plant
C1.1	Form of Offer
C2.1	Pricing Data
C2.2	Bill of Quantities

---

**3. OTHER DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES**

**3.1 Tax obligation as captured in Central Supplier Database.**

- a) It is a condition of Tender that any responsive Tenderer demonstrates compliance with respect to Central Supplier Database.
- b) Each Party to a Consortium/Sub-Contractors must provide a separate Central Supplier Database documents for compliance with tax obligation.

**3.2 Compensation Fund**

The Tenderer is required to submit with his Tender, proof of registration and good standing with the Compensation Fund.

**3.3 Contractor Registration**

The Tenderer is required to submit with his Tender, proof of registration and grading with the Construction Industry Development Board.

**3.4 Data Provided by Contractor**

**Note:** Tenderer must complete the required information at the Contract Data, Part C1, Items 3.1 and 3.2 (page 3-12) and submit as part of his tender.

**4. RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT**

- a) Curricula vitae of personnel
- b) Schedule of Proposed Sub-contractors
- c) Schedule of Available Infrastructure, Resources and Experience
- d) Commercial Equity Declaration
- e) Rates of labour and Materials (Daywork Rates)

**5. OTHER SCHEDULES AND AFFIDAVITS THAT WILL BE INCORPORATED INTO THE CONTRACT**

- a) Offer and Acceptance
- b) Contract Data
- c) Schedule of Bills

## **T2.2 RETURNABLE SCHEDULES**

The Tenderer **must complete** the following returnable schedules:

<b>Description</b>	<b>Page</b>
MBD 1 Invitation to Tender	2-6
MBD 2 Tax Clearance	2-8
MBD 3.1 Pricing Schedule – Firm Prices	2-14
MBD 3.2 Pricing Schedule – Non-Firm Prices – Subject to Escalation	2-15
MBF 3.3 Pricing Schedule – Firm Prices (Professional Services)	2-18
MBD 4 Declaration of Interest	2-20
MBD 5 Declaration for Procurement above R10 Million (all applicable taxes included)	2-22
MDB 6.1 Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2011	2-24
MBD 7.1 Contract Form – Purchase of Goods/Works	2-29
MBD 7.2 Contract Form – Rendering of Services	2-31
MBD 7.3 Contract Form – Sale of Goods/Works	2-35
MBD 8 Declaration of Tenderer's Past Supply Chain Management Practices	2-37
MBD 9 Certificate of Independent Tender Determination	2-39
A1 Evaluation Criteria	2-42
A2 Certificate of Attendance at Site Clarification Meeting	2-48
A3 Certificate of Authority of Signatory	2-49
A4 Certificate of Registration with the Construction Industry Development Board	2-53
A5 Record of Addenda to Tender Documents	2-58
A6 Form of Intent to Provide a Performance Guarantee	2-59
A7 Health and Safety Plan: Declaration by Tenderer	2-60
A8 Schedule of Proposed Sub-Contractors	2-63
A9 Quality Assurance Programme	2-69
A10 Insurance Statement	2-70
A11 Commercial Equity Declaration	2-71
A12 Financial Information of Tenderer	2-73
A13 Joint Venture Disclosure Form (where applicable)	2-74
A14 Rates of labour and Materials (Daywork Rates)	2-82
A15 Alterations by Tenderer	2-83
A16 Plant (Daywork schedule)	2-84
C1.1 Form of Offer	2-86
C2.1 Pricing Instructions	2-91
C2.2 Bill of Quantities	2-97

**Functionality Criteria are as follows, refer to tables below:**

**a. Prequalification / Quality Criteria**

**The documents and schedules the tender shall submit with the tender shall include, but not limited to those set below, *table 1*.**

**Table 1.**

RETURNABLE DOCUMENT	YES	NO
1. CERTIFIED COMPANY REGISTRATION CERTIFICATE		
2. ID COPIES OF COMPANY DIRECTORS: CERTIFIED.		
3. ORIGINAL SIGNATORY OF AUTHORITY AUTHORISATION LETTER ON A COMPANY LETTER HEAD		
4. RECENT COMPLIANT CENTRAL SUPPLIER DATABASE, JV SHOULD SUBMIT FOR BOTH COMPANIES, SHOULD BE PRINTED BETWEEN ADVERT AND CLOSING DATE.		
5. CIDB GRADING, JV SHOULD SUBMIT CONSOLIDATED CIDB <b>(4CE or HIGHER)</b> . CIDB CONSOLIDATED		
6. LETTER OF GOOD STANDING: CERTIFIED (COIDA).		
7. BBBEE CERTIFICATE: SANAS ACCREDITAION, JOINT VENTURES TO SUBMIT A CONSOLIDATED BBBEE CERTIFICATE: CERTIFIED OR SWORN AFFIDAVIT (FOR THE PURPOSE OF PREFERENTIAL POINTS ONLY).		
8. RECENT ORIGINAL STAMPED OR ELECTRONIC STAMPED LETTER FROM THE BANK WITH RATING (FOR EVALUATION ON FUNCTIONALITY POINTS ONLY).		
9. PROOF OF MUNICIPAL RATES AND TAXES OR SERVICES CHARGES: <ul style="list-style-type: none"> <li>• OF THE COMPANY AND ALL ITS DIRECTORS NOT IN ARREARS FOR MORE THAN 90 DAYS OR</li> <li>• CONFIRMATION FROM MUNICIPALITY. IF MUNICIPAL RATES AND TAXES ARE NOT LEVIED (FOR COMPANY AND ITS DIRECTOR(S) AS PER THE CK/COMPANY FORM OF ADDRESS ON THE REGISTRATION CERTIFICATE, OR</li> <li>• IF LEASING, A SIGNED LEASE AGREEMENT BY THE LESSOR AND THE LESSEE AND A DECLARATION/LETTER INDICATING THAT THE BIDDER AND/OR THE DIRECTOR DOES NOT HAVE MUNICIPAL ACCOUNT AND THE MUNICIPAL SERVICES, RATES AND TAXES ARE PAID BY THE PROPERTY OWNER, SHOULD BE SIGNED BY THE LESSOR AND SUCH DECLARATION/LETTER MUST BE ATTACHED/MUNICIPAL RATES IN THE NAME OF THE LESSOR FOR BOTH COMPANY DIRECTOR(S).</li> </ul>		
10. COMPANY PROFILE		
11. AUDITED FINANCIAL STATEMENT. IF THE COMPANY IS OLDER THAN THREE (3) YEARS, SUBMIT PAST THREE YEARS FINANCIAL STATEMENT (2019/2020 – 2020/2021 – 2021/2022)		
12. LETTER OF INTENT FROM A REGISTERED FINANCIAL INSTITUTION AS A GUARANTOR IN THE AMOUNT OF 10% FOR SURETY.		
13. COMPLETE THE DOCUMENT WITH A BLACK INK, INITIAL WHERE ALTERED AND INITIAL EVERY PAGE, INCLUDING ALL DRAWINGS ISSUED WITH THE DOCUMENT. COMPLETE FORM OF OFFER IN BLACK INK. <b><u>THE DOCUMENT SHOULD NOT BE DISMANTLED OR RE-ARRANGED</u></b> . BOOK OF PLANS ISSUED WITH DOCUMENTS SHOULD BE RETURNED		



RETURNABLE DOCUMENT	YES	NO
WITH THE DOCUMENTS WITH ALL DRAWINGS SIGNED BY TENDERERS.		
14. 30% LOCAL SUBCONTRACTING CLAUSE IS <b>NOT</b> APPLICABLE FOR THIS TENDER, IT IS ONLY APPLICABLE IF TENDER PRICE EXCEEDS THE <b>R30M THRESHOLD</b>		
15. INCASE OF A JOINT VENTURE, ASSOCIATION OR CONSORTUIM, A FORMAL CONTRACT AGREEMENT MUST BE SIGNED BY BOTH PARTIES AND BE ATTACHED. THE FOLLOWING MUST BE ADDED TO: a. ALL OF THE ABOVE REQUIREMENTS MUST BE FOR BOTH ENTITIES. b. CONSOLIDATED VALID BBBEE. c. CONSOLIDATED CIDB		
16. STAMPED & SIGNED CERTIFICATE OF SITE BRIEFING ATTENDANCE		

A pre-qualification process will be used as follows:

Tenderers will be assessed based on the prequalification criteria as set out in the table below. **Tenderers scoring less than 70% will considered non-responsive.** Tenderers shall fill in the relevant information on the Prequalification / Quality Criteria Schedules in Part T2 and this information shall be used to award points for functionality on the following basis per category:

## MBD 2

### TAX CLEARANCE CERTIFICATE REQUIREMENTS

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

- 1 In order to meet this requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- 2 SARS will then furnish the bidder with a Tax Clearance Certificate Pin that will be valid for a period of 1 (one) year from the date of approval.
- 3 The original Tax Clearance Certificate Pin must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate Pin.
- 5 Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website [www.sars.gov.za](http://www.sars.gov.za).
- 6 Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website [www.sars.gov.za](http://www.sars.gov.za).

MBD 3.1

PRICING SCHEDULE – FIRM PRICES  
(PURCHASES)

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of Bidder..... Bid Number.....

Closing Time ..... Closing Date .....

OFFER TO BE VALID FOR.....DAYS FROM THE CLOSING DATE OF BID.

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)
----------	----------	-------------	--

-	Required by:	.....
---	--------------	-------

-	At:	.....
---	-----	-------

.....

-	Brand and Model	.....
---	-----------------	-------

-	Country of Origin	.....
---	-------------------	-------

-	Does the offer comply with the specification(s)?	*YES/NO
---	--	---------

-	If not to specification, indicate deviation(s)	.....
---	--	-------

-	Period required for delivery	..... *Delivery: Firm/Not firm
---	------------------------------	-----------------------------------

-	Delivery basis	.....
---	----------------	-------

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

\*\* "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

\*Delete if not applicable

**MBD 3.2**

**PRICING SCHEDULE – NON-FIRM PRICES  
(PURCHASES)**

**NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED IN THE BIDDING DOCUMENTS.**

**IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT**

Name of Tenderer .....	Tender No. ....
Closing Time .....	Closing Date .....

OFFER TO BE VALID FOR ..... DAYS FROM THE CLOSING DATE OF TENDER.

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)
- Required by:			.....
- At:			.....
- Brand and model			.....
- County of origin			.....
- Does the offer comply with the specification(s)?			*YES/NO
- If not to specification, indicate deviation(s)			.....
- Period required for delivery			.....
- Delivery			*Firm/Not Firm

\*\* "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

\*Delete if not applicable

## MBD 3.2

### PRICE ADJUSTMENTS

#### A NON-FIRM PRICES SUBJECT TO ESCALATION

1. IN CASES OF PERIOD CONTRACTS, NON FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES
2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = (1 - V)Pt \left( D1 \frac{R1t}{R1o} + D2 \frac{R2t}{R2o} + D3 \frac{R3t}{R3o} + D4 \frac{R4t}{R4o} \right) + VPt$$

Where:

Pa	=	The new escalated price to be calculated.
(1-V) Pt	=	85% of the original bid price. <b>Note that Pt must always be the original bid price and not an escalated price.</b>
D1, D2..	=	Each factor of the bid price e.g. labour, transport, clothing, footwear, etc. The total of the various factors D1,D2...etc. must add up to 100%.
R1t, R2t.....	=	Index figure obtained from new index (depends on the number of factors used).
R1o, R2o	=	Index figure at time of bidding.
VPt	=	15% of the original bid price. This portion of the bid price remains firm

i.e.

it is not subject to any price escalations.

3. The following index/indices must be used to calculate your bid price:

D1 = Labour	=	0.15
D2 = Fuel	=	0.1
D3 = Plant	=	0.2
D4 = Material	=	0.55

Base month for Index Figures = **June 2023 (the month prior to the month of tendering)**

Labour, Material, Fuel & Plant's Statistical Base Date = **June 2023 = 100**

4. FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA. THE TOTAL OF THE VARIOUS FACTORS MUST ADD UP TO 100%.

FACTOR (D1, D2 etc. e.g. Labour, transport etc.)	PERCENTAGE OF BID PRICE
Labour	
Fuel	
Plant	
Material	

**MBD 3.2**

**B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS**

1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO.	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR =		
				ZAR =		
				ZAR =		
				ZAR =		
				ZAR =		
				ZAR =		

2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE

**MBD 3.3**

**PRICING SCHEDULE**  
**(Professional Services)**

Name of Bidder:.....Bid Number: .....

Closing Time: ..... Closing Date .....

OFFER TO BE VALID FOR .....DAYS FROM THE CLOSING DATE OF BID.

ITEM NO	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)
------------	-------------	--

1. The accompanying information must be used for the formulation of proposals.
2. Bidders are required to indicate a ceiling price based on the total estimated time for completion of all phases and including all expenses inclusive of all applicable taxes for the project. R.....

3. PERSONS WHO WILL BE INVOLVED IN THE PROJECT AND RATES APPLICABLE (CERTIFIED INVOICES MUST BE RENDERED IN TERMS HEREOF)

4.	PERSON AND POSITION	HOURLY RATE	DAILY RATE
	-----	R-----	-----
	-----	R-----	-----
	-----	R-----	-----
	-----	R-----	-----
	-----	R-----	-----

5. PHASES ACCORDING TO WHICH THE PROJECT WILL BE COMPLETED, COST PER PHASE AND MAN-DAYS TO BE SPENT

-----	R-----	----- days
-----	R-----	----- days
-----	R-----	----- days
-----	R-----	----- days

- 5.1 Travel expenses (specify, for example rate/km and total km, class of airtravel, etc). Only actual costs are recoverable. Proof of the expenses incurred must accompany certified invoices.

DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT
-----	-----	-----	R.....
-----	-----	-----	R.....
-----	-----	-----	R.....
-----	-----	-----	R.....

\*\*\*"all applicable taxes" includes value-added taxes, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

5.2 Other expenses, for example accommodation (specify, eg. Three star hotel, bed and breakfast, telephone cost, reproduction cost, etc.). On basis of these particulars, certified invoices will be checked for correctness. Proof of the expenses must accompany invoices.

DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT
-----	.....	.....	R.....
-----	.....	.....	R.....
-----	.....	.....	R.....
-----	.....	.....	R.....
TOTAL: R.....			

6. Period required for commencement with project after acceptance of bid.....
7. Estimated man-days for completion of project.....
8. Are the rates quoted firm for the full period of contract? .....\*YES/ NO.
9. If not firm for the full period, provide details of the basis on which adjustments will be applied for, for example consumer price index.....  
.....  
.....  
.....



**MBD 4**

**DECLARATION OF INTEREST**

1. No bid will be accepted from persons in the service of the state\*.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.
3. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**
  - 3.1 Full Name: .....
  - 3.2 Identity Number: .....
  - 3.3 Company Registration Number: .....
  - 3.4 Tax Reference Number: .....
  - 3.5 VAT Registration Number: .....
  - 3.6 Are you presently in the service of the state?\* **YES/NO**
  - 3.6.1 If so, furnish particulars:  
.....  
.....
  - 3.7 Have you been in the service of the state for the past twelve months? **YES/NO**
  - 3.7.1 If so, furnish particulars:  
.....  
.....

\* MSCM Regulations: "in the service of the state" means to be –

- (a) a member of –
  - (i) any municipal council;
  - (ii) Any provincial legislature; or
  - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors on any municipality entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of 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)
- (e) a member of the accounting authority of any national or provincial public entity; or

- (f) an employee of Parliament or a provincial legislature.
- 3.8 Do you, have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this? **YES/NO**
- 3.8.1 If so, furnish particulars  
.....  
.....
- 3.9 Are you, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid? **YES/NO**
- 3.9.1 If so, furnish particulars  
.....  
.....
- 3.10 Are any of the company’s directors, managers, principal shareholders in service of the state? **YES/NO**
- 3.10.1 If so, furnish particulars  
.....  
.....
- 3.11 Are any spouse, child of parent of the company’s directors, managers, principal shareholders of stakeholders in service of the state? **YES/NO**
- 3.11.1 If so, furnish particulars  
.....  
.....

**CERTIFICATION**

**I, THE UNDERSIGNED (NAME).....**

**CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.**

**I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.**

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

**MBD 5**

**DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)**

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

1. Are you by law required to prepare annual financial statements for auditing? **\*YES/NO**

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

.....

.....

2. Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days? **\*YES/NO**

2.1 If no, this services to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days.

2.2 .....

.....

.....

.....

3. Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract? **\*YES/NO**

3.1 If yes, furnish particulars

.....

.....

\*Delete if not applicable

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality/municipal entity is expected to be transferred out of the Republic? **\*YES/NO**

4.1 If yes, furnish particulars  
.....  
.....

**CERTIFICATION**

**I, THE UNDERSIGNED, (NAME) .....**

**CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FROM IS CORRECT.**

**I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.**

.....  
Signature Date

.....  
Position Name of Bidder

**MBD 6.1**

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL  
PROCUREMENT REGULATIONS 2017**

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.**

**1. GENERAL CONDITIONS**

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

- a) The value of this bid is estimated not to exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
- b) The 80/20 preference point system will be applicable to this tender

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

POINTS	
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

## 2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
  - 1) B-BBEE Status level certificate issued by an authorized body or person;
  - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
  - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

## 3. POINTS AWARDED FOR PRICE

### 3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

<b>80/20</b>	<b>or</b>	<b>90/10</b>
$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$	or	$P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$

Where

- P<sub>s</sub> = Points scored for price of bid under consideration
- P<sub>t</sub> = Price of bid under consideration
- P<sub>min</sub> = Price of lowest acceptable bid

#### 4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

- 4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

#### 5. BID DECLARATION

- 5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

#### 6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

- 6.1 B-BBEE Status Level of Contributor: . = ..... (maximum of 10 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

#### 7. SUB-CONTRACTING

- 7.1 Will any portion of the contract be sub-contracted?

(***Tick applicable box***)

YES		NO	
-----	--	----	--

- 7.1.1 If yes, indicate:

- What percentage of the contract will be subcontracted .....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- Whether the sub-contractor is an EME or QSE

(***Tick applicable box***)

YES		NO	
-----	--	----	--

- v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms

**of Preferential Procurement Regulations,2017:**

<b>Specific Goals Categories (CSD will be used for verification)</b>	<b>Number of Points (80/20 system) 20 Points breakdown</b>
<b>1. 100% Black ownership</b>	<b>10</b>
<b>2. 100% Women ownership</b>	<b>5</b>
<b>3. Youth</b>	<b>3</b>
<b>4. Disability (Medical certificate will be used to verify the disability status of the bidder).</b>	<b>2</b>

**8. DECLARATION WITH REGARD TO COMPANY/FIRM**

8.1 Name \_\_\_\_\_ of  
company/firm:.....

8.2 VAT \_\_\_\_\_ registration  
number:.....

8.3 Company \_\_\_\_\_ registration  
number:.....

**8.4 TYPE OF COMPANY/ FIRM**

- ☐ Partnership/Joint Venture / Consortium
  - ☐ One person business/sole propriety
  - ☐ Close corporation
  - ☐ Company
  - ☐ (Pty) Limited
- [TICK APPLICABLE BOX]

**8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES**

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

**8.6 COMPANY CLASSIFICATION**

- ☐ Manufacturer
  - ☐ Supplier
  - ☐ Professional service provider
  - ☐ Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]



8.7 **MUNICIPAL INFORMATION**

**Municipality where business is situated:**

.....

**Registered Account Number:** .....

**Stand Number:** .....

8.8 Total number of years the company/firm has been in business: .....

8.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
  - (a) disqualify the person from the bidding process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution.

WITNESSES

1. ....

2. ....

.....  
SIGNATURE(S) OF BIDDERS(S)

DATE: .....

ADDRESS .....

.....  
.....

**MBD 7.1**

**MBD 7.1**

**CONTRACT FORM – PURCHASE OF GOODS/WORKS**

**THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.**

**PART 1 (TO BE FILLED IN BY THE BIDDER)**

7. I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to (name of institution)..... in accordance with the requirements and specifications stipulated in bid number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
- i) Bidding documents, viz
    - Invitation to bid;
    - Tax clearance certificate;
    - Pricing schedule(s);
    - Technical Specification(s);
    - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
    - Declaration of interest;
    - Declaration of bidder's past SCM practices;
    - Certificate of Independent Bid Determination;
    - Special Conditions of Contract;
  - ii) General Conditions of Contract; and
  - iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) .....

CAPACITY .....

SIGNATURE .....

NAME OF FIRM .....

DATE .....

<b>WITNESSES</b>
1. ....
2. ....
DATE: .....

**MBD 7.1**

**CONTRACT FORM - PURCHASE OF GOODS/WORKS**

**PART 2 (TO BE FILLED IN BY THE PURCHASER)**

1. I..... in my capacity as.....  
accept your bid under reference number .....dated.....for the supply of  
goods/works indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating delivery instructions is forthcoming.
3. I undertake to make payment for the goods/works delivered in accordance with the terms and  
conditions of the contract, within 30 (thirty) days after receipt of an invoice accompanied by the  
delivery note.

ITEM NO.	PRICE (ALL APPLICABLE TAXES INCLUDED)	BRAND	DELIVERY PERIOD	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

4. I confirm that I am duly authorized to sign this contract.

SIGNED AT ..... ON .....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP

--

WITNESSES

1. ....

2.....

DATE .....

**MBD 7.2**

**CONTRACT FORM – RENDERING OF SERVICES**

**THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.**

**PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)**

1. I hereby undertake to render services described in the attached bidding documents to Thulamela Local Municipality in accordance with the requirements and task directives / proposals specifications stipulated **in Bid Number 08/2023/2024** at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
  - i) Bidding documents, viz
    - Invitation to bid;
    - Tax clearance certificate;
    - Pricing schedule(s);
    - Filled in task directive/proposal;
    - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
    - Declaration of interest;
    - Declaration of Bidder's past SCM practices;
    - Certificate of Independent Bid Determination;
    - Special Conditions of Contract;
  - ii) General Conditions of Contract; and
  - iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) \_\_\_\_\_

CAPACITY \_\_\_\_\_

SIGNATURE \_\_\_\_\_

NAME OF FIRM \_\_\_\_\_

DATE \_\_\_\_\_

<b>WITNESSES</b>
1. ....
2. ....
DATE: .....

**MBD 7.2**

**CONTRACT FORM – RENDERING OF SERVICES**

**PART 2 (TO BE FILLED IN BY THE PURCHASER)**

1. I..... in my capacity  
as.....  
accept your bid under reference number .....dated.....for the rendering  
of services indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms and  
conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

4. I confirm that I am duly authorized to sign this contract.

SIGNED AT ..... ON .....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP

--

WITNESSES

1. ....

2.....

DATE .....

**MBD 7.3**

**CONTRACT FORM – SALE OF GOODS/WORKS**

**THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER (PART 1) AND THE SELLER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE SELLER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.**

**PART 1 (TO BE FILLED IN BY THE BIDDER)**

1. I hereby undertake to purchase all or any of the goods and/or works described in the attached bidding documents from (name of institution)..... in accordance with the requirements stipulated in (bid number)..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the seller during the validity period indicated and calculated from the closing time of bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
  - i) Bidding documents, viz
    - Invitation to bid;
    - Tax clearance certificate;
    - Pricing schedule(s);
    - Declaration of interest;
    - Declaration of Bidder's past SCM practices;
    - Special Conditions of Contract;
  - ii) General Conditions of Contract; and
  - iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) cover all my obligations and I accept that any mistakes regarding price(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.
5. I undertake to make payment for the goods/works as specified in the bidding documents.
6. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
7. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) .....

CAPACITY .....

SIGNATURE .....

NAME OF FIRM .....

DATE .....

**WITNESSES**

1. ....

2. ....

DATE: .....

**MBD 7.3**

**CONTRACT FORM – SALE OF GOODS/WORKS**

**PART 2 (TO BE FILLED IN BY THE PURCHASER)**

1. I..... in my capacity as.....  
accept your bid under reference number .....dated.....for the purchase  
of goods/works indicated hereunder and/or further specified in the annexure(s).
2. I undertake to make the goods/works available in accordance with the terms and conditions of the  
contract.

ITEM NO.	DESCRIPTION	PRICE (ALL APPLICABLE TAXES INCLUDED)		

3. I confirm that I am duly authorized to sign this contract.

SIGNED AT ..... ON .....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP

--

WITNESSES

1. ....

2.....

DATE .....

**MBD 8**

**DECLARATION OF BIDDER'S PAST SUPPLY CHAIN  
MANAGEMENT PRACTICES**

1. This Municipal Bidding Document must form part of all bids invited.
2. It serves as a declaration to be used by municipalities and municipal entities 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 bid of any bidder may be rejected if that bidder, or any of its directors have:
  - a) abused the municipality' / municipal entities supply chain management system or committed any improper conduct in relation to such system;
  - b) been convicted for fraud or corruption during the past five years;
  - c) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
  - d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
4. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) and can be accessed by clicking on its link at the bottom of the home page.</p>	<p>Yes</p> <p><input type="checkbox"/></p>	<p>No</p> <p><input type="checkbox"/></p>
4.1.1	<p>If so, furnish particulars:</p>		



Item	Question	Yes	No
4.2	Is the bidder 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)?  <b>The Register for Tender Defaulters can be accessed on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) by clicking on its link at the bottom of the home page.</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder 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 <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and any municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.5.1	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 Bidder

Js367bW

## MBD 9

### CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

- 1 This Municipal Tendering Document (MBD) must form part of all tenders<sup>1</sup> 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).<sup>2</sup> Collusive tendering is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
  - a. take all reasonable steps to prevent such abuse;
  - b. reject the tender of any tenderer if that tenderer or any of its directors had abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
  - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the tendering process or the execution of that contract.
4. This MBD 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 (MBD 9) must be completed and submitted with the tender:

<sup>1</sup> Includes price quotations, advertised competitive tenders, limited tenders and proposals.

<sup>2</sup> 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.

**MBD 9**

**CERTIFICATE OF INDEPENDENT TENDER DETERMINATION**

I, the undersigned, in submitting the accompanying tender:

\_\_\_\_\_  
(Tender Number and Description)

in response to the invitation for the tender made by:

\_\_\_\_\_  
(Name of Municipality / Municipal Entity)

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

I certify, on behalf of \_\_\_\_\_ that:  
(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<sup>3</sup> will not be construed as collusive tendering.
7. In particular, without limiting the generality of paragraphs 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.

<sup>3</sup> 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.

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.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Tenderer

## ANNEXURE A1: EVALUATION CRITERIA

The bids will be evaluated in three stages. The first stage will check whether the bidders have submitted all documents as requested on the advert. Although functionality does not form part of the final tender points scoring for award purpose, tenderer will be assessed for responsiveness and functionality first and if the tenderer is not responsive or does not meet the minimum functionality score, the tenderer will be eliminated and not considered further for second stage of evaluation.

- ◆ Contractors must demonstrate their experience capability with regard to earthworks, layer-works, landfill cell works, roadworks, structural works done previously within the last 5 years. (Refer Table 1)
- ◆ Contracts Manager, Site Agent and Safety Officer must have experience in earthworks, layer-works, roadworks and structural works.
- ◆ Plant and equipment required for the assignment
- ◆ Bank rating

The third stage of the evaluation will be based on Price (80) and preference points for B-BBEE status level of contribution (20)

Details points scoring for functionality are as follows:

**Goals at which points should be allocated.**

**TABLE 1: EXPERIENCE AND REFERENCES**

	TARGETED GOALS	MAX POINT TO BE SCORED (PER GRADING)	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Five (05) largest completed projects of similar nature with appointment letters and completion certificates signed by both the Employer and the Contractor attached will be assessed as follows):			
2	Complete project with value of >R5 million	12 points each		
3	Complete project with value of >R2 million – =<5 million	8 points each		
	Complete project with value of =< R2 million	4 points each		
	<b>SUB TOTAL: Reputation and References</b>	<b>60 points</b>		

**TABLE 2: EXPERIENCE OF KEY STAFF**

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	<b>Contract Manager:</b> must be available on site for the duration of a project. A Construction Manager with project management degree or B-Tech / BSc in Civil Engineering or equivalent qualification registered with ECSA or SACPCMP. <ul style="list-style-type: none"> <li>➤ &gt;10 years experience</li> <li>➤ &gt;5 -10 years experience</li> <li>➤ &lt;5 years experience</li> </ul>	5  5 3 1		
2	<b>Site Agent:</b> A site agent with a National Diploma in Civil Engineering qualification: <ul style="list-style-type: none"> <li>➤ &gt;10 years experience</li> <li>➤ 5-&lt;10 years experience</li> <li>➤ &gt;2-&lt;5 years experience</li> <li>➤ &lt;2 years experience</li> </ul>	10  10 6 3 0		
3	<b>Safety Officer:</b> registered as a construction health and safety officer with SACPMP or OHSA or higher (non-registered = 0 points): Certified proof must be attached. <ul style="list-style-type: none"> <li>➤ &gt;5 years of experience in water project</li> <li>➤ &gt;2-&lt;5 years experience</li> <li>➤ &lt;2 years experience</li> </ul>	5  5 2 1		
	<b>SUB TOTAL: EXPERIENCE REFERENCES</b>	<b>20</b>		

**BIDDERS must provide submit CVs and certified qualifications for each key personnel. Failure to submit the CVs and certified qualifications will result in the bidder getting zero (0) points. Key personnel should be unencumbered available full time and unique to this project.**

**TABLE 3: PLANT AND EQUIPMENT**

TARGETED GOALS				WEIGHT	POINTS SCORED
	Plant & Equipment Required	Size/Capacity or Model etc	Min. Number required		
1.	1 x TLB	0.5m <sup>3</sup>	1	1	
2.	1 x Pedestrian Roller		1	1	
3.	1 x Smooth Roller		1	1	
4.	1 x 12-ton grid roller		1	1	
5.	3 x Tipper Trucks	8 to 10 tons	3	3	
6.	1 x Water tanker	10,000L minimum capacity	1	1	
7.	1 x Excavator	1m <sup>3</sup> bucket size	1	1	
8	1 x Grader	Cat 480 or Equivalent	1	1	
<b>SUB-TOTAL: Tender Construction Plant &amp; Equipment</b>				<b>10.00</b>	

**BIDDERS must provide proof of ownership or a letter of intent for the plant and equipment (failure to submit proof of ownership OR Letter of intent for Plant and Equipment hire is signed by both the lessee and the lessor will result in the bidder getting zero points).**

**TABLE 4: BANK RATING**

	TARGETED GOALS	WEIGHT	POINTS SCORED
1	Rating A or B	10	
2	Rating of C	8	
3	Rating D	5	
4	Rating E or lower	2	
	<b>SUB TOTAL: Financial References</b>	<b>10</b>	

**Bidders must complete rating and add supporting documentations. (Failure to submit proof of the bank rating from the relevant bank will result in the bidder getting zero points). Bank ratings may be verified with the bank by the employer.**

**SUMMARY OF ADJUDICATION COMPETENCE ACHIEVEMENTS**

	TARGETED GOALS	WEIGHT	POINTS SCORED
<b>COMPETENCE GOALS</b>	Company Experience : Table 1	60.0	
	Key Personnel Experience : Table 2	20.0	
	Plant and Equipment : Table 3	10.0	
	Bank Rating : Table 4	10.0	
	<b>SUB-TOTAL: Functionality Achievements</b>	<b>100.0</b>	

**Functionality will be scored out of 100 points and the minimum threshold to qualify is 70 points. Tenderers who fail to meet the minimum threshold will be considered as non-responsive.**

The following is a statement of similar work executed by myself/ourselves in the last five (5) years:

[illegible]



[illegible]

[illegible]

[illegible]



## APPENDIX 2: CERTIFICATE OF ATTENDANCE AT SITE CLARIFICATION MEETING

This is to certify that:

..... (Tenderer)

of ..... (Address)

was represented by the person(s) named below at the compulsory meeting held for all Tenderers at

..... (location) on ..... (date), starting at .....

We acknowledge that the purpose of the meeting was to acquaint ourselves with the Site of the Works and/or matters incidental to doing the work specified in the Tender documents in order for us to take account of everything necessary when compiling our entire Tender submission.

Particulars of person(s) attending the meeting:

Name ..... Signature .....

Capacity .....

Note: All particulars above this horizontal divide line to be filled in by the Tenderer **prior to** signature by Employer's representative.

---

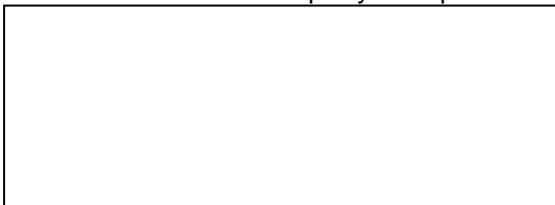
Attendance of the above persons at the meeting is confirmed by the representative of **Uranus Consulting Engineers** namely:

Name: ..... Signature: .....

Capacity: ..... Date: .....

Time: .....

Thulamela Local Municipality Stamp



**APPENDIX A3: CERTIFICATE OF AUTHORITY OF 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.

A Company ☐

B Partnership ☐

C Joint Venture ☐

D Sole Proprietor ☐

E Close Corporation ☐

(Tick the appropriate box)

**A. 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 authorised to sign all  
documents in connection with this Tender and any contract resulting from it on behalf of the  
company.

As witnesses:

1. ....  
Chairman

.....  
Print Name

2. ....  
Date

.....  
Print Name

**B. Certificate of partnership**

We, the undersigned, being the key partners in the business trading as .....  
....., hereby authorise Mr/Ms ....., acting in  
the capacity of ....., to sign all documents in connection with the Tender for  
Contract ....., and any contract resulting from it on our behalf.

Name	Address	Signature	Date

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

**C. Certificate for Joint Venture**

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize

Mr/Ms ....., authorised signatory of the firm .....

....., acting in the capacity of lead partner, to sign all documents in

connection with the Tender offer for Contract ..... and any contract resulting from it on our behalf.

This authorisation is evidenced by the attached power of attorney signed by legally authorised signatories of all the partners to the Joint Venture.

Name of Firm	Address	Authorising	
		Signature	Name
Lead Partner			

**D. Certificate for sole proprietor**

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

As witnesses:-

- .....  
Signature: Sole Owner

.....  
Print Name
- .....  
Date

.....  
Print Name

**E. 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 Contract ..... and any contract resulting from  
it on our behalf.

Name	Address	Signature	Date

Note: This Certificate is to be completed and signed by each and all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.



## **APPENDIX A4: CERTIFICATE OF REGISTRATION WITH THE CONSTRUCTION INDUSTRY DEVELOPMENT BOARD**

### **1. General**

The Register of Contractors is established by the Construction Industry Development Board in terms of the CIDB Act 38 of 2000 and Construction Industry Development Regulations as published in Government Gazette number 26427 of 2004.

The Act makes it mandatory for public sector clients to apply this register when considering Tenders. Any enterprise that submits a Tender or enters into contract for construction works with the public sector, must be registered.

Once-off joint ventures do not have to register, provided that each partner of the joint venture is separately registered.

### **2. Status**

Tenderers shall fill in the following sections of this form, depending on their status:

#### **2.1 Section A**

Tenderers who have accomplished registration and can provide proof of their grading designation.

#### **2.2 Section B**

Tenderers who are in the process of registration of an update to an existing registration or a renewal.

#### **2.3 Section C**

Tenderers who have submitted the first application.

#### **2.4 Section D**

Tenderers submitting this Tender offer in Joint Venture and can provide proof that each partner of the Joint Venture is separately registered.

**Note: Complete only one of Sections A, B, C or D.**

SECTION A							
<p>I, ..... acting in capacity of ..... was authorised to sign all documents in connection with this Tender an any contract resulting from it on behalf of the following entity: ..... hereby declare that the above mentioned entity has achieved registration with the Construction Indus- try Development Board on date ..... and declare that the grading designation is reflected in the following <b>symbols</b> on the registration certificate.</p>							
<div><table border="1"><tr><td>Contract Value</td><td></td></tr></table> <table border="1"><tr><td>Type of Work</td><td></td><td></td></tr></table></div>			Contract Value		Type of Work		
Contract Value							
Type of Work							
<div><div><p>..... Signature of Tenderer</p> <p>..... Print Name</p></div><div><p>..... Signature of Witness</p> <p>..... Print Name</p></div></div>							

## SECTION B

I, ..... acting in capacity of ..... was authorised to sign all documents in connection with this Tender and any contract resulting from it on behalf of the following entity: ..... hereby declare that the above mentioned entity has achieved registration with the Construction Industry Development Board on date ..... furthermore declare that the existing grading designation is:

Contract Value	
----------------	--

Type of Work		
--------------	--	--

and the following update has been applied for:

Amendment of Category Status	
Change of Particulars	
Annual Confirmation of Particulars	
Renewal of Registration	

mark with a "✓"

.....  
Signature of Tenderer

.....  
Signature of Witness

.....  
Print Name

.....  
Print Name

**SECTION C**

I, ..... acting in capacity of .....  
was authorised to sign all documents in connection with this Tender and any contract resulting from  
in/on behalf of the following entity: ..... hereby declare that the above  
mentioned entity has submitted its FIRST APPLICATION FOR REGISTRATION with the Construction  
Industry Development Board on date .....

I furthermore accept that failure to achieve registration with the Construction Industry Development  
Board in a category stipulated in the Tender Data within 10 days from the date of closing this Tender  
implies a non-responsive Tender and warrants rejection of the Tender on account of non-compliance  
with the requirements of the Tender Data.

.....  
Signature of Tenderer

.....  
Signature of Witness

.....  
Print Name

.....  
Print Name

## SECTION D

I, ..... acting in capacity of the LEAD PARTNER in the Joint Venture

.....  
.... was authorised to sign all documents in connection with this Tender and any contract resulting from it, hereby declare that each of the Joint Venture is separately registered with the Construction Industry Development Board and declare that the grading designation is reflected in the following **symbols** on the registration certificates:

Name of Lead Partner:		
Contract Value		
Type of Work		

Name of 2 <sup>nd</sup> Partner:		
Contract Value		
Type of Work		

Name of 3 <sup>rd</sup> Partner:		
Contract Value		
Type of Work		

.....  
Signature of Tenderer

.....  
Signature of Witness

.....  
Print Name

.....  
Print Name

## APPENDIX A5: RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Procuring Department before the submission of this Tender Offer, amending the Tender Documents, have been taken into account in this Tender Offer:

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....

## APPENDIX A6: FORM OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE

If my/our Tender is accepted, I/we will, when required and within the time stipulated, provide a guarantee of

Insurance Company (name) .....

(of address) .....

.....

or

Commercial Bank (Name) .....

(Branch) .....

(of address) .....

.....

to be approved by you, the Employer, for the amount stipulated.

I/we understand that failure to produce an acceptable Performance Guarantee within the stipulated period is a fundamental breach of Contract, entitling the Employer to:

- (i) withhold all payments which may be due to the Contractor pending compliance with the stipulated requirements to produce an acceptable Performance Guarantee.
- (ii) instruct the Contractor to cease all work pending provision of the Performance Guarantee, and
- (iii) cancel the Contract.

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....

## APPENDIX A7: HEALTH AND SAFETY PLAN: DECLARATION BY TENDERER

I/we declare that we have read and understand the health and safety specifications contained in the Contract Data and undertake to:

- provide and demonstrate to the Employer a suitably and sufficiently documented health and safety plan, which shall be applied from the date of commencement of and for the duration of the construction work,
- appoint a full-time competent employee in writing as the Construction Supervisor from the date of commencement of and for the duration of construction work,
- appoint a full time/part time competent employee in writing as the Construction Safety Officer from the date of commencement of and for the duration of construction work.

I/we undertake to rectify all non-conforming conditions for which we are responsible. I/we accept that, should I/we not rectify these timeously, they will be corrected by the Employer and the cost subtracted from any amounts due to me/us in terms of the Contract Data.

I/we confirm that I/we am/are registered and in good standing with the Compensation Fund and our

registration number is: .....

alternatively, my/our licensed compensation insurer is:

(Name) .....

(Address) .....

.....

To this effect, I/we attach proof of registration and good standing.

I/we certify that to the best of my/our knowledge and belief, the curricula vitae of our proposed key health and safety personnel cited hereinafter correctly describe their qualifications and experience.

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....



Name:	Date of Birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (Firm):	
Current Position:	Years with the firm:
<b>Employment Record:</b> (List in chronological order stating with earliest work experience)	
<b>Experience Record Pertinent to Required Service</b>	
<b>Certification</b> I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.	
..... ..... [Signature of person named in schedule]	Date:

[illegible]

## APPENDIX A8: SCHEDULE OF PROPOSED SUB-CONTRACTORS

We notify you that it is our intention to employ the following Sub-Contractors for work in this contract.

If we are awarded a contract we agree that this notification does not change the requirement for us to submit the names of proposed Sub-Contractors in accordance with requirements in the Contract for such appointments.

Name and Address of Proposed Sub-Contractor		Nature and Extent of Work	Previous Experience with Sub-Contractor
1			
2			
3			
4			
5			

Signed .....

Date .....

Print Name .....

Position .....

Tenderer .....

## SUB-CONTRACTING UNDERTAKING

LETTER OF UNDERTAKING TO PERFORM AS A SUB-CONTRACTOR  
(Copy as many as necessary)

Contract Number: .....

From: (Name and address of Sub-contractor)

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

To: (Name and address of Contractor)

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

The undersigned undertakes to \*perform work/provide services/supply goods in connection with the above Contract as a \*close corporation/sole proprietor/partnership/company and is prepared to perform in connection with the above-named Contract as Sub-contractor to the Contractor, the following \*work/provide the following services/supply the following goods:

\*(delete that which is not applicable)

.....  
.....

for an estimated amount of R..... excluding VAT, subject to the terms of any agreement made between us for the purpose of the Contract which agreement shall include the General Conditions of Contract and relevant Special Conditions that govern this Contract.

Signature: .....

Name: .....

Designation: .....

Date: .....

who duly warrants that he/she is authorised to sign this letter.

## SUB-CONTRACTING UNDERTAKING

### LETTER OF UNDERTAKING TO PERFORM AS A SUB-CONTRACTOR (Copy as many as necessary)

Contract Number: .....

From: (Name and address of Sub-contractor)

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

To: (Name and address of Contractor)

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

The undersigned undertakes to \*perform work/provide services/supply goods in connection with the above Contract as a \*close corporation/sole proprietor/partnership/company and is prepared to perform in connection with the above-named Contract as Sub-contractor to the Contractor, the following \*work/provide the following services/supply the following goods:

\*(delete that which is not applicable)

.....  
.....

for an estimated amount of R..... excluding VAT, subject to the terms of any agreement made between us for the purpose of the Contract which agreement shall include the General Conditions of Contract and relevant Special Conditions that govern this Contract.

Signature: .....

Name: .....

Designation: .....

Date: .....

who duly warrants that he/she is authorised to sign this letter.

## SUB-CONTRACTING UNDERTAKING

### LETTER OF UNDERTAKING TO PERFORM AS A SUB-CONTRACTOR (Copy as many as necessary)

Contract Number: .....

From: (Name and address of Sub-contractor)

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

To: (Name and address of Contractor)

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

The undersigned undertakes to \*perform work/provide services/supply goods in connection with the above Contract as a \*close corporation/sole proprietor/partnership/company and is prepared to perform in connection with the above-named Contract as Sub-contractor to the Contractor, the following \*work/provide the following services/supply the following goods:

\*(delete that which is not applicable)

.....  
.....

for an estimated amount of R..... excluding VAT, subject to the terms of any agreement made between us for the purpose of the Contract which agreement shall include the General Conditions of Contract and relevant Special Conditions that govern this Contract.

Signature: .....

Name: .....

Designation: .....

Date: .....

who duly warrants that he/she is authorised to sign this letter.

## SUB-CONTRACTING UNDERTAKING

### LETTER OF UNDERTAKING TO PERFORM AS A SUB-CONTRACTOR (Copy as many as necessary)

Contract Number: .....

From: (Name and address of Sub-contractor)

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

To: (Name and address of Contractor)

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

The undersigned undertakes to \*perform work/provide services/supply goods in connection with the above Contract as a \*close corporation/sole proprietor/partnership/company and is prepared to perform in connection with the above-named Contract as Sub-contractor to the Contractor, the following \*work/provide the following services/supply the following goods:  
**\*(delete that which is not applicable)**

.....  
.....

for an estimated amount of R..... excluding VAT, subject to the terms of any agreement made between us for the purpose of the Contract which agreement shall include the General Conditions of Contract and relevant Special Conditions that govern this Contract.

Signature: .....

Name: .....

Designation: .....

Date: .....  
who duly warrants that he/she is authorised to sign this letter.

## SUB-CONTRACTING UNDERTAKING

### LETTER OF UNDERTAKING TO PERFORM AS A SUB-CONTRACTOR (Copy as many as necessary)

Contract Number: .....

From: (Name and address of Sub-contractor)

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

To: (Name and address of Contractor)

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

The undersigned undertakes to \*perform work/provide services/supply goods in connection with the above Contract as a \*close corporation/sole proprietor/partnership/company and is prepared to perform in connection with the above-named Contract as Sub-contractor to the Contractor, the following \*work/provide the following services/supply the following goods:  
**\*(delete that which is not applicable)**

.....  
.....

for an estimated amount of R..... excluding VAT, subject to the terms of any agreement made between us for the purpose of the Contract which agreement shall include the General Conditions of Contract and relevant Special Conditions that govern this Contract.

Signature: .....

Name: .....

Designation: .....

Date: .....  
who duly warrants that he/she is authorised to sign this letter.



## APPENDIX A9: QUALITY ASSURANCE PROGRAMME

Tenderer to submit details here below of his Quality Assurance Policy whereby he shall demonstrate that he has the following:

- (a) An Operating Quality Management System based on SABS/ISO 9001: 2000 international standards, if not, state alternative.
- (b) Proof of Quality Assurance Co-ordination.
- (c) Proven technical capabilities and resources to ensure Quality Management.
- (d) A recent assessment/audit report on his Quality Management and Quality Control System(s).

Contractor's details with respect to items a), b), c) and d):

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....

## APPENDIX A10: INSURANCE STATEMENT

### TENDERER'S DECLARATION OF INSURANCES

I/We hereby declare that the insurances enumerated below have been affected by me/us.

I/We further declare that all premiums in respect of the insurances are fully paid up to date.

Cover Effected	Insurer and Policy Number	Expiry Date	Limits of Indemnity / Sums Insured	Deductibles
Contractor's All Risks				
Occupational Injuries and Diseases				
Unemployment Insurance				
Motor Vehicle Insurance				
Other:				

We submit herewith a letter of good standing from the Workman's Compensation Commissioner in respect of Occupational Injuries and Diseases Insurance.

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....

## APPENDIX A11: COMMERCIAL EQUITY DECLARATION

### A11.1 General

The Employer considers the information contained in this Declaration as a material aspect of the Contract. Should there, during the duration of either the bid enquiry or contract, be any significant change in the equity situation of the Bidder, the Employer shall immediately be notified and the Employer will, in terms of the Contract Data, exercise its rights.

**A11.2 Name of Bidder** .....

**A11.3 Type of enterprise e.g. Sole Proprietor, Partnership, CC, Pty, JV, etc.** .....

### A11.4 Details of Firm:

Name of Company: .....

Street Address: .....

Postal Address: .....

Tel. Number: .....

Fax Number: .....

Contact Person: .....

Company Registration No. ....

Income Tax Registration No. ....

VAT Registration No. ....

Number of years in Business: .....

Founding Date of Firm: .....

### A11.5 List all equity owners

Name	M/F	PDI (Y/N)	D (Y/N)	% Equity owned	ID Number

Attached registration documents and shareholders agreements.

PDI (Previously Disadvantaged Individuals). If disabled indicate under D.

**A11.6 Did the enterprise exist under a previous name?** (Tick one box)

☐ Yes ☐ No

If yes:

What was its previous name? .....

Why did it change its name? .....

List the previous owners/partners/directors .....

.....

**A11.7 Identify by name, status and length of service, those individuals in the enterprise (including owners) responsible for day-to-day management and business decisions.**

Financing decisions	Name	Status (Yes/No)*			Length of service (years)
		PDI	Women	Disabled	
Cheque signing					
Signing and co-signing of loans					
Acquisition of lines of credit					
Demand & Retention Guarantees					
Major Purchases or acquisitions					
Signing contracts					

Management decision	Name	Status (Yes/No)*			Length of service (years)
		PDI	Women	Disabled	
Estimating					
Marketing and sales operations					
Hiring & firing of management personnel					
Hiring & firing of non-management personnel					
Supervision of office personnel					
Supervision of field/production activities					

\*State Yes or No

Attach separate list, if necessary.

I (1), ..... and (2) .....  
(names), hereby certify that, to the best of our knowledge, the information, facts and representations are correct and that we are duly authorised to sign on behalf of the Bidder.

Date: .....

Signature: (1).....

(2) .....

## APPENDIX A12: FINANCIAL INFORMATION OF TENDERER

This information sheet has to be filled in by the financier of the Tenderer, duly signed and stamped on behalf of the financial institution he represents.

### Tenderer / Tender Details

Name of Tenderer : .....

Bank Account Number: .....

Tender Amount: .....

Performance Guarantee will be provided by this Bank: YES ☐ NO ☐

If yes, state amount of Performance Guarantee: R .....

### Financial Institution

Name the Branch of Commercial Bank: .....

Name & Tel. No. of Bank Manager: .....

I / We acting on behalf of the above Commercial Bank confirm that

.....  
(Tenderer)

has operated an account with us for the last ..... years.

We have been requested to provide a bank rating based in relation to the financial capability of the Tenderer, taking into account directives set out in the following two tables.

BANK RATING	
Bank Code	Description of Bank Code
A	Undoubted good for the amount of enquiry
B	Good for the amount of enquiry
C	Good for the amount quoted if strictly in the way of business
D	Fair trade risk for amount of enquiry
E	Figures considered too high
F	Financial position unknown
G	Occasional dishonours
H	Frequent dishonours

The value on which our Bank Rating of the Tenderer is based is R.....

(in words .....

..... only)

The Bank Rating is code: .....

.....  
Signature: Manager Financial Institution

.....  
Print Name

.....  
Date

**RUBBER STAMP OF BANKING INSTITUTION**

## APPENDIX A13: JOINT VENTURE DISCLOSURE FORM

Employer: .....

Contract Number: .....

NOTE 1 This form need only be completed in the event of a Joint Venture submitting this Tender.

NOTE 2 Fill in all the information requested in the spaces provided. Attach additional sheets if required.

NOTE 3 Provide a copy of the Joint Venture agreement. Demonstrate that the partners to the Joint Venture share in the ownership, control, management responsibilities, risks and profits of the Joint Venture. The Joint Venture agreement shall include specific details relating to:

- a) the contributions of capital and equipment;
- b) portions of the Contract to be performed by the partner's own resources; and
- c) portions of the Contract to be performed under the supervision of each partner.

NOTE 4 Provide copies of all written agreements between partners concerning the Joint Venture, including those that relate to ownership options and to restrictions/limits regarding ownership and control.

### A13.1 Joint Venture Particulars

Name .....

Postal Address .....

Physical Address .....

Telephone No. ....

Fax No. ....

Name of Authorized Representative .....

### A13.2 Identity of Partner No. 1

Name .....

Postal Address .....

Physical Address .....

Telephone No. ....

Fax No. ....

Contact Person .....

**A13.3 Identity of Partner No. 2**

Name .....

Postal Address .....

Physical Address .....

.....

Telephone No. ....

Fax No. ....

Contact Person .....

**A13.4 Identity of Partner No. 3**

Name .....

Postal Address .....

Physical Address .....

.....

Telephone No. ....

Fax No. ....

Contact Person .....

**A13.5 Description of the Role of the Partners in the Joint Venture**

Partner No. 1 .....

.....

Partner No. 2 .....

.....

Partner No. 3 .....

.....

**A13.6 Ownership of the Joint Venture**

i) Ownership percentage(s)	Partner No. 1	.....	%
	Partner No. 2	.....	%
	Partner No. 3	.....	%

ii) Partner percentage in respect of:

a) Profit and loss sharing	Partner No. 1	_____	%
	Partner No. 2	_____	%
	Partner No. 3	_____	%
b) Initial capital contribution	Partner No. 1	_____	%
	Partner No. 2	_____	%
	Partner No. 3	_____	%
iii) Anticipated ongoing contributions:	Partner No. 1	_____	
	Partner No. 2	_____	
	Partner No. 3	_____	

iv) Contributions of equipment (specify types, quality and quantities of equipment) to be provided by each partner:

Partner No. 1 \_\_\_\_\_  
\_\_\_\_\_

Partner No. 2 \_\_\_\_\_  
\_\_\_\_\_

Partner No. 3 \_\_\_\_\_  
\_\_\_\_\_

**A13.7 Recent contracts performed by partners in their own right or as partners in other Joint Ventures**

a) Partner No. 1

i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

iv) \_\_\_\_\_

v) \_\_\_\_\_

b) Partner No. 2

i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

iv) \_\_\_\_\_



v)

c) Partner No. 3

i)

ii)

iii)

iv)

v)

**A13.8 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, for example, co-signature requirements and monetary limits).

a) Joint Venture cheque signing

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

c) Signing, co-signing or collateralizing of loans

d) Acquisition of lines of credit

e) Acquisition of demand bonds

f) Negotiating and signing of labour agreements

**A13.9 Management of the performance of the Contract**

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

- a) Supervision of field operations

.....  
.....

- b) Major purchasing

.....  
.....

- c) Estimating

.....  
.....

- d) Technical management

.....  
.....

**A13.10 Management and control of the Joint Venture**

- a) Identify the managing partner

.....  
.....

- b) What authority does each partner have to commit or obligate the other to financial institutions, insurance companies, suppliers, Sub-Contractors or other parties participating in the performance of the contemplated works:

Partner No. 1

.....  
.....

Partner No. 2

.....  
.....

Partner No. 3

.....  
.....

- c) Describe the management structure for the joint venture's work under this Contract:

Management Function / Designation	Name	Partner

### A13.11 Personnel

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

Trade/function/discipline	Number

- b) State the number of operative personnel to be employed on the Contract who are currently in the employ of partners:

- c) State the number of operative personnel who are not currently in the employ of the respective partners and shall be engaged on the project by the Joint Venture:

- d) State the name of the individual who shall be responsible for hiring Joint Venture employees:

- e) State the name of the partner who shall be responsible for the preparation of Joint Venture payrolls:

### A13.12 Services

List the firms who provide the following services:

Service	Name	Contact Person	Tel. No.
Accounting			
Auditing			
Banking			
Insurance			
Legal			

### A13.13 Control and structure of the Joint Venture

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

The undersigned warrants that he/she is duly authorised to sign this Joint Venture disclosure form and affirms that the foregoing statements are correct and include all the 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 authorized representatives of the Employer.

Duly authorized to sign on behalf of: .....

.....  
**(the Joint Venture)**

Signature: ..... Print Name: .....

Name: .....

Address: .....

.....

Tel. No. ....

Date: .....

Duly authorized to sign on behalf of: .....

.....  
**(Partner No. 1)**

Signature: ..... Print Name: .....

Name: .....

Address: .....

.....

Tel. No. ....

Date: .....

Duly authorized to sign on behalf of: .....

.....  
**(Partner No. 2)**

Signature: ..... Print Name: .....

Name: .....

Address: .....

.....

Tel. No. ....

Date: .....

Duly authorized to sign on behalf of: .....

---

(Partner No. 3)

---

Signature: ..... Print Name: .....

Name: .....

Address: .....

.....

Tel. No. ....

Date: .....

---

## APPENDIX A14: RATES OF LABOUR AND MATERIALS (DAYWORK RATES)

### LABOUR

The rates for labour indicated below shall be the total cost to the Employer, and shall include for all the Contractor's profits, overheads, wages, accommodation, travelling, subsistence and other costs relative to the employment by the Contractor of the personnel detailed, and for hand and portable electric or pneumatic tools and consumables normal to the trade of the respective personnel.

Contractor's labour rates are based on a normal ..... hours/day

The application and use of these rates shall be at the sole discretion and subject to the prior approval of the Engineer.

Item No	Category	Rate per Day in Rand		
		Normal	Overtime	Sundays and PPH
1				
2				
3				
4				
5				
6				
7				
8				
9				

### MATERIALS

The Contractor shall indicate hereunder the percentage mark-up required on the net cost of materials actually used on site. Proof of cost of materials shall be furnished by invoices.

Percentage Mark-up \_\_\_\_\_ % (Default 5%)

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....

## APPENDIX A15: ALTERATIONS BY TENDERER

Should the Tenderer desire to make any departures from or modifications to the “Tender” or “Contract”, or to qualify his Tender in any way, he shall set out his proposals clearly hereunder or alternatively state them in a covering letter attached to his Tender and referred to hereunder, failing which the Tender will be deemed to be unqualified.

Page	Item of Clause	Details	Cost Involved (R)

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....

## APPENDIX A16 PLANT (Day work Schedule)

The Day work Schedule shall be used for the valuation of any additional or substituted work which cannot conveniently be valued at the rates and prices submitted in the schedule of quantities.

In respect of labour and materials used in the additional or substituted work not covered in the Day work Schedule the Contractor shall be paid the actual cost plus the percentage allowance stated in the schedule of quantities.

The Tenderer shall quote hereunder rates which shall apply for payment purposes if the Engineer orders additional or substituted work to be carried out on a day work basis and shall therefore be in accordance with the requirements of clause 37(2) of the General Conditions of Contract.

### 1. LABOUR AND MATERIALS

Rates and prices entered in the schedule shall be held to allow for net cost of labour and materials delivered to site respectively with the percentage allowances stated in the schedule of quantities.

### 2. PLANT AND EQUIPMENT

The Tenderers shall list all major items of plant and equipment to be used on the works and which may be required for use on day works. The proposed hire rates of these items shall be entered against each type of machine, such rates to include for all relevant costs of plant hire inclusive of fuels and lubricants but exclusive of labour charges for the operators, which will be paid for under sub-clause (1) above.

The rates for plant items not listed in the schedule will be the ruling plant hire rates, inclusive of fuels and lubricants but exclusive of labour charges for the operators, inclusive of a 7.5% handling charge. It is therefore in the Tenderers interest to ensure that the list is complete.

Should there be insufficient space on the pages provided the Tenderer shall add further pages as required.

THE RATES FOR THE PLANT AND EQUIPMENT MENTIONED IN THE SCHEDULE SHALL BE FILLED IN FOR THE ITEMS REQUESTED. SHOULD AN ITEM BE OMITTED IT SHALL BE DEEMED TO HAVE BEEN INCLUDED IN THE OTHER DAYWORKS RATES.

#### A. Labour

Designation		Rate	
		R	c
Plant Operators	per hour		
Truck Drivers	per hour		
Labour - unskilled	per hour		
- semi-skilled	per hour		
- skilled	per hour		

#### B. Materials

Designation		Rate	
		R	c
Cement	per 50 kg pocket delivered		
Concrete Sand	per m <sup>3</sup> delivered		
Concrete Aggregate	per m <sup>3</sup> delivered		



**C. Transport**

Designation	Rate	
	R	c
Per cubic metre kilometre		

**D. Plant and Equipment**

Item	Description	Size	Non-working Rate*		Operating Rate		Per Unit
			R	c	R	c	
	TLB						
	Water Cart						
	LDV						
	Compactor						
	Vibrating Roller						
	Concrete Mixer						
	Test Pump						
	Excavator						
	Crane						
	Water tanker						
	Excavator						
	Grader						
	Tipper Truck						
	12-ton roller						
	Pedestrian roller						

\*Only applicable on authority of the Engineer

Signed ..... Date .....

Print Name ..... Position .....

Tenderer .....

## **C1.1 FORM OF OFFER AND ACCEPTANCE**

**C1.1 FORM OF OFFER AND ACCEPTANCE**

**1. OFFER**

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of construction works viz.:

**CONSTRUCTION OF GUNDANI LANDFILL CELL  
BID NUMBER: 08/2023/2024**

The Tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto 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 this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of 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:**

.....  
.....  
..... (amount in words);  
R..... (amount in figures)

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 terms of the Conditions of Contract identified in the Contract Data.

For the Tenderer .....  
.....  
(Name and address of organization)

Signature(s) .....  
Print Name(s) .....  
Capacity .....

Signature of witness ..... Date: .....  
Print Name .....

Important Note

This page to be duly completed by the **Tenderer** before submitting the Tender.

## 2. ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions 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: Agreements and Contract Data (which include this Agreement)

Part 2: Pricing Data

Part 3: Scope of Work

Part 4: Site Information and drawings 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, as 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 shall be duly signed by the authorized representative(s) of both parties.

The Tenderer shall, within 7 days of receiving a completed copy of this Agreement (including the Schedule of Deviations, if any), contact the Employer's Agent (whose details are given in the Contract Data) to arrange the delivery of any guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfil any of the 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 copy of this original document, including the Schedule of Deviations (if any). Such date shall be confirmed in a manner that can be read, copied and recorded and shall be accepted by the contracting parties as the Commencement Date. This Agreement shall constitute a binding contract between the parties.

For the Employer .....

.....  
(Name and address of organization)

Signature(s) .....

Print Name(s) .....

Capacity .....

Signature of witness ..... Date: .....

Print Name .....

**3. SCHEDULE OF DEVIATIONS**

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

A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, be 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 into the final Contract Document.

3.1	Subject	.....
	Details	.....
3.2	Subject	.....
	Details	.....
3.3	Subject	.....
	Details	.....

By the duly authorized representatives signing this Schedule of Deviations, the Employer and the Contractor agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer in concluding this process of offer and acceptance; in witness thereof the parties hereto have caused this Agreement to be executed.

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.

**Employer**

Signed by: .....  
Print Name: .....  
Capacity: .....  
Address: .....  
.....

**Tenderer**

Signed by: .....  
Print Name: .....  
Capacity: .....  
Address: .....  
.....

for and on behalf of the **Employer** in the  
presence of  
Witness: .....  
Print Name: .....  
Date : .....

for and on behalf of the **Tenderer** in the  
presence of  
Witness: .....  
Print Name: .....  
Date : .....

**4. CONFIRMATION OF RECEIPT**

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the ..... (day)

the ..... (month)

20..... (year)

at ..... (place)

For the Contractor:

.....  
Signature

.....  
Print Name

.....  
Capacity

Signature and name of witness:

.....  
Signature

.....  
Print Name

## **PART C2 PRICING DATA**

---

## **CONTENTS**

<b>Part</b>		<b>Colour</b>	<b>Page No</b>
C2.1	Pricing Instructions	Yellow	C2.85



## **PART C2.1 PRICING INSTRUCTIONS**

### **C2.1.1 GENERAL**

The pricing instructions describe the criteria and assumptions which will be assumed in the Contract that the Bidder has taken into account when developing his prices. The Bills of Quantities record the Contractor's rates for providing supplies, services, engineering and construction works in accordance with the Scope of Work.

The terms of payment and the provisions for price adjustment, if applicable, are established in the Contract Data. These items are not described in the Pricing Data.

The Bidder's obligations in pricing the Bid offer and the Employer's undertakings in the checking and correction of arithmetical errors are dealt with in the Standard Conditions of Bid contained in Annexure F of SANS 294, as amended in and read in conjunction with the Bid Data.

### **C2.1.2 DOCUMENTS MUTUALLY EXPLANATORY**

The documents forming the Contract are to be taken as mutually explanatory of one another. The Bill of Quantities forms an integral part of the Contract Documents and shall be read in conjunction with the Bid Data, Contract Data, Scope of Work, Site Information General and Special Conditions of Contract, the Specifications and the Drawings.

### **C2.1.3 DEFINITIONS**

For the purpose of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

- Unit : The unit of measurement for each item of work as defined in the Scope of Work and Site Information.
- Quantity : The number of units of work for each item.
- Rate : The payment per unit of measurement at which the Contractor contracts to do the work.
- Amount : The product of the quantity and the rate Bid for an item.
- Sum : An amount contracted for an item, the extent of which is described in the Bill of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.

### **C2.1.4 DESCRIPTIONS**

Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

### **C2.1.5 REFERENCES**

The clauses in a specification in which further information regarding the schedule item can be obtained appear under "Reference clause" in the Bill. The reference clauses indicated are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract

documents. Standardised Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, e.g. G for SABS 1200 G.

#### **C2.1.6      UNITS OF MEASUREMENT**

The units of measurement indicated in the Bill of Quantities are metric units.

The following abbreviations are used in the Bill of Quantities:

%	=	per cent
h	=	hour
ha	=	hectare
kg	=	kilogram
kl	=	kilolitre
km	=	kilometre
km-pass	=	kilometre-pass
kW	=	kilowatt
l	=	litre
m	=	metre
mm	=	millimetre
MN	=	meganewton
MN-m	=	meganewton-metre
MPa	=	megapascal
m <sup>2</sup>	=	square metre
m <sup>3</sup>	=	cubic metre
m <sup>3</sup> -km	=	cubic metre-kilometre
m <sup>2</sup> -pass	=	square metre-pass
no	=	number
PC sum	=	Prime Cost sum
Prov Sum	=	Provisional Sum
sum	=	lump sum
t	=	ton (1 000 kg)

#### **C2.1.7      NET MEASUREMENTS**

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for off-cuts and waste.

#### **C2.1.8      QUANTITIES**

The quantities set out in the Bill of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Engineer from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work accepted and certified for payment.

#### **C2.1.9      CURRENCY**

All rates and sums of money quoted in the Bill of Quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

#### **C2.1.10      VALUE ADDED TAX**

Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the Bill of Quantities. VAT will be added as a single entry to the summary.

**C2.1.11 RATES AND PRICES**

**C2.1.11.1 General**

- a) The Contractor must price each item in the Bill of Quantities in **BLACK INK**. Reproduced computer printouts of the Bills of Quantities will not be acceptable.
- b) The rates and prices to be inserted in the Bill of Quantities shall cover all the services and incidentals for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Bid is based, as well as overhead charges and profit. **Reasonable prices** shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- c) Where the Contractor is required to furnish detailed drawings and designs or other information in terms of the Contract Data, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts contracted for the items scheduled in the Bill of Quantities. Separate additional payments will not be made.
- d) A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill. The Contractor will not be paid for items against which no rate or lump sum has been entered in the Bill of Quantities.
- e) Should the Contractor group a number of items and contract one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.
- f) Should the Contractor indicate against any item that compensation for such item is included in another item, the rate for the item included in another item shall be deemed nil.
- g) **A submission may be regarded as non-responsive if any rates or lump sums in the Bill of Quantities are, in the opinion of the Employer, unreasonable or out of proportion.**

**C2.1.11.2 "Rate only" items**

The Contractor shall fill in a rate (in the rate column) against all items where the words "rate only" appear in the Amount column, which rate will constitute payment for work which may be done in terms of this item. Such "rate-only" items are used where it is estimated that little or no work will be required under the item or where the item is to be considered as an alternative to another item for which a quantity is given.

**C2.1.11.3 Arithmetic**

Excepting where Sum Amounts are required or where Provisional Sums have been indicated, the Contractor shall enter an applicable rate in the Rate Column of the Bill of Quantities for each scheduled item. He shall also enter an appropriate sum in the Amount column for each scheduled item, by determining in the applicable line item the product of the Quantity and the Unit Rate.

If there is an error in the line item resulting from the product of the unit rate and the quantity, the rate shall be binding and the error of extension as entered in the Bid offer will be corrected by the Employer in determining the Contract Price.

### **Prefix LI to relevant items**

Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column or as a prefix or suffix against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a deviation from the contract. The items marked with the letters 'LI' are not necessarily an exhaustive list of all the activities, which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.

### **Requirement for tenderer to meet Work Opportunity target**

Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target.

### **Unauthorized use of Plant to construct designated LI activities in the BOQ**

Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the scope of works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work, which was to be done labour-intensively will not be condoned, and any works so constructed will not be certified for payment.

## **C2.2 BILL OF QUANTITIES**

## **CONTENTS**

<b>Schedule</b>	<b>Description</b>	<b>Colour</b>	<b>Page</b>
1200	Preliminary & General	Yellow	01
1300	Establishment on Site & General Obligations	Yellow	02
1400	Offices & Facilities & Laboratories	Yellow	03
1700	Clearing & Grubbing	Yellow	04
2100	Stormwater Drainage	Yellow	05
2200	Grouted Stone Pitching	Yellow	06
3300	Mass Earthworks	Yellow	07
3400	Landfill Layer-works	Yellow	09
PB001	Leachate Pond Layer-works	Yellow	10
PB002	Landfill Cell Works	Yellow	11
PB003	Building Refurbishment, Fencing & Other Works	Yellow	12
PB004	Material Testing	Yellow	13
PB005	Environmental Management	Yellow	14
	SUMMARY	Yellow	15

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1200		<b>SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS</b>				
B12.01		<b>Sums stated provisionally by Engineer</b>				
		(a) Employment of a community liaison officer for the duration of the contract	Months	6	R4 500,00	R27 000,00
		(b) Allowance for Environmental Student training	Months	6	R8 571,43	R51 428,57
		(c) Occupational Health and Safety (OHS) Consultant including preparation and provision of Health and Safety File	Months	6	R32 500,00	R195 000,00
		(d) Percentage for charges and profit on the Provisional Sums for contractor's cost and profit on items 12.01 (a), (b) and (c)	%	273 428,57		
<b>SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE</b>						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1300		<b>CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATION</b>				
13,01		<b>Contractor's Fixed-charge and Value-related items</b>				
		(a) Fixed-charge items	Lump Sum	1	70 000.00	70 000.00
		(b) Value-related charge items	Lump Sum	1	75 000.00	75 000.00
		(c) Time related obligation	Month	6		
13,02		<b>Prime Cost Items</b>				
		(a) Control Testing and Acceptance	Lump Sum	1	R30 000,00	R30 000,00
		(b) Contractor's overheads, charges and profit in terms 13.02 (a)	%	R30 000,00		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						



ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1400		<b>HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL</b>				
14,01		<b>Office accommodation</b>				
		(a) Offices (Interior floor space only)	m <sup>2</sup>	50		R0,00
		(e) Ablution units	m <sup>2</sup>	9		R0,00
14,02		<b>Office furniture</b>				
		(a) Chairs	No	3		R0,00
		(d) Desks complete with drawers and locks	No	1		R0,00
		(f) Conference tables	No	1		R0,00
14,03		<b>Office fittings, installations and equipment</b>				
		(a) Items measured by number				
		(i) 220/250 volt power points	No	5		
		(xiv) General purpose steel cupboards and shelves	No	2		
		(xv) Steel filing cabinets with drawers	No	2		
14,05		<b>Housing for labourers</b>				
		(a) Housing including beds, mattresses , chairs, tables and locker	Persons	10		
		(b) Ablution unit, including latrines, wash basins and taps	P. Sum	1	R10 000,00	R10 000,00
14,08		<b>Services</b>				
		(a) Services at laboratory and office				
		(i) Fixed costs	P. Sum	1	R50 000,00	R50 000,00
		(ii) Running costs (sum per month)	Month	6		
		(d) Services for labours' accommodation on site				
		(i) Fixed costs	Lump sum	1		
		(ii) Running costs (sum per month)	Month	6		
14.10		<b>Provision of photostatic facilities</b>	L. Sum	1		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1700		<b>SECTION 1700: CLEARING AND GRUBBING</b>				
17,01		Clearing and grubbing	ha	2,4		
17,02		Remove and grub large trees and tree stumps of girth				
		(a) Over 1m and up to and including 2m	No	3		
		(b) Over 2m and up to and including 3m	No.	0		
17,03		Reclearing of surfaces (on the written instruction of the engineers only)	ha	0,2		

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>2100</b>		<b>STORMWATER DRAINAGE</b>				
21,01		Excavation for open drains: (a) Excavation in soft material situated within the following depth ranges below the surface level: (i) 0 m up to 1.5 m	m³	92,70		
		(ii) Exceeding 1.5 m and up to 3.0 m	m³	0		
		(b) Extra over sub item 23.05(a) for excavation in hard (rock) material irrespective of depth	m³	25,0		
		Intermediate excavation	m³	123,6		
21,02	LI	Clearing and shaping existing open drains	m³	50		
21,03		Excavation for subsoil drainage system  (a) Excavating soft material situated within the following depth ranges below the surge level (i) 0 m up to 1.5 m	m³	196,9		
		(ii) Exceeding 1.5 m and up to 3.0 m	m³	12		
		(b) Extra over sub item 23.05(a) for excavation in hard material irrespective of depth	m³	5,9		
21,04		Impermeable backfilling to subsoil drainage systems	m³	36,8		
21,06		Natural permeable material in subsoil drainage systems  (a) Crushed stone obtained from approved sources (State grade)	m³	52,5		
		(b) Provision for additional costs of procuring crushed stone from commercial sources (Provisional)	P.Sum	1	R33 000,00	R33 000,00
21,07		Pipes in subsoil drainage systems (leachate drainage)				
	LI	(a) Unplasticised PVC pipes and fittings, normal duty, complete with couplings				
	LI	(i) 250 mm dia perforated pipe	m	54,8		
21,08	LI	Polyethylene sheeting, 0.15 mm thick, or similar approved material, for lining subsoil drainage systems	m²	136		
21,9	LI	Synthetic fibre filter fabric (Bidum)	m²	54		
21,1	LI	Composite in-plane drainage systems (water percolation type and grade 3)	m	60		
21,11	LI	Concrete outlet structures for subsoil drainage systems (including formwork)	No.	4		
21,12		Concrete caps for subsoil drain pipes	No.	4		
21,13		Overhaul for material hauled in excess of 1.0 km free haul (normal overhaul)	m³-km	54		
21,14		Selected backfill material under concrete-lined side drains compacted to 93% of modified AASHTO density	m³	121,5		
<b>SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE</b>						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2200		STONE PICTHING				
22,01	LI	Stone pitching for cell berm				
		a) surface preparation for stone pitching	m <sup>2</sup>	210		
		b) grouted stone pitching around cell berm base	m <sup>2</sup>	210		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3300		<b>SECTION 3300: MASS EARTHWORKS</b>				
33,01		Cut and borrow to fill, including free-haul up to 0.5 km:				
		(a) Gravel material in compacted layer thickness of 150 mm and less:				
		(i) Compacted to 90% of modified AASHTO Density	m <sup>3</sup>	576		
		(ii) Compacted to 93% of modified AASHTO Density	m <sup>3</sup>	204		
		(iii) Eight-roller-pass compaction	m <sup>3</sup>	706		
33,03		(a) Intermediate material	m <sup>3</sup>	1 822		
		(b) Hard rock	m <sup>3</sup>	1 235		
		(c) Boulder, Class A	m <sup>3</sup>	460		
		(d) Boulder Class B	m <sup>3</sup>	329		
		Variations in the number of roller passes, applicable to items 33.01 (a)(iii), 33.01(b) and 33.11				
33,06		(a) Vibratory rollers	m <sup>2</sup> -pass	2550		
		(b) Heavy grid rollers	m <sup>2</sup> -pass	1650		
33,07		Cut to spoil of soft material , including free-haul up to 0,5 km, unsuitable material:	m <sup>3</sup>	1 735		
33,08		Rock blasting	m <sup>3</sup>	3 060		
33,09		Stock piling/disposal of blasted/excavated at suitable area as directed by Engineer	m <sup>3</sup>	4 795		
33,10		<b>Foundation layer preparation and the compaction of material:</b>				
		(i) Compaction to 93% of modified AASHTO density in layers of 300mm thick	m <sup>3</sup>	1 706		
33,11		Three-pass roller pass compaction				
		(a) Heavy pneumatic-tyred roller	m <sup>2</sup>	2 595		
33,11		In-situ treatment of foundation layer				
		(a) In-situ treatment by ripping	m <sup>3</sup>	625		
33,12		Finishing off cut and fill slopes, median and interchange areas				
		(a) Cut slopes	m <sup>3</sup>	263		
		(b) Fill slopes	m <sup>3</sup>	255		
<b>SUBTOTAL CARRIED FORWARD TO NEXT PAGE</b>						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
SUBTOTAL BROUGH FORWARD FROM PREVIOUS PAGE						R0,00
		(d) Overhaul, extra-over item 33.10 (i) above				
		(i) Limited haul	m <sup>3</sup>	0		
		(ii) Long haul (exceeding 2 km)	m <sup>3</sup> -km	0		
		(e) Excavation for Landfill Base Levelling				
		(i) Excavate to a specified or directed levels, load, and transport the surplus excavated material to the nearest dumping site as directed by the Engineer. The price also includes stockpiling the suitable excavated soil to be used for embankment construction	m <sup>3</sup>	694		
		(ii) Backfill the landfill base area to specified or directed levels, using stockpiled excavated material	m <sup>3</sup>	208		
		(iii) Trim, level and grade the landfill base area to the designated levels and slopes. The price includes watering and compaction as well as hauling all trimmed materials to the nearest dumping site or to stockpiles as directed by the Engineer.	m <sup>2</sup>	1260		
		(iv) Trim, grade, and shape the landfill side slopes to the designated levels and slopes. The price includes carting away all trimmed materials to the nearest dumping site or to stockpiles as directed by the Engineer.	m <sup>2</sup>	434		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3400		SECTION 3400: LANDFILL LAYERWORKS OF GRAVEL MATERIAL				
34,01		<p>Pavement layers constructed from gravel taken from cut or borrow, including free haul up to 2 km</p> <p>(a) Gravel selected (G7 material) layer compacted to:</p> <p>(i) 95% of modified AASHTO density for compacted layer thickness of 150 mm</p> <p>(2) Gravel upper selected (G7 material) layer compacted to:</p> <p>(i) 93% of modified AASHTO density for a compacted layer thickness of 150 mm</p> <p>(c) Gravel subbase (C4 material) - Stabilised gravel and compacted to:</p> <p>(i) 95% of modified AASHTO density for a compacted layer thickness of 150 mm</p>	<p>m<sup>3</sup></p> <p>m<sup>3</sup></p> <p>m<sup>3</sup></p>	<p>626</p> <p>660</p> <p>825</p>		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>PB001</b>		<b>LEACHATE POND LAYER WORKS</b>				
<b>PB01.1</b>		<b>Excavation</b>				
PB01.4.1.1		Excavate in all soil materials and stockpile on site to be used for backfill and trench bedding where necessary				
		(a) Soft Soil Material	m <sup>3</sup>	31,2		
		(b) Intermediate Rock	m <sup>3</sup>	6,24		
		(c) Hard Rock	m <sup>3</sup>	6		
<b>PB01.2</b>		<b>Subsurface Bed Preparation</b>				
PB01.4.2.1		Backfill and compact to 93% MOD AASHTO				
PB01.4.2.2		300mm subsurface bed preparation with material from:				
		(a) Materials Stockpiled on site compacted to 95% Mod. Aashto	m <sup>3</sup>	18,6		
<b>PB01.3</b>		<b>Sand Material</b>				
PB01.3.1	LI	Supply and install silty sand in layers as shown on drawing	m <sup>3</sup>	15		
PB01.3.2	LI	Supply and install coarse sand in layers as shown on drawing	m <sup>3</sup>	18		
<b>PB01.4</b>		<b>Geosynthetic Material</b>				
		Supply and install the following geosynthetic material to leachate pond floor and walls as per drawing No. TLM/GUN/040-04				
PB01.4.1	LI	Supply and install 1000g/m2 geosynthetic clay liner	m <sup>2</sup>	50		
PB01.4.2	LI	Supply and install 3,7kg/m2 geosynthetic clay liner	m <sup>2</sup>	110		
PB01.4.3	LI	200g/m2 geosynthetic material	m <sup>2</sup>	45		
<b>PB01.5</b>	LI	<b>Geomembrane Material</b>				
		Supply geomembrane material on floor and sides of the Leachate Pond. No wrinkling is allowed. The overlaps in longitudinal and transverse direction shall be minimum 150 mm. All works shall be done according to specification, drawing <b>No: TLM/GUN/040-04</b> , above notes and supervision direction.				
PB01.5.1	LI	2mm thick smooth HDPE Geomembrane liner	m <sup>2</sup>	82,95		
PB01.5.2	LI	1,5mm smooth HDPE geomembrane liner	m <sup>2</sup>	82		
PB01.5.3	LI	1000g/m2 geotextile material	m <sup>2</sup>	40		
<b>PB01.6</b>	LI	Supply and install 19mm crashed stone around leachate pipe drain	m3	5,4		
<b>PB01.7</b>	LI	Supply and install ND110 perforated HDPE pipes for leachate detection drain as shown on drawing No.TLM/THO/037-07	m	30		
<b>PB01.8</b>	LI	Supply and install 1200mm diameter precast concrete manhall rings for installation of leachate manhole	No	6		
<b>PB01.9</b>	LI	Supply and install cuspatd HDPE drain with minimum 150mm lapping length at all joints	m <sup>2</sup>	56		
<b>SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE</b>						



ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
PB002		LANDFILL CELL				
PB02.1	LI	Supply, lay, and install woven geotextile material with minimum mass of 21kg/m <sup>2</sup> with minimum throughflow of 125L/m <sup>2</sup> as 100mm head. No wrinkling is allowed. The overlaps in longitudinal and transverse direction shall be min. 150mm. Only the ground covered by the geotextile shall be remunerated. All works shall be done according to specification, drawings, above notes and supervision direction. The strip tensile strength shall be min. 20 kN/m (machine direction/cross machine direction).	m <sup>2</sup>	1836		
PB02.2	LI	Supply, lay and install niddle-punched non-woven geotextile (1,000 g/m <sup>2</sup> ) as a protection layer in accordance with the manufacturer's guidelines. Overlaps in longitudinal and transverse direction shall be min. 500mm. Only the ground covered by the geotextile shall be remunerated, the overlapping parts shall be included in the standard price. All works shall be done according to specification, drawings, above notes and supervision direction	m <sup>2</sup>	1896		
PB02.3	LI	Supply lay and install 150mm thick stone leachate drainage layer (50mm stone size) in line with the design drawings. The stone should be well cleaned and of uniform size.	m <sup>2</sup>	1860		
PB02.4	LI	Supply, lay and install 1.5mm thick geomembrane liner in accordance with the manufacturer's guidelines. Overlaps in longitudinal and transverse direction shall be min. 500mm. Only the ground covered by the geotextile shall be remunerated, the overlapping parts shall be included in the standard price. All works shall be done according to specification, drawings, above notes and supervision direction	m <sup>2</sup>	1860		
PB02.5		Supply, lay and install geosynthetic clay liner (2,7kg/m <sup>2</sup> ) in accordance with the manufacturer's guidelines. Only the ground covered by the liner shall be remunerated, the overlapping parts shall be included in the standard price. All works shall be done according to specification, drawings, above notes and supervision direction	m <sup>2</sup>	1860		
PB02.6		Supply, lay and install niddle-punched non-woven geotextile (minimum nominal mass 200 g/m <sup>2</sup> ) in accordance with the manufacturer's guidelines. Overlaps in longitudinal and transverse direction shall be min. 500mm. Only the ground covered by the geotextile shall be remunerated, the overlapping parts shall be included in the standard price. All works shall be done according to specification, drawings, above notes and supervision direction	m <sup>2</sup>	1860		
PB02.7		Supply and install 150mm thick stone leakage detection layer (19mm stone size) uniformly distributed and cleaned throughout the layer	m <sup>3</sup>	279		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>PB003</b>		<b>BUILDING REFURBISHMENT, FENCING AND OTHER WORKS</b>				
PB03.1	LI	Refurbishment of ablution block. Recycling centre, guard house	P.sum	1	R85 000,00	R85 000,00
PB03.2	LI	Supply and installation of 1800mm high powder-coated clearview fencing (with 76mm*50mm aperture and 4mmx4mm wire size) around the landfill site including support structures and razor wire installation at top of fence	m	0		
PB03.3	LI	Provision for Weigh Pad complete with all accessories	P. Sum	1	R265 000,00	R265 000,00
PB03.4	LI	Clearing works, Excavation works and Installation of leachate manhole (using 1200mm diameter precast concrete rings) complete with step iron ladder, reinforced concrete base, connections grouted in place, and with concrete manhole cover as on drawing No. TLM/GUN/040-04	No.	1		
PB03.4	LI	Clearing works, Excavation works and Installation of sump manhole, reinforced concrete base, connections grouted in place, and with concrete manhole cover and all ancillaries as on drawing No. TLM/GUN/040-04	No.	1		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
PB004		<b>MATERIALS AND TESTING</b>				
PB04.1	LI	Other special tests requested by the engineer:				
		(a) Cost of testing (Prime cost)	PC Sum	1,00	R48 820,00	R48 820,00
		(b) Charge on prime Cost Sum in respect of item 81.02 (a)	%	R48 820,00		
PB04.2	LI	Providing testing equipment				
		(a) Water quality	No	1		
		(b) Air quality	No	1		
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

ITEM NO	EPWP	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
PB005		<b>ENVIRONMENTAL MANAGEMENT</b>				
PB05.1		Provision of Services by Specialist Environmental Scientist to ensure Environmental Compliance in accordance with the NEMA Act. <b>(Sums stated provisionally)</b>				
		(a) Site Handover Meeting	Sum	1	R6 500,00	R6 500,00
		(b) Environmental Monitoring				
		(i) Monthly Site Visits (Once a month)	Month	6		
		(c) Attending Site Monthly Progress Meetings and reporting	Month	6		
		(d) Preparation of Monthly Reports	Month	6		
		(f) Environmental Risk Assessment	Month	6		
		(g) Handling Fee in terms of items (a) to (f) above	%			
SUBTOTAL CARRIED FORWARD TO SUMMARY PAGE						

SUMMARY OF BILL OF QUANTITIES: GUNDANI LANDFILL SITE PROJECT		
CONSTRUCTION WORKS		
ITEM NO	DESCRIPTION	BILLED AMOUNT
1200	SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS	
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATION	
1400	HOUSING, OFFICES AND LABORATORIES	
1700	SECTION 1700: CLEARING AND GRUBBING	
2100	STORMWATER DRAINAGE	
2200	GROUTED STONE PITCHING	
3300	SECTION 3300: MASS EARTHWORKS	
3400	SECTION 3400: LANDFILL LAYERWORKS OF GRAVEL MATERIAL	
PB001	LEACHATE POND LAYER WORKS	
PB002	LANDFILL CELL	
PB003	BUILDING REFURBISHMENT, FENCING AND OTHER WORKS	
PB004	MATERIALS AND TESTING	
PB005	ENVIRONMENTAL MANAGEMENT	
A.	SUBTOTAL 1 FOR CONSTRUCTION	
A.	ADD CONTINGENCIES @ 10% OF (A.1)	
A.	ADD ESCALATION @ 8% OF (A.1)	
A.	SUBTOTAL 2 FOR CONSTRUCTION	
A.	ADD VALUE ADDED TAX @ 15% OF (A.4)	
TOTAL FOR CONSTRUCTION		

## **PART C3    SCOPE OF THE WORKS**

## **CONTENTS**

<b>Item</b>	<b>Topic</b>	<b>Page</b>
<b>1.</b>	<b>DESCRIPTION OF THE WORKS</b>	<b>3-22</b>
1.1	Employer's Objectives	3-22
1.2	Overview of the Works	3-22
1.3	Extent of the Works	3-22
1.4	Location of the Works	3-23
1.5	Labour Regulations	3-23
1.6	Temporary Works	3-28
<b>2.</b>	<b>ENGINEERING</b>	<b>3-29</b>
2.1	Design Services and Activity Matrix	3-29
2.2	Employer's Design	3-29
2.3	Drawings	3-29
<b>3.</b>	<b>PROCUREMENT</b>	<b>3-29</b>
3.1	Preferential Procurement	3-29
3.2	Sub-Contracting	3-30
<b>4.</b>	<b>CONSTRUCTION</b>	<b>3-30</b>
4.1	Works Specifications	3-30
4.2	Plant and Materials	3-31
4.3	Construction Equipment	3-31
4.4	Existing Services	3-31
4.5	Site Establishment	3-32
4.6	Site Usage	3-33
4.7	Permits and Way Leaves	3-33
4.8	Alterations, Additions, Extensions and Modifications to Existing Works	3-33
4.9	Water for Construction Purposes	3-33
4.10	Survey Control and Setting Out of the Works	3-34
<b>5.</b>	<b>MANAGEMENT</b>	<b>3-35</b>
5.1	Management of the Works	3-35
5.2	Health and Safety	3-35
<b>6.</b>	<b>ANNEXURES TO SCOPE OF WORK</b>	<b>3-36</b>
Annexure A	Variations to Standardized Specifications and Additional Clauses	3-37
Annexure B	Particular Specifications	3-55
Annexure C	EPWP Requirements	3-81
Annexure D	Standard Forms to be used during the currency of the Contract	3-86
Annexure E	Electrical Specifications	3-87
Annexure F	List of drawings	3-101

## **1. DESCRIPTION OF THE WORKS**

### **1.1 Employer's Objective**

Thulamela Local Municipality, in consultation with the community, identified the need for the **Construction of Gundani Landfill Cell**

The employer's objective is to deliver public infrastructure using labour intensive methods in accordance with EPWP Guidelines.

Labour-intensive work shall be constructed/maintained using local workers who are temporarily employed in terms of this Scope of Work.

Contractors shall engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/Supervisors at NQF "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/Manager at NQF level 4 "Manage labour-intensive Construction Processes" or equivalent QCTO qualifications.

### **1.2 Overview of the Works**

This overall envisaged project will consist of the following:

- a) Site clearance: General clearance of the area of the works,
- b) Excavation works,
- c) Installation of storm-water drainage structures and related erosion control structures,
- d) Bulk earthworks for cell development
- e) Installation of weigh pad
- f) Erosion protection works. The works will include stone-pitching
- g) Installation of leachate drainage system- pipe work and structures
- h) Construction of leachate pond and associated ancillary works
- i) Earthworks and Layer works
- j) Installation of geomembrane materials
- k) Site clearing after works
- l) Fencing works
- m) Finishes to existing structures

### **1.3 Extent of the Works**

The work required to be done by the Contractor, comprises the execution of civil work and includes:

- a) Site clearance: General clearance of the area of the works,
- b) Excavation works,
- c) Opening up borrow pits and reinstating of borrow pits,
- d) Installation of reinforced concrete storm-water drainage structures and related erosion control structures,
- e) Installation of prefabricated culvert pipes and related structures such as wing walls, retaining wall and floor slabs,
- f) Rock blasting
- g) Fence erection around the landfill site
- h) Erosion protection works. The works will include stone-pitching and installation of gabion baskets,
- i) Mass earthworks and layer construction,
- j) Site clearing works



All labour intensive works are marked as Labour Intensive Construction (LIC) items in the Bill of Quantities and this development will be part of the Expanded Public Works Programme (EPWP).

#### **1.4 Location of the Works**

- a) The project is located as shown on the locality map bound into the book of drawings.
- b) Location Data
  - Province : Limpopo
  - District Municipality : Vhembe
  - Local Municipality : Thulamela Local Municipality

#### **1.5 Labour Regulations**

##### **1.5.1 Payment for the labour-intensive component of the works**

Payment for works identified in clause 1.3 “the Extent of Works” as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

##### **1.5.2 Applicable labour laws**

The Ministerial Determination 4 for Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R347 in Government Gazette 35310 of 4 May 2012, as reproduced below, shall apply to works described in the scope of work as being labour intensive (LI) and which are undertaken by unskilled or semi-skilled workers.

##### **1.5.2.1 Introduction**

1.5.2.1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on Expanded Public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of an EPWP.

5.2.1.1.2 In this document –

- (a) “department” means any department of the State, implementing agent or contractor;
- (b) “employer” means any department, implementing agency or contractor that hires workers to work in elementary occupations on an EPWP;
- (c) “worker” means any person working in an elementary occupation on an EPWP;
- (d) “elementary occupation” means any occupation involving unskilled or semi-skilled work;
- (e) “management” means any person employed by a department or implementing agency to administer or execute an EPWP;
- (f) “task” means a fixed quantity of work;
- (g) “task-based work” means work in which a worker is paid a fixed rate for performing a task;

- (h) “task-rated worker” means a worker paid on the basis of the number of tasks completed;
- (i) “time-rated worker” means a worker paid on the basis of the length of time worked.

#### **1.5.2.2.1 Terms of Work**

1.5.2.2.1 Workers on an EPWP are employed on a temporary basis.

#### **1.5.2.3 Normal Hours of Work**

1.5.2.3.1 An employer may not set tasks or hours of work that require a worker to work–

- (a) more than forty hours in any week
- (b) on more than five days in any week; and
- (c) for more than eight hours on any day.

1.5.2.3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.

1.5.2.3.3. A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker

#### **1.5.2.4 Meal Breaks**

1.5.2.4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

1.5.2.4.2 An employer and worker may agree on longer meal breaks.

1.5.2.4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

1.5.2.4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

#### **1.5.2.5 Special Conditions for Security Guards**

1.5.2.5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

1.5.2.5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

#### **1.5.2.6 Daily Rest Period**

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

#### **1.5.2.7 Weekly Rest Period**

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work (“emergency work”).

#### **1.5.2.8 Sick Leave**

1.5.2.8.1 Only workers who work more than 24 hours per month have the right to claim sick-pay in terms of this clause.

1.5.2.8.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

1.5.2.8.3 A worker may accumulate a maximum of twelve days' sick leave in a year.

1.5.2.8.4 Accumulated sick-leave may not be transferred from one contract to another contract.

1.5.2.8.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

1.5.2.8.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

1.5.2.8.7 An employer must pay a worker sick pay on the worker's usual payday.

1.5.2.8.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –

(a) absent from work for more than two consecutive days; or

(b) absent from work on more than two occasions in any eight-week period.

1.5.2.8.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

1.5.2.8.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

#### **1.5.2.9 Maternity Leave**

1.5.2.9.1 A worker may take up to four consecutive months' unpaid maternity leave.

1.5.2.9.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.

1.5.2.9.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

1.5.2.9.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

1.5.2.9.5 A worker may begin maternity leave –

(a) four weeks before the expected date of birth; or

(b) on an earlier date –

(i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or

- (i) if agreed to between employer and worker; or
- (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.

1.5.2.9.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

#### **1.5.2.10 Family responsibility leave**

1.5.2.10.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances –

- (a) when the employee's child is born;
- (b) when the employee's child is sick;
- (c) in the event of a death of –
  - (i) the employee's spouse or life partner;
  - (ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

#### **1.5.2.11 Statement of Conditions**

1.5.2.11.1 An employer must give a worker a statement containing the following details at the start of employment –

- (a) the employer's name and address and the name of the EPWP;
- (b) the tasks or job that the worker is to perform; and
- (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
- (d) the worker's rate of pay and how this is to be calculated;
- (e) the training that the worker will receive during the EPWP.

1.5.2.11.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement

1.5.2.11.3 An employer must supply each worker with a copy of these conditions of employment.

#### **1.5.2.12 Keeping Records**

1.5.2.12.1 Every employer must keep a written record of at least the following –

- (a) the worker's name and position;
- (b) copy of an acceptable worker identification
- (c) in the case of a task-rated worker, the number of tasks completed by the worker;
- (d) in the case of a time-rated worker, the time worked by the worker;
- (e) payments made to each worker

1.5.2.12.2 The employer must keep this record for a period of at least three years after the completion of the EPWP.

#### **1.5.2.13 Payment**

1.5.2.13.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

1.5.2.13.2 A worker may not be paid less than the minimum EPWP wage rate of rate of R102 per day during 2022. This will be adjusted annually on the 1<sup>st</sup> of November in

line with inflation (available CPI as provided by Stats SA six (6) weeks before implementation).

1.5.2.13.3 A task-rated worker will only be paid for tasks that have been completed.

1.5.2.13.4 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to employer

1.5.2.13.5 A time-rated worker will be paid at the end of each month.

1.5.2.13.6 Payment must be made in cash, by cheque or by direct deposit into bank account designated by the worker.

1.5.2.13.7 Payment in cash or by cheque must take place –

- (a) at the workplace or at a place agreed to by the worker;
- (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
- (c) in a sealed envelope which becomes the property of the worker.

1.5.2.13.8 An employer must give a worker the following information in writing-

- (a) the period for which payment is made;
- (b) the numbers of tasks completed or hours worked;
- (c) the worker's earnings;
- (d) any money deducted from the payment;
- (e) the actual amount paid to the worker.

1.5.2.13.9 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it

1.5.13.10 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

#### **1.5.2.14 Deductions**

1.5.2.14.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

1.5.2.14.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

1.5.2.14.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

1.5.2.14.5 An employer may not require or allow a worker to –

- (a) repay any payment except an overpayment previously made by the employer by mistake;
- (c) state that the worker received a greater amount of money than the employer actually paid to the worker; or
- (c) pay the employer or any other person for having been employed.

#### **1.5.2.15 Health and Safety**

1.5.2.15.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

1.5.2.15.2 A worker must –

- (a) work in a way that does not endanger his/her health and safety or that of any other person;
- (b) obey any health and safety instruction;
- (c) obey all health and safety rules of the EPWP;
- (d) use any personal protective equipment or clothing issued by the employer;
- (e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

#### **1.5.2.16 Compensation for Injuries and Diseases**

1.5.2.16.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

1.5.2.16.2 A worker must report any work-related injury or occupational disease to their employer or manager.

1.5.2.16.3 The employer must report the accident or disease to the Compensation Commissioner.

1.5.2.16.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

#### **1.5.2.17 Termination**

1.5.2.17.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

1.5.2.17.2 A worker will not receive severance pay on termination.

1.5.2.17.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

1.5.2.17.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

1.5.2.17.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

#### **1.5.2.18 Certificate of Service**

1.5.2.18.1 On termination of employment, a worker is entitled to a certificate stating –

- (a) the worker's full name;
- (b) the name and address of the employer;
- (c) the EPWP on which the worker worked;
- (d) the work performed by the worker;
- (e) any training received by the worker as part of the EPWP;
- (f) the period for which the worker worked on the EPWP;
- (g) any other information agreed on by the employer and worker

## **1.6 Temporary Works**

The Contractor has no responsibility for construction of temporary works.

## **2. ENGINEERING**

### **2.1 Design Services and Activity matrix**

- a) The Contractor has no responsibility for design of permanent works.
- b) The Contractor has no responsibility for the design of temporary works.

### **2.2 Employer's Design**

The Employer's design of the Works is complete.

Construction drawings for the Works are complete.

As-built drawings will be compiled by the Employer, however it is to be noted that it remains the duty of the Contractor to timeously convey any information in his possession which may prove necessary for the Engineer for compilation of the as-built drawings.

### **2.3 Drawings**

#### **2.3.1 Drawings Prepared by Contractor**

None required.

#### **2.3.2 Drawings Prepared by the Employer**

The drawings prepared by the Employer comprise the following:

- a) **Drawings issued separately**

The Contractor will be supplied with three full scale prints of each construction drawing free-of-charge. Further copies will be charged for at ruling rates.

Any information in the possession of the Contractor, which is necessary for the resident engineer for completing of his as-built drawings, shall be supplied to the resident engineer before a certificate of completion will be issued.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Engineer. The Engineer will supply any figured dimensions which may have been omitted from the drawings.

### 3. **PROCUREMENT**

#### 3.1 **Preferential Procurement Procedure Requirements**

The Employer's preferential procurement policy applicable to this Contract is set out in paragraph 6.3.2 of the Tender Data.

##### 3.1.1 **Applicable Specification**

The South Africa National Standards SANS 1914 - 5: 2002 Edition 1 specification shall apply to the Contract.

##### a) **Definition of Targeted Labour**

South African Citizens who:

- have not been employed for more than 100 days during the year preceding their engagement on the Contract; and
- reside within the boundaries of **Thulamela Local Municipality**

##### b) **Weighting Factor** (Clause 3.3.1)

The weighting factor for all cases shall be unity.

##### c) **Targeted Labour Engagement**

Targeted labour shall be engaged on the following aspects of the Contract:

<b><u>Activity</u></b>	<b><u>Target area</u></b>
Site Clearance	Clearing of the area of the works
Erosion protection works	Stone pitching
Structure rehabilitation	brickwork, plastering, painting, roof-work, finishes
Edge protection	kerbing to the access road
Foundations	Restricted excavations
Fencing works	Fence erection and connections

#### 3.2 **Sub-Contracting**

##### 3.2.1 **Mandatory sub-contract works**

This project does not provide for any mandatory sub-contract works.

##### 3.2.2 **Preferred subcontractors/suppliers**

This project does not provide for any preferred sub-contractors or suppliers.

##### 3.2.3 **Sub-contracting procedures**

Should the Contractor intend to employ sub-contractors for execution of portions of the Works, the relevant information shall be submitted per Appendix A8 of Part 2 of this document, for consideration of the Employer.

### 4. **CONSTRUCTION**

#### 4.1 **Works Specifications**



#### 4.1.1 Applicable SABS Standardised Specifications

The applicable standardised specifications for this Contract shall be the following:

SANS 1200	A	General
SANS 1200	AB	General - Engineer's Office
SANS 1200	C	Site Clearance
SANS 1200	D	Earthworks
SANS 1200	DB	Earthworks (Pipe Trenches)
SANS 1200	DK	Gabions and Pitching
SANS 1200	DM	Earthworks (roads, subgrade)
SANS 1200	G	Concrete (Structural)
SANS 1200	H	Structural Steelwork
SANS 1200	HC	Corrosion protection for structural steelwork
SANS 1200	LE	Stormwater
SANS 1200	M	Roads (General)
SANS 1200	ME	Subbase
SANS 1200	MF	Base
SANS 1200	MH	Asphalt Base and Surfacing
SANS 1200	MJ	Segmented Paving
SANS 1200	MK	Kerbing and Channelling

- 4.1.2 The following variations to standardised specifications and additional clauses are applicable to this Contract and are contained in the "Annexure to the Scope of Work".

PSA	General
PSAB	Engineer's Office
PSC	Site Clearance
PSD	Earthworks
PSG	Concrete
PSHG	Corrosion protection for structural steelwork

#### 4.1.3 Particular Specifications

The following Particular Specifications are applicable to this Contract and are contained in the "Annexure to the Scope of Work".

PB	Building Work
PD	Sub-surface Drains and Filter Sand
PF	Fencing
PT	Top Soiling, grassing and erosion control
Thulamela LM	Health and Safety Specification

#### 4.2 Plant and Materials

All materials used in the Works shall, where such mark has been awarded for a specific type of material, bear the SANS mark.

#### 4.3 Construction Equipment

The contractor's equipment for construction shall be adequate for the purpose required, of modern design and in good condition to carry out the works expeditiously. Should the Engineer be of the opinion that the equipment in use is in any way unsuitable for carrying out the works in a manner or at a rate commensurate with the requirements of the contract, he shall have the right to call on the Contractor at any time during the progress of the works to provide such additional or improved equipment as may be necessary to meet these requirements.

The Employer makes no provision in this contract for financial assistance to the Contractor for the acquisition of plant, machinery and equipment.

#### **4.4 Existing Services**

##### **4.4.1 Care of Existing Services**

It is to be noted that construction work will be done adjacent to or traversing existing services. Prior to commencement of any constructional work in the aforesaid affected area, the Contractor shall satisfy the Engineer that all necessary precautions with respect to setting out procedures have been taken by the Contractor to evade the existing services.

The Contractor shall, before starting any excavations, carefully search and probe the terrain for any existing services or indications of the presence of such services. A payment item is included in the Schedule of Quantities for excavations by hand to locate known and unknown services. If other methods are to be used, the cost thereof is to be included in the Preliminary and General Payment items.

In addition, if the proposed new services cross underneath overhead power lines belonging to Eskom as well as underground pipelines and communication cables belonging to Telkom, the Contractor shall have to comply with all the requirements laid down by the relevant authorities when working in the vicinity thereof. The Contractor shall be responsible for checking the locations of all such services with representative of the relevant authorities to ensure that no damage is caused by construction operations.

Work executed within the road reserve of provincial or local roads shall be carried out strictly in accordance with the requirements laid down by the relevant provincial or local authorities. These include the use of traffic signs, flagman and other requirements as applicable. As the above work entails working in or close to an already developed enclosure, special care must be taken so as not to disturb the functioning of the existing facilities.

##### **4.4.2 Connection to Existing Services**

Prior to connection of new services to existing services, the Contractor shall ensure that the constructed services are clean and free of foreign matter and shall subsequently request the Engineer, in writing, to inspect such Works. Only upon written approval of the Engineer, may connections to existing services be made.

##### **4.4.3 Contractor to Notify Relevant Authority and the Engineer of Damaged Service**

In the event of any service being damaged or accidentally disconnected for any reason, the Contractor shall immediately contact the relevant authority for instructions and shall report the occurrence to the Engineer in writing. The report shall include the reasons for the occurrence of the incident. When instructed the damaged is to be repaired as soon as possible to the approval of the Engineer and Authority. The Contractor will be held responsible for paying all costs incurred by the Service owner or himself as result of each incident where the relevant service was clearly identified beforehand.

#### **4.5 Site Establishment**

##### **4.5.1 Services and Facilities provided by the Employer:**

a) Water

No clean water is available on site.

b) Electricity / power supply

Electricity is available on site.

The Contractor shall be responsible for making his own arrangements to obtain water, electric power and other services that he may require for construction purposes.

The costs of making such arrangements, for meeting the conditions imposed and for the metered consumption shall be paid by the Contractor, and his tender will be held to include for all such requirements throughout the duration of the Contract. All water including that used for testing will be charged for at the prevailing tariffs.

#### 4.5.2 Facilities Provided by the Contractor

The Contractor will be required to make his own arrangements for the provision of a suitable construction camp, offices and workshops. He shall be responsible for all negotiations with the relevant authorities and he shall comply with all requirements imposed by those authorities. Suitable sites available within the municipal area will be pointed out during the site inspection.

Should the Contractor require additional storage sites outside of the municipal areas he will be responsible for making his own arrangements at his own cost for such offices.

The facility shall be properly fenced around the perimeter. Temporary buildings and fencing are to be neat and presentable and the surrounding areas must be at all times be kept in a neat, clean and orderly condition. The costs associated with the provision of these items shall be borne by the Contractor. The Contractor will be required to remove all facilities and restore the site to its original condition on completion of Works.

#### 4.5.3 Other Facilities and Services

##### a) Latrine and Ablution Facilities

It will be required of the Contractor to provide temporary toilets and ablution facilities for his staff for the currency of the contract, to the standards laid down by the Authorities.

##### b) Housing of Contractor's Staff

The Contractor shall make his own arrangements for the housing of his supervisory staff.

##### c) Security

The Contractor will be responsible for providing adequate security for the Works and for the site establishment. All costs associated with the provision of watchmen shall be borne by the Contractor.

#### 4.5.4 EPWP Branded Project Name Boards

The Contractor shall provide for the installation of one (1) name board. The size, design and contents shall be as indicated on the detail drawing.

The name board shall be removed upon completion of the Works.

#### 4.6 Site Usage

The Employer expects the contractor, his staff or agents to maintain good public relations with landowners, other contractors and members of the public at all time.

The Contractor shall see to it that no roads, gates, pipes, fences, vegetation and crops with private ownership is damaged due to construction activities.

#### **4.7 Permits and Way Leaves**

No way leaves are required on this project.

#### **4.8 Alterations, Additions, Extensions and Modifications to Existing Works**

The Contractor shall verify all levels, alignment and dimensions of existing structures or components thereof prior to the commencement of any work to determine the compatibility with the proposed works. The Contractor shall notify the Employer's Agent of any discrepancies.

#### **4.9 Water for Construction Purposes**

No water for construction purposes is available on site. The Contractor shall make provision for procuring, transporting and storing of water for construction purposes at his own cost.

#### **4.10 Survey Control and Setting Out of the Works**

##### **4.10.1 Survey Control**

###### **a) Geometric Control**

The Bench-mark Control and topographical survey for the Works has been established. The Contractor is to check the Bench-marks and existing levels prior to construction and bring any discrepancies to the attention of the Engineer.

###### **b) Preservation and Replacement of Beacons and Pegs**

The Contractor shall protect and preserve all survey marks. Any survey marks disturbed or removed without prior written consent of the Engineer, shall be replaced by a Registered Land Surveyor at the expense of the Contractor.

Any errors in construction levels or positions resulting from use of disturbed bench-marks shall be made good by the Contractor at his expense.

##### **4.10.2 Setting out of the Works**

###### **a) Setting out**

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract Data or notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

###### **b) Construction Tolerance Control**

The Contractor will be required to issue to the Engineer in writing certification of construction accuracy at each of the following construction phases, before continuing with the next phase of construction:

- i) Setting out of Works.
- ii) Corner positions and levels of building platform
- iii) Centre lines and levels of access roads

The Contractor shall only continue with the next phase of construction when directed by the Engineer in writing.

Should any item or section of the Works be constructed outside the limits of tolerance specified, instruction for remedial or other measures will be issued by the Engineer. The Contractor will not be permitted to continue with the next phase of construction until remedial work has been completed to the satisfaction of the Engineer.

No claim for loss in material, production or time resulting from the Contractor's work being constructed outside the limits of tolerance specified, will be entertained.

## **5. MANAGEMENT**

### **5.1 Management of the Works**

#### **5.1.1 Planning and Programming**

The Contractor shall supply within the period stated in the Contract Data a suitable and realistic construction programme, cash flow diagram, and critical path diagram for the consideration of the Engineer. This programme shall show the proposed scheduling and methods of execution of the Works and the resources to be allocated to each item or phase of the work. Quantities proposed for execution during each week and the anticipated cash-flow based upon these quantities should be shown, due allowance being made for price escalations and retention moneys.

The programme shall make provision for the accommodation of other contractor's requirements. It will be required from the contractor to liaise with other contractors to ensure continuous co-ordination and execution of the scheduled work.

#### **5.1.2 Recording of Weather**

The Contractor shall provide and install a rain gauge on site and shall record rainfall data in the site diary. A site diary will be issued to the Contractor.

#### **5.1.3 Community Liaison Officer (CLO)**

Community Liaison Officer will be appointed to be the link between Contractor and Community through the PSC and be remunerated by the Contractor at the rate of **R4 500-00.**

### **5.2 Health and Safety**

#### **5.2.1 Health and Safety Requirements**

The Occupational Health and Safety Act, Act 85 of 1993 shall apply to this contract. The Contractor shall comply with the Particular Specification for Occupational Health and Safety, including the appointment of health and safety representative to be remunerated by Contractor at a rate of R5 500-00.

#### **5.2.2 Protection of the Public**

As the above entails working in an already developed area where services are provided to the general public special attention must be paid to the following aspects:

- a) No blasting or working with percussion tools will be allowed unless prior written approval from the Engineer and local authorities is obtained.

- b) Safety of the public must be of prime importance and the utmost care must be taken to ensure that the correct signs, barriers and warning devices are in place.
- c) Movement of construction equipment must be controlled on site at all times.
- d) When dust from the Works becomes a nuisance the Contractor shall, when so ordered by the Engineer, apply sufficient water or take other measures to lay the dust.

**6. ANNEXURES**

Annexure A	Variations to Standardized Specifications and Additional Clauses
Annexure B	Particular Specifications
Annexure C	EPWP Regulations
Annexure D	Standard Forms to be used during the currency of the Contract
Annexure E	Drawings

## **ANNEXURE A**

### **VARIATIONS TO STANDARDIZED SPECIFICATIONS AND ADDITIONAL CLAUSES**

#### **PSA            GENERAL**

This portion contains essential clauses and data and additional clauses required to augment the standardised specifications to suit the nature of this Contract.

#### **PSA1           SPECIFICATION DRAWINGS (Clause 2.7)**

Specification Drawings are included in this document as Annexures to the Project and Particular Specifications. Where such Specification Drawings depict items and standard structures according to lay-outs and details differing from those shown in the Standardised Specifications, the lay-outs and details shown in the Annexures to the Project and Particular Specifications shall prevail.

#### **PSA2           QUALITY (Clause 3.1)**

All material used in the Works shall, where such mark has been awarded for a specific type of material, bear the SABS mark.

#### **PSA3           PREVENTION OF DUST AND NOISE NUISANCE (Clause 5.6)**

The Contractor is particularly required to take all necessary precautions, including watering where appropriate, to prevent dust blowing from construction material and spoil heaps and/or ground stripped of vegetation cover. The Contractor shall take necessary steps to limit noise during school activities.

#### **PSA4           TOLERANCES**

##### **PSA4.1        Methods of Specifying (Clause 6.1)**

Tolerances for final earthwork levels	:	25 mm ±
Tolerances for final earthwork reference positions (X & Y Plane as per the L.O. system)	:	25 mm ±

##### **PSA4.2        Degrees of Accuracy (Clause 6.2)**

The Degree of Accuracy of " (seconds) shall generally apply to this contract, with the following exceptions:

Elements or components above foundations – Degree of Accuracy - ' (minutes)

#### **PSA5           TESTING (Clause 7)**

PSA5.1        All test results obtained by the Contractor in the course of his process control of the Works shall be submitted to the Engineer or his Representative prior to requesting inspection of the relevant portions of the Works. Any request for inspection shall be submitted on the prescribed forms appended as annexures to these Specifications.

PSA5.2        The Contractor shall make suitable arrangements for process control prior to commencement with the Works. Should he intend using site personnel for this purpose he shall ensure that suitably trained and competent personnel take charge of the necessary

test work and that the necessary equipment is at their disposal prior to commencement of the Works. Failure to comply with these requirements shall be just cause for the Engineer to order suspension of the works without additional remuneration in terms of Clause 39 of the Conditions of Contract or for him to recommend termination to the Employer in terms of Clause 55 thereof.

**PSA6      PAYMENT (Clause 8.2)**

Monthly progress payment certificates shall be submitted to the Engineer's Representative on site on the last working day of the calendar month in which the work was done to allow for reconciliation of all quantities, rates, extensions and additions in the certificate. Upon approval by the Engineer's Representative, the certificate shall be submitted in typed form to the Engineer before or on the 7th day of each month following the month of measurement, together with the required number of copies, for certification. It will be assumed that the Contractor has made adequate provision in the prices tendered for manufacture/supply, delivery, assembly, installation and commissioning of all necessary aids required to execute the contract. The certificates shall be according to the standard format included in the annexures to these specifications. Special attention shall be given to the requirements set out in Special Condition of Contract 49(1).

Where day works have been instructed by the Engineer, the Contractor shall submit the returns to the Engineer for signature and approval within twenty-four (24) hours of the end of the working day on which the work was executed. Day work returns shall be submitted on forms included in the annexures to the Specifications.

**PSA7      SUMS STATED PROVISIONALLY (Clause 8.5)**

PSA7.1      A provisional amount has been included in Schedule 1 for materials to be used during the execution of day works.

In addition to the abovementioned amount, provision is made for a mark-up on the materials to be used during the execution of day works. Payment made shall be regarded as full compensation for overheads, charges and profit on the materials to be used when executing day works.

PSA7.2      A Provisional Sum has been included in Schedule 1 for contingencies. No percentage mark up will be applicable to any payments made in this regard other than those included in prices for variation determined in terms of Clause 36 of the Conditions of Contract.

**PSA8      INSTRUCTIONS BY THE ENGINEER**

Site instructions by the Engineer, addressed to the Contractor at his office on the site, will be numbered consecutively and will be deemed to have been received by the Contractor's Representative unless a break in the sequence of numbers is brought to the notice of the Engineer in writing immediately.

**PSA9      SITE RECORD BOOK/DIARY**

An approved quality A4-size, triplicate copy, Site Record Book/Diary shall be kept in the Contractor's site office and be accessible to the Engineer at all times.

A summary of each working day's events shall be recorded in this book, including inter alia, plant and machinery, movement of materials, construction work completed or undertaken (eg.. volume of concrete cast, mass of reinforcement fixed, length of cabling erected, etc.

Daily entries shall be initialled both by the Resident Engineer / Engineer / Engineer's Representative at the close of the day's activities, or immediately prior to the start of construction activity on the following working day.



Compliance with these requirements is deemed to be included in the Contractor's tendered rates.

**PSA10      CONSTRUCTION**

**PSA10.1      Survey**

**PSA10.1.1      Setting out of the works**

The Bench Mark Control and topographical survey for the works has been established. The Contractor is to check the Bench Marks and existing levels by staking prior to construction and bring any discrepancies to the attention of the Engineer.

**PSA10.1.2      Preservation and Replacement of Beacons and Pegs**

The Contractor shall protect and preserve all survey marks. Any survey marks disturbed or removed without prior written consent of the Engineer, shall be replaced by a Registered Land Surveyor at the expense of the Contractor.

**PSA10.1.3      Setting-out and Construction Tolerance Control**

The Contractor will be required to issue to the Engineer in writing certification of construction accuracy at each of the following construction phases, before continuing with the next phase of construction:

- a)      Setting out of Works
- b)      Centreline of route

The Contractor shall only continue with the next phase of construction when directed by the Engineer in writing.

Should any item or section of the Works be constructed outside the limits of tolerance specified, instruction for remedial or other measures will be issued by the Engineer. The Contractor will not be permitted to continue with the next phase of construction until remedial work has been completed to the satisfaction of the Engineer.

No claim for loss in material, production or time resulting from the Contractor's work being constructed outside the limits of tolerance specified, will be entertained.

**PSAB      ENGINEER'S OFFICE**

**PSAB1      OFFICE BUILDINGS (Clause 3.2)**

The Contractor shall supply and furnish an on-site office of at least 16 m<sup>2</sup> for the use of the Engineer or his representative. Included in this item the Contractor must allow for the cost of providing electricity, acceptable lighting and air conditioning.

The internal furnishings of the office shall include:

- a)      One trestle table, 2 m long x 1 m wide x 0,9 m high with a smooth top
- b)      One desk having a top size of at least 1,5 m x 0,9 m
- c)      One high chair
- d)      Two chairs
- e)      A lockable steel filing cabinet with four drawers
- f)      An A1 drawing cabinet

The Contractor will be responsible for the security of the office.

**PSAB2      TELEPHONE (Clause 5.4)**

A cell phone with minimum R1 000.00 airtime/month will be required for the use of the Resident Engineer for the duration of the contract. The Tenderer shall supply a router with a cellular data package of minimum 3 GB per month for the use by the Resident Engineer for the duration of the Contract

**PSAB3      NAME BOARDS (Clause 3.1)**

One (1) name board will be required.

**PSAB4      MEASUREMENT AND PAYMENT**

**PSAB4.1      Telephone & Data**

A provisional sum shall be included for providing communication systems.

Payment for expenditure under this item will be made in accordance with the money expended, subject to written proof by the Contractor of payment of the amounts.

---

**PSC**                    **SITE CLEARANCE**

**PSC1**                    **SCOPE (Clause 1.1)**

The scope of the work shall also include :

- a)        Clear and grub the area of the works. Include for material, rubble and debris, temporary stockpiling (if necessary) and dispose of neatly on site as directed by the Engineer.
- b)        Remove and grub all trees and tree stumps regardless of girth. (No tree shall be removed without the express approval of the Engineer).

**PSC2**                    **DISPOSAL OF MATERIAL (Clause 3.1)**

All rubble, debris and waste material shall be disposed of neatly on site as directed by the Engineer.

**PSC3**                    **PRESERVATION OF TREES (Clause 5.2.3)**

No trees shall be cut down without the express approval of the Engineer.

**PSC4**                    **CONSERVATION OF TOPSOIL (Clause 5.6)**

No topsoil will be preserved.

**PSC5**                    **LANDSCAPE PRESERVATION AND CONSERVATION OF FLORA (Clause 5.7)**

All flora outside the designated.

Any damage of whatever nature shall be made good to the Engineer's instructions and at the Contractor's own expense.

The cost of preservation shall be deemed included in the Tenderer's rates.

**PSC6**                    **MEASUREMENT & PAYMENT**

**PSC6.1**                    **Transport and Disposal of Materials and Debris on Site**

The rate shall cover all cost for temporary stockpiling on site (if necessary); and disposing of neatly on site to the Engineer's site instructions.

**PSD                    EARTHWORKS**

**PSD1                SCOPE (Clause 1.1)**

The work covered includes for the earthworks required for construction of all structures.

**PSD2                WORKING SPACE BEYOND PERIMETERS OF STRUCTURES (Sub-clause 5.2.2.1b)**

All vertical faces for concrete structures shall be shuttered except in the special case of pipeline thrust blocks where no working space shall be excavated and the concrete shall be cast directly against the undisturbed earth face.

In all cases where formwork has to be provided for concrete structures, the extremities of the excavation, for purposes of measurement and payment, shall be deemed to be the vertical planes parallel to and 0.5 metre outside the perimeter of the member for which formwork is to be provided.

**PSG**            **CONCRETE (Structural)**

**PSG1**            **MATERIALS**

**PSG1.1**        **CEMENT (Clause 3.2.1)**

All Cement to be used shall conform to SABS EN 197-1. Only CEM I 42,5 cement shall be used in construction of the Works, unless otherwise approved by the Engineer.

**PSG1.2**        **STORAGE OF CEMENT (Clause 3.2.3)**

A first-in-first out circulation shall be followed to ensure that no cement shall be older than two (2) months from the date of manufacture.

**PSG1.3**        **AGGREGATES (Clause 3.4.1)**

The maximum size of the coarse aggregate shall be 20 mm unless otherwise indicated on the drawings.

**PSG2**            **PLANT**

**PSG 2.1**        **FORMWORK**

**PSG2.1.1**      **Finish (Clause 4.5.2)**

All concrete save for water retaining structures against which earth will be backfilled, shall be finished rough.

All exposed concrete surfaces shall be finished smooth to Degree of Accuracy I. (Subclause 6.2.3), unless otherwise indicated on the drawings.

**PSG2.1.2**      **Ties (Clause 4.5.3)**

No system leaving holes through the walls will be permitted. Ferrules shall be of the permanent sacrificial type.

Sacrificial holes formed in reinforced concrete walls during the fixing of formwork shall be repaired with 1:3 cement-sand mortar. All grouting material shall be thoroughly punned in.

**PSG2.1.3**      **Chamfers (New Clause 4.5.4)**

All rectangular edges or corners shall be chamfered off to 20 mm x 20 mm unless otherwise indicated on the drawings.

The scheduled prices for formwork shall include for forming of chamfers.

**PSG3**            **CONSTRUCTION**

**PSG3.1**        **REINFORCEMENT**

**PSG3.1.1**      **Fixing Tolerances (Clause 5.1.2)**

Reinforcement shall be positioned as shown on the drawings (read together with the bending schedules) and maintained in those positions within the tolerances given in Clause 6.2 to degree of accuracy I, unless otherwise indicated on the drawings.

---

**PSG3.2      FORMWORK**

**PSG3.2.1      Classification of Special Finishes (Clause 5.2.1)**

**PSG3.2.1.1      Rubbed surface finish**

Where a rubbed surface finish is specified or scheduled the surface shall first be treated as a smooth finish as specified in SABS 1200 G subclause 5.2.1(b).

After sufficient time has elapsed to allow the mortar to set, the surface shall be saturated by water. Rubbing shall then be carried out with a medium coarse carborundum stone and a small amount of mortar until all form marks, projections and irregularities are removed and a uniform surface obtained.

Leaving the paste produced by the rubbing in place, rubbing shall be continued with a fine carborundum stone and water. Rubbing shall be continued until the entire surface is of a smooth even texture and uniform colour. After the final rubbing the surface shall be washed down to remove surplus paste and powder.

**PSG3.3      HOLES, CHASES AND FIXING BLOCKS (Clause 5.3)**

Substitute the contents of the clause with:

a)      General

Holes, recesses and boxed-out openings shall be allowed in concrete structures, as specified, for the subsequent installation of mechanical equipment and/or pipework.

b)      Preparation of openings for the installation of equipment

Before commencing the positioning in holes of any pipes/specials the Contractor shall:

- i)      Remove all shuttering and boxing remaining in the holes;
- ii)      Make any alterations required to the position and shape of the holes;
- iii)      Thoroughly clean the sides of the holes so as to obtain a satisfactory bond surface for the new concrete; and
- iv)      Free all surfaces of the pipes/specials of all coatings, and thoroughly scrape and clean the pipes/specials.
- v)      Apply a wet-to-dry concrete adhesive (two component, solvent free, polysulphide modified epoxy compound) immediately before grouting.

c)      Grouting of voids

The concrete ingredients shall be mixed and placed as dry as possible to obtain a dense, waterproof concrete. Where a watertight seal is required, the concrete shall constitute a non-ferrous, non-shrink grout. The grout shall be worked around the puddle flange, if any, and the pipe barrel or body of the special, and shall be vibrated in layers so as to obviate any falling away from pipe/special surface of the concrete already placed. The whole shall, when set, form a dense, homogeneous, and waterproof mass. A spare vibrator with an independent power source shall be kept in readiness to ensure continuity of placing in the event of the breakdown of the duty vibrator.

Smooth formwork that has been suitably strengthened for use with a vibrator shall be provided for facing the concrete around each pipe/special.

**PSG3.4      PIPES AND CONDUITS EMBEDDED IN CONCRETE (Clause 5.4)**

Except with the written approval of the Engineer, no pipes other than those shown on the drawings shall be embedded in concrete, and the approval of the Engineer for the position of all services to be embedded shall be obtained before concreting commences. The clear space between pipes of any kind embedded in reinforced concrete and the clear space between such pipes and reinforcement shall not at any point be less than:

- i) 40 mm; or
- ii) 5 mm plus the maximum size of coarse aggregate, whichever is the greater.

**PSG3.5**      **CONCRETE**

**PSG3.5.1**    **QUALITY**

**PSG3.5.1.1**   **No-fines Concrete** (New Clause 5.5.1.8)

a)      **Scope**

This section covers the manufacture and placing of no-fines concrete used in the Works.

b)      **Materials**

Cement, aggregate and water shall comply with the requirements of Clause 3 of SABS 1200G, read together with sub-clause PSG1.1 herein.

c)      **Classes of No-Fines Concrete**

No-fines concrete shall be classified by the prefix NF and the size of aggregate to be used. Class NF 19 means a no-fines concrete with a 19mm nominal size aggregate.

The volume of aggregate per 50kg of cement for each class of concrete shall be as follows:

<b>Class</b>	<b>Aggregate per 50 kg cement</b>
NF 38	0,33m <sup>3</sup>
NF 19	0,30m <sup>3</sup>
NF 13	0,27m <sup>3</sup>

d)      **Batching and Mixing**

Cement shall be measured by mass or full pockets of 50kg each and aggregate shall be measured by volume in approved measuring boxes or barrows.

The quantity of water added shall be just sufficient to form a smooth grout which will adhere to and coat completely each and every particle of aggregate, and which is just wet enough to ensure that at periods of contact of aggregate the grout will run together to form a small fillet to bond the aggregate together. The mix shall contain no more than 20 litres of water per 50 kg of cement.

Mixing shall be carried out in an approved batch type mechanical mixer but small quantities may be hand mixed.

e)      **Placing**

No-fines concrete shall be placed in accordance with the procedure agreed to by the Engineer. It shall be placed in its final position within 30 minutes of mixing.

The concrete shall be worked sufficiently to ensure that it completely fills the space to be concreted and that adjacent aggregate particles are in contact with one another. Excessive tamping or ramming shall be avoided and under no circumstances shall the concrete be vibrated.

f) Curing

All no-fines concrete shall be protected from the elements and loss of moisture. Protection against loss of moisture shall be accomplished by one or more of the following:

- a) Retaining formwork in place.
- b) Covering exposed surfaces with sacking or other approved material kept continuously wet.
- c) Covering exposed surfaces with plastic sheeting.

No-fines concrete shall be cured for at least 7 days.

g) Covering of No-Fines Layer

In the event that no-fines concrete is to be covered by concrete, the undermentioned procedures shall be followed:

Before second stage concrete is cast on the no-fines, the surface shall be covered with building paper to prevent mortar from the wet concrete entering the no-fines layer. The building paper shall be properly protected against unnecessary damage before the concrete is cast.

h) Permeability of the No-fines Layer

After the no-fines concrete has been cured, the layer shall be tested for permeability by the continuous sprinkling of water over the entire area with approved sprinklers. The layer shall be considered acceptable if no water is ponding on the surface and if the water is running freely into the drainage system.

**PSG3.5.2      COMPACTION (Clause 5.5.6.3)**

Delete the words:

“or (if approved) by spading, rodding or forking”.

**PSG3.5.3      CONCRETE SURFACE FINISH (Clause 5.5.10.2)**

Delete the words:

“Degree of Accuracy” (seconds) and substitute with:      “Degree of Accuracy” (minutes)  
unless otherwise indicated on the drawings”.

**PSG3.5.4      WATERTIGHT CONCRETE (Clause 5.5.11)**

Add to Clause 5.5.11 the following:

- a) Definition (Clause 2.3)



For purposes of this Contract, all reservoirs, chambers and manholes will be regarded as **water retaining structures**.

The requirements of the Department of Water Affairs Specification DWS0750 (refer to Section 5) shall apply in addition to SABS 1200G.

b) Construction Joints

i) General

Construction joints in the reinforced concrete walls shall consist only of horizontal joints. If under abnormal conditions a vertical construction joint is unavoidable it may only be constructed with the approval of the Engineer.

Construction joints shall only be placed at intervals shown on the drawings or as directed by the Engineer. The exact position of construction joints shall be marked on the formwork in order to obtain truly horizontal joints.

A sealant using an approved PVC water stop (water-bar) shall be placed, as specified, **at all construction joints**.

ii) Preparation of Surface

Prior to placing any further concrete the joint must be clean, damp and free of laitance. During the period when the concrete has set but is still green all loose material shall be removed, without disturbing the aggregates, by light brushing. Where this is not possible, or if the concrete has already set, the surface film shall be removed by mechanical means appropriate to the degree of hardness of concrete so as to expose the aggregate over the entire surface and leave a sound, irregular surface.

c) Ferrule Cup Holes

No system leaving holes passing through the walls will be permitted. Ferrules shall be of the permanent sacrificial type.

Holes formed in reinforced concrete walls during the fixing of formwork shall be repaired on the waterside face with an approved epoxy or non-shrink grout. On the dry face the holes left in the concrete shall be repaired with 1:3 cement-sand mortar. All grouting material shall be thoroughly punned in.

**PSG4** **TOLERANCES**

**PSG4.1** **PERMISSIBLE DEVIATIONS**

**PSG4.1.1** Specified PD's (Clause 6.2.3)

The following permissible deviations for location of holding down bolts shall apply:

- a) the centre line of a holding-down bolt from its designated location in plan:  
plus 1 mm, minus 1 mm
- b) the top of the bolt from its designated elevation:  
plus 5 mm, minus 3 mm

**PSHC** **CORROSION PROTECTION OF STRUCTURAL STEELWORK**

---

**PSHC 1      PREPARATION FOR COATING (Clause 5.4)**

**PSHC 1.1      Wire-Brushing (Clause 5.4.3.2)**

Notwithstanding the requirements of PSH 4.3, steelwork, as relevant after fabrication shall be cleaned by hand by means of wire-brushing or any other appropriate method to a finish equal to or better than Sa 2½ of SIS 05 59 00.

**PSHC 1.2      Sand Blasting (Clause 5.4.3.1)**

Notwithstanding the requirements of PSH 4.3, steelwork, as relevant after fabrication shall be cleaned by means of sand blasting to a finish equal to or better than Sa 2½ of SIS 05 59 00.

**PSL8      SETTING OUT (Clause 4.2)**

Alignment of the pipes may be done either by means of infra-red sighting equipment or by sight rails. The following method should be followed if alignment is to be done by sight rails:

Prior to the preparation of the pipe bedding, the Contractor is to erect sight rails of 38mm x 150mm timber at intervals of a maximum of 60m or at points of change of pipe gradient, whichever may be the lesser. These shall be supported by wooden posts on each side firmly fixed on solid ground and the rails shall be accurately placed in position as regards alignment and invert level of the proposed trench. The centre line of the trench (i.e. pipeline) shall be denoted on each sight rail, both back and front by a single vertical line drawn thereon, and the rail on either side of the centre line painted in two contrasting colours. The Contractor shall also provide boning rods of an appropriate length marked in even decimetres for use in the fixing of the trench bottom to the correct line and level.

**PSL9      LAYING AND JOINTING**

**PSL9.1      Approval of trenches and bedding**

No pipe laying shall commence on any particular section until the Engineer has approved of the trenches and bedding. No pipes shall be laid in trenches with free standing water.

**PSL9.2      Positioning pipes and fittings**

The pipes shall be laid true to the lines, levels and grades shown on the drawings, or ordered by the Engineer, to within the specified tolerances.

**PSL9.3      Jointing**

All valves and fittings are to be checked beforehand to ensure their operational order prior to connection in the line.

The ends of laid pipes shall be suitably closed by means of approved caps, or as shown on the drawings, to prevent the ingress of soil or other matter. After the pipes have been laid, they shall be inspected and checked by the Engineer for grade, direction and line, to the specified tolerances.

**PSL10      BACKFILL (New clause)**

**PSL10.1      Approval**

Following the inspection by the Engineer with respect to the grade, direction and line as well the successful testing of the pipeline the Contractor shall promptly refill trenches and excavations.

**PSL10.2      Material and Method**

Material used for backfill shall be either selected granular material, selected backfill material or main fill as specified in SABS 1200 LB : Bedding (Pipes) with the backfill profile as described for the specific type of bedding.

The pipe must be supported underneath and on the side by placing prisms of the bedding material underneath the pipe. The backfill material shall then be punned around the pipe until a cover above the pipe of at least half the width of the trench is reached. Only then may mechanical compaction commence.

The selected material shall be brought up in 150mm layers, uniformly moistened to the optimum moisture content to attain the specified compaction. After reaching a cover of 300mm above the pipe, filling with the main fill may commence.

The degree of compaction shall in all cases be at least 90% of the modified AASHTO density.

**PSL10.3      Finishing off**

The backfill shall be mounded to a height of 100mm above ground level with gaps allowed at regular intervals for cross drainage. Sufficient topsoil shall be set aside during vegetation to form not less than the upper 150mm layer of backfill material. Any surplus material shall then be levelled off adjacent to the pipeline.

**PSL13      MEASUREMENT AND PAYMENT**

**PSL13.1      Principles**

- a) Measurement of the specials and valves shall be as per the appropriate items in SABS 1200L i.e. Items 8.2.2 and 8.2.3.

Measurement of the pipes shall be as per item 8.2.1 in SABS 1200 L.

**PSLB      BEDDING (Pipes)**

**PSLB1      MATERIALS (Subclause 3)**

**PSLB1.1      Selected Granular Material (Subclause 3.1)**

Selected granular material shall be regarded as a clean river sand or any other granular, non-cohesive material of an acceptable nature and a P.I. less than 6. Stones shall not be in excess of 20mm. Selected granular material might occur in-situ, be imported or selected from trench excavation.

**PSLB1.2      Selected Fill Material (Subclause 3.2)**

Selected fill material shall be material that has a P.I. less than 10 and does not contain vegetation or stones exceeding 30mm. Selected fill material might occur in-situ, be imported or selected from trench excavations.

**PSLB1.3      Ordinary Backfilling**

Ordinary backfilling will consist of material excavated and, if so approved by the Engineer, of material imported from other parts of the trench or borrowed from adjacent to the trench on the downhill side. All material above the selected fill blanket (drawing SABS LB-1) will be measured as ordinary backfill.

**PSLB2        BEDDING (Subclause 3.3)**

**PSLB2.1     Rigid Pipes**

All steel and FAC pipes for water supply will be regarded as being rigid and shall be bedded in a class C bed, unless otherwise specified.

**PSLB2.2     Flexible pipes**

uPVC and polythene pipes will be regarded as being flexible and shall be bedded as per drawings..

**PSLB3        TOLERANCES**

**PSLB3.1     Moisture Content and Density (Subclause 6.1)**

Degree of accuracy II shall prevail.

---

## **ANNEXURE B : PARTICULAR SPECIFICATIONS**

### **PB BUILDING WORK**

#### **PB1 SCOPE**

This section of the Specifications deals specifically with all the building work associated with the Works.

Concrete work, steelwork, cladding, pipelaying, mechanical and electrical equipment, etc. forming part of or to be housed in a building erected in terms of this specification shall conform to the requirements of the relevant standardized or particular specifications referred to in the Project Specification.

#### **PB2 INTERPRETATIONS**

The relevant SABS 1200 Standardized Specifications such as Site Clearance, Earthworks, Earthworks (pipe trenches), Concrete (structural), Low pressure pipelines, Bedding (pipes), Sewers and Stormwater drainage shall also apply to the work under this section.

#### **PB3 MATERIALS**

All materials used for the Building Work shall, where such mark has been awarded for a specific type of material, bear the SABS mark.

##### **PB3.1 Brick and Plasterwork**

Cement, sand and water shall conform to the requirements of SABS 1200 G - Concrete.

Unless otherwise described, cement mortar shall be composed of six parts by volume of sand to one part by volume of cement. The materials are to be mixed dry until the mixture is of a uniform colour and then clean water is to be added gradually through a fine rose and the mixture turned over until the ingredients are thoroughly incorporated.

Cement mortar must be mixed in small quantities and must be used within one hour of mixing, as the use of cement mortar that has commenced to set will not be permitted.

Plaster on concrete ceilings, beams, columns etc. shall be mixed one part cement to three parts sand.

Bricks shall be of the best quality sound hard burnt pressed bricks even in size and shape and equal to a sample submitted to and approved by the Engineer prior to commencement of work.

Clay bricks shall conform with the requirements of SABS 227.

Damp proof courses, unless otherwise described, shall be an asphaltic damp proof course with a base of fibre felt, and complying with the requirements of SABS 248 Horizontal Damp Proof Courses, and with a mass of 3,25 kg/m<sup>2</sup> or a plastic damp proof course of 15 micron thickness as Type B, complying with the requirements of SABS 952.

**PD                    SUB-SURFACE DRAINS AND FILTER SAND**

**PD1                  MATERIALS**

**PD1.1              Pipes**

Pipes for subsurface drainage shall have the specified internal diameter, (which shall be not less than 100 mm), and shall be one of the following types:

- Perforated or slotted unplasticised PVC pipes complying with SABS 791; or
- Perforated high-density polyethylene pressure pipes complying with the requirements of SABS 533, Part II.

The size of perforations in perforated pipes shall in all cases be 8 mm in diameter  $\pm$  1,5 mm and the number of perforations per metre shall be not less than 26 for 100 mm pipes and 52 for 150 mm pipes. Perforations shall be spaced as shown on the Drawings for 150 mm pipes.

Slotted pipes shall have a slot width of 8 mm  $\pm$  1,5mm. The arrangement of slots shall be subject to the Engineer's approval, but the total slot area shall be not less than that specified for perforations.

Pipes without slots or perforations required for conveying ground water from the subsurface drainage proper to the point of discharge, shall be unperforated PVC or polyethylene pipes of the types specified above or concrete pipes complying with the requirements of SABS 677.

**PD1.2              Natural permeable material**

Natural permeable filter materials for subsurface drainage shall consist of sand and/or crushed stone of suitable gradings. Natural permeable materials shall conform to the following requirements:

- ◆            Sand shall be clean, hard sand obtainable from approved borrow pits. Depending on the particular conditions of each case, the required sand shall be either of coarse, medium or fine grade.

- ◆            Crushed stone shall be graded crushed stone with conforms to the following grading requirements:

Percentage passing through a - %

26.5 mm sieve    100

13.2 mm sieve    60 - 85

Fine-grade stone:

a minimum of 15% passing through a 3.35 mm sieve

a maximum of 15% passing through a 1.18 mm sieve.

- ◆            The aggregate shall be evenly graded between these limits. The aggregate crushing value of the stone shall not exceed 30 when tested in accordance with TMH1 method B1.

When no suitable sand and/or crushed stone is available from borrow pits, the Engineer may require that it be procured from commercial sources outside the Site.

The Engineer shall indicate the grades of sand and crushed stone to be used in each case to comply with the requirements.

In the case of any sand and/or crushed stone, not more than 5% of the material shall pass through the 0.075 mm sieve.

**PD1.3      Synthetic-fibre filter fabric**

Should the use of synthetic-fibre filter fabric in subsurface drainage, or as filter blankets, or for any other purposes, be specified in the Project Specifications, it shall comply with the requirements of the Specifications and the Drawings. Filter material shall not be exposed to direct sunlight for prolonged periods, and shall be protected from mechanical damage during installation and construction.

**PD1.4      Composite in-plane draining fabric**

The make and class of fabric shown on the Drawings or approved by the Engineer shall be used.

**PD2      CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS**

**PD2.1      With natural permeable material**

Trenches for subsurface drainage systems shall be excavated to the dimensions and gradients shown on the Drawings or as directed by the Engineer.

The specified width of trenches and the width of excavations measured for payment shall be not less than 0.5 m, but, with the Engineer's permission, the Contractor may reduce the actual width.

A layer of natural permeable material of the grade and thickness as shown on the Drawings shall be placed on the bottom of the trench and be lightly tamped and finished to the required gradient.

Pipes of the type and size required shall then be firmly bedded on the natural material, true to level and grade, and be coupled in accordance with the requirements. Thereafter the trench shall be backfilled with natural permeable material to such height above the pipes as shown on the Drawings or as directed by the Engineer. The natural permeable material shall be lightly compacted and trimmed to the required level. Further layers of finer natural permeable material shall then be placed, lightly compacted and finished to an even surface, as directed by the Engineer. The remainder of the trench, if any shall be backfilled with approved impermeable material and as required by the Engineer, in layers not exceeding 100 mm, and compacted to at least the same density as the surrounding material. The trench shall be specially protected against the ingress of water until the impermeable layer has been completed.

Natural permeable material shall be placed in layers not exceeding 300 mm in thickness at a time and be lightly compacted. The total thickness of each type of natural permeable material shall be carefully controlled, and when the thinner layers are placed, suitable spacers shall be used. When successive layers are placed, the lower layer shall not be walked on and, as far as possible, shall not be disturbed. Care shall be taken to prevent the contamination of natural permeable material during construction of the subsurface drainage system and all natural permeable material contaminated by soil or silt shall be removed and replaced by the Contractor at his own expense.

Perforated and slotted pipes shall be joined by means of couplings. Perforated pipes shall be laid with perforations at the top or bottom as may be prescribed.

The higher end of each subsurface drainage pipe shall be sealed off with a loose concrete cap of class 20 MPa/19 mm concrete, as shown on the Drawings, and at the lower end the pipe shall be built into a concrete head-wall providing a positive outlet or it shall be connected to stormwater pipes or culverts. The complete system, together with head-walls, shall be constructed in one process starting at the lower head-wall.

Any section of a subsurface drainage system constructed with pipes without perforations or slots shall be backfilled with impermeable backfill material as specified herein. Where suitable, the excavated material may be used for backfilling.

**PD2.2      With polyethylene lining to trenches for subsurface drainage systems**

Where shown on the Drawings or directed by the Engineer, trenches for subsurface drainage systems shall be lined with approved polyethylene sheeting 250 microns thick. The polyethylene sheet shall cover the bottom of the trench and shall extend upwards on both sides for as far as may be directed by the Engineer in each particular case, in order to form a waterproof channel. At joints the polyethylene sheeting shall be heat-welded together or lapped by a minimum of 200 mm.

When backfilling the trench with natural permeable material, care shall be taken not to displace or damage the polyethylene lining in any way. The use of plastics other than polyethylene will be considered, provided that the material is of equal quality and is approved by the Engineer.

**PD2.3      With synthetic-fibre filter fabric**

Where specified that synthetic-fibre filter fabric shall be used for lining in subsurface drainage systems, it shall be procured, furnished and installed as specified and shown on the Drawings. The lining shall not be displaced or damaged in any way when the trench is being backfilled with natural permeable material.

Filter fabric shall be stored under suitable cover and shall not be exposed to direct sunlight for prolonged periods and shall be protected from mechanical damage during installation and construction.

**PD2.4      With composite in-plane drainage fabric**

Wherever specified, composite in-plane drainage systems shall be constructed in accordance with the details shown on the drawings. The elements of the system shall be assembled above ground in manageable lengths, and all exposed surfaces shall be sealed with an approved geo-fibre seal. The trench sides shall be vertical, and the composite in-plane system shall be installed against the side through which the subsurface flow is expected. The trench shall then be backfilled with sand, which shall be saturated with water after placement, up to the prescribed level. The upper part of the trench shall be backfilled with impermeable material, in layers not exceeding 100 mm in thickness.

**PD3        BANKS AND DYKES**

Mitre banks, catch water banks and dykes shall be constructed to the dimensions and at the positions shown on the Drawings or directed by the Engineer. Approved soil or gravel obtained from open-drain excavations or, if no suitable material can be obtained from that source, from suitable alternative sources, shall be placed in such a way that the water will flow on the natural ground and against the bank.



The banks and dykes shall be properly compacted in layers not exceeding 150 mm in thickness to a minimum density of 90% of modified AASHTO density, true to the lines, levels and cross-sections shown on the Drawings or as directed by the Engineer.

**PD4** **FILTER SAND/LOAM TOPSOIL LAYER**

This layer shall be constructed directly below the topsoil layer. This layer shall consist of a 50/50 mixture of washed plaster sand and loam topsoil. Samples (at least 3) of this mixture shall be submitted to the Engineer at least 3 weeks before the Contractor intends to commence with the construction of this layer. Test results of the relevant Atterberg limits as well as the grading (sieve analysis) shall be submitted with the samples. No construction may commence without the Engineers written approval of one of the samples.

**PD5**                      **MEASUREMENT AND PAYMENT**

PD5.1	Impermeable backfilling to subsurface drainage systems	Unit: cubic metre (m <sup>3</sup> )
-------	--	-------------------------------------

The unit of measurement shall be the cubic metre of completed backfill, measured in place in the subsurface drainage systems and calculated in accordance with the authorized dimensions.

The tendered rate shall cover the cost of procuring, hauling, furnishing, placing and compact the backfilling.

## PD5.2 Natural permeable material in subsurface drainage systems

- a) Crushed stone obtained from approved commercial sources (state grade)  
Unit: cubic metre (m<sup>3</sup>)
- b) Sand obtained from approved commercial sources (state grade)  
Unit: cubic metre (m<sup>3</sup>)

The unit of measurement shall be the cubic metre of approved crushed stone or sand in place in the drains, calculated in accordance with the authorized dimensions.

The tendered rate shall cover the cost of procuring, transporting and furnishing approved crushed stone or sand from commercial suppliers, including the cost of transporting the material to the Site and placing the material as specified.

### PD5.3 Pipes in subsurface drainage systems

- |    |   |                 |
|----|---|-----------------|
| a) | Pitch-fibre pipes and fittings complete with couplings (state size and whether or not perforated or slotted)                              | Unit: metre (m) |
| b) | Unplasticised PVC pipes and fittings, normal duty, complete with couplings (state size and whether or not perforated or slotted)          | Unit: metre (m) |
| c) | High-density polyethylene pressure pipes and fittings, complete with couplings (state size, type and class and whether or not perforated) | Unit: metre (m) |
| d) | concrete pipes (state type and diameter)  | Unit: metre (m) |

The unit of measurement for pipes shall be the metre of pipe, measured in place along its centre-line, including the length of fittings.

The tendered rate shall cover the cost of procuring, furnishing, laying and jointing the pipes and fittings as specified.

- 
- PD5.4 Polyethylene sheeting, 250 microns thick or equivalent approved material, for lining subsurface drainage systems Unit: square metre (m<sup>2</sup>)
- The unit of measurement shall be the square metre of polyethylene sheeting installed, measured net from the specified dimensions.
- The tendered rate shall cover the cost of procuring, supplying, cutting, overlapping, jointing, placing and protecting the sheeting's specified, as well as for wastage.
- PD5.5 Synthetic fibre filter fabric (state type, grade, etc.) Unit: square metre (m<sup>2</sup>)
- The unit of measurement shall be the square metre of filter fabric supplied and installed as specified, measured nett from the specified dimensions.
- The tendered rate shall cover the cost of furnishing, procuring, cutting, overlapping, jointing, placing and protecting the filter fabric as specified, as well as for wastage.
- PD5.6 Composite in-plane drainage system (state size, type, grade, etc.) Unit: square metre (m<sup>2</sup>)
- The unit of measurement shall be the square metre of composite in-plane drainage system measured in place along the centre-line of the system, measured nett from the specified dimensions.
- The tendered rate shall cover the cost of procuring, furnishing, assembling, installing and jointing the composite in-plane drainage system, including perforated or other types of pipes, complete as specified.
- PD5.7 Concrete outlet structures for subsoil drainage systems (including formwork) Unit: number (No)
- The unit of measurement shall be the number of outlet structures for subsurface drainage systems provided as shown on the drawings.
- The tendered rate shall cover the cost of procuring and furnishing all materials, providing and erecting formwork and mixing, placing and transporting concrete.
- PD5.8 Concrete caps for subsurface drain pipes Unit: number (no)
- The unit of measurement shall be the number of caps supplied, and the tendered rate shall cover the cost of supplying and installing the caps.
- PD5.9 Banks and dykes Unit: cubic metre (m<sup>3</sup>)
- The unit of measurement shall be the cubic metre of material used for the construction of banks and dykes, measured in place in the banks or dykes.
- The rate shall cover the cost of procuring, furnishing, placing, watering, compacting, shaping and trimming the material in the banks and dykes as specified.
- PD5.10 Filter sand/loam topsoil layer Unit: m<sup>3</sup>
- The unit of measurement shall be the cubic metre of material used for the construction of the composite sand/loam topsoil drainage layer.
- The rate shall cover the cost of procuring furnishing, placing, levelling, mixing and lightly compact the drainage layer.

---

## **THULAMELA LOCAL MUNICIPALITY – HEALTH AND SAFETY SPECIFICATION**

### **1. INTRODUCTION**

In terms of the Construction Regulation, 2003 4 (1) (a) of the Occupational Health and Safety Act, No. 85 of 1993, THULAMELA LOCAL MUNICIPALITY, refer as the Client, is required to compile a Health & Safety specification for any intended project and provide such specification to any prospective tenderer.

The specification has as objective to ensure that Principal Constructors entering into a Contract with THULAMELA LOCAL MUNICIPALITY achieve an acceptable level of compliance in terms Occupational Health & Safety performance. This document forms an integral part of the Contract and/or Suppliers.

Compliance with this document doesn't absolve the Principal Contractor from complying with minimum legal requirements and the Principal Contractor remains responsible for the Health and Safety of his employees and for his or her mandatories unless the agreements has been reached in terms of section 37(2) of the Occupational Health and Safety Act, 1993.

The following legislations have been considered:

1. National Environmental Management Act No. 107 of 1998
- 1.1 National Environment Management: Air Quality Act, 39 of 2004
2. Occupational Health and Safety Act No. 85 of 1993
- 2.1 Construction Regulations, 2003
- 2.2 Asbestos Regulations, 2001
- 2.3 General Administration Regulations, 2003
- 2.4 Electrical Installation Regulations, 1992
- 2.5 Noise-Induced Hearing Loss Regulations, R307, 07 March 2003
- 2.6 Environmental Regulations for Workplaces, R2281, 16 October 1987
3. Employment Equity Act No. 55 of 1998
- 3.1 Employment Equity Policy
4. Compensations for Occupational Injuries and diseases Act No. 130 of 1993
5. National Health Act No. 61 of 2003
6. Amendment- Compensation for Occupational Injuries and Diseases Act 1997
7. ISO Standards including SABS or SANS Code of Practice

---

**FORM OF AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 85 OF 1993**

THIS AGREEMENT made at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_ between THULAMELA LOCAL MUNICIPALITY hereinafter) called "the client" of the one part, herein represented by \_\_\_\_\_ in his capacity as \_\_\_\_\_ and delegate of the employer in terms of the employer's standard powers of delegation pursuant to the provision of the Act and \_\_\_\_\_ (hereinafter called "the mandatory") of the other part, herein represented by \_\_\_\_\_ as \_\_\_\_\_ and as being duly authorized by virtue of resolution.

WHEREAS the Employer is desirous that certain works be constructed, viz. \_\_\_\_\_ and has accepted a tender by the Mandatory for the construction, completion and maintenance of such works and whereas the Client and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act 1993 (Act No. 85 of 1993)

**NOW THEREFORE THIS AGREEMENT WITNESSED AS FOLLOWS:**

1. The mandatory declares himself/herself to be conversant with the following:-
  - a) All the requirements, regulations and standards of the Act hereinafter together with its amendments.
  - b) The procedures and safety rules of the Client as pertaining to the Mandatory and all his sub-contractors
2. In addition to all requirements, the Mandatory agrees to execute all the works forming part of this contract and to operate and utilize all machinery, plant and equipment in accordance with the Act.
3. The Mandatory is responsible for the compliance with the Act by all his sub-contractors, whether or selected and/or approved by the Client.
4. The Mandatory warrants that all his Occupational Injuries and Diseases Act 1993 which covers shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Client upon signature of the agreement.
5. The mandatory undertakes to ensure that he/she and/or subcontractors and/or their respective employees will at all times comply with the following conditions:
  - a) The mandatory shall assume the responsibility in terms of section 16.1 of the Act. The Mandatory shall not delegate any duty in terms of section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2, a copy of such written delegation shall immediately be forwarded to the Client.
  - b) All incidents referred to in the Act shall be reported by the Mandatory to the Department of Labour as well as to the Client. The Client will further be provided with copies of all written documentation relating to any incident (Occupational Health and Safety Act, 1993 and COIDA).

- c) The Employer hereby obtains an interest in the issue of any formal enquiry and informal conducted in terms of sections 31 and 32 of the Act into any incident involving the Mandatory and/or his/her employees and/or his/her sub-contractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

**SIGNED FOR AND ON BEHALF OF THE CLIENT:** \_\_\_\_\_

**WITNESSES:** 1. \_\_\_\_\_ 2. \_\_\_\_\_

**NAME (IN CAPITAL)** 1. \_\_\_\_\_

2. \_\_\_\_\_

**SIGNED FOR AND ON BEHALF OF THE MANDATORY:** \_\_\_\_\_

**WITNESSES:** 1. \_\_\_\_\_ 2. \_\_\_\_\_

**NAME (IN CAPITAL)** 1. \_\_\_\_\_

2. \_\_\_\_\_

## SCOPE

This specification details the Health & Safety requirements associated with the work.

## INTERPRETATIONS

Occupational Health and Safety Act, No 85 of 1993 shall apply to this Contract. The construction regulation promulgated on 18 July 2003 and incorporated into the said Act by Government Notice R1010, published in Government Gazette 25207 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”.

Construction work is defined as:

Any work in connection with:

1. the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or similar structure;
2. the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
3. the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road sewer or water reticulation system or any similar civil engineering structure; or
4. the moving of earth, clearing of land, the making of an excavation, piling or any similar type of work.

## GENERAL

The Client will appoint the Contractor in writing for execution of the Works. The Contractor shall accept its appointment under the terms and conditions of the Contract. The Contractor shall sign and agree to those terms and conditions and shall before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3 of the Construction Regulations. The Contractor shall submit the notification in writing prior to commencement with work.

The Contractor shall ensure that is fully conversant with the requirements of this specification. This specification is not intended to supersede the Act nor the Construction Regulations. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Contractor in terms of this Contract continue to be a legal requirement of the Contractor.

Should the Contractor at any stage in execution of the Works÷

- ◆ Fail to implement or maintain Client's health and safety plan.
- ◆ Execute construction work which is not in accordance with Client's health and safety specification. (check regulation 4(1)(e) of Construction Regulation; or
- ◆ Act in any way which may pose a threat to the health and safety of persons.

The Client or the Engineer will, by written order, suspend the progress of the Works. The Contractor shall, during the suspension, properly protect the Works so far as is necessary.

The contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified **Health and Safety** requirements, the Act and the Construction Regulations, all in terms of sub-clause 4(1) of the Construction Regulations. The costs of compliance shall clearly be demonstrated separately under the appropriate items of measurement, both under “fixed charge items” and “time related items”.

The Contractor shall consistently demonstrate his competence and adequacy of resources to perform the duties imposed on the Contractor in terms of this Specification, the Act and the Construction Regulations.

The Contractor shall, throughout execution of the Contract, ensure that all conditions imposed on his sub-contractors in terms of the Act and Construction Regulations are complied with, as they were the Contractor.

## GENERAL REQUIREMENTS

### 1. Contract's Health and Safety

- 1.1 The Contractor is responsible for providing medical assessments for both his employees and that of sub-contractors.
- 1.2 Occupational Health and Safety
  - 1.2.1 The Client shall provide and demonstrate to the Contractor, a suitable and sufficient documented health and safety plan based on the Specifications, the Act and the Construction Regulations, which shall be supplied from the date of commencement of and duration of execution of the Works.
  - 1.2.2 The **health and safety plan** includes the following principles:
    - ◆ A proper risk assessment of the construction work
    - ◆ Pro-active identification of potential hazards and unsafe working conditions
    - ◆ Informing and/or training of employees in hazards and risk area.
    - ◆ Provision of a safe working environment and safety equipment
    - ◆ Ensure the safety of sub-contractors through the safety plans.
    - ◆ Monitoring the health and safety on the construction works on a regular basis.
    - ◆ Use of competent safety officers.
  - 1.2.3 The health and safety plan will cover the following details:
    - 1.2.3.1 Method to ensure the approval, implementation and maintenance of all health and safety aspects regarding sub-contractors through the Contractor
    - 1.2.3.2 Supervision of construction work, with:
      - ◆ Details of the construction supervisor as well as his appointed assistants
      - ◆ Details of the construction safety officer.
      - ◆ Details of the suitability and competency of the above persons regarding the health and safety aspects of the construction works.
      - ◆ Details of a proper risk assessment on which the health and safety plan is based.
      - ◆ Details of the design, management, responsibilities, procedures, work methods, commissioning, maintenance, and any other requirement necessary for the Contractor and Sub-contractor to work safely and in a healthy environment.
      - ◆ Ways in which all construction employees are informed, instructed and trained regarding hazards and related work procedures.
  - 1.2.4 The Client will take reasonable steps to ensure that **health and safety plan** is implemented and maintained. The steps taken will include periodic audits and regular monitoring.
  - 1.2.5 The Contractor shall ensure that a copy of this **Health and Safety plan** is kept in the site office for further references or when requested by the Client, an inspector, employee or sub-contractors.
  - 1.2.6 Upon completion of the Works, the Contractor shall hand over a consolidated Health and Safety file to the Client.

### Consultation, Communication and Liaison

- ◆ Occupational Health and Safety Liaison between the Client, the principal Contractor, the other Contractors, the Designer and other concerned parties will be through the OH&S Representative/committee.
- ◆ In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing as and when the need arises.
- ◆ Consultation with the workforce on OH&S matters will be through their Supervisors, OH&S Representatives, the OH&S committee and their elected Trade Union Representatives, if any.
- ◆ The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors through the appointed Safety Officers.

- ◆ The Principal Contractor will be required to do Site Safety Walks with THULAMELA LOCAL MUNICIPALITY at least on a basis to be determined between the two parties.
- ◆ The Principal and other Contractors will be required to conduct Toolbox Talks with their employees on weekly basis and records of these must be kept on the OH&S file. Employees must acknowledge the receipt of Toolbox Talks which record must, likewise be kept on the OH&S file.
- ◆ The Principal Contractors most senior manager on site may be required to attend all THULAMELA LOCAL MUNICIPALITY OH&S meetings.

### **Training, Awareness and Competence**

The Principal Contractor is required to have a promotion and awareness scheme in place to create an OH&S culture in employees. The following are some of the methods that may be used:

- ◆ Toolbox Talks
- ◆ OH&S Posters
- ◆ Videos
- ◆ Competitions
- ◆ Suggestion schemes
- ◆ Participative activities such as OH&S circles.

### **HIV/AIDS Awareness Campaign**

The Principal Contractor will see to it that all the employees are made aware of HIV/AIDS; thus include preventive measures (by providing condoms) and encouraged them for voluntary testing and counselling.

### **Safety Health Environment and Quality Audit (SHEQ Audit)**

- ◆ THULAMELA LOCAL MUNICIPALITY will be conducting a Monthly Audit to comply with Construction Regulation 4(1) (d) to ensure that the Principal Contractor has implemented and is maintaining the agreed and approved plan.
- ◆ THULAMELA LOCAL MUNICIPALITY reserves the right to conduct other ad hoc audits and inspections as deemed necessary. This will include Site Safety Walks.
- ◆ The Principal Contractor shall conduct his own monthly internal audits to verify compliance with his own OH&S Management system as well as of with this specification including mandatory (Read section 37(2) of Occupational Health and Safety Act, 1993.

### **Contractor's Construction Supervisor**

The Contractor shall appoint in writing a full-time construction supervisor with the duty of supervising construction of the Works (Construction Regulation 6(1) and 6(2)).

### **Contractor's Construction Safety Officer**

Before commencing with the Works, the Contractor shall designate in writing a competent Construction Safety Officer (CSO) who shall be acceptable to the Engineer, to represent and act for the Contractor. The Contractor shall inform the Engineer in writing of the name and address of the Contractor's CSO and of any subsequent changes in the name and address of the Officer, together with the scope and limitation of the CSO's authority to act on behalf of the Contractor. The Contractor's CSO shall make available to the Employer an all-hours telephone number at which the CSO can be contacted at any given time in the event of an emergency involving any of the Contractor's employees, or other persons at the Works.

### **Log Books**

The contractor shall keep the following log books and shall make them available to the Engineer on request:

- ◆ A record of the weekly inspection of first aid boxes.
- ◆ A record of the weekly inspection of ladders.
- ◆ A record of the weekly inspection of fire-fighting equipment.



- ◆ A record of the names and addresses of its employees who are registered as trained fire-fighting personnel and who are available on site for fire-fighting duties.
- ◆ A record of the monthly inspection of welding machines.
- ◆ A record of the monthly inspections of oxy-acetylene equipment.
- ◆ A record of the weekly inspections of scaffolding structure.
- ◆ A record of the monthly inspections of builder's hoist.
- ◆ A record of the monthly inspections of mobile and tower cranes.
- ◆ A record of the monthly inspections of lifting gear.
- ◆ A record of the inspections of electrical equipment.
- ◆ A record of the monthly tests of earth leakage units.

### **First Aid**

The Contractor shall appoint in writing, before commencing with the Works, a person(s) who is well trained in First Aid and being in a possession of a valid certificate of competency issued by an organization approved for the purposes by the Chief Inspector of the Department of Labour.

### **Safety Notice Board**

The Contractor shall provide a safety notice board where safety notices, site regulations concerning safe working practices and information on the location of the nearest first aid station, can be conspicuously displayed to its entire staff. The size of the notice board shall be at least (600 x 800) mm.

### **First Aid Equipment**

The contractor may provide for its employees a stretcher for emergencies and an approved first aid box. The first aid box shall be checked weekly by a responsible person, appointed by the Contractor and a record shall be kept of the contents. Any deficient medical supplies shall be promptly replenished by the Contractor. The said first aid box should be in compliance with regulation 3(2)(a) of General Administration Regulation.

### **Hazard Notices**

The Contractor shall display hazard notices in all areas where hazardous conditions prevail or may occur. (Warning notices)

### **Reporting of Incidents and/or injuries**

All incidents in respect of damage to Works, property or machinery, or injury to persons, shall be reported by the Contractor's Safety Officer or Site Representative to the Engineer by the quickest means possible. Thereafter should be reported in terms of section 24 of the Occupational Health and Safety Act to the Provincial Executive Manager of the Department of Labour jointly with the Compensation Commissioner in terms COIDA.

A mandatory incident report form, containing full details of the incident, shall be completed and submitted to the Engineer within twenty four (24) hours of the occurrence of the incident.

The Engineer shall have the right to make all or any enquiries as to the cause and result of any such incident. The Contractor shall provide the Engineer with full facilities for carrying out such enquiries.

### **Good Housekeeping and Safety Policy**

The Contractor shall at all times carry out the Works in a manner to avoid the risk of bodily harm to persons or risk of damage to any property. The Contractor shall take all precautions which are necessary and adequate to eliminate any conditions which contribute to the risk of injury to persons or damage to property. The Contractor shall continuously inspect all work, materials and equipment to discover and determine any such conditions and shall be solely responsible for the discovery, determination and elimination of such conditions.

During the period of this contract, the Contractor shall be responsible for the safe storage of all materials and equipment required for the execution of the Contract, and for disposal of all non-usable waste material in an orderly manner.

All materials, whether stored on the construction site or within the Contractor's designated area, shall be stored neatly and safely to prevent possible injury to any personnel. The material shall be stored to facilitate safe access to, and removal of the material from the storage area.

Any flammable material, such as paint, diesel fuel and oil, shall be stored in lockable no-combustible structures, which shall be clearly marked to indicate the hazardous nature of the materials stored within. The flammable materials stored shall be located in safe areas away from hazardous surroundings and adequate and suitable fire-fighting equipment shall be provided with easy reach of the materials stores and a "no smoking" sign should be displayed in that area.

### **Toilets**

In terms of the National Building Regulations and Construction Regulation 28, the provision of Toilets is required. Chemical toilets are allowed instead of the water borne sewerage type. Toilets have to be provided at ratio of 1 toilet per 30 workers and a sign indicating to the recommendations made in the risk assessment.

### **Exposed Danger Area**

All exposed danger area shall be demarcated by the Contractor with appropriate barrier tape and hazard notices to prevent unauthorized persons entering the danger area.

### **Personal Protective Clothing**

The Contractor shall provide the necessary personal protective clothing for its employees and those of his sub-contractors in hazard areas, appropriate to the nature of the hazard.

### **Hard Hats**

All employees of the Contractor shall wear hard hats in area where appropriate hazard notices are displayed. The Engineer shall have the right to ban certain colours if they are similar to the Employer's identifying colours. Hard hats shall not be painted or otherwise defaced.

### **Eye Protection**

Suitable eye protection shall be worn in areas where appropriate hazard notices are displayed, or when grinding, chipping, breaking, drilling, arc-welding, cutting with oxy-acetylene equipment or similar activities are taking place.

### **Hearing Protection**

Suitable hearing protection shall be worn in areas where appropriate hazard notices are displayed.

### **Foot Wear**

All employees of the Contractor shall wear undamaged, laced-up safety boots or safety shoes, suitable for the intended purpose, in prescribed areas where appropriate hazard notices are displayed.

### **Gloves**

All employees of the Contractor shall wear suitable protective gloves in areas where appropriate hazard notices are displayed, or when handling hot or hazardous materials or chemicals.

---

### **Overheard Power lines**

Regulations of the Electricity Supply Authority in connection with prohibition of operations in the vicinity of overhead power lines shall be observed by the Contractor at all times.

### **Machine Guarding**

All power tools and machinery driven by belts, gears, ropes, chains, couplings and similar drives shall be adequately guarded. The Contractor shall prohibit the use of any equipment with a damaged, missing or inadequate guard.

### **Prevention of Uncontrolled Collapse**

The Contractor shall ensure that:

- ◆ All reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work; and
- ◆ No structure or part of a structure is loaded in a manner that would render it unsafe.

### **Safe Working Loads**

The Contractor shall ensure that :-

- ◆ The safe working loads of hoist, load-bearing beams and cranes are prominently displayed at all times.
- ◆ The safe working loads are not exceeded under any circumstances
- ◆ All lifting gear is marked with a unique identity number and recorded in a register.

### **Commissioning Safety Precautions**

The Contractor shall ensure that wherever repairs, adjustments or any other work are undertaken on any plant or machinery, the power supply is switched off, disconnected or the plant/machinery disengaged until the work or repairs have been completed.

### **Toxic Materials**

The Contractor shall exercise all necessary care in the handling of toxic compound and shall be able to identify the major chemical components in the event of medical treatment being required.

### **Hazardous Chemical and Materials**

- ◆ The Contractor shall provide suitable and adequate protective equipment when working in an area where hazardous chemical and materials are being used.
- ◆ The Contractor shall ensure that its employees have familiarized themselves with the hazardous material data sheets applicable to the specific site as well as the location of fire fighting equipment, safety showers/baths and other washing facilities prior to commencement of work.

### **INDEMNITY OF CLIENT AND HIS AGENTS**

1. The annexure to this Contract Document contain a "Mandatory Form of Authority and Agreement in terms of section 37(2) of the Occupational Health and Safety Act, No. 85 of 1993" which agreement shall be entered into and duly signed by both the Employer and Contractor prior to commencement with work.

A copy of the signed agreement shall be included in the Employer's Health and safety plan.

- 2 Any acceptance, approval, check, certificate, consent, examination, inspection, instruction, notice, observation, proposal, request, test or similar act by either the Employer, any of his agents or the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, the Act and the Construction Regulations, including responsibility for errors, omissions, discrepancies and no-compliance

## **ANNEXURE C: EPWP REQUIREMENT**

### **1. EPWP REQUIREMENTS**

#### **1.1 Use of local Workers for LI designated activities**

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of this Scope of Work. The minimum required unskilled labour to be employed shall be 32 (thirty two) in number as informed by project requirements.

#### **Competencies of LI Management and Supervisory staff**

Contractors shall engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/Supervisors at NQF "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/Manager at NQF level 4 "Manage labour-intensive Construction Processes" or equivalent QCTO qualifications.

#### **1.2 Ministerial Determination**

Include the current Ministerial Determination

#### **1.3 Wage Dispute (Contractor default to pay beneficiaries)**

- (a) Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene.
- (b) The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.

#### **1.4 Provision of Hand tools**

The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions

#### **1.5 Reporting requirement of Contractor**

The Contractor should submit the following at the beginning of the Contract:

- (a) Contracts of all the workers employed on the contracts including their certified identity documents;
- (b) Proof of Registration for COIDA and UIF;
- (c) OHS Files

The Contractor shall submit monthly returns/reports as specified below:

- (a) Signed Muster rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance.
- (b) Copies of certified identity documents of workers
- (c) Number of persons who have attended training including nature and duration of training provided
- (d) Assets created, rehabilitated or maintained in accordance with indicators in the EPWP M&E framework
- (e) Plant utilization returns

Progress report detailing production output compared to the programme of works

## **2. REQUIREMENTS OF EXPANDED PUBLIC WORKS PROGRAMME EPWP**

### **2.1 EPWP Special Project Specification**

As much as is economically feasible all work shall be implemented by employing Labour Intensive Construction methods. Over and above the normal Building and Allied works to be implemented by employing skilled and unskilled labour the works specified in the "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)" shall be undertaken using Labour Intensive Construction methods

### **2.2 Requirement for Sourcing and engagement of Labour**

Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

The minimum rate of pay set for the EPWP is R (**Municipality to advise**) per task or per day.

Tasks established by the contractor must be such that:

- a) the average worker completes 5 tasks per week in 40 hours or less; and
- b) the weakest worker completes 5 tasks per week in 55 hours or less.
- d) The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.1.3.
- e) The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby.

Preference must be given to people with previous practical experience in construction and / or who come from households:

- a) where the head of the household has less than a primary school education;
- b) that have less than one full time person earning an income;
- c) where subsistence agriculture is the source of income.
- d) those who are not in receipt of any social security pension income

### **2.3 Employment demographics**

The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:

- a) 60 % women;
- b) 55% youth who are between the ages of 18 and 35; and
- c) 2% on persons with disabilities.

### **2.4 SANS 1914-5**

Add the Specific provisions pertaining to SANS 1914-5

#### **4.1.4.2 Specific provisions pertaining to SANS 1914-5**

##### **4.1.4.2.1 Definitions**

**Targeted labour:** Unemployed persons who are employed as local labour on the project.

##### **4.1.4.2.2 Contract participation goals**

- (a) There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.

(b) The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

#### 4.1.4.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

#### 4.1.4.2.6 Variations to SANS 1914-5

(a) The definition for net amount shall be amended as follows: Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

(b) The schedule referred to in clause 5.2 of SANS 1914-5, shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

#### 4.1.4.3 Training of targeted labour

4.1.4.3.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.

4.1.4.3.2 The cost of the formal training of targeted labour, will be funded by 1% of the construction value specified in the bill of quantities. This training should take place as close to the project site as practically possible.

4.1.4.3.3 The contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and minimum of ten (10) days if he she is employed for 4 months or more.

4.1.4.3.4 The contractors shall do nothing to dissuade targeted labour from participating in the above mentioned training programmes.

4.1.4.3.5 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 4.1.4.3.3 above.

Proof of compliance with the requirements of 4.1.4.3.2 to 4.1.4.3.5 must be provided by the Contractor to the Employer prior to submission of the final payment certificate

## 2.5 Construction Methods

Add Labour Intensive Specification in the Guidelines pertaining to "Earth works"

<http://www.cidb.org.za/clients/infrastructure-delivery-guides-standards/guidelines-for-labour-intensive-construction-methods/>

Add the following:

"In all cases where soft founding materials is classified as suitable for culvert bedding construction, the in situ material shall be ripped, moistened and compacted to 90% or 93% modified AASHTO density. The depth of preparation and compaction of founding material shall be as indicated on the drawings or as specified by the engineer. Allowance for measurement and payment for this work is made in the bill of quantities under this section."

The Generic Labour-intensive specification below is the same as SANS 1921-5, Construction and management requirement for works contracts- Part 5: Earthwork's activities which are to be performed by hand and should be included in the scope of works without amendment or modification as set out below.

### **SCOPE**

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- a) trenches having a depth of less than 1.5 metres
- b) stormwater drainage
- c) low-volume roads and sidewalks

### **PRECEDENCE**

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

### **HAND EXCAVATEABLE MATERIAL**

Hand excavatable material is material:

a) granular materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) cohesive materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note:

1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.

2) A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle

of 60° with respect to the horizontal) into the material being used.

Table 1: Consistency of materials when profiled

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation.	Stiff	Can be indented by thumbnail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumbnail with difficulty; slight indentation produced by blow of a geological pick point.

#### Trench excavation

All hand excavatable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

#### Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm.

Each layer shall be compacted using hand stampers or walk behind roller

(a) to 90% Mod AASHTO;

(b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or



- (c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

#### **Excavation**

All excavatable material including topsoil classified as hand excavatable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. Any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

#### **Clearing and grubbing**

Grass and bushes shall be cleared by hand.

#### **Shaping**

All shaping shall be undertaken by hand.

#### **Loading**

All loading shall be done by hand. Haulage equipment should be selected in a manner that allows loading by hand to the greatest extent possible.

#### **Haul**

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

#### **Offloading**

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage.

#### **Spreading**

All material shall be spread by hand.

#### **Compaction**

Small areas may be compacted by hand provided that the specified compaction is achieved. Appropriate rollers should be used where higher (than can be achieved by hand) levels of compaction are required or for large areas.

#### **Stone pitching and rubble concrete masonry**

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must to be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

#### **Manufactured Elements**

Elements manufactured or supplied by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. Where the mass of an element exceeds 55 kg, consideration should be given to the size of the element relative to its total mass related to the number of workers who would be needed to lift such mass.

### **ANNEXURE D**

#### **STANDARD FORMS TO BE USED DURING THE CURRENCY OF THE CONTRACT**

Certificate Summary  
Summary of Schedules  
Schedules – Description  
Contract Price Adjustment  
Daywork Returns  
Requisition for Final Checking of Work  
Requisition for Checking of Earthworks