



DEPARTMENT OF WATER AND SANITATION

DUE AT 11:00 ON

CLOSING DATE: 15 OCTOBER 2026

***Bids to be submitted to the Tender Box before 11:00, bids not submitted in the tender box will not be accepted.**

WTE-2633ES

M/0188 QEDUSIZI GWS: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE

SUBMIT BID DOCUMENTS TO:

POSTAL ADDRESS:
DEPT OF WATER AND SANITATION
SUPPLY CHAIN MANAGEMENT OFFICE
PRIVATE BAG X 24
HOWICK, 3290

OR

TO BE DEPOSITED IN:
DEPT OF WATER AND SANITATION
THE BID BOX AT THE ENTRANCE
GATE OF MIDMAR DAM
R103 PROSPECT ROAD
MIDMAR DAM
HOWICK, 3290

***Please do not address your parcel to an official if you are making use of a delivery company.
Clearly state: Tender Box**

Compulsory Briefing Session

Date: 06 OCTOBER 2026

Time: 13:00pm

Venue: Qedusizi dam, 28°32'38.18"S 29°44'53.30"E

BIDDER: (Company Address OR Stamp)

COMPILED BY: DEPARTMENT OF WATER AND SANITATION



DEPARTMENT OF WATER AND SANITATION

DOCUMENTS THAT ARE RELATED TO TENDER/QUOTATION			
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T1 TENDERING PROCEDURES

T1.1 INSTRUCTIONS TO BIDDERS

1. ISSUING OF DOCUMENTS

- (a) A complete sets of bid documents are issued to a prospective Bidder.
- (b) Bidders must satisfy themselves that the document is complete and conform to the index of this document. Should any figures or writing be indistinct or should any pages be missing from this document or should this document or the drawing(s) contain any obvious errors, the Bidders must immediately notify the Department in order to have any discrepancy rectified or clarified before submitting his bid. Such clarification will be valid only if made by the Department by means of formal amendment as described hereunder prior to the date of submission of bids. The Department may issue amendments to clarify or modify the Bid Documents. A copy of each amendment will be issued to each bidder and shall be acknowledged on the form issued with the amendments. No claim whatsoever will be entertained for faults in the bid price resulting from the above-mentioned discrepancies.
- (c) No alterations, omissions or additions shall be made to this document, but should it be deemed necessary to do so, the Bidder is at liberty to qualify his bid.
- (d) All Bidders shall be deemed to have waived, renounced and abandoned any conditions printed or written upon any stationery used by them for the purpose of or in connection with the submission of bids which are in conflict with the conditions laid down in this document.
- (e) Each page of the completed document that will be submitted should be initialled by the Bidder at the bottom of the page.

2. QUERIES WITH RESPECT TO THIS BID

Queries of a specific technical nature may be discussed personally or telephonically with **Mr Melisizwe Zuma at 033 239 1286 / ZumaM@dws.gov.za** or may be directed in writing to: The Director: Eastern Operations, Department of Water and Sanitation, Private bag X24, Howick.

3. COMPLETION OF BIDS

- (a) The bid must be signed on the Invitation to Bid form (SBD 1) annexed hereto with all blanks in the bid and the appendix filled in.
- (b) All spaces in the bid forms and other annexures shall be completed in full.
- (c) **SBD 3.1 in the bid document and the Pricing Schedule must be fully completed and priced out by the bidder. Failure to do so will deem your bid invalid.**
- (d) The bid documents shall not be separated in any way nor must any pages be detached from the original documents.

4. SUBMISSION OF BIDS

The Bid Document shall be completed, signed and submitted as follows:

- (a) The original Bid, together with a covering letter and supporting documents, shall be sealed in an envelope endorsed:

ORIGINAL BID FOR M/0188 QEDUSIZI GWS: WTE-2633ES: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE

- (b) Bids sealed and endorsed as above, will be received by: The Supply Chain Management Office or may be deposit in the bid box at the entrance of **Department of Water and Sanitation, R103 Prospect Road, Howick** and not later than **11:00** on the date stipulated on the front cover of this document.

5. SIGNATURE ON BIDS

The Bid, if by an individual, must be signed by that individual or by someone on his behalf duly authorised thereto and **proof of such authority must be produced**. If the bid is by a Company, it must be signed by a person duly authorised thereto by a Resolution of a Board of Directors a copy of which Resolution, duly certified by the Chairman of the Company is to be submitted with the bid.

The successful bidder will be required to submit a "Letter from the manufacturer" confirming the supply arrangement within 14 days after the approval of the bid.

If the bid is submitted by joint venture of more than one person and/or Companies and/or firms it shall be accompanied by the following:

- (a) The original or a notarially certified copy of the original document under which such joint venture was constituted which must define precisely inter alia the conditions under which the joint venture will function, its period of duration and the participation of the several constituent persons and/or companies and/or firms.
- (b) A certificate signed by or on behalf of each participating person and/or company and/or firm authorising the person who signed the bid to do so.

6. GENERAL CONDITIONS OF CONTRACT

The General Conditions of Contract, as attached shall be regarded as an integral part of the contract documents.

7. PERIOD OF VALIDITY OF QUOTATIONS AND WITHDRAWAL AFTER CLOSING DATE

All quotations shall remain valid for a period of **one hundred and twenty days (120)** after the closing time and date set.

8. PROJECT DURATION

All work conducted under the scope of the project will need to be completed within a duration of 4 Months (120 Days).

8. TELEGRAPHIC BIDS

No bid forwarded by telegram, telex, facsimile, e-mail or similar apparatus will be considered.

9. THE DEPARTMENTS RIGHT TO DECLINE ANY BID

The Department does not bind itself to accept the lowest or any bid. Bids not complying with the above-mentioned requirements and specifications may be regarded as incomplete and may not be considered.

10. ACCEPTANCE OR REJECTION

Quotations may be rejected if they show any departure from the conditions or specifications contained in the quotation documents or are incomplete in any way. The employer **does not bind him** to accept the lowest or any quotation and reserves the right to accept any quotation he may deem expedient, nor will he assign any reason for the acceptance or rejection of any quotation.

If the successful bidder declines the award, fails to sign the contract, or fails to deliver in accordance with the terms and conditions of the contract, the Department reserves the right to cancel the award and award the contract to the next highest ranked responsive and acceptable bidder, subject to applicable procurement legislation and policies.

11. DEPARTMENT NOT LIABLE FOR BIDDER'S EXPENSES

The Department will not be held liable for any expenses incurred in preparing and submitting bids.

12. PAYMENTS UNDER THE CONTRACT

All payments due to the Bidder in terms of the contract will be done by means of Electronic Fund Transfer. The evaluation committee will be following a phased approach during evaluation.

T1.2 EVALUATION CRITERIA

DWS will evaluate all proposals according to the Preferential Procurement Regulations, 2022, using 80/20 preference points system as prescribed in the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000). The lowest acceptable bid will score 80 points for price and a maximum of 20 points will be awarded for the specific goals. Maximum of 100 points will be scored for functionality (quality).

Bids received will be evaluated on the five (4) phases namely:

- (1) Mandatory Requirements (if applicable),
- (2) Functionality Requirements
- (3) Administrative Compliance
- (4) Price & Specific Goal

PHASE 1: MANDATORY REQUIREMENTS:

Failure to submit any of the documents listed below will render your bid non-responsive and the bid will be disqualified.

No	Criteria	Yes	No
1	CIDB minimum 2CE/GB		
2	Attendance of compulsory briefing session and service provider to sign the attendance register during the briefing session		
3	SBD3.1 (Fully completed)		
4	Bill of Quantities (Fully completed)		

PHASE 2: FUNCTIONALITY COMPLIANCE

- Full compliance to technical requirements by indicating compliant or non-compliant.
- Bidders who Fail to comply with the below requirements in full will be considered non-responsive and may be disqualified from further evaluation.

Criteria	Sub-Criteria	COMPLY YES/NO	
		Yes	No
Team capability	Team capability- Demonstrated skills and experience of key personnel for this project, limited to the Project Manager or Site agent. • An Organogram with personnel relevant to the project. • Attach 1 page resume of Project Manager or Site Agent indicating, amongst others, relevant qualifications, experience, accreditation/affiliation. Site Agent with 2 or more years' experience. • Attach 1 page resume of OHS officer indicating, amongst others, relevant qualifications, experience, accreditation/affiliation. OHS officer with 2 or more years' experience.		
Proposed construction programme	Proposed construction programme- • A proposed detailed Gantt Chart must be submitted • Provides a detailed list of tasks necessary to complete the work • Provides a list of tasks a specific to the project and encompass milestones. Appropriate timeline and time estimates		
Past relevant work experience	Past relevant work Experience - Two (2) verifiable completion certificates of which the scope of work is relevant to the project scope as prescribed in the project specification. Attach project scope where the description on the completion certificates do not fully show the experience relevant to this contract.		

Methodology	Methodology- Items (a-g) must be clearly outlined in the detailed method statement.		
	a) Work Sequence b) Time c) Resources d) Associated Health, Safety and Environmental Assessments e) Control Measures f) Welfare Facilities		
	Work Method etc.		
	Content, Clear, detailed presentation of the scope of work with full understanding and a logical structure.		

PHASE 3: ADMINISTRATIVE COMPLIANCE

Bidders are required to comply with the following listed below:

No	Criteria	Yes	No
1	Companies must be registered with National Treasury's Central Supplier Database must submit CSD report. Provide MAAA number on SBD1		
2	Tax compliant with SARS (to be verified through CSD and SARS). Attach Tax Compliance status PIN page		
3	Active registration with Company Intellectual Property Commission (to be verified through CSD and CIPC). Attach copy of Bidder's CIPC / CIPRO certificate.		
4	A valid copy of B-BBEE Status Level Verification Certificate or a valid original sworn affidavit (failure to submit, the Bidder will forfeit the relevant points allocated for B-BBEE under specific goals)		
5	A valid letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 and or third parties' insurance registered with Financial Service Board (COIDA).		
6	Initial and sign Tender data section (T1 & T2) and all required documents to be submitted with tender. Initial each page of section C1, C2 and C3 and sign where required.		
7	Letter of appointment of duly authorized person to sign bid. Proof of such authority must be submitted with the bid. If by an individual, must be signed by that individual or by someone on his behalf duly authorised thereto and proof of such authority must be produced. If the bid is by a Company, it must be signed by a person duly authorised thereto by a Resolution of a Board of Directors a copy of which Resolution, duly certified by the Chairman of the Company is to be submitted with the bid.		
8	Complete, sign, submit SBD1, SBD4, SBD6.1 and Annexures C (Local Production and Content declaration – summary schedule.)		

PHASE 4: PRICE AND SPECIFIC GOALS

The 80/20-point system will be used in evaluating all proposals.

Evaluation element	Weighting (Points)
SPECIFIC GOALS	20
PRICE	80
Total	100

Price

A maximum of 80 points are allocated for price on the following basis

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where:

P_s = Points scored for comparative price of bid under consideration
 P_t = Comparative price of bid under consideration
 $P_{\min}$ = Comparative price of lowest acceptable bid

Preference Point System (Specific Goals)

SPECIFIC GOALS	NUMBER OF POINTS TO BE ALLOCATED
Women	5
People with disability	5
Youth (35 and below)	5
Location of enterprise (Province)	2
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	3
Total points for SPECIFIC GOALS	20

Documents requirement for verification of points allocation:

Procurement Requirement	Required Proof Documents
Women	Full CSD Report
Disability	Full CSD Report
Youth	Full CSD Report
Location	Full CSD Report
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	Valid BBBEE certificate/sworn affidavit Consolidated BEE certificate in cases of Joint Venture Full CSD Report

The definition and measurement of the goals above is as follows:

Women, disability, and youth:

This will be measured by calculating the pro-rata percentage of ownership of the bidding company which meets this criterion. E.g., Company A has five shareholders each of whom own 20% of the company. Three of the five shareholders meet the criterion, i.e. they are women/disability/youth. Therefore, this bidder will obtain 60% of the points allowable for this goal.

Location of enterprise

Local equals province. Where a project cuts across more than one province, the bidder may be located in any of the relevant provinces to obtain the points.

B-BBEE status level contributors from level 1 to 2 which are QSE or EME

Measured in terms of normal BBBEE requirements.

Note: Formula for calculating points for specific goals

Preference points for entities are calculated on their percentage shareholding in a business, provided that they are actively involved in and exercise control over the enterprise. The following formula is prescribed:

$$PC = Mpa \times \frac{P\text{-own}}{100}$$

Where

PC= Points awarded for specific goal

Mpa= The maximum number of points awarded for ownership in that specific category

P-own = The percentage of equity ownership by the enterprise or business

Should you require any further information in this regard, please do not hesitate to contact:

Name:	Mr. M.M Zuma
Tel:	033 239 1286
Email:	ZumaM@dws.gov.za

T1.3 LIST OF RETURNABLE DOCUMENTS AND SCHEDULES

The Bidder must complete and attach the following Returnable Documents:

a) SBD Forms to be completed and signed

- | | | |
|--------|--|--------------------------|
| SBD1 | Invitation to Bid | ☐ |
| SBD3.1 | Pricing Schedule – Firm Prices | ☐ |
| SBD4 | Declaration of Interest | ☐ |
| SBD6.1 | Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022 | ☐ |

b) Returnable Schedules required for Bid Evaluation purposes

- | | | |
|----|---|--------------------------|
| A: | Certificate of attendance of briefing session | ☐ |
| B: | Bill of Quantities (BOQ) | ☐ |

c) Other Documents required for Bid Evaluation purposes

- | | | |
|----|--|--------------------------|
| 1: | Company/business registration certificate (CK) issued by the Commissioner of Companies & Intellectual Property Commission (Joint Ventures/Close Corporation/Partnership/Company/Sole Proprietor) | ☐ |
| 2: | An original valid Tax Clearance Certificate issued by the South African Revenue Services. | ☐ |
| 3: | Certified copies of Identity Documents of shareholders | ☐ |
| 4: | B-BBEE Status Level Verification Certificate or Sworn Affidavit | ☐ |
| 5: | Letter of Authority indicating the person who will be authorized to sign bidding documents and contract on behalf of bidder | ☐ |
| 6: | General condition of a contract, signed | ☐ |
| 7: | CSD Reports (comprehensive) | ☐ |
| 8: | Check list of returnable documents | ☐ |



water & sanitation

 Department:
 Water and Sanitation
 REPUBLIC OF SOUTH AFRICA

SBD 1

PART A: INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)							
BID NUMBER:	WTE-2633ES		CLOSING DATE: 15 OCTOBER 2026			CLOSING TIME:	11:00am
DESCRIPTION	QEDUSIZI GWS: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE						
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)							
THE BID BOX AT THE ENTRANCE OF WATER AND SANITATION – MIDMAR DAM							
R103 PROSPECT STREET							
HOWICK, 3290							
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO				TECHNICAL ENQUIRIES MAY BE DIRECTED TO:			
CONTACT PERSON	Gerda Lamprecht			CONTACT PERSON	Mr. M Zuma		
TELEPHONE NUMBER	033 239 1309				033 239 1286		
E-MAIL ADDRESS	lamprechtg@dws.gov.za			E-MAIL ADDRESS	ZumaM@dws.gov.za		
SUPPLIER INFORMATION							
NAME OF BIDDER							
POSTAL ADDRESS							
STREET ADDRESS							
TELEPHONE NUMBER	CODE		NUMBER				
CELLPHONE NUMBER							
FACSIMILE NUMBER	CODE		NUMBER				
E-MAIL ADDRESS							
VAT REGISTRATION NUMBER							
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA		
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] ☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX] ☐ Yes ☐ No		
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]							
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?			☐ Yes ☐ No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]	
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS							
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?						☐ YES ☐ NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?						☐ YES ☐ NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?						☐ YES ☐ NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?						☐ YES ☐ NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?						☐ YES ☐ NO	
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.							

PART B

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

(Proof of authority must be submitted e.g. company resolution)

.....

DATE:

.....



SBD 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: WTE-2633ES

Closing date: 15 OCTOBER 2026

Closing Time 11:00

OFFER TO BE VALID FOR **120 DAYS** FROM THE CLOSING DATE OF BID.

ITEM NO.	QTY	DESCRIPTION OF GOODS	UNIT PRICE (To be filled by the bidder)	BID PRICE (To be filled by the bidder)
1	1	SCHEDULE A – GENERAL ESTABLISHMENT		
2	1	SCHEDULE B – WORKS		
			5% CONTINGENCIES	
			SUB-TOTAL (VAT EXCLUSIVE)	
			15% VAT	
			TOTAL BID PRICE (VAT INCLUSIVE)	

-
- **Required by:** OPERATIONS EASTERN
 - **Att:** SUPPLY CHAIN MANAGEMENT
 - **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**



BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the Bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

- 2.1 Is the Bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

- 2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

2.2 Do you, or any person connected with the Bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....
.....

2.3 Does the Bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, the undersigned, (name).....
in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The Bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the Bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

² 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.

- 3.5 There have been no consultations, communications, agreements or arrangements made by the Bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the Bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids 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.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2022**

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and

1.2 To be completed by the organ of state

- a) The applicable preference point system for this tender is the **80/20** preference point system.

- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20 or

$$Ps = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

Ps = Points scored for price of tender under consideration
Pt = Price of tender under consideration
Pmin = Price of lowest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
 - (a) an invitation for tender for income-generating contracts, that either the 80/20 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.
(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points Claimed (80/20 system) To be completed by the Tenderer
Women Ownership	5	
Disability Ownership	5	
Youth Ownership	5	
Location of enterprise (local equals province) KZN	2	
B-BBEE status level contribution from level 1 to 2 which are QSE or EME	3	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I 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 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

- (a) disqualify the person from the tendering 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 tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted 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, if deemed necessary.

SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

LOCAL CONTENT ANNEXURE C

SATS 1286.2011

Annex C

Local Content Declaration - Summary Schedule

(C1) Tender No.
(C2) Tender description:
(C3) Designated product(s)
(C4) Tender Authority:
(C5) Tendering Entity name:
(C6) Tender Exchange Rate:
(C7) Specified local content %

Note: VAT to be excluded from all calculations

Pula EU GBP

Calculation of local content							
Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)

Tender summary			
Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C16)	(C17)	(C18)	(C19)

Signature of tenderer from Annex B

Date: _____

(C20) Total tender value R 0
(C21) Total Exempt imported content R 0
(C22) Total Tender value net of exempt imported content R 0
(C23) Total Imported content R 0
(C24) Total local content R 0
(C25) Average local content % of tender

CONTRACT

C1: CONTRACT DATA

C2: PRICING DATA

C3: SCOPE OF WORK

C4: SITE INFORMATION

CONTRACT

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C1.1.1.1 GENERAL CONDITIONS OF CONTRACT

C1.2.1 CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works, Third Edition, 2015", issued by the South African Institution of Civil Engineering (abbreviated title: "GCC 2015").

C1.2.2: CONTRACT DATA (Applicable to this contract)

PART A: DATA PROVIDED BY THE EMPLOYER

The following contract specific data are applicable to this contract.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
1.	GENERAL
Clause 1.1.1.13:	The Defects Liability Period is 12 months.
Clause 1.1.1.14:	The time for achieving Practical Completion is <u>4 months</u> from the Commencement Date, including non-working days and special non-working days.
Clause 1.1.1.26:	Pricing Strategy: The Contract is to be a Fixed Rates Contract.
Clause 1.1.1.15:	Name of Employer: Department of Water and Sanitation
Clause 1.2.1.2:	Address of Employer: <u>Physical:</u> R103 Prospect Road Howick 3290 <u>Postal:</u> Private Bag X 23 Howick 3290 E-Mail: LamprechtG@dws.gov.za Telephone No: (033) 239 1200
Clause 1.1.1.16:	Name of Employer's Agent: Melisizwe Zuma
Clause 1.2.1.2:	Address of Employer's Agent: <u>Physical:</u> R103 Prospect Road Howick 3290 <u>Postal:</u> Private bag X 23 Howick 3290 E-Mail: ZumaM@dws.gov.za Telephone No: (033) 239 1286
3.	EMPLOYER'S AGENT
Clause 3.2.3:	The Employer's Agent is required to obtain the specific approval of the Employer for any expenditure in excess of the Contract Price.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
5.	TIME AND RELATED MATTERS Clauses 5.3.1 and 5.3.2: Where the Employer <u>is not required</u> to apply for a permit to do construction work in terms of Construction Regulation 3(1), the following documentation is to be submitted within <u>14 days</u> from the Commencement Date: The documents required before commencing to carry out the Works: • Health and Safety Plan (refer to Clause 4.3) • Initial Programme (refer to Clause 5.6) • Security (refer to Clause 6.2) • Insurance (refer to Clause 8.6) • Form C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993' to be signed by the Contractor and the Employer (refer to Clause 4.3 of the GCC 2015 and to paragraph E9. CONTRACTOR'S RESPONSIBILITIES in Part E of C3.3 Particular Specifications) Clauses SCC 5.3.1 and SCC 5.3.2: Where the Employer <u>is required</u> to apply for a permit to do construction work in terms of Construction Regulation 3(1), the following documentation is to be submitted within <u>14 days</u> from the date that the Agreement, made in terms of the Form of Offer and Acceptance, comes into effect: The documents required before commencing to carry out the Works: • Health and Safety Plan (refer to Clause 4.3) • Initial Programme (refer to Clause 5.6) • Security (refer to Clause 6.2) • Insurance (refer to Clause 8.6) • Form C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993' to be signed by the Contractor and the Employer (refer to Clause 4.3 of the GCC 2015 and to paragraph E9. CONTRACTOR'S RESPONSIBILITIES in Part E of C3.3 Particular Specifications) And: The documents required by the Employer to apply for a permit to do construction work in terms of Regulations 3(1) and (2) of the Construction Regulations 2014:

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
Clause 5.8.1: Clause 5.13.1: Clause 5.14.1: Clause 5.16.3:	• Temporary works designer's appointment duties in terms of Regulation 6(2) as have been agreed upon plus proof of registration with ECSA [CR 3(5)(b)(iii) read with CR 5(1)(e) and CR 6(2)]; • Evidence that the contractor has made adequate provision for the cost of Health and Safety, i.e., Bill of quantities [CR 3(5)(b)(iii) read with CR 5(1)(g)]; • Evidence that the Principal contractor has the necessary competencies to carry out construction work safely, viz., schedule of activities, relevant appointments and proofs of competency [CR 5(1)(h)]; • Valid Letter(s) of Good Standing for the appointed Principal Contractor(s) [CR 3(5)(b)(ii) read with CR 5(1)(j)]. The non-working days are Sundays. The special non-working days are the construction industry year end break, all foreseeable statutory election days as declared by National Government, and the following statutory public holidays as declared by National Government: New Year's Day, Human Rights Day, Good Friday, Family Day, Freedom Day, Workers' Day, Youth Day, National Women's Day, Heritage Day, Day of Reconciliation, Christmas Day and the Day of Goodwill. The construction industry year end break commences on the first working day after 15 December and ends on the first working day after 5 January of the following year. The penalty for failing to complete the Works is 0,05% of the Contract Sum per day, up to a maximum limit of twenty-five thousand rand per day (R25000,00 per day). The requirements for achieving Practical Completion are as stated in clause 1210 of the COLTO Standard Specifications for Road and Bridge Works for State Road Authorities 1998 Edition, as amended in clause B1210 in Part B of C3.2: Project Specifications where applicable. The latent defects period is 10 years.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
6.	PAYMENT AND RELATED MATTERS
Clauses 6.2.1 and SCC 6.2.1:	The security to be provided by the Contractor shall be: Fixed Performance Guarantee of 8% of the first One Million Rand plus 3.5% of the balance of the accepted Contract Sum.
Clause 6.5.1.2.3:	The percentage allowance to cover overhead charges is 15%.
Clauses 6.8.2 and SCC 6.8.2:	The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: The values of the coefficients for calculating the Contract Price Adjustment Factor are: a = 0.20 b = 0.35 c = 0.35 d = 0.10 The "Consumer Price Index" will be as for the Province of <u>KwaZulu-Natal</u> . The base month is the month prior to the month in which the closing date for the tender falls.
Clause 6.8.3:	Price adjustments for variations in the costs of special materials is not allowed.
Clause 6.10.1.5:	The percentage advance on materials not yet built into the Permanent Works is Nil.
Clause 6.10.3:	The percentage retention on the amounts due to the Contractor is 10%. The limit of retention money is 5% of the first One Million Rand plus 1.6% of the remaining amount of the tender offer excluding Contract Price Adjustment, contingencies and VAT. A retention guarantee in lieu of a cash retention is permitted.
8.	RISKS AND RELATED MATTERS
Clause 8.6.1.1.2:	The value of Plant and materials supplied by the Employer to be included in the insurance sum is NIL.
Clause 8.6.1.1.3:	The amount to cover professional fees for repairing or reinstatement of damage to the Works to be included in the insurance sum is NIL.
Clause 8.6.1.2:	Special Risks Insurance issued by SASRIA is required.
Clause 8.6.1.3:	The limit of indemnity for liability insurance is <u>R10 000 000,00 (ten million Rand only)</u> for any single liability claim. Liability insurance shall include spread of fire risk. Ensure there is no exclusion of water infrastructure to the insurance cover, e.g. dams.
10.	CLAIMS AND DISPUTES
Clause 10.5.3:	The number of Adjudication Board Members to be appointed is one.
Clause 10.7.1:	Unresolved disputes shall be referred to arbitration.

C1.2.2: CONTRACT DATA (Applicable to this contract)

PART B: DATA PROVIDED BY THE CONTRACTOR

The following contract specific data are applicable to this contract.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE CONTRACTOR						
1.	GENERAL						
Clause 1.1.1.9:	Name of the Contractor:						
							
Clause 1.2.1.2:	Address of the Contractor:						
	<u>Physical:</u> <u>Postal:</u>						
							
							
							
							
							
6.	PAYMENT AND RELATED MATTERS						
Clause 6.8.3:	The Tenderer shall complete Table 1 below with respect to each of the special materials listed. This information shall be used to calculate the variation in cost of the special materials. The rates and prices for the special materials shall be furnished by the Tenderer, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies. The tendered price to be provided by the Tenderer is the ruling price on the first of the month prior to the month in which the closing date for the Tender falls. Table 1 <table border="1"><thead><tr><th>SPECIAL MATERIALS</th><th>UNIT*</th><th>RATE OR PRICE FOR THE BASE MONTH</th></tr></thead><tbody><tr><td></td><td></td><td>.....</td></tr></tbody></table> * Indicate whether the material shall be delivered in bulk or in containers. When called upon to do so, the Contractor shall substantiate the above rates or prices with acceptable documentary evidence. Signed on behalf of Tenderer:	SPECIAL MATERIALS	UNIT*	RATE OR PRICE FOR THE BASE MONTH			
SPECIAL MATERIALS	UNIT*	RATE OR PRICE FOR THE BASE MONTH					
							

C1.3: PERFORMANCE GUARANTEE

PRO FORMA

PERFORMANCE GUARANTEE

For use with the General Conditions of Contract for Construction Works, Third Edition (2015).

1. GUARANTOR DETAILS AND DEFINITIONS

“Guarantor” means:

Physical address:

“Employer” means:

“Contractor” means:

“Employer’s Agent” means:

“Works” means:

“Site” means:

“Contract” means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

“Contract Sum” means: The accepted amount inclusive of tax of R

Amount in words:

“Guaranteed Sum” means: The maximum aggregate amount of R

Amount in words:

“Expiry Date” means: or any other later date set by the Contractor and/or Employer provided such instruction is received prior to the Expiry Date as indicated here.

2. CONTRACT DETAILS

Employer’s Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate of Completion of the Works as defined in the Contract.

3. GUARANTOR’S LIABILITY

3.1 The Guarantor’s liability shall be limited to the amount of the Guaranteed Sum.

3.2 The Guarantor’s period of liability shall be from and including the date on which the Performance Guarantee is signed, up to and including the Expiry Date, or the date of issue by the Employer’s Agent of the Certificate of Completion of the Works, or the date of payment in full of the Guaranteed Sum, whichever occurs first.

3.3 The Employer’s Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

4. CONDITIONS APPLICABLE TO THIS PERFORMANCE GUARANTEE

4.1 The Guarantor hereby acknowledges that:

4.1.1 Any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.

4.1.2 Its obligation under this Performance Guarantee is restricted to the payment of money.

4.2 Subject to the Guarantor's maximum liability referred to in 3.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.2.1 to 4.2.3:

4.2.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2.2;

4.2.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.2.1 and the sum certified has still not been paid;

4.2.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.2.

4.3 Subject to the Guarantor's maximum liability referred to in 3.1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:

4.3.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 4.3; or

4.3.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 4.3; and

4.3.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.

4.4 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4.2 and 4.3 shall not exceed the Guarantor's maximum liability in terms of 3.1.

4.5 Where the Guarantor has made payment in terms of 4.3, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.

4.6 Payment by the Guarantor in terms of 4.2 or 4.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.

4.7 Payment by the Guarantor in terms of 4.3 will only be made against the return of the original Performance Guarantee by the Employer.

4.8 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may consider fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.

- 4.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 4.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 3.2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 4.11 This Performance Guarantee, with the required demand notices in terms of 4.2 or 4.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 4.12 Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrates' Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

C1.4: AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993

THIS AGREEMENT is made between The Republic of South Africa represented by Director General:
Department of Water and Sanitation
(hereinafter called the EMPLOYER) of the one part, herein represented by:

.....
in his capacity as:

AND:

(hereinafter called the CONTRACTOR) of the other part, herein represented by

.....
in his capacity as:

duly authorised to sign on behalf of the Contractor.

WHEREAS the CONTRACTOR is the Mandatary of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of:

CONTRACT No. WTE-2633ES: QEDUSIZI GWS: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE

for the construction, completion and maintenance of the works;

AND WHEREAS the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHS Act Amendment Act No 181/1993 (hereinafter referred to as the ACT);

NOW THEREFORE the parties agree as follows:

1. The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
 2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
 3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the EMPLOYER'S AGENT from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
 4. The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps the EMPLOYER may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
-

5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at..... for and on behalf of the **CONTRACTOR**

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

Thus signed at..... for and on behalf of the **EMPLOYER** on this

the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

C1.5: RETENTION MONEY GUARANTEE

PRO FORMA

RETENTION MONEY GUARANTEE

DEPARTMENT OF WATER AND
SANITATION
PRIVATE BAG X25
HOWICK
3290

CONTRACT No. WTE-2633ES: QEDUSIZI GWS: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE

ISSUED TO: the **REPUBLIC OF SOUTH AFRICA**, represented by **DIRECTOR GENERAL: DEPARTMENT OF WATER AND SANITATION** (Hereinafter referred to as "the Employer")

ON BEHALF OF:(Hereinafter referred to as "the Contractor")

In connection with

CONTRACT NO. WTE-2633ES.....(Hereinafter referred to as "the Contract")

WHEREAS the Employer and the Contractor have agreed that the Contractor may provide a guarantee in lieu of the whole or portion of the retention monies provided for under the Contract;

NOW THEREFORE we, the undersigned, undertake, in accordance with the following provisions, to pay the Employer such amounts as the Employer may, from time to time, demand from us.

1. Each demand by the Employer shall be in writing signed by the Employer and delivered to us at

.....
or such other address as we shall in writing notify to the Employer and shall be accompanied by a certificate complying with Clause 2, signed by the Employer's Agent as such in terms of the Contract.

2. The Employer's Agent's certificate referred to in Clause 1 shall certify

- (a) that he is the Employer's Agent in terms of the Contract,
- (b) that the Contractor is in breach of his obligations under the Contract, and
- (c) that the amount demanded, which amount the certificate shall specify,

- (i) does not exceed the amount of retention monies which, but for this guarantee, would have been retained by the Employer in terms of the Contract at the date of the certificate, less the aggregate of the amounts of retention money actually retained by the Employer and the amounts previously paid by us to the Employer in terms hereof, and
- (ii) does not exceed a genuine estimate of the cost to the Employer of having the breach referred to in paragraph (b) remedied less the aggregate of any amounts withheld by the Employer from payments due the Contractor in terms of the Contract by reason of the breach referred to, and any amount in retention money actually held by the Employer save to the extent that the same had been deducted from any previous demand in terms hereof.

3. We shall within 28 days after our receipt of a demand complying with the provisions of Clauses 1 and 2 make payment to the Employer of the amount demanded at R103 Prospect Road, Howick, 3290 or at such other address as the Employer shall in writing notify us.
 4. Subject to compliance with the provisions thereof, our liability to make the payments herein referred to shall be unconditional and shall not be affected nor diminished by any disputes, claims or counterclaims between the Employer and the Contractor.
-

5. Our aggregate liability under this guarantee is limited to R
6. This guarantee shall expire on the date on which the last of the retention monies, which but for this guarantee would have been retained by the Employer, becomes payable to the Contractor.
7. This guarantee is not transferable and must be produced for endorsement if any part payment is made and must be returned to us against final payment of our aggregate liability or on the date of the expiry of the guarantee in terms of Clause 6, whichever is the earlier.

Signed in the presence of the witnesses named hereunder:

At for and on behalf of

on this day of

Signature:

Capacity:

Address:

As Witnesses:

1. Name in Block Letters ...

2. Name in Block Letters

C1.6: TRANSFER OF RIGHTS

TRANSFER OF RIGHTS AND INDEMNITY

(To be completed during construction by successful Tenderer only)

Claim for materials on site, Payment Certificate No. Date:

CONTRACT No. WTE-2633ES: QEDUSIZI GWS: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE

I, the undersigned (name of signatory) in my capacity as
..... of (name of Contractor)

duly authorised hereto on behalf of the Contractor hereby transfer, cede and assign all the Contractor's rights, title and interest in and to the materials and goods, for which evidence of bona fide ownership is attached hereto, unto and in favour of (name of Employer)

Insofar as the Contractor retains actual control of the materials and goods, the right of ownership thereof passes to the Employer by *constitutum possessorium*.

I herewith indemnify the Employer against any claim to and in respect of said materials by reason of the Contractor's sequestration or liquidation or of any defect in the Contractor's title to the materials and agree that no payment for materials on site will be made by the Employer until such time as I have submitted documentary proof of bona fide ownership of the said materials and goods.

This transfer shall become effective upon conclusion of the Contractor receiving payment from the Employer or from any other person on behalf of the Employer for the materials and goods as Materials on Site, payment of retention money thereon excluded.

I further confirm that I am fully responsible for all materials and goods listed under this Transfer of Rights and that they have been insured adequately against all risks and will remain insured until they are built into or used in the permanent works and taken over by the Employer.

This certificate of Transfer of Rights applies only to the materials and goods as listed in the following table.

DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE	AMOUNT	SUPPLIER
TOTAL VALUE OF MATERIALS AND GOODS					

Signed by: **Date:**
for and on behalf of the Contractor.

Witnessed by: **Date:**

NOTE: This form, together with the documentary proof of ownership or proof of payment by the Contractor to the supplier, shall accompany the Contractor's claim for payment for materials on site in terms of Clause 6.10.1.5 of the General Conditions of Contract 2015.

C2: PRICING DATA

C2.1 INSTRUCTIONS

1. GENERAL

The Schedule of Quantities forms part of the Contract Documents and must be read in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract, the Specifications (including the Project Specifications) and the Drawings.

2. DESCRIPTION OF ITEMS IN THE SCHEDULE

The short descriptions of the items in the Schedule of Quantities are for identification purposes only and the measurement and payment clause and the Particular Specifications, read together with the relevant clauses of the amendments and additions contained in the Project Specifications and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

For the purposes of this Schedule 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 specifications.

Quantity: The number of units of work for each item.

Rate: The payment per unit of measurement at which the Tenderer quotes to do the work.

Amount: The product of the quantity and the rate tendered for an item.

Lump Sum: An amount tendered for an item, the extent of which is described in the Schedule of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.

3. QUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Schedule of Quantities are estimates only, and are subject to re-measure during the execution of the work. The quantities finally accepted and certified for payment, and not the quantities given in the Schedule of Quantities, shall be used to determine payments to the Contractor. The Contractor shall obtain the Employer's Agent's detailed instructions for all work before ordering any materials or executing work or making arrangements for it. The quantities of material or work stated in the Schedule of Quantities shall not be regarded as authorisation for the Contractor to order material or to execute work.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Schedule of Quantities and in accordance with the General and Special Conditions of Contract, the Project Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste. The validity of the contract will in no way be affected by differences between the quantities in the Schedule of Quantities and the quantities finally certified for payment.

4. PROVISIONAL SUMS

Where Provisional sums or Prime Cost sums are provided for items in the Schedule of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract 2015. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted by the Employer in the "Amount" column of the Schedule of Quantities and in the Summary of the Schedule of Quantities unless so ordered or authorised in writing by the Employer before closure of tenders. Any unauthorised changes made by the Tenderer to provisional items in the schedule, or to the provisional percentages and sums in the Summary of the Schedule of Quantities, at the Employer's discretion, may invalidate the Tenderer's offer or may be treated as arithmetical errors and the provisional items and percentages corrected without change to the Contract Sum.

5. SCHEDULE OF QUANTITIES

The Schedule of Quantities in the tender document are listed as a project scope by the Employer for the work described under the several items, Actual quantities will be issued later and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Each item shall be priced on a later stage and extended to the "Amount" column by the Tenderer, with the exception of the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Tenderer omits to price any items in the Schedule of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

Should the Tenderer group a number of items together and tender 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.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the contract.

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Amount" column. "Rate Only" items have been included where:

- (a) an alternative item or material is contemplated;
- (b) variations of specified components in the make-up of a pay item may be expected; and
- (c) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For "Rate Only" items, no quantities are given in the "Quantity" column but the tendered rate shall apply in the event of work under this item being required. The Tenderer shall, however, note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

Reasonable compensation will be received where no payment item appears in respect of work required in terms of the Contract which is not covered in any other pay item.

All rates and amounts tendered in the Schedule of Quantities shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Schedule of Quantities. Note that fractions of a cent in all rates shall be omitted.

6. CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

7. INTERIM PAYMENTS

Unless otherwise specified, progress payments in Interim Certificates, referred to in Clause 6.10 of the General Conditions of Contract 2015, in respect of "sum" items in the Schedule of Quantities shall be by means of interim progress instalments assessed by the Employer's Agent and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

Notwithstanding any custom to the contrary, the work as executed will be measured for payment in accordance with the methods described in the contract documents under the various items of payment.

8. UNITS OF MEASUREMENT

The units of measurement described in the Schedule of Quantities are metric units. The following abbreviations are used in the Schedule of Quantities:

mm	= millimetre	m ³ -km	= cubic metre-kilometre	Prov sum	= provisional sum
m	= metre	l	= litre	kPa	= kilopascal
km	= kilometre	kl	= kilolitre	MPa	= megapascal
km-pass	= kilometre-pass	kg	= kilogram	MN	= meganewton
m ²	= square metre	t	= ton (1 000 kg)	t-km	= ton-kilometre
m ² -pass	= square metre-pass	No	= number	h	= hour
ha	= hectare	%	= percent	dia	= diameter
m ³	= cubic metre	PC sum	= prime cost sum	Sum	= lump sum
kW	= kilowatt	MN-m	= meganewton-metre		

9. CONSISTENCY OF RATES

In order to ensure that payments certified by the Employer's Agent are reasonably consistent with the market value of the work done, and that variations in quantities do not distort the contract valuation, the rates, prices and amounts tendered in the Schedule of Quantities are required to be in balance.

A tender will be considered out of balance if:

- (i) the combined, extended total tendered for the item:

Preliminaries:

- (a) Fixed obligations
- (b) Value-related obligations
- (c) Time-related obligations

exceeds a maximum of 15% of the Contract Sum (excluding contingencies, escalation and VAT).

- (ii) the rate, price or amount tendered for any other item differs by more than 20 (twenty) percent from the average of the rates, prices or amounts for the same item as tendered by those Tenderers who submitted the lowest five responsive tender offers (or as tendered by all the responsive Tenderers if there are less than five responsive Tenderers).

Any such unbalanced tender may be rejected if, after fourteen (14) days of having been given written notice by the Employer to adjust those rates or lump sums which are unreasonable or out of balance, the Tenderer fails to make the necessary satisfactory adjustments. These adjustments in rectification will be such that increases are balanced by decreases, leaving the tender offer unchanged.

11. FILLING OUT OF SCHEDULE

The schedule must be filled out by hand in **black ink only**.

Typed out schedules and computer generated schedules including automated calculations will **NOT** be accepted. Tenders will be considered non-responsive. If this is found to be the case.

12. HANDLING COSTS

Handling costs and profits in respect of specialist work carried out by approved 3rd party Tenderers and Provisional sum items, shall not exceed 10% of the work amount or provisional sum costs.

13. PAYMENT FOR THE LABOUR-INTENSIVE COMPONENT OF THE WORKS:

Those parts of the works to be constructed using labour-intensive methods are marked in the bill of quantities with the letters LI either 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 work, 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.

Where minimum labour intensity is specified in 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 targets.

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. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

NOTE REGARDING THE “LI” COLUMN IN THE SCHEDULE OF QUANTITIES:

The schedule of quantities contains a column designated “LI”. The letters “LI” are written in the “LI” column against certain items which must be executed using labour intensive construction methods.

Such items include:

- (a) Items in the standard specifications that would normally be executed using plant but which have been modified specifically so as to require the use of labour intensive construction methods instead of plant for some or all of the work components of the item.
- (b) New items that have been written for this contract specifically requiring the use of labour intensive construction methods rather than plant for some or all of the work components of the item.

The letters “LI” are not written in the “LI” column against items in the standard specifications that would normally be constructed using labour intensive construction methods anyway, for example items for the construction of brickwork, gabions, fencing or guardrails.

C2.2. SCHEDULE OF QUANTITIES

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SCHEDULE OF QUANTITIES



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

PRICING DATA: BILL OF QUANTITIES

**QEDUSIZI GWS: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE
SCHEDULE A – GENERAL**

ESTABLISHMENT

Item. No.	Pay Ref.	Description	Unit	QTY	Rate	Amount
1		PRELIMINARIES				
1.1		Contractor's general obligations				
1.1.1		(a) Fixed obligations	Sum	1	.....	.....
1.1.2		(c) Time-related obligations	Month	4	.....	.....
1.2		OHSA 1993 Safety specification				
1.2.1		(a) Health and safety officer for the duration of the project.	Sum	1	.....	.....
1.2.2		(b) Required documentation from OHS officer(H&S plan, risk assessment, etc) and PPE.	Sum	1	.....	.....
1.3		Protection of existing services.	Sum	1	.....	.....
SUB TOTAL CARIED TO THE SUMMARY PAGE						

SCHEDULE B – WORKS

GUARD HOUSE

Item. No.	Pay Ref.	Description	Unit	QTY	Unit Price	Amount
2		GUARD HOUSE				
2.1		Site setting out, preparation, clearing, excavation, level formation and compaction for guard house, septic system, gate, driveway and fencing.	Sum	1	.....	.....
2.2		Prefabricated guard house complete to Drawing Qedusizi Guard House, including manufacture, transport, delivery, offloading, positioning, supports, anchoring and installation.	No.	1	.....	.....
2.3		Factory and site quality control, inspection and test plan, inspections, test records and quality dossier.	Sum	1	.....	.....
2.4		12 000 BTU split air-conditioner, complete supply, installation, electrical connection, condensate drain, testing and commissioning.	No.	1	.....	.....
2.5		Kitchenette: 1.2 m sink/cupboards/worktop, plumbing fittings and complete installation.	Sum	1	.....	.....
2.6		10 L outside geyser complete with valves, discharge, pipework, electrical connection, testing and commissioning	Sum	1	.....	.....
2.7		Steel cage for protection of gyser and aircons with lock mechanism.	Sum	1	.....	.....
2.8		WC and wash-hand basin complete with all fittings, connections and commissioning	Sum	1	.....	.....
2.9		Complete potable-water service connection to guard house, including pipework, valves, trenching, sleeves, testing and as-builts.	Sum	1	.....	.....
SUB TOTAL CARRIED TO THE NEXT PAGE						

SCHEDULE B – WORKS

GUARD HOUSE

Item. No.	Pay Ref.	Description	Unit	QTY	Unit Price	Amount
SUB TOTAL BROUGHT FORWARD FROM THE PREVIOUS PAGE						
2.10		2500 l Water storage tank complete with site preparation, bedding, construction of stand, installation, anchoring, valves, fittings, water connections, testing and commissioning.	Sum	1	.....	.....
2.11		6000 l septic tank complete with excavation, bedding, installation, anchoring, covers, sewer connections, testing and backfill	Sum	1	.....	.....
2.12		French drain / soak-away complete, including excavation, filter material, distribution pipework and testing	Sum	1	.....	.....
2.13		Sewer connection from WC to septic tank, including concrete protective encasement where pipe crosses driveway with inadequate cover	Sum	1	.....	.....
2.14		Electrical design, load calculations, single-line/line diagrams, cable schedules and approval documentation	Sum	1	.....	.....
2.15		Electrical kiosk(Steel) and complete incoming electrical supply to kiosk/DB, including cables, ducts, trenching, protection and earthing	Sum	1	.....	.....
2.16		Guard-house distribution board, internal wiring, sockets, switches, isolators, earthing and bonding	Sum.	1	.....	.....
SUB TOTAL CARRIED TO THE NEXT PAGE						

SCHEDULE B – WORKS

GUARD HOUSE

Item. No.	Pay Ref.	Description	Unit	QTY	Unit Price	Amount
SUB TOTAL BROUGHT FORWARD FROM THE PREVIOUS PAGE						
2.17		Internal LED lighting complete with switches and wiring, including veranda and toilet.	Sum	1	.....	.....
2.18		External LED lighting complete with fittings, wiring, controls and supports	Sum	1	.....	.....
2.19		Electrical testing, commissioning, as-built drawings and Certificate of Compliance	Sum	1	.....	.....
2.20		Burglar bars to windows, complete, finished and securely fixed	Sum	1	.....	.....
2.21		Fixed desk/worktop complete and permanently installed	No.	1	.....	.....
2.22		Concrete apron around guard house complete, including reinforcement, formwork, joints, falls and curing	Sum	1	.....	.....
SUB TOTAL CARRIED TO THE NEXT PAGE						

SCHEDULE B – WORKS

GUARD HOUSE

Item. No.	Pay Ref.	Description	Unit	QTY	Unit Price	Amount
SUB TOTAL BROUGHT FORWARD FROM THE PREVIOUS PAGE						
3		AUXILARY WORKS				
3.1		6.0m Wide High-Security Clearview Steel Vehicle Gate.	Sum	1	.....	.....
3.2		Supply, deliver, install heavy duty commercial grade 24V DC sliding gate operator and controls complete with safety photocells, manual override, cabling, commissioning and anti-theft steel cage.	Sum	1	.....	.....
3.3		Manual boom gate barrier, sized to entrance width, complete with foundations and reflective.	Sum	1	.....	.....
3.4		Concrete driveway, total 12 m long x gate/driveway width, comprising 6 m approach and 6 m internal, including subbase, Ref. 617 mesh, concrete, joints, broom finish and curing.	Sum	1	.....	.....
3.5		Final testing, integrated commissioning, demonstrations, O&M manuals, warranties, as-built drawings and handover	Sum	1	.....	.....
3.6		Supply and install 2.4m high high-security clear view fencing: comprising 76.2mm x 12.7mm anti-climb/anti-cut black powder-coated mesh panels with structural V-bends, fixed securely to matching 76mm x 76mm square-tube posts embedded in concrete foundations using spider clamps and tamper-proof fasteners, topped with pre-manufactured heavy-duty black shark-tooth security spikes, all installed complete as per manufacturer's specifications.	m	20	.....	.....
3.7		Sand blasting and repainting DWS sign board, include all associated cost of works.	Sum	1	.....	.....
SUB TOTAL CARIED TO THE SUMMARY PAGE						



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

PRICING DATA: BILL OF QUANTITIES

CONTRACT NO: WTE-2633ES

QEDUSIZI GWS: QDD: SUPPLY AND INSTALLATION OF GUARD HOUSE

SUMMARY OF BILL OF QUANTITIES

SECTION	DESCRIPTION	SECTION AMOUNT
A	SCHEDULE A – GENERAL	R
B	SCHEDULE B – WORKS	R
	Sub Total 1	R
	ADD: 5% of Sub Total 1 Contingencies	R
	Sub Total 2	R
	ADD: 15% of Sub Total 2 Value Added (VAT)	R
	TOTAL CARRIED TO FORM OF OFFER (SBD 3.1)	R

SIGNATURE OF BIDDER:

DATE:

C3: SCOPE OF WORK

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PROJECT SPECIFICATIONS RELATING TO THE STANDARD
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2 DRAWINGS

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PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

PART D: DAYWORK

PART E: DEPARTMENT OF WATER AND SANITATION HEALTH AND SAFETY SPECIFICATION

C3.1 STANDARD SPECIFICATIONS

The Standard Specifications on which this contract is based are the: PW 371-A: Construction works specification (General specification), SANS 1200, and SANS 10400.

The Standard Specifications that form part of this Contract have been written to cover all phases of work normally required for building works, and may therefore cover items of work not applicable to this particular Contract.

The Project Specifications form an integral part of the Contract Documents, supplement the Standard Specifications, and take precedence in the event of discrepancies with the Standard Specifications, the Schedule of Quantities or the Drawings.

C3.2 PROJECT SPECIFICATIONS

1 DESCRIPTION OF THE WORKS

1.1 Employer's objectives:

To provide security infrastructure that supports ongoing operations and maintenance activities for Qedusizi dam.

1.2 Overview of the works

The works comprise the supply and installation of the guard house at Qedusizi dam.

1.3 Extent of the works

- Design, manufacture, supply, delivery, installation, testing and commissioning of a prefabricated guard house.
- Supply, delivery and installation of septic tank system complete with soak away.
- Installation of water services and electrical services.
- Refurbishment of the existing gate, including gate track, and supporting posts.
- Supply and installation heavy duty electrical operator for the gate.

1.4 Location of the works

Qedusizi Dam, near Ladysmith, KwaZulu-Natal Province.

2 DRAWINGS

All work shall be executed in accordance with approved drawings and specifications prepared by the Department's engineer.

DESCRIPTION	DRAWING NO.
Locality Plan	
Type Drawings:	

3 PROCUREMENT

The preferential points shall be allocated and tenders awarded in accordance with T1.2 "EVALUATION CRITERIA"

4 CONSTRUCTION

4.1 The works shall be executed in accordance with the Department of Water and Sanitation standard construction requirements and the applicable South African National Standards. The following standards and specifications, as applicable to the work, shall form part of this specification:

- PW 371-A: Construction Works Specification (General Specification), where applicable.
- SANS 1200 series – materials and workmanship, as applicable to the works.
- SANS 10400 – The application of the National Building Regulations.
- SANS 2001 construction works standards applicable to site clearance, earthworks, concrete works, masonry, foundations and related work.
- SANS 10142 – The Wiring of Premises, applicable to electrical installations.
- SANS 10161 – The design of foundations for buildings, where applicable.
- SANS 10109 – Concrete floors and floor finishes, where applicable.
- SANS 10237 – Roof and side cladding, where applicable.
- SANS 1044 – welding requirements for steelwork.
- SANS 1058 – precast concrete paving, where applicable.
- SANS 497 – sanitary ware, where applicable.
- SANS 1385 – built-in kitchen cupboards, where applicable.
- SANS 50572 series and SANS 10137 – glazing and installation of glass, where applicable.
- Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Construction Regulations, 2014.

The Contractor shall comply with the latest applicable edition of the above standards unless the Contract Documents state otherwise. Where this specification is more onerous or specific than a referenced standard, this specification shall govern to the extent permitted by the Contract 4.2

4.2 Applicable national and international standards

All construction work must be undertaken in accordance with the 'PW 371-A: Construction works specification (General specification)' and as amended in Particular/ generic specifications.

4.3 Particular / generic specifications

As well as the 'Particular/ generic specifications' contained in this document, the following Particular Specifications as contained in Section C3.3, are applicable to this Contract:

Part C: Environmental Management Specification

Part D: Daywork

Part E: OHSA 1993 Health and Safety Specification

The relevant provisions of the SANS 2001-Construction works shall apply to the contract with the following amendments:

1 DESCRIPTION OF THE WORKS

The Works comprise the complete design, manufacture, supply, delivery, installation, connection, testing and commissioning of one prefabricated guard house based on Drawing Qedusizi Guard House, together with all associated civil, water, sewer, electrical, security, access-control and external works necessary

to provide a complete operational facility. Removal and disposal of existing container, used as a guard house.

The Contractor shall include all labour, supervision, materials, plant, transport, lifting, temporary works, fixings, consumables, testing equipment, certification, making good and commissioning necessary for a complete installation, whether or not each minor ancillary item is separately listed.

2 DRAWING AND DIMENSIONAL CONTROL

The Qedusizi Guard House drawing, shall be the governing architectural/layout drawing for the prefabricated guard house. The drawing indicates an overall unit size of approximately 5.820 m x 2.990 m and includes the indicated door, windows, WC, basin, sink/cupboards, geyser, electrical points and lighting arrangement.

The Contractor shall not substitute a different layout or materially alter the drawing. Fabrication and installation shall be checked against the drawing before manufacture, delivery and placement. Where fabrication details are required to achieve the specified performance, the Contractor shall submit shop/fabrication drawings without changing the approved layout.

The drawing identifies 900 x 900 top-hung clear-glass windows with burglar bars, a 600 x 600 top-hung obscure-glass window with burglar bars, a single external door, a single internal door, 1.2 m single-bowl sink with cupboards, 10 L under-bench geyser, close-coupled WC, porcelain wash-hand basin, 16 A plug point(s), LED batten lights, light switches and a 12 000 BTU split air-conditioner. These components shall be incorporated into the complete installation.

3 PREFABRICATED GUARD HOUSE

The prefabricated guard house shall be factory manufactured as a complete, transportable single-wide unit to the dimensions and arrangement shown on Drawing Qedusizi Guard House. The unit shall be structurally sound, weatherproof, corrosion protected, transportable and suitable for permanent installation on the prepared site.

- Provide the complete structural frame, floor system, roof, wall/side cladding, internal linings, floor covering, trims, flashings, sealants and all proprietary components necessary for a watertight and durable building.
 - Provide the concrete pads/support system and all approved anchoring/fixing arrangements required to secure the unit against movement. The unit shall be levelled and securely fixed in its final position.
 - Provide all doors, windows, glazing, hardware, locks, weather seals and associated flashings. The external doors shall be a robust single personnel door as shown on the drawing.
 - Provide burglar bars to all windows. Burglar bars shall be securely fixed, corrosion protected and finished to match the approved colour/finish.
 - Provide internal vinyl floor sheeting/finish in charcoal or equivalent approved finish consistent with the drawing.
 - Provide a fixed desk/worktop in the guard room in the position indicated/compatible with the approved drawing. The desk shall be permanently fixed, robust, sealed and suitable for security/control-room use, with no obstruction to doors, windows or service access.
 - Provide the two three-tier step with handrail shown on the drawing, or approved equivalent required to suit the final finished level.
 - Provide all factory and site sealing, touch-up painting, corrosion protection and making good.
-

3.1 Ground Preparations

Ground where buildings will be positioned should be level and not slope more than 100mm over the length of the building. Ground should be compacted to ensure a 100KPa load bearing capacity is achieved.

300 x 300 x 300mm reinforced concrete plinths to be positioned +/- every 2.5m between the length of the building for placement of the buildings.

Load bearing capacity of the floors are rated at +/- 250kg/m²

3.2 Floors

Bolted Chassis

Chassis are manufactured from (galvanised) 2.5mm mild steel and bolted together;

Welded Chassis

Main Frames are manufactured from lip channel (welded) and painted with black water based primer (cover coat).

Floor Frames are manufactured from 75mm lip channel (welded) and painted with black water based primer (cover coat).

Outriggers are manufactured from 45mm HR Angle (welded) and painted with black water based primer (cover coat).

Floor Board

18mm Shutter Board;

CTX 108 Treated;

Covering

Vinyl Sheeting;

2mm beige - sandalwood;

Slip Resistance – EN 13893 Class DS;

Reaction to fire – EN 13501-1 Class Bfl-S1; ASTM E662 <450 (1.5,2.0mm); ASTM E648 class 1 (1.5,2.0mm)

Abrasion resistance – EN660-2 Group M;

Indentation Residua – ASTM F970 (modified), static load 750psi;

Electrical Behaviour (Body Voltage) – EN 1815 s2kV, classified as 'antistatic';

Supported by

Welded or bolted chassis placed on top of concrete plinths or concrete pads

3.3 Internal and External Walls

Base Rails

31 upstand x 41 x 96mm down-stand;

Galvanised pre-painted with QD Enamel;

External walls - 1.6mm Thick galvanised Z-section base rail including mastic damp proof seal between chassis and base rail; Internal walls – 1.6mm Thick x 30mm girth with angle bottom rail;

Top Rails

External wall panels supported and joined at top with 31 x 41 x 170mm U-channel, 1.6mm Z275 Galvanised sheeting fixed to wall panel with aluminium rivets;

Pre-painted galvanised sheets

Galvanised sheets – 0.5mm nominal thickness;

Inside facing section of sheets finished with single backing coat – 8 microns dry film thickness;

Wall Panels

40mm thick panel comprising two 0.5mm rigidised pre-painted galvanized (chromadek) sheets;

Chromadek is rigidised to provide extra strength.

Standard panel sizes, 1160mm wide x 2400 high;

Insulation properties, 0.022W/mK;

Foam density, 36kg/m³;

Each blank panel is injected with high density polyurethane covered with a temporary protective film;

Thermal break provided on both male and female sides,

Panels have a vertical load bearing capacity of 1.1 tons in the centre and 2 tons on the seam between two panels

Acoustic properties of 32db drop through panel

Environmental (Wall Panels)

The product conforms 100% to the requirements of the Montreal protocol and contains no products harmful to the Ozone layer.

Fire Properties (Wall Panels)

The panel conforms to a DIN 4102 82 fire rating

Energy Performance (Wall Panels)

The building regulations for England and Wales now ensure that standards of thermal insulation in ALL buildings are at least as good as those which became mandatory for dwellings in 1976. Energy conservation is now an important factor in the statutory control of building designs.

Maximum U-value (W/m²K) of Building Elements

Building Type		Building Element
Wall		Roof
Dwelling	0.6	0.35
Storage	0.7	0.7
Others	0.6	0.6

The excellence of polyurethane (PUR) and polyisocyanate (PIR) rigid foams as insulants is well documented, with ad-value of 0.022 W/mk, less PUR or PIR is needed to provide the same degree of insulation as other commonly used insulants.

Values of thermal resistance of standard thicknesses of polyurethane foam ($k = 0.022 \text{ W/mk}$) (Excluding facings and surfaces.)

U-Value

Thickness 40mm

Resistance to thermal Transmission (m²KW) 1.82

Comparison's

Figure 1 shows the equivalent thickness of common building and insulation materials required to achieve the same degree of insulation (dry condition)

1. 25mm Polyurethane
2. 40mm Polystyrene
3. 45mm mineral wool
4. 50mm cork
5. 65mm fibreboard
6. 140mm softwood
7. 380mm concrete blocks
8. 860mm common bricks

Cappings & Skirting

All trims manufactured from 0.5mm Pre-painted galvanised sheets;

7mm x 45mm white PVC skirting secured to panels;

3.4 Roof and Ceiling

Cranked Roofs for building < 3,5m wide

0.5mm IBR AZ150 hot dipped pre-painted Traffic Green ISQ550, pre-painted 20 micron galvanized steel roof sheet;

Cranked to 3 degrees and fitted onto top-hat roof section;

Double over lapped roof sheets;

Roof dead load 0.170 kN/m²;

Ceilings for building < 3,5m wide

40mm polyurethane panel (refer to wall panels specification above);

Minimum floor to ceiling height 2.400mm high as indicated on floor layouts;

Light Steel Frame Roofs for buildings > 3,5m wide

Roof is designed to a 7° - 11° pitch with 0 - 300mm overhangs on the eave and 0mm on the gable ends.

Z275,0.5mm pre-painted galvanised roof sheet covering;

Single over lapped roof sheets;

Ceilings for LSF Roofs for buildings > 3,5m wide

6mm nailed up pvc ceilings;

Minimum floor to ceiling height 2.400mm high as indicated on floor layouts;

Insulated with 100mm Aerolite insulation;

3.5 Electrical

Wiring & Distribution Boards

Wiring is in accordance with SANS 10142-1: 2008 - 220 volts;

Distribution boards are 1x20 Way and/or 3 x 15 Way Surface Din Distribution Boards (Where applicable);

Light fittings

Ceiling mounted 4 ft single or double open channel V-Shape waterproof 1.2 meter florescent lights;

Ceiling mounted bowl fittings JD 90 Lights or equivalent in bathrooms;

External bulkheads IP44 circular 16w 2D external round bulkhead with porcelain KO or equivalent;

Plug sockets

Single or double Shuko plug sockets; Lear or equivalent (16 Amp), 4x4 single or 4x4 double;

Light Switches, Isolators & Circuit Breakers

Lear 10AMP or equivalent switches;

Lear 20AMP or equivalent isolators;

Onesto circuit breakers or equivalent for Din Rail Boards;

10-63 Amp S/p circuit breakers & 63 Amp non-overload protected earth-leakage;

3.6 Plumbing & Sanitary Wear

Potable water supply

JG Speed Fit white polyethylene pipe certified in accordance to SANS 15875;

15mm and or 22mm;

PEM twist and lock range of fittings or equivalent;

Plumbing system pressure tested to 10 bar;

Geysers (hot water heaters)

Electric geysers;

Certified in accordance with IPX4 International standards;

ISO 9001 and SABS SANS 151 Approved;

Capacities are indicated on the floor plans;

Toilets

Ceramic close couple cistern or equivalent;

Cistern - SABS Certified Mark No: 1182/2512 SANS 821

Capacity 9 litres with left or right side inlet flush handle;

Afsan low level pan or equivalent;

Toilet seat - B2 seat and cover

Basins

White porcelain, Amber wash hand basin with pedestal;

Taps

Cobra Pillar taps;

In accordance with SANS 226 Type 2;

Waste water pipes

110mm white PVC or equivalent - black water;

50mm white PVC or equivalent - grey water;

Grease Shield

Automatic Solids Transfer;

Effectively removes oils and fats as well as food particles from kitchen waste water into separate waste containers for recycling or disposal;

Proactive grease trap to deal with emulsified and saturated animal fats and FOG's before they solidify;

Removes entrained solids reducing loads and strain on waste water stations and the environment

Harvest a source of renewable energy, without the use of heating elements with highly economical operating costs;

The need to apply special cleaning practice with the use of expensive chemical to prevent blockages and odours is eliminated entirely with the use of this system

3.7 Windows

Natural anodised 25 micron aluminium frame;

Top hung frames fitted with 4mm clear float glass for all windows except in toilets and ablutions where obscure float glass is used;

Standard sizes throughout 900mm x 900mm and 600mm x 600mm (Obscure);

Burglar proofing over all opening windows;

Blinds and Flyscreens (provided as an optional when required)

3.8 Doors

External & Internal

40mm thick door panel cut from standard PU wall panel;

Standard size of 2032mm x 813mm;

Each door framed with 0.5mm pre-painted galvanised capping riveted to door panel;

Natural anodised aluminium rebated door frame including rubber buffers and heavy duty aluminium hinges;

Pre-painted galvanised drip rail to doors opening outwards;

External locks are five lever Dorma locks complete with stainless steel striker plate and two keys; Chrome plated handles or Equivalent;

3.9 Fittings

Mirrors

3mm silvered float copper backed glass with exposed chromium plated corner brackets fixed to panels; standard sizes - 300 x 300mm high

Air conditioners

Samsung split type / window wall air conditioners or equivalent as per the sizes and type indicated on the floor plans;

Extractor fans

Expel air GX6 wall mounted extractor fans suitable for 220 240 volt (50Hz) single phase installation

Steps & Handrails

4 AIR-CONDITIONING

- Supply, install, test and commission one 12 000 BTU split air-conditioning unit.
- The air-conditioner shall be installed complete with indoor unit, outdoor condensing unit, refrigerant pipework, condensate drain, supports/brackets, isolator, electrical connection, controls and all accessories.
- The air-conditioning installation shall be coordinated with the electrical design and the approved building drawing.
- The system shall be commissioned by a competent technician and handed over with manufacturer documentation, settings and warranty information.

5 KITCHENETTE, GEYSER AND SANITARY FITTINGS

- Supply and install a 1.2 m single-bowl sink complete with cupboards, worktop, waste fittings, traps, hot/cold water connections and all necessary accessories.
- Provide a 10 L outside geyser as indicated, complete with safety valve, isolation valve, hot-water pipework, discharge arrangement and electrical connection.
- Provide the close-coupled porcelain WC complete with cistern, seat, flush mechanism, pan connector, isolation valve and all necessary fittings.
- Provide the porcelain wash-hand basin for cold-water use as shown, complete with tap, trap, waste, isolation valve, brackets and connection. Provide and install wall mirror above hand-wash basin.
- All sanitary fittings shall be white unless otherwise approved and shall be installed square, level, securely fixed and sealed.
- Provide all plumbing accessories and making good, including pipe supports, sleeves, access points and identification.

6 WATER SERVICES

Design, supply, installation, testing and commissioning of all water services required to serve the guard house shall be included.

- Provide the complete incoming potable-water connection from the designated connection point to the guard house, including isolation valve(s), meter/interface where required, pipes, fittings, sleeves, supports, trenching, bedding, backfilling and reinstatement.
 - Provide 5000l water tank and build a meter high stand for the tank.
-

- Provide separate cold-water branches to the wash-hand basin, WC, sink and geyser.
- Provide hot-water pipework from the geyser to the sink where required by the final plumbing layout.
- Protect all pipes from mechanical damage and UV exposure where applicable and provide suitable sleeves where pipes pass through concrete or structural elements.
- Test the complete hot and cold water installation for leaks and pressure integrity before concealment and again before handover.
- Provide as-built water service drawings showing routes, connection points, isolation valves and pipe sizes.
- Provide a steel cage for the security protection of geyser and aircon, with lockable mechanism.

7 SEPTIC TANK, SOAK-AWAY AND SEWER

The Contractor shall provide a complete independent wastewater disposal system for the guard house comprising a PVC septic tank, French drain/soak-away and all connecting sewer pipework, fittings and ancillary works.

- Supply and install a proprietary PVC septic tank of adequate capacity for the intended guard-house occupancy and site conditions. The Contractor shall submit the tank manufacturer's data and installation requirements for approval before procurement.
- Provide all excavation, bedding, tank placement, anchoring against flotation where necessary, backfilling, access covers, inspection points, inlet/outlet connections and making good.
- Provide a French drain/soak-away of adequate capacity and dimensions for the expected effluent loading and ground conditions. The system shall be positioned to avoid contamination of potable-water sources and shall comply with applicable authority requirements.
- Provide sewer pipework from the WC to the septic tank, including bends, junctions, inspection points, rodding/access points and all required fittings.
- Provide a concrete protective surround/encasement to the toilet sewer pipe where it crosses the driveway and there is insufficient cover to protect the pipe from vehicle loading. The protection shall be designed to prevent crushing or displacement of the pipe and shall extend sufficiently beyond the vehicle loading zone to provide continuous protection.
- The Contractor shall verify invert levels and falls before excavation and shall ensure positive gravity flow to the septic tank and soak-away.
- Sewer lines shall be water-tested/inspected before backfilling and shall be free from leaks, blockages and obstructions.
- The complete system shall be tested and commissioned before practical completion.

8 ELECTRICAL SERVICES

The Contractor shall provide the complete electrical installation for the guard house and external works, including design, supply, installation, testing and commissioning. The scope shall include all equipment and components necessary to provide a safe, compliant and fully operational installation.

- Prepare the electrical design, load schedule, single-line/load diagrams, protection schedule and cable schedules for approval by the Employer's Agent before installation.
 - Provide the incoming electrical supply from the designated source to the electrical kiosk and/or guard-house distribution board, including cable, ducts/sleeves, trenching, warning tape, termination, glands, lugs, supports and all accessories.
-

- Provide an external lockable steel electrical kiosk required by the approved design, complete with suitable enclosure, protection, metering/interface provisions, isolators, distribution equipment and weatherproofing.
- Provide the surface-mounted distribution board indicated on Drawing Qedusizi Guard House, complete with main isolator, earth leakage protection, circuit breakers, neutral and earth bars, labels, circuit identification and spare ways appropriate to the design.
- Provide dedicated circuits for air-conditioner, geyser, general socket outlets and lighting, with ratings and cable sizes determined by the approved electrical design.
- Provide all internal socket outlets, switches and connection points indicated on the drawing and additional points required for the specified equipment.
- Provide internal LED lighting and external LED lighting, including all fittings, mounting brackets, conduits, cabling, switches, photocells/timers as specified by the design, and weatherproof external fittings.
- Provide an air-conditioner isolator and dedicated electrical supply.
- Provide electrical supply and isolator for the geyser.
- Provide complete earthing and bonding system, earth electrode(s) where required, earth continuity conductors and testing.
- Provide electrical connection to the automated sliding gate motor and associated controls, including isolator, protection and control cabling.
- All electrical work shall be tested and commissioned and a Certificate of Compliance shall be provided by the appropriately registered electrical contractor/person.

9 ELECTRICAL DESIGN AND DOCUMENTATION

- Electrical design calculations and load assessment.
- Single-line diagram / line diagram of the complete installation.
- Distribution-board circuit schedule and labelling schedule.
- Electrical kiosk schematic and equipment schedule.
- Cable schedule and cable-route drawing.
- Earthing and bonding layout.
- Internal and external lighting layout.
- Gate motor electrical/control schematic.
- As-built drawings and final load diagrams after commissioning.
- Test results and Certificate of Compliance.

10 QUALITY CONTROL – PREFABRICATION AND SITE INSTALLATION

Quality control shall apply from procurement and factory fabrication through transport, delivery, installation, testing and final handover. The Contractor shall establish and maintain a project-specific Inspection and Test Plan (ITP).

- Submit a fabrication quality plan and ITP before manufacture, identifying hold points and witness points for the Employer's Agent.
 - Verify incoming materials against approved specifications, manufacturer data sheets and approved
-

samples.

- Inspect structural frame dimensions, welds, alignment, corrosion protection, cladding, roof, doors, windows, glazing, flooring and internal finishes before dispatch.
- Welding shall be performed by competent personnel and inspected for workmanship, continuity, alignment and defects. Defective welds shall be repaired and re-inspected.
- Verify dimensions of the prefabricated unit against Drawing Qedusizi Guard House before dispatch.
- Inspect all plumbing rough-ins, sanitary fittings, geyser installation, electrical containment, DB installation, lighting and socket outlets before closing up.
- Carry out factory functional checks of equipment installed before dispatch where practical, including the air-conditioner and prefabricated service installations.
- Protect the unit during transport and lifting. Any transport damage shall be repaired before acceptance.
- At site, inspect foundations/pads, levels, anchor points, service routes, sewer falls and driveway interfaces before placing the unit.
- Record concrete delivery, slump/quality checks, reinforcement placement and curing records for concrete works where applicable.
- Inspect the septic tank and soak-away before backfilling and obtain approval of the installation.
- Inspect electrical installation before energisation; complete insulation resistance, earth continuity, earth leakage and functional tests.
- Inspect water and sewer installations before concealment/backfilling and record test results.
- Maintain a snag list and close all defects before requesting Practical Completion.
- Submit a quality dossier at handover containing inspection records, test certificates, material approvals, warranties, commissioning records and as-built information.

11 CIVIL WORKS, CONCRETE APRON, AND DISPOSAL OF EXISTING CONTAINER USED AS A GUARD HOUSE

- Remove the existing container and dispose it in compliance with Municipal bylaws and as per instructed by the Dam Water Control from Alfred Duma Local Municipality.
- Prepare and level the site for the guard house, including removal of unsuitable material, trimming and compaction as necessary.
- Provide concrete pads/supports suitable for the prefabricated unit and compatible with the manufacturer's support requirements.
- Provide a reinforced concrete apron around the guard house, minimum 1.0 m wide unless the site layout requires otherwise, sloped away from the building to prevent ponding. Concrete shall be minimum 25 MPa at 28 days and minimum 100 mm thick unless the approved design requires greater thickness.
- Provide all formwork, reinforcement, joints, falls, edge finishing, curing and making good.
- Apron falls shall direct stormwater away from the guard house and away from the septic/soak-away system.

12 SLIDING GATE AND ACCESS CONTROL

- Supply, deliver, and install a heavy-duty, high-security Clearview-style vehicle gate, overall clear opening width 6.0m, finished in a UV-stabilised architectural black powder coating over a hot-dip galvanised anti-corrosion substrate.
-

- Gate Leaf Frame & Bracing: Fabricated from heavy-duty mild steel rectangular hollow sections (RHS), minimum 100mm x 50mm x 3.0mm outer frame, with 50mm x 50mm x 2.0mm internal square hollow section (SHS) vertical and diagonal structural bracing, fully welded and ground smooth.
- Mesh Infill: High-security anti-climb, anti-cut welded wire mesh panels featuring a 76.2mm x 12.7mm aperture with 4mm diameter high-tensile wire, complete with rigidifying horizontal V-bends, securely fixed to the internal gate frame using heavy-duty tamper-proof clamping strips or continuous welding.
- Supporting Posts & Hardware: Minimum 150mm x 150mm x 4.0mm SHS flanged or embedded heavy-duty steel portal and catch posts, including all necessary industrial-grade hardware (heavy-duty double-bearing V-groove tracking wheels, top guide roller brackets with nylon rollers, floor-mounted inverted V-track, safety stop blocks, and receiving catch portal).
- Installation: Rates to include for all necessary concrete foundations (minimum 25 MPa at 28 days), excavation, backfilling, leveling, alignment, and commissioning of the complete gate assembly to ensure perfectly smooth, plumb manual operation (ready for automation interface).
- Gate refurbishment shall be robust, suitable for continuous security use and compatible with the site boundary and driveway.
- Provide one electrically operated gate motor sized for the gate mass and duty cycle, complete with control panel, manual override, safety devices, limit switches, remote controls, mounting plate, cabling and all accessories.
- Provide safety photocells and/or equivalent obstruction detection, warning provisions and emergency/manual release.
- Provide concrete foundations for gate posts and motor/track as required by the manufacturer and approved structural detail.
- Coordinate the gate motor electrical supply with the electrical kiosk and guard-house electrical installation.
- Supply and install one automated boom gate barrier, with a boom arm of not less than 6.0 m or sized to suit the approved entrance arrangement, complete with drive unit, control cabinet, limit switches, manual release, safety photocells/obstruction detection, warning light, remote controls, mounting/foundation, cabling, signage, testing and commissioning. The boom gate shall be coordinated with of the sliding gate, electrical kiosk and access-control arrangement.

13 CONCRETE DRIVEWAY

Provide a new reinforced concrete driveway of total length 12 m serving the 6 m sliding gate, comprising approximately 6 m outside the gate on the approach and 6 m inside the gate. The driveway width shall match the 6 m gate opening and be adjusted locally where required for proper gate operation and edge restraint.

- Strip and prepare the formation, remove unsuitable material, import approved selected fill where required and compact the subgrade.
- Provide suitable subbase/base material compacted to the specified density and proof-roll before concrete placement.
- Provide reinforced concrete pavement, minimum 150 mm thick, 25/30 MPa at 28 days, reinforced with Ref. 617 mesh wire centrally supported on approved spacers/chairs, unless the approved pavement design requires greater thickness or reinforcement.
- Provide all construction joints, isolation joints, edge thickening or other detailing required by the pavement design and gate installation.
- Concrete shall be finished with a uniform broom/tined non-slip finish suitable for vehicle traffic, with neat

formed edges and falls sufficient to prevent ponding.

- Provide curing immediately after finishing in accordance with the concrete specification.
- The driveway shall be tied into the existing approach and internal roadway without creating trip hazards or obstructing drainage.
- Where the sewer pipe crosses beneath the driveway with inadequate cover, provide the specified reinforced concrete protective encasement/sleeve before placing the driveway concrete.
- The completed driveway shall be protected from traffic until adequate concrete strength has been achieved.

14 DRAINAGE AND STORMWATER

- Maintain existing stormwater flow during construction.
- Provide falls to the concrete apron and driveway to prevent standing water.
- No stormwater shall be discharged into the septic tank or soak-away.
- Make good all disturbed surfaces and provide erosion protection where required.

15 INSTALLATION, COMMISSIONING, AND HANDOVER

- The Contractor shall coordinate all trades so that the building, plumbing, electrical, air-conditioning, septic system, gate and driveway are completed as one integrated installation.
- Test all plumbing, electrical, air-conditioning and gate systems before requesting completion inspection.
- Demonstrate operation of lights, socket outlets, geyser, water services, WC, basin, sink, air-conditioner and sliding gate motor to the Employer's Agent.
- Provide operating and maintenance manuals, equipment warranties, manufacturer certificates and recommended maintenance schedules.
- Provide electrical Certificate of Compliance and all required specialist certificates.
- Provide as-built drawings for electrical, water, sewer, septic tank/soak-away and gate electrical/control systems.
- Remove all temporary works, waste, surplus materials and debris and leave the site clean and operational.

16 HEALTH, SAFETY AND ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the Occupational Health and Safety Act, Construction Regulations, the project Health and Safety Specification and applicable environmental requirements. The source project format requires a site-specific Health and Safety File, baseline risk assessment, induction and compliance with relevant legislation.

- Submit and obtain approval of the Health and Safety File before commencement of construction activities.
 - Provide risk assessments and safe work procedures for excavation, lifting/offloading, prefabricated-unit installation, concrete works, electrical work, hot works, gate installation and work around existing services.
 - Use electromagnetic service detection and hand-excavation/trial holes where required before disturbing existing underground services.
 - Protect workers, road users and the public during driveway and gate construction.
-

- Control dust, noise, waste, spills and pollution and maintain a clean working area.
- All incidents and near misses shall be reported and recorded in accordance with the project requirements.

17 EXISTING SERVICES

Before excavation, the Contractor shall establish the location of existing services, liaise with service owners and protect all existing services from damage. The source project specification requires enquiry with landowners/service owners, exploratory hand excavation where necessary, marking of service routes and protection before excavation.

Any damage to existing services caused by the Contractor's operations shall be immediately reported and repaired at the Contractor's cost where attributable to the Contractor.

18 TESTING AND COMMISSIONING REQUIREMENTS

System	Minimum tests / records
Prefabricated building	Dimensional inspection, weather-tightness/visual inspection, doors/windows operation, finishes and snagging record.
Electrical	Insulation resistance, polarity, earth continuity, earth electrode/earth fault loop as applicable, earth-leakage operation, functional tests, DB schedule and Certificate of Compliance.
Water	Pressure/leak test, functional flow test, geyser operation and hot/cold water verification.
Sewer / septic	Pipe integrity, flow test, inspection of falls, septic tank/soak-away inspection before backfill.
Air-conditioning	Functional operation, temperature/control check, condensate drainage and manufacturer commissioning record.
Gate	Motor operation, limits, manual release, obstruction/safety device operation and power isolation.
Concrete	Material records, reinforcement inspection, curing record and concrete test results where specified.

19 WARRANTIES AND DEFECTS

All equipment and workmanship shall carry the manufacturer's warranty or Contractor's workmanship warranty, whichever is applicable and more beneficial to the Employer. The Contractor shall remedy defects attributable to defective materials, workmanship or installation during the applicable defects liability period without additional cost to the Employer.

The prefabricated unit, air-conditioner, geyser, gate motor and other proprietary equipment shall be handed over with original manufacturer warranties and documentation.

20 MEASUREMENT AND PAYMENT

Unless otherwise stated in the Schedule of Quantities, rates shall include all materials, labour, plant, delivery, offloading, lifting, installation, testing, commissioning, wastage, loading and disposal, temporary works, protection, making good, documentation and all incidental work required for a complete installation. The Schedule of Quantities is to be read with the specifications and drawings and that rates include associated work necessary for completion.

5 MANAGEMENT

5.1 Applicable SANS 1921 standards

The following parts of SANS 1921 and associated specification data are applicable:

SANS 1921-1: 2004: Part 1: General engineering and construction works

SANS 1921-6: 2004: Part 6: HIV/AIDS awareness

Specification data associated with SANS 1921-1	
Clause No.	Essential data
4.1.7	There are no requirements for drawings, information and calculations for which the Contractor is responsible.
4.2.1	The responsibility strategy assigned to the Contractor for the works is 'A'.
4.3.1	The programme must conform to clause 1204 'Programme of Work' of the 'Standard Specifications' and clause 5.6 'Programme' of the 'General Conditions of Contract 2015'.
4.3.3	The Contractor must give 24 hours' notice for inspection of work that is to be covered up.
4.7.3	Where applicable, the Contractor is afforded the opportunity of pricing an item to cover costs of unavoidable over-break.
4.12.2	The samples of materials, workmanship and finishes that the Contractor is to provide and deliver to the Employer/Employer's Agent are to be as described in clause 7 'Quality and Related Matters' of the 'General Conditions of Contract 2015'.
4.12.2	The fabrication drawings that the Contractor is to provide to the Employer are: Electrical load diagrams and Entity Relationship Diagrams(ERD).
4.14.5	The Contractor is to provide latrine and ablution facilities as described in Part C 'Environmental Management Plan' in Section C3.3: Particular Specifications of these Project Specifications.
4.14.6	The requirements for the provision and erection of sign boards are as detailed in the 'Example of Contract Signboard Details' in Section C4: Site Information of these Project Specifications.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are described in Section C3.2: Project Specifications.
4.17.3	Services that are known to exist on the site are described in Section C3.2: Project Specifications.
4.17.4	The requirements for detection apparatus for locating underground services are: Electromagnetic locators.
4.18	The additional health and safety requirements are described in Part E 'OHS 1993 Health and Safety Specification' in Section C3.3: Particular Specifications

Specification data associated with SANS 1921-1	
Clause No.	Essential data
	of these Project Specifications.

5.1.1 Additional clauses

5.1.1.1 Site meetings and procedures

Site meetings shall be convened as described in 'Monthly Site Meetings' of the 'Standard Specifications'. The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site memoranda book, a complete set of contract working drawings and a copy of the procurement document, and shall make these available at all reasonable times to all persons concerned with the contract.

5.1.1.2 Water and electricity

The Contractor is to provide water and electricity as described in the 'Standard Specifications'.

Specification data associated with SANS 1921-6	
Clause No.	Essential data
4.2.1(a)	A qualified service provider is one that is an accredited or provisionally accredited training service provider in the HIV/AIDS field. A list of accredited service providers can be obtained from the Construction SETA (CETA) (tel. 011 265 5900), Health and Welfare SETA (HWSETA) (011 622 6852) or on the Health and Welfare SETA website: www.hwseta.org.za .
4.2.1(a)	The HIV/AIDS awareness programme is to be repeated at four monthly intervals throughout the duration of the contract.

5.1.2 Additional clauses

The duration of each workshop shall not be less than 2½ hours.

5.2 Recording of weather

The Contractor shall erect a rain gauge and record the rainfall as described in the 'Standard Specifications'. This information together with other details of the prevailing weather conditions shall be recorded in the daily site diary.

5.3 Unauthorised persons

The Contractor shall keep unauthorised persons away from the Works at all times. Under no circumstances may the Contractor's personnel be accommodated on the site.

5.4 Management meetings

Management meetings are to be held weekly at a time convenient to all concerned, to discuss planning

and health and safety amongst other things. Attendance by the Contractor's and the Employer's Agent's Representatives on site is mandatory, and attendance by other interested parties will be by invitation.

5.5 Forms for contract administration

The Employer's Agent's Representative will provide standard forms for 'Site Diary', 'Site Memoranda', 'Requests for Inspection' and any others deemed to be necessary during the contract. The Contractor is to provide two copies of GCC Construction Works 2015 and SANS 2001 Construction Works.

5.6 Electronic payments

Payments of approved payment claims will be made electronically upon submission of the Contractor's banking details.

5.7 Daily records

A site diary is to be compiled jointly by the Contractor's and the Employer's Agent's Representatives on site and is to be agreed and signed by both parties. The original signed copy is to be retained by the Employer's Agent's Representative.

The Contractor is to keep daily records of people and equipment on site in a format to be agreed by the Employer's Agent's Representative, and is to provide copies to the Employer's Agent's Representative when requested.

5.8 Payment certificates

Details of measurements, proof of payment for items contained in provisional sums, proof of ownership of materials on site and documentation pertaining to contract price adjustment and special materials, are required as substantiation of claims for payment. No payments will be made for materials on site and price adjustment.

5.9 Permits

No security/entrance permits are required by the Contractor's personnel to enter the site.

5.10 Proof of compliance with the law

There are no requirements for the Contractor to verify compliance with any legislation.

SITE INSPECTION CERTIFICATE

This is to certify that I, _____

Representative of (Tenderer) _____

Affiliation with Contractor (proof of Technical representative's affiliation with the Contractor required)

Of (address) _____

Telephone No: _____

In the company of (Engineer) _____

Visited the site on _____

Having previously studied the documents, I carefully examined the site and equipment. I have made myself familiar with all the equipment likely to influence the work and the cost thereof.

I further certify that I am satisfied with the description of the work and the explanations given by the Engineer and I understand perfectly the work to be done, as specified and implied, in the execution of this Contract.

Signed on behalf of the Tenderer

(PRINT NAME AND SIGNATURE)

Engineer / DWS Representative

(PRINT NAME AND SIGNATURE)

Witness (PRINT NAME AND SIGNATURE)

C3.3: PARTICULAR SPECIFICATIONS

In addition to the Standard Specifications and the Project Specifications, the following Particular Specifications shall apply to this contract and are bound in hereafter:

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

PART D: DAYWORK

PART E: DEPARTMENT OF WATER AND SANITATION HEALTH AND SAFETY SPECIFICATION

3.3 PARTICULAR SPECIFICATIONS

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

C.1 General

In order to ensure that the construction work is carried out in an environmentally sensitive manner, strict compliance with the Environmental Management Plan (EMP) guidelines is required. The purpose of the EMP is to:

- Encourage good management practices through planning and commitment to environmental issues,
- Provide rational and practical environmental guidelines to:
 - i. Minimize disturbance of the natural environment,
 - ii. Prevent pollution of land, air and water,
 - iii. Prevent soil erosion and facilitate re-vegetation.
- Adopt the best practicable means available to prevent or minimise adverse environmental impact,
- Develop waste management practices based on prevention, minimisation, recycling, treatment or disposal of wastes,
- Train employees and contractors with regard to environmental obligations.

C.2 Training and Induction of Employees

- The Contractor has a responsibility to ensure that all those people involved in the project are aware of and familiar with the environmental requirements for the project (this includes subcontractors, casual labour, etc.). The EMP shall be part of the terms of reference for all contractors, subcontractors and suppliers.

C.3 Complaints Register and Environmental Incident Book

Any complaints received by the project team from the public will be recorded. The complaint should be brought to the attention of the Construction Manager, who will respond.

The following information must be recorded:

- Time, date and nature of the complaint,
- Type of communication (telephone, letter, etc.),
- Name, contact address and telephone number of the complainant,
- Response and investigation undertaken and
- Actions taken and by whom.

All complaints received will be investigated and a response given to the complainant within 14 days.

All environmental incidents occurring on the site will be recorded. The following information will be provided:

- Time, date, location and nature of the incident,
- Actions taken and by whom.

C.4 Site Cleanliness and Neatness

- Location of a construction camp is to be approved by the Employer's Agent and is to be restored to its previous condition after completion of construction.
 - The construction camp should preferably be fenced with a 1.8m Bonnox fence or similar approved.
 - All materials, equipment, plant and vehicles must be stored within the construction camp.
 - A dedicated area must be made available for construction staff to change and store their personal belongings.
-

C.5 Access

- Access to existing roads, schools, buildings, shops and residential properties must not be impeded during construction.
- Access roads utilised by the Contractor must be maintained in good condition.

C.6 Dust Control / Air Quality

- Dust suppression measures must be implemented during construction by ensuring that all surfaces prone to dust generation are kept damp (e.g. use of water tanker).
- Ensure that vehicles and equipment are in good working condition and that emissions are not excessive.
- Special care must be taken in areas where the route passes close to schools and residential areas.
- The speed of construction vehicles must be reduced.

C.7 Fauna

- Contractors and subcontractors staff and workers may not chase, catch or kill animals encountered during construction.

C.8 Fire Prevention and Control

- Smoking is prohibited in the vicinity of flammable substances.
- The Contractor must ensure that fire-fighting equipment is available on site, particularly where flammable substances are being stored or used, and that construction staff are aware of where it is kept and how it is operated.
- Fires started for comfort (warmth) are prohibited, due to the risk of veld fires and risk to adjacent property owners' lands.

C.9 Grave Sites

- Gravesites in close proximity to the site must not be disturbed during construction.

C.10 Materials Handling and Spills Management

- Any hazardous materials to be used during construction (e.g. lime, fuel, paint, etc.) are to be stored in a designated area at the campsite.
 - The storage containers/facilities (including any diesel/petrol tanks) must be placed on an impermeable surface and surrounded by a bund wall, in order to ensure that accidental spillage does not pollute the environment.
 - Workers must at all times be made aware of the health and safety risks associated with any hazardous substances used (e.g. smoking near fuel tanks), and must be provided with appropriate protective clothing/equipment in case of spillages or accidents.
 - Ensure all staff and contractors undergo relevant training in the maintenance of equipment to prevent the accidental discharge or spill of fuel, oil, lubricants and other chemicals.
 - Any spill of potentially hazardous materials must be cleaned up immediately (Potentially hazardous materials on site include paint, oil, grease, fuel, turpentine, etc.).
 - The area of contaminated soil or spill must be deposited into the hazardous waste container(s).
-

- The Contractor should keep Peat Sorb or a similar absorbent on site to clean up any spills. The absorbent must be stored in a designated area and be available for inspection.
- All spills are to be recorded in the environmental incident book.

C.11 Noise

- Noise generating activities must be restricted to between 07h00 and 17h00 Monday to Friday, unless otherwise approved by the appropriate competent person in consultation with adjacent landowners/affected persons.
- All equipment, vehicles and machinery must be in good working condition and be equipped with sound mufflers if necessary.
- Construction staff must be trained and made aware of not creating unnecessary noise such as hooting and shouting.

C.12 Pollution Control

- Soil and water pollution through usage of fuel, oil, paint, bitumen or other hazardous substances must be avoided.
- All construction vehicles are to be maintained in good working order so as to prevent soil or water pollution from oil, fuel or other leaks, and to reduce noise pollution.

C.13 Rivers and Streams

- During construction of bridge structures, there must be no obstruction of the water flow of rivers and streams.
- Excavated material must not be stockpiled on or near riverbanks, in order to prevent sedimentation occurring.
- Erosion control measures must be employed both during and after construction.
- No impediments to natural surface water flow, other than approved erosion control measures, must occur.

C.14 Safety

- Safety measures, such as detour signs, must be implemented during construction to ensure the safety of workers, pedestrians and drivers/passengers in vehicles in the vicinity of construction work.
- Special care must be taken in the vicinity of schools to ensure the safety of children wishing to cross the road under construction.
- The relevant signage (e.g. speed control signs) must be erected alongside the road during the operation phase in order to control traffic.
- Accommodation must be made for pedestrian pathways alongside the road during the construction and operation phases.

C.15 Soil Management

- Storm water drainage pipes must be installed alongside the road in all areas susceptible to soil erosion.
- Erosion should be minimised by the construction of meadow drains and the planting of indigenous vegetation on the side slopes and drains to reduce flow velocity of storm water.
- Spoil from cuts may be used in existing erosion gullies.
- Stone pitching and gabions should be constructed at pipe culvert outlets.
- Accidental spills of contaminants onto the ground e.g. oil, concrete, fuel and chemicals should be removed together with the contaminated soil.
- If necessary an absorbent such as Peat Sorb should be used to aid in cleaning up the spill. The contaminated soil should be disposed of in an appropriate container, depending on its classification.
- Servicing and refuelling of vehicles must only be carried out at the construction camp.

C.16 Worker Conduct

Code of Conduct for Construction Personnel:

- Do not leave the construction site untidy and strewn with rubbish which will attract animal pests.
- Do not set fires.
- Do not cause any unnecessary, disturbing noise at the construction camp/site or at any designated worker collection/drop off points.
- Do not drive a construction-related vehicle under the influence of alcohol.
- Do not exceed the national speed limits on public roads or exceed the recommended speed limits on the site.
- Do not drive a vehicle which is generating excessive noise or gaseous pollution (noisy vehicles must be reported and repaired as soon as possible).
- Do not litter along the roadsides, including both the public and private roads.
- Do not pollute any water bodies (whether flowing or not).
- No member of the construction team is allowed to enter the areas outside the construction site.

C.17 Traffic Disturbances and Diversions

- Any traffic diversions must be undertaken with the approval of all relevant authorities and in accordance with all relevant legislation.
- Wherever possible, traffic diversion must only take place on existing disturbed areas and remain within the existing road reserve.
- Traffic diversion routes must be rehabilitated after use.

C.18 Vegetation

- Only vegetation falling directly on the route must be removed where necessary.
- Alien vegetation within the road reserve must be eradicated, and management measures must be implemented for future control of these species.
- Vegetation that has been removed from large areas (e.g. on traffic diversion routes) during construction must be replaced with indigenous vegetation after construction has been completed.

C.19 Waste Management

- All general, non-hazardous waste must be placed in a skip container and disposed of at a registered waste disposal site.
- The Contractor is to ensure that the portable toilet facilities at the campsite are properly maintained and in working order.
- No disposal, or leakage, of sewage must occur on or near the site.
- All hazardous waste (e.g. oil, paint, empty lime bags, contaminated wash water, etc.) must be stored in leakproof containers and disposed of at a registered hazardous waste disposal site.
- The contents of waste storage containers must, under no circumstances, be emptied to the surrounding area. In general, littering, discarding or burying of any materials is not allowed on site or along the route.
- Adequate waste receptacles must be available at strategic points around the construction camp and site for all domestic refuse and to minimise the occurrence of littering.
- Concrete rubble must be collected and disposed of as directed by the Employer's Agent.
- Each working area must be cleared of litter and building waste (e.g. rubble, wood, concrete packets, etc.) on completion of the day's work.
- Any spill around the container(s) should be treated as per Section C.11 and C.16.

•

3.3 PARTICULAR SPECIFICATIONS

PART D: DAYWORK

PART D: DAYWORK

This part of the Particular Specifications deals with the provision for daywork in the Schedule of Quantities. Rates for daywork shall be entered in the Schedule of Quantities in accordance with the following specifications.

D1. SCOPE

According to Clause 6.5 of the General Conditions of Contract 2015, certain work may be carried out using rates tendered in the daywork schedule. A schedule of personnel, plant and equipment which may be necessary to perform work on a daywork basis is included in the Schedule of Quantities. The quantities used in the Schedule of Quantities are for quotation evaluation purposes only and the use or not of these items shall not constitute a variation in terms of Clause 6.3 of the General Conditions of Contract 2015.

No work will be paid for as daywork without the written instruction or approval of the Employer's Agent.

D2. TYPE OF WORK

The Employer's Agent may order daywork in certain cases where it is necessary to vary or to extend the works due to new or unforeseen circumstances to such an extent that the tendered rates for specific items of work are no longer applicable, or where no suitable combination of tendered rates can be used to pay for such work.

As a general rule, applicable rates for additional work items will be agreed between the Contractor and the Employer's Agent. Daywork will only be used in exceptional circumstances.

D3. MATERIALS

Materials for use in works carried out under daywork shall be purchased by the Contractor who shall also arrange for delivery to site, and shall be responsible for any other requirements associated with specific materials. A Provisional Sum has been allowed in Section D of the Schedule of Quantities for daywork materials. The Contractor shall enter a tendered percentage in the Schedule of Quantities to cover his handling costs and profit, as per other provisional and prime cost sums in this Contract.

Materials shall be paid for using the method described in C2.1, 'Pricing Instructions'. No contract price adjustment will be applicable to materials.

The Contractor shall submit proof of ownership for any materials used in daywork with his daywork claim to the Employer's Agent. Further, if specific materials are required for daywork, quotations will be called for as per Clause 6.5.2 of the General Conditions of Contract 2015.

D4. CONSTRUCTION PLANT HIRE

Where daywork is ordered, the tendered rates for plant hire in Section D of the Schedule of Quantities shall be used in calculating the payment due for any plant required to execute the daywork. If no rate is included in the Schedule of Quantities for a particular piece of equipment, and where no other rate or combination of rates would provide suitable compensation, then the daywork method of payment described in Clause 6.5.1.3 of the General Conditions of Contract 2015 will be used.

The tendered rates for each item of constructional plant shall include for all operating costs associated with the said item of plant. Such costs are deemed to include fuel, re-fuelling costs, lubrication and routine servicing / maintenance, breakdowns and spares, all overhead costs, site management costs and administration costs. The tendered rates shall also include the plant operator and the general supervision of the plant while it is engaged in the daywork.

D5. SALARIES AND WAGES OF WORKMEN

The salaries and wages of workmen executing daywork shall be paid for using the tendered rates in the Schedule of Quantities. The tendered rates shall include for all costs associated with the employment of personnel, including salaries, wages, allowances, workmen's compensation, medical aid and pension

contributions, government levies and taxes, training costs and any costs associated with living on the site. The tendered rates shall also include for the transportation of the workmen to the site of the daywork.

All overhead costs, administration costs, site management costs and the Contractor's profit are deemed to be covered by the daywork rates and no additions or mark ups will be made to the tendered rates.

The tendered rates shall also include any hand tools normally associated with the workmen's job description e.g. picks, shovels, hammers, saws, spirit levels, etc. The tendered rate for labourers shall also include for the casual supervision by a gang boss or foreman. Only when specifically called for by the Employer's Agent, will payment be made for the use of a gang boss or foreman supervising on a continuous basis.

D6. MEASUREMENT AND PAYMENT

The following principles shall also apply to the measurement and payment of daywork.

The unit of measurement for plant shall be the number of Vibroclock hours worked and each item of plant shall be fitted with a Vibroclock, the cost of which shall be included in the rates. Excessive non-productive time when the engine is idling will not be paid for. Where there is ambiguity between the flywheel horsepower and mass of the machine, the flywheel horsepower shall govern the measurement category. Where width and mass are specified, mass shall govern the measurement category.

The Contractor's attention is drawn to the requirements of Clauses 6.5.3 and 6.5.4 of the General Conditions of Contract 2015 with regard to the submission of daywork claims.

C3.3 PARTICULAR SPECIFICATIONS

**PART E: DEPARTMENT OF WATER AND SANITATION HEALTH AND SAFETY
SPECIFICATION**

PART E: DEPARTMENT OF WATER AND SANITATION HEALTH AND SAFETY SPECIFICATION

Prepared In Accordance With: Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations, 2014

E1. INTRODUCTION

This Health and Safety Specification is a legal requirement in terms of the Construction Regulations of the Occupational Health and Safety Act (85 of 1993). It forms part of the tender and contract documentation for the project: Qedusizi dam guard house, undertaken by the Department of Water and Sanitation (DWS).

E2. PROJECT OVERVIEW

Location: Qedusizi dam, 28°32'38.18"S 29°44'53.30"E

Scope of Work:

- Design, manufacture, supply, delivery, installation, testing and commissioning of a prefabricated guard house.
- Supply, delivery and installation of septic tank system complete with soak away.
- Installation of water services and electrical services.
- Supply a new gate, including gate track, and supporting posts and fencing.
- Supply and installation heavy duty electrical operator for the gate.
- Commissioning works.

E3. LEGAL FRAMEWORK

The Principal Contractor and all subcontractors must comply with:

- Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
- Construction Regulations, 2014
- SANS Codes of Practice
- National Environmental Management Act (NEMA), where applicable

E4. CLIENT'S REQUIREMENTS

The following are mandatory:

- Appointment of a competent contractor
- Development and submission of a baseline risk assessment
- approval of a site-specific Health and Safety File
- Compilation of an Environmental Management Plan (EMP) aligned to DWS protocols
- Induction training for all site personnel
- Ensure compliance with relevant legislation

E5. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The appointed Health and Safety Officer shall:

- Identify potential hazards (e.g., Contact underground services, crane and lifting operations, manual handling, slips and trips, biological hazards, equipment use)
- Develop control measures for each risk
- Implement safe work procedures for:
 - Site clearance and preparation
 - Construction of concrete foundations and floor slab
 - Supply, fabrication and erection of steel structure
 - Installation of roof and side cladding
 - Installation of roller shutter and personnel doors
 - Electrical and lighting installations
 - Perimeter apron and stormwater management
 - Final finishing, painting and site reinstatement.

E6. HEALTH AND SAFETY FILE REQUIREMENTS

The Principal Contractor must prepare a file that addresses (File index attached):

- Access control to the site
- Safe work procedures
- PPE requirements (life jackets, gloves, boots, eye protection, etc.)
- First aid and emergency response procedures
- Safe handling and use of tools and machinery
- Environmental protection measures (erosion control, habitat preservation)
- Waste management procedures

E7. SAFETY EQUIPMENT AND PPE

All personnel must be provided with and must wear:

Personal Safety equipment as per task specific risk assessment.

E8. TRAINING AND COMPETENCY

- Only competent persons shall perform hazardous work.
- Operators of excavators and brush cutters must be trained and certified.
- Induction training shall cover:
 - Project-specific hazards
 - Emergency procedures
 - Use of PSE
 - Incident reporting

E9. INCIDENT REPORTING AND RECORD KEEPING

- All incidents, including near misses, must be reported to the DWS representative within 24 hours.
- A site incident register must be maintained.
- The contractor shall conduct investigations and submit reports.

E10. EMERGENCY PREPAREDNESS

The site Health and Safety Plan must include:

- Emergency contact numbers
- Evacuation routes and assembly points
- Procedures for drowning, injury, and environmental spillages
- Provision of fully stocked first aid kits

E11. SITE RULES AND SIGNAGE

- Adequate warning and information signage must be posted.
- Smoking and alcohol consumption on site is prohibited.
- Unauthorized access to the site must be prevented.

E12. MONITORING AND COMPLIANCE

- DWS or its appointed agent reserves the right to:
- Audit the site at any time
- Stop unsafe work
- Enforce penalties for non-compliance

E13. CLOSE-OUT REQUIREMENTS

Upon completion:

- Submit a Health and Safety File containing:
- All inspection reports
- Incident logs
- Training records
- Signed handover and demobilization checklists

E14. SHE FILE INDEX

1.	SERVICE PROVIDER APPOINTMENT AND MANDATORY AGREEMENT (37.2)
2.	CONTACT DETAILS, EMERGENCY NUMBERS,
3.	LETTER OF GOOD STANDING (COIDA)
4.	PUBLIC LIABILITY INSURANCE
5.	SHE POLICY
6.	HEALTH AND SAFETY PLAN
7.	ORGANOGRAM (INDICATING SUPERVISOR AND FIRST AIDER),
8.	LEGAL APPOINTMENTS CVs AND COMPETENCIES
9.	VALID MEDICAL CERTIFICATES OF FITNESS, AND ID COPIES
10.	ENVIRONMENTAL MANAGEMENT PLAN
11.	WASTE MANAGEMENT PLAN
12.	EMERGENCY PREPAREDNESS PLAN
13.	SAFE WORKING PROCEDURES/METHOD STATEMENTS
14.	RISK ASSESSMENTS
15.	INCIDENT REPORTING PROCEDURE AND FORMS

16.	EQUIPMENT REGISTER
17.	TOOLBOX TALKS
18.	EQUIPMENT CHECKLISTS
19.	INDUCTION TRAINING
20.	OSHA

 water & sanitation Department: Water and Sanitation REPUBLIC OF SOUTH AFRICA	WATER RESOURCES INFRASTRUCTURE OPERATION AND MAINTENANCE		
	EASTERN OPERATIONS		
		Reference Number	
		Implementation Date From:	
		Implementation Date to:	

NO :	TASK OR STEP OR PROCESS	HAZARD OR RISK RELATED	RISK WITH CONSEQUENCE	RAW OR INITIAL RISK			CURRENT CONTROLS	RESIDUAL RISK			ADDITIONA L CONTROLS
				CONSEQUENCE	LIKELIHOOD	RISK RATING		CONSEQUENCE	LIKELIHOOD	RISK RATING	
	Break down project or overall activity as per methodology.	Hazard: conditions or behaviours which can, or have the potential to cause injury or harm. (quantify the hazard, consider existing and potential conditions and behaviours).	Risk: Chance of an injury, illness or damage occurring. (what can go wrong, how can people be injured, how can people become ill).				CONSIDER: Substitution, engineering and administrative controls. <i>NB: PPE is always the last resort</i>				PPE required or to be utilised.
1	Site establishment	Trips, falls, equipment mishandling	Injuries to personnel	3	D	14H	Safety induction, demarcated paths, housekeeping	2	B	5L	PPE (safety boots, helmets, hi-vis)
2	Excavation for foundations and trenches	Excavation collapse	Worker buried, serious injury	5	D	20H	Shoring/benching, safe work method	3	B	8M	PPE (hard hats, harness if edge work)

		Striking underground services	Electrocution, flooding, service disruption	5	D	20H	Wayleaves, cable detection, trial holes	3	C	11M	Supervision by service providers, insulated tools
3	Concrete poring	Cement handling	Chemical burns, respiratory issues	4	C	13M	PPE (gloves, masks), safe handling	2	B	5L	Training on MSDS, barrier creams
4	Manufacture, supply, delivery, installation, testing and commissioning of a prefabricated guard house.	Sharp edges, grinding sparks, hot work	Cuts, burns, eye injury	4	C	13M	Trained welders; work in designated area	2	B	5L	Gloves, face shield, aprons
5	Supply, delivery and installation of septic tank system complete with soak away.	Working on sloped surface, slip and fall	Serious injury or fatality	5	D	20H	Roof lifeline, safety harness, edge protection	1	C	4L	No work during high wind/rain
6	Refurbishment of the existing gate, including gate track, and supporting posts	Falling panels, pinching during lifting	Back injury, crushed fingers	3	D	14M	Team lifting, use of lifting equipment, gloves	2	B	5L	Supervisor presence during installation
7	Electrical and lighting installations	Live cable termination	Electrocution, arc flash	3	D	17H	Lock-out/tag-out (LOTO), insulated tools	2	C	8M	Permit-to-work, arc flash PPE

8	Backfilling and compaction	Plant movement, poor compaction	Struck-by equipment, later settlement	4	C	1 3M	Spotters, plant operators certified	2	B	5L	PPE (hi-vis vests, boots)
9	Working at height (Assembly)	Falls from height	Major injury or fatality	5	D	20H	Safety harnesses, fall arrest, permits	3	B	9M	PPE (harness, lanyard, helmets)

				LIKELIHOOD OF EVENT				
				A - Rare	B - Unlikely	C - Possible	D - Likely	E - Almost Certain
				Very unlikely to happen	Unlikely to happen	Possibly could happen	Likely to happen	Very likely to happen
CONSEQUENCE	5 - Catastrophic	Health Multiple fatalities because of an occupational disease	Safety Multiple fatalities	15 (M)	19 (H)	22 (H)	24 (H)	25 (H)
	4 – Major	Fatality or multiple irreversible occupational disease cases	Fatality or several disabling injuries	10 (M)	14 (M)	18 (H)	21 (H)	23 (H)
	3 – Moderate	Irreversible occupational disease	Serious disabling injury	6 (L)	9 (M)	13 (M)	17 (H)	20 (H)
	2 – Minor	Reversible occupational illness	Minor injury that requires medical treatment other than first aid	3 (L)	5 (L)	8 (M)	12 (M)	16 (M)
	1 - Negligible	Over exposure and or an irritant effect.	First aid injury	1 (L)	2 (L)	4 (L)	7 (M)	11 (M)

To: The Provincial Director, Department of Labour,

ANNEXURE 2

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(Regulation 4 of the Construction Regulations, 2014)**

NOTIFICATION OF CONSTRUCTION WORK

1. (a) Name and postal address of Contractor:
.....
 - (b) Name and telephone number of Contractor's contact person:
.....
 2. Contractor's compensation registration number:
.....
 3. (a) Name and postal address of Employer:
.....
.....
 - (b) Name and telephone number of Employer's contact person or agent:
.....
 4. (a) Name and postal address of designer(s) for the project:
.....
.....
 - (b) Name and telephone number of designer's(s') contact person(s):
.....
.....
 5. Name and telephone number of Contractor's Construction Manager on site appointed in terms of regulation 8(1):
.....
 6. Name(s) of Contractor's assistant construction manager(s) on site appointed in terms of regulation 8(2):
.....
.....
.....
-

ANNEXURE 2 - Continued

7. Exact physical address of the construction site or site office:

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

8. Nature of the construction work:

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

9. Expected commencement date:

10. Expected completion date:

11. Estimated maximum number of persons on the construction site:

Total: Male: Female:

12. Planned number of subcontractors on the construction site accountable to Contractor:

.....

13. Name(s) of subcontractors already selected:

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

Contractor

Date

Employer's Agent (where applicable)

Date

Employer

Date

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.
-

C4: SITE INFORMATION

TABLE OF CONTENTS

C4.1	LOCALITY PLAN
C4.2	EXISTING SERVICES INFORMATION.....
C4.3	DRAWINGS.....

C4.1 LOCALITY PLAN



C4.2 EXISTING SERVICES INFORMATION

1. Location of services

Prior to commencing construction activities in a particular area, the Contractor shall diligently enquire of local landowners as to whether there are any known services which have not been shown on the drawings but which may be affected by the construction activities in that area, and any such services shall be brought to the attention of the Engineer immediately. Exploratory hand excavation trenching work shall be carried out where necessary to establish the exact position of buried services.

2. Liaison with service owner

Immediately after the site has been handed over and prior to the commencement of any construction work on the site, the Contractor shall arrange a meeting with the relevant authorities to establish the exact location of the various services affected, to plan the necessary services relocations and to obtain contact details for the municipality's technical and emergency staff.

The contractor shall thereafter arrange regular planning meetings with the service owners until such time as the services have been relocated and commissioned and the existing services uplifted and removed.

3. Protection of existing services

Immediately after the site has been handed over and prior to the commencement of any construction work on the site, the Contractor shall establish markers at 20m centres or closer where necessary, clearly delineating the route traversed by the sewer and water supply pipelines within the construction site. The routes thus marked shall be confirmed by the service owner.

Excavation operations shall commence only after the existing services within or in the near vicinity of the excavations have been suitably protected against damage. This will be particularly important in the vicinity of the existing sewer and water pipeline crossing points where the box culvert crosses below or above the existing service respectively and where excavation methods other than blasting will be required if such excavation is to be attempted prior to the services relocation. The Contractor shall note that the existing sewer pipeline is raised above ground level where it currently crosses the box culvert alignment.

The Contractor shall take particular care when carrying out blasting, pneumatic or mechanical breaking, and general excavation operations in the vicinity of the services, and subcontractors, foremen and plant operators shall be fully briefed on precautionary measures to be taken before excavation commences in these areas.

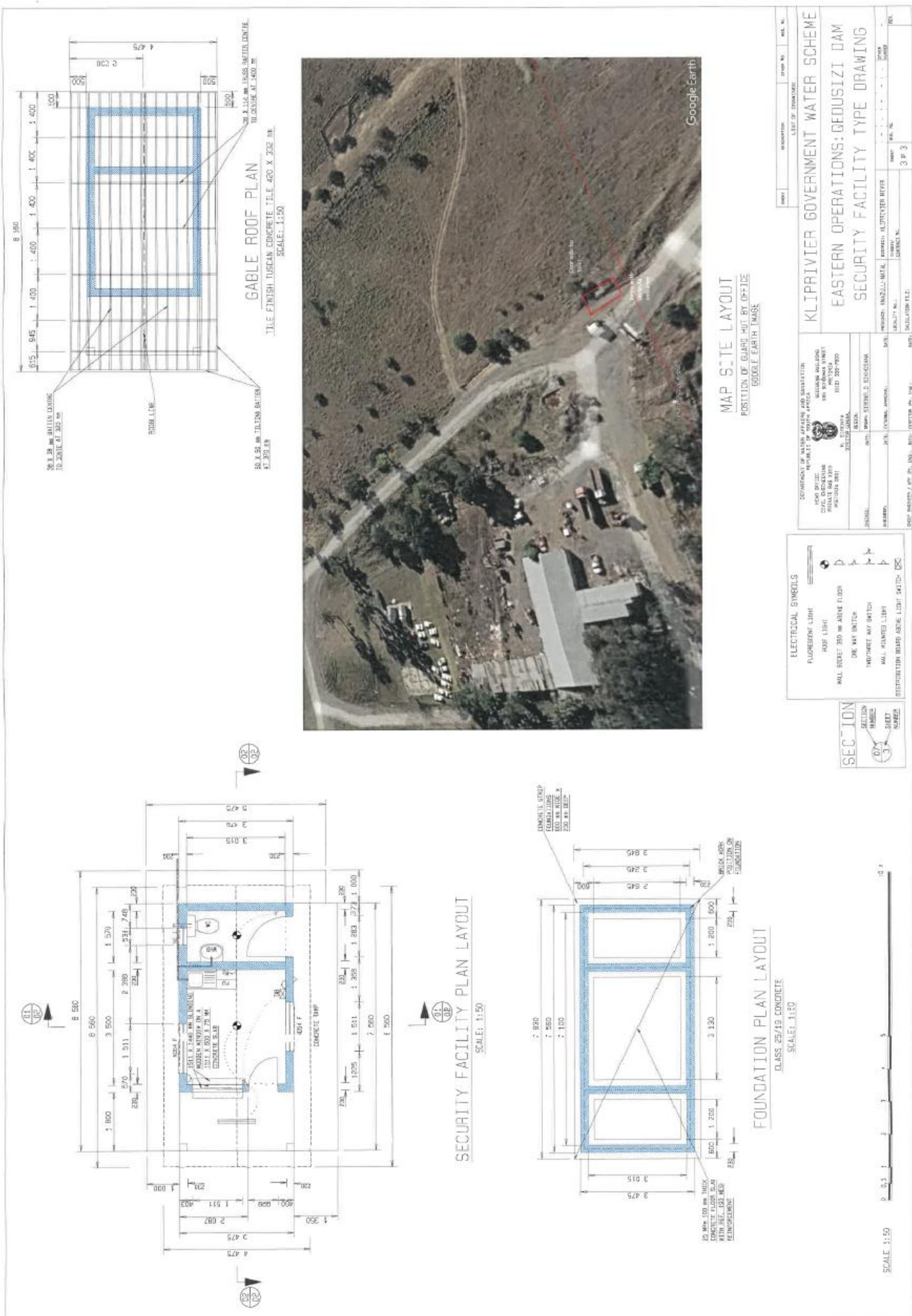
4. Relocation of services

The electricity and telephone services which might need to be relocated, will be undertaken by the relevant service owners. The Contractor is to assist and organise the relocations, to minimise any delays in the construction. Any water relocations will be undertaken by the Contractor in association with the relevant water authority.

5. Payment for the services relocation work

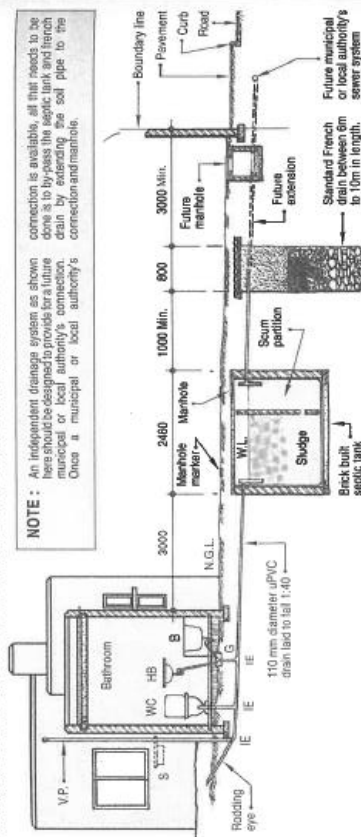
A provisional sum has been provided under Establishment in the Schedule of Quantities to cover the cost of the services relocation work.

C4.3 DRAWINGS

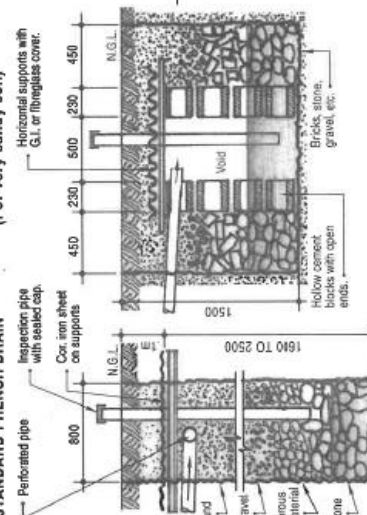


SECTIONAL ELEVATION SHOWING A TYPICAL SEPTIC TANK & FRENCH DRAIN INSTALLATION

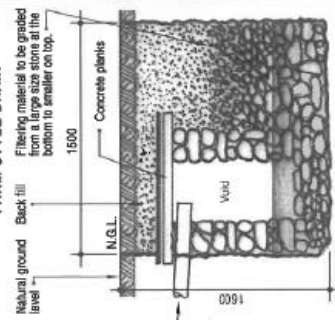
NOTE: An independent drainage system as shown here should be designed to provide for a future municipal or local authority's connection. Once a municipal or local authority's connection is available, all that needs to be done is to by-pass the septic tank and trench drain by extending the soil pipe to the connection and manhole.



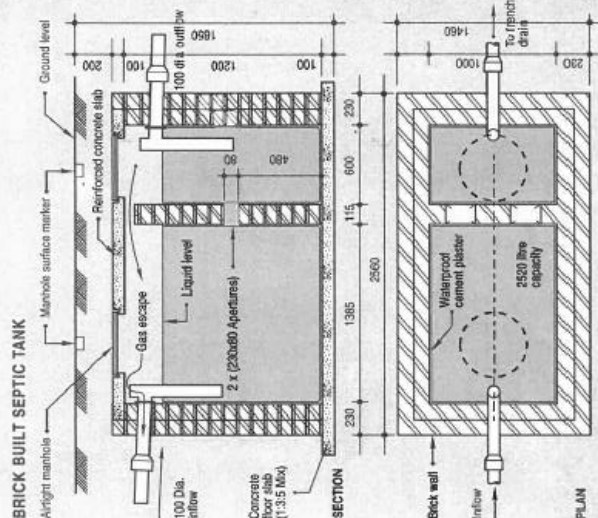
SECTION SOAK-AWAY PIT
(For very sandy soil)



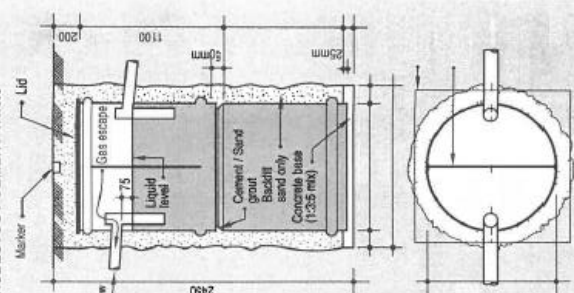
SECTION SOAK-AWAY PIT
(For very sandy soil)



BRICK BUILT SEPTIC TANK

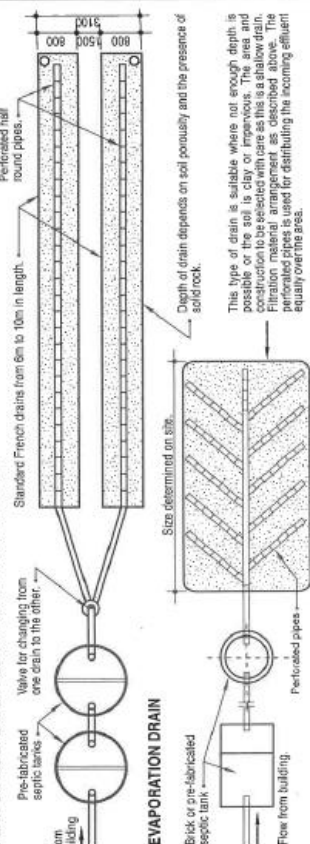


ASBESTOS / CEMENT TANK



Min 6
8
10
12
16 to 20

PLAN ON INDEPENDENT SEWERAGE DISPOSAL LAYOUT



This type of drain is suitable where not enough depth is possible or the soil is clay or impervious. The area and construction to be selected with care as this is a shallow drain. Filtration material arrangement as described above. The perforated pipes is used for distributing the incoming effluent equally over the area.

- 1.1. General
- 1.2. Tank constructed from Polyethylene.
- 1.3. The HSEPS is to be installed in a location that will not cause a nuisance, obstruct fire access, cannot be vandalised or be damaged by vehicles.
- 1.4. The HSEPS must have ease of access to pumpout point for maintenance.
2. Installation below ground
- 2.1. Non standard installations require Halgan approval.
- 2.2. Any excavation exceeding 1.5 metres in depth shall comply with the construction safety acts and regulations before backfilling.
- 2.3. The HSEPS must be filled with water prior to backfilling.
- 2.4. Riser heights greater than 900mm require Halgan approval.
3. Excavation dimensions
- 3.1. The excavated hole width shall be kept as narrow as practicable. The depth shall not be greater than 1500mm more than the required depth.
- 3.2. Formation above is required at the sides of tank.
4. Overlays
- 4.1. Where an excavation has been made deeper than required, the excess depth shall be filled either with 4.1 sand and cement compacted to achieve 98% compaction or concrete.
5. Bedding Backfill
- 5.1. The bedding backfill material shall be Blue Metal granular material up to 10mm diameter.
- 5.2. The bedding backfill shall be minimum 75mm thick.
- 5.3. The bedding backfill shall be thoroughly compacted by tamping.
- 5.4. The bedding backfill material shall encase the whole tank.
- 5.5. Foreign material such as builder's waste, bricks, and concrete shall not be used as backfill.
- 5.6. The backfill shall be compacted to restore the excavated hole as near as practicable to the normal ground.
7. Water Installation Areas
- 7.1. Charged ground subject to flooding & groundwater is only permitted when the level of water does not exceed the height of the installed tank. If the tank is installed in a charged area, the installation is only permitted if the tank is installed on a raised concrete slab. The tank must have sufficient drainage underneath the body of the tank.

HDPE PARTITION BAFFLE DETAIL

HALGAN ENVIRONMENTAL™ HSEPS 6000 SEPTIC TANK DIMENSIONS					
DIMENSIONS DO NOT INCLUDE PIPEWORK OR ACCESS LIDS					
MODEL	HEIGHT	WIDTH	LENGTH	VOLUME	WEIGHT
HSEPS6000	2480mm	1650mm	3950mm	6000L	459KG

^a Height dimension includes 300mm riser and 300mm adaptor.
^b Connection plate not considered in dimensions.

* Connection pipes not considered in dimensions



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Existing Structures



Proposed New Structure

