



SEKHUKHUNE
District Municipality

Private Bag X8611 Groblersdal 0470, 3 West Street Groblersdal 0470
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E-Mail : sekinfo@sekhukhune.co.za

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION FOR KUTULLO/ STEELPORT PARK - CONTRACT J

Reference no: SK8/3/1-07/2022/23

A Tender for Category 7CE or higher CIDB Registered Contractors

JUNE 2022

ISSUED BY: Sekhukhune District Municipality Private Bag X8611 Groblersdal 0470 Contact Person: Mr Voster Masemola Supply Chain Management Telephone: 013 262 7656	PREPARED BY: HWA Engineers & Project Managers P.O Box 3472 Polokwane 0700 Tel: 015 297 5906 Fax: 086 246 0744 Email: admin@hwaeng.co.za
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Registered Name of Bidder:	
Trading Name of Bidder:	
Registration No. of Entity:	
Postal Address of Bidder:	
Contact Person:	
Tel. No:	E-mail Address:
Cell No.	Fax No:
CIDB CRS Number(s):	
Tender Amount	
 EXPANDED PUBLIC WORKS PROGRAMME Creating opportunities towards human fulfilment	 mig Municipality Infrastructure Grant

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J**

DESCRIPTION		COLOUR
<u>PORTION 1: TENDER</u>		
PART T1	TENDERING PROCEDURES	
	T1.1 TENDER NOTICE AND INVITATION TO TENDER	White
	T1.2 TENDER DATA	Pink
	T1.3 STANDARD CONDITIONS OF TENDER	Pink
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<u>PORTION 2: CONTRACT</u>		
PART C1	AGREEMENTS AND CONTRACT DATA	
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	C1.2 CONTRACT DATA	Yellow
	C1.3 FORM OF GUARANTEE	Yellow
	C1.4 SAFETY AGREEMENT	Yellow
	C1.5 AGREEMENT WITH ADJUDICATORS	Yellow
PART C2	PRICING DATA	
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<u>PORTION 3: SCOPE OF WORK</u>		
PART C3	SCOPE OF WORK	
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	C3.2 ENGINEERING	Pale Blue
	C3.3 PROCUREMENT	Pale Blue
	C3.4 CONSTRUCTION	Pale Blue
	C3.5 MANAGEMENT	Pale Blue
	C3.6 PARTICULAR SPECIFICATIONS AND ADDITIONS TO THE STANDARD SPECIFICATIONS	Pale Blue
	C3.7 HEALTH AND SAFETY SPECIFICATION	Pale Blue
	C3.8 ENVIRONMENT MANAGEMENT DURING CONSTRUCTION	Pale Blue
PART C4	SITE INFORMATION	
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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J**

T1.1 Tender Notice and Invitation to Tender

Contractor

Witness 1

Witness 2

Employer

2

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

INVITATION TO BID

MBD1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE SEKHUKHUNE DISTRICT MUNICIPALITY					
BID NUMBER:	SK8/3/1-07/2022/23	CLOSING DATE:	12 JULY 2022	CLOSING TIME:	11:00
DESCRIPTION	DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7) or SERVICE LEVEL AGREEMENT OF SEKHUKHUNE DISTRICT MUNICIPALITY.					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT					
Groblersdal Fire Station, R33 Groblersdal 0470, No later than 11:00 on 12 JULY 2022.					
There will be NO briefing session. Tenders will be available on e-Tenders for free and/or at No 03 West, Groblersdal, 0470 from 10 June 2022 after 15h00 at a non-refundable fee of R1000.00					
The Bid box is generally open 24 hours, 7 days a week.					
Completed Bid document, fully priced and signed must be sealed in an envelope marked:					
"SK8/3/1-07/2022/23-: DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J					
Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.					
It is a requirement of this project that the Tenderer sub-contract a minimum of 30% of the work to Community Based Sub-Contractors.					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Mr Voster Masemola		CONTACT PERSON	Mr. Ramadje K	
TELEPHONE NUMBER	013 262 7556		TELEPHONE NUMBER	013 262 7656	
FACSIMILE NUMBER	013 262 7688		FACSIMILE NUMBER	013 262 7688	
E-MAIL ADDRESS	masemolav@sekhukhune.gov.za		E-MAIL ADDRESS	ramajek@sekhukhune.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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

1. ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]	2. ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
MINIMUM WORK OPPORTUNITIES TO BE CREATED		CIDB GRADING	7 CE OR HIGHER
SIGNATURE OF BIDDER		DATE	
CAPACITY UNDER WHICH THIS BID IS SIGNED			

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.	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

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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 SUPPLY CHAIN MANAGEMENT REGULATIONS, SEKHUKHUNE DISTRICT MUNICIPALITY SUPPLY CHAIN MANAGEMENT POLICY (ON REQUEST FROM MUNICIPALITY), THE GENERAL CONDITIONS OF CONTRACT THIRD EDITION 2015 (GCC 2015) 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 (MBD7).**

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.

NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g., company resolution)

DATE:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

BID NUMBER: SK8/3/1-07/2022/23-: DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J

DIRECTORATE: ENGINEERING SERVICES

BUSINESS UNIT: PMU

Bids are hereby invited for DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J

The MUNICIPALITY also reserves the right to negotiate further conditions and requirements with the successful bidder.

THIS BID IS SUBJECT TO THE, THE SUPPLY CHAIN MANAGEMENT REGULATIONS, SEKHUKHUNE DISTRICT MUNICIPALITY SUPPLY CHAIN MANAGEMENT POLICY (ON REQUEST FROM MUNICIPALITY), AND THE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS (THIRD EDITION) (2015) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

The Municipality shall adjudicate and award bids in accordance with the Supply Chain Management Regulations, Sekhukhune District Municipality Supply Chain Management Policy (on request from Municipality). Prospective bidders must accept that the bid will be adjudicated, according to the said legislation. Bids will remain valid for 90 (ninety) days.

Municipal Manager: Ms. Maureen Ntshudisane
LIMPOPO PROVINCE
Corner van Riebeeck and Chris Wiid Street
Groblersdal
0470

Supply Chain Manager
Mr Voster Masemola

Acting Chief Financial Officer
Mr. Hendrick Nkadimeng

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

RESPONSIVENESS AND EVALUATION CRITERIA**1. RESPONSIVENESS CRITERIA**

Sekhukhune District Municipality will consider no Bid unless it meets the following responsiveness criteria:

- The bid must be properly received in a sealed envelope clearly indicating the description of the service and the bid number for which the bid is submitted.
- The bid must be deposited in the relevant bid box as indicated on the notice of the bid on or before the closing date and time of the bid.
- A valid CSD number must be submitted with the bid on or before the closing time and date of the bid.
- A certified Copy of the company registration certificate must be submitted with the bid on or before the closing time and date of the bid.
- Submission of a Joint Venture Agreement, where applicable, which has been properly signed by all parties.
- Proof of payment of Municipal Rates and Taxes or letter for Tribal Authority or lease agreement must be attached.
- Complies with the requirements of the bid and technical specifications.
- Registered in the relevant Contractor category in the Construction Industry Development Board Register of Contractors (CIDB).
- Adheres to Pricing Instructions.
- Financial ability to execute the Contract.
- Comply in full and observe the requirements of the Notice to Bidders.
- Experience with similar work – demonstrate a track record of a similar scope and size

2. EVALUATION OF BIDS

- a) All bids received shall be evaluated in terms of the Supply Chain Management Regulations, Sekhukhune District Municipality Supply Chain Management Policy (on request from Municipality), and other applicable legislations, including functionality.
- b) The MUNICIPALITY reserves the right to accept all, some, or none of the bids submitted – either wholly or in part – and it is not obliged to accept the lowest bid.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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By submitting this bid, bidder authorises the MUNICIPALITY or its delegate(s) to carry out any investigation deemed necessary to verify the correctness of the statements and documents submitted and that such documents reasonably reflect the ability of the Bidder to provide the goods and services required by the MUNICIPALITY.

PLEASE NOTE

1. The Municipal Manager may cancel a Contract awarded to a person if:

- a) The person committed a corrupt or fraudulent act during the procurement process or in the execution of the Contract, or
 - i. An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the Contract that benefited that person.

2. The Municipal Manager may reject the bid or quote of any company if that company or any of its directors has:

- a) Failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months;
- b) Failed, during the last five years, to perform satisfactorily on a previous Contract with the Sekhukhune District Municipality or any other organ of State after written notice was given to that bidder that performance was unsatisfactory;
- c) Abused the supply chain management system of the Municipality or have committed any improper conduct in relation to this system;
- d) Been convicted of fraud or corruption during the past five years;
- e) Willfully neglected, reneged on or failed to comply with any government, municipal or other public sector Contract during the past five years; or
- f) Been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No. 12 of 2004) or has been listed on National Treasury's database as a person prohibited from doing business with public sector

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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SEKHUKHUNE DISTRICT MUNICIPALITY**LIMPOPO PROVINCE****DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J****T1.2 Tender Data**

The conditions of Bid are the Standard Conditions of Bid as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (SFU) of May 2015, as published in Government Gazette No 33239, Board Notice 86 of 2010 of 28 May 2015. Those Standard Conditions of Tender remained the same as those published in the previous edition of the SFU as published in Government Gazette No 31823, Board Notice 12 of 2009 of 30 January 2009 - See www.cidb.org.za.

Each Tenderer shall obtain its own copy of the Standard Conditions of Tender.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. In the interpretation of any ambiguity or inconsistency between the Tender Data and the Standard Conditions of Tender, the Tender Data shall have precedence.

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Clause number	Tender Data
EMPLOYER F1.1	The employer is Sekhukhune District Municipality in Limpopo Province. The Employer's domicile citadel et executant (permanent physical business address) is: Bareki Mall Corner van Riebeeck and Chris Wiid Street Groblersdal 0470 The Employer's address for communication relating to this project is: Private Bag X8611 Groblersdal 0470
TENDER DOCUMENTS F.1.2	Volume 1 The tender documents issued by the employer comprise: Part T1 Tendering Procedures T1.1 Tender notice and invitation to tender T1.2 Tender data T1.3 Standard and Particular conditions to tender Part T2 Returnable documents T2.1 List of returnable documents T2.2 Returnable schedules Part C1: Agreements and Contract Data C1.1 Form of offer and acceptance C1.2 Contract Data C1.3 Demand Guarantee and Retention Money Guarantee C1.4 Agreement in terms of Occupational Health and Safety Part C2: Pricing data C2.1 Pricing instructions C2.2 Activity schedules / Bills of Quantities Part C3: Scope of work C3.1 Description of the Works C3.2 List of Drawings C3.3 Procurement C3.4 Construction C3.5 Management of the Works C3.6 Particular Specifications and Variations and Additions to SANS 1200 Standardized Specifications C3.7 Health and Safety Specifications C3.8 Environmental Management during Construction Part 4: Site information C4 Site information Part C4.2 : Drawings Tender Drawings incorporated into the tender document

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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EMPLOYER'S AGENT F.1.4	The Employer's Agent is: HWA Engineers and Project Managers Physical Address: 24 A Rissik Str. Polokwane 0700 Postal Address: P.O. Box 3472 Polokwane 0700 Tel.: (015) 297 5906 E-mail: admin@hwaeng.co.za Fax: (086) 246 0744
	Each communication between the Employer and a Bidder shall be to or from the Employer's Agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The Employer shall not take any responsibility for non-receipt of communications from or by a Bidder. The name and contact details of the Employer's Agent are stated in the tender data.
EMPLOYER'S RIGHT TO ACCEPT OR REJECT TENDER OFFER F.1.5.1	Sekhukhune District Municipality may, prior to the award of the tender, cancel a tender if- a) Due to changed circumstances, there is no longer a need for the services, works or goods requested; or b) Funds are no longer available to cover the total envisaged expenditure; or c) No acceptable tenders are received. d) Such decision to cancel this tender will be published in the CIDB website and in the government Tender Bulletin for the media in which the original tender invitation was advertised.
ELIGIBILITY F.2.1	Only those tenderers who can demonstrate that they will have in their employ, management and supervisory staff satisfying the requirements of the scope of work for labour-intensive competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders. Tender Qualification: Labour Intensive Contracts To qualify for award of the Contract, tenderers shall meet the following minimum qualifying criteria: a) Having participated in and graduated with fully satisfactory results from the relevant national qualification framework training organized under EPWP (or other similar project), and applying trained supervisory staff on a full-time basis for the execution of the works. LIC NQF Level 5. b) Liquid assets/or credit facilities covering the expected expenditures for two full work months c) Proposals for timely acquisition (own, lease, hire, etc.) of the essential minimum equipment d) The contractor will carry out the works using labour based work methods as described in the Special Conditions of Contract The tenderer must submit to the Employer, names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirement. The contractor shall ensure that the minimum supervisor to worker ratio of 1:10 for effective supervision of Labour intensive works for all LI activities.

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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F.2.2	The following Bidders who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to submit tenders: a) Contractors who have a Contractor grading designation equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for an 7CE or Higher class of construction work Joint ventures are eligible to submit tenders provided that: 1. Every member of the joint venture is registered with the CIDB; 2. The lead partner has a Contractor grading designation in the 7CE or Higher class of construction work; and 3. The combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for an 7CE or Higher class of construction work. Or 4. The lead partner has a Contractor grading designation in the 7CE or Higher class of construction work; and 5. The two combined Contractors grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for an 7CE or Higher class of construction work.
F.2.1	Only those Bidders who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in an 7CE or Higher Class of construction work and are registered with the CIDB as having a track record, are eligible to submit tenders.
COST OF TENDERING F2.2	The employer will not compensate the Bidder for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer comply with requirements.
SITE VISIT AND CLARIFICATION MEETING F.2.7	No COMPULSORY CLARIFICATION MEETING will take place. Bidders will be allowed to seek clarification by contacting responsible officials assigned to the Contract.
SEEK CLARIFICATION F.2.8	Request clarification of the tender documents, if necessary, by notifying the Employer's Agent at least five working days before the closing time stated in the tender data.
INSURANCE F2.9	Be aware that the extent of insurance to be provided by the employer (if any) may not be for the full cover required in terms of the conditions of Contract identified in the Contract Data. The Tenderer is advised to seek qualified advice regarding insurance.
ALTERATIONS TO DOCUMENTS F.2.11	Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the Bidder. All signatories to the tender offer shall initial all such alterations.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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ALTERNATIVE TENDER OFFERS F.2.12	Unless anything to the contrary has been determined in the Contract Data, a Tenderer may, together with his tender for the original designs contained in the Contract Documents, submit alternative designs and tender offers for consideration. All designs, calculations, drawings and Operation and Maintenance manuals shall be fully endorsed by a third party registered engineer, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor. Such alternative designs and offers shall be subject to the following conditions and requirements: 5.4.1. Tenders An alternative offer or design will be considered only if the tender for the original items has been fully priced and completed. The alternative tender offer is to be submitted in the same envelope as the main tender offer, together with a schedule that compares the requirements of the tender documents with the alternative requirements the Tenderer proposes. No alternative tender will be considered unless a tender free from qualifications is also submitted. Unless the alternative offer stipulates to the contrary, it shall be assumed that the period for completion of the Works shall be the same as for the original design. Designs, calculations, drawings and a modified schedule of quantities (as determined hereafter) in respect of each alternative offer or design shall accompany the alternative tender offer and shall be endorsed fully by a third party registered engineer, accomplished in such specific field of practice. 5.4.2. Preliminary calculations Preliminary calculations for an alternative design shall be submitted with the tender. Such calculations shall give adequate details so as to enable an assessment to be made of the general efficacy of the design and of its principal elements, also of the degree to which the design prescriptions and codes of the Employer are being complied with. The calculations shall be clear and in a logical sequence and shall clearly reflect all the design assumptions.
	5.4.3. Preliminary drawings Preliminary drawings of the alternative designs shall also be submitted with the tender. These drawings shall comprise adequate layout plans, elevations and sections and shall clearly illustrate the general efficacy of the design and its principal elements. 5.4.4. Quantities Each alternative offer shall be accompanied by a modified priced schedule of quantities compiled in accordance with the specifications, in so far as it is applicable, which clearly shows the manner in which the price for the alternative offer has been determined and the items in the original schedule of quantities which fall away or are being changed. In addition to the schedule of quantities, a set of calculations shall be supplied to show how the quantities have been determined. All assumptions in regard to factors which will determine quantities shall be clearly and conspicuously marked by underlining or colouring, and shall indicate whether or not the assumptions have been based on information furnished in the Contract Data (with the necessary references).

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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	5.4.5. Further details Should the Employer's Agent find that the calculations and drawings submitted for alternative designs are not complete enough for proper adjudication of the alternative designs, the Employer reserves to itself the right to call on the Tenderer to submit such further calculations and drawings as may be required. If such further details are not submitted within ten days of having been requested, the alternative designs will not be given further consideration. 5.4.6. Preliminary adjudication of alternative designs The Employer's Agent will undertake a preliminary scrutiny of any alternative designs for compliance with the specified requirements of the Employer. Should he find any mistakes or unsatisfactory aspects, he may afford the Bidder the opportunity to rectify them within a period to be determined by the Employer's Agent. However, it is emphasized that the preliminary scrutiny of the design and tender by the Employer's Agent, by its very nature, cannot be comprehensive, and no guarantee can be given in this regard that all the mistakes made by the Bidder will in fact be detected. Any correction of such mistakes shall be made with the tender price of the bidder being retained, and, wherever necessary, the priced schedule of quantities for the alternative design shall be adjusted accordingly. 5.4.7. Acceptance of alternative design The Bidder shall note that the acceptance of a tender which includes alternative designs shall mean that the alternative designs have been approved in principle only. If the final calculations, drawings and details do not comply with the specified requirements, such alternative designs may be rejected, unless they are suitably amended by the Bidder so as to be acceptable to the Employer. 5.4.8. Final drawings and calculations and the priced schedule of Quantities Where a tender with an alternative design has been accepted, the Contractor shall, not less than two months before he intends starting with the construction of such design, submit to the Employer's Agent a complete set of working drawings, detailed calculations and a complete schedule of quantities, for approval. The schedule of quantities shall be based on the preliminary schedule of quantities, but with the necessary adjustments in quantities and prices and with the tendered price for the alternative design being retained. Within three weeks of having received the above, the Employer's Agent will indicate which drawings, calculations, quantities, prices and other particulars are acceptable to him and which not, with reasons furnished. The Contractor shall then submit to the Employer's Agent in good time any modified drawings and other particulars for approval, for which he will require two weeks. Any delay arising from the fact that the amended particulars do not meet the requirements shall be the responsibility of the Contractor. No work which will be affected by an alternative design may be commenced, unless the drawings, schedule of quantities and prices for such alternative design have been approved. Should the Contractor fail to modify any drawings,
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 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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	calculations, quantities, prices or any other particulars to the satisfaction of the Employer's Agent, the alternative design will be rejected and the original design shall be constructed for the same amount as has been tendered for the alternative design. 5.4.9. Responsibility for alternative design The approval of a design by the Employer's Agent shall not in any way relieve the Bidder of his responsibility to produce a design which conforms in all respects to all the specified requirements and which will be suitable for the purpose envisaged. Should it appear later during construction or during the maintenance period that the design does not conform to the specified requirements, the Contractor only, shall be liable for any damage arising there from and he shall, at his own expense, do all the necessary work to ensure that the Works conforms to all the specified requirements. 5.4.10. Indemnity Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Employer, its agents and assigns, against all claims howsoever arising out of the said design whether in Contract or delict.
SUBMITTING TENDER OFFERS F.2.13.3	5.5.1. Whole of the Works (Cl. F.2.13.1) Tenderers shall offer to provide for the whole of the Works identified. 5.5.2. Original tender documents (Cl. F.2.13.3) The original tender document, issued to the Bidder, shall be submitted in its entirety. No copies are required. 5.5.3. Marking of Tender Submissions (Cl. F.2.13.5) The complete tender documents shall be enclosed and sealed in a single envelope, marked: BID NUMBER: SK8/3/1-07/2022/23 .-: DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J The Employer's address for delivery of tender offers to be shown on each tender submission package is the Tender Box located at: Groblersdal Fire Station R33 Groblersdal 0470 5.5.4. Two envelope system (Cl. F.2.13.6) A two-envelope procedure will not be followed. 5.5.5. Closing time (Cl. F.2.15) The closing time for submission of tender offers is: 11H00 on 12 July 2022. Telegraphic, telephonic, telex, facsimile, e-mail, electronic and late tender offers

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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	will not be accepted. 5.5.6. Tender offer validity (Cl. F.2.16) The tender offer validity period is 90 days after tender closing date. 5.5.7. Clarification of tender offer after submission (Cl. F.2.17) Delete the last part of the second sentence, commencing with the word "and". Furthermore, delete the last two sentences of Cl. F.2.17. Add the following sentence: "The rates stated by the Bidder shall be binding". 5.5.8. Provide other Material (Cl. F.2.18.1) Upon request by the Employer, the Bidder shall promptly supply any other material that has a bearing on the tender offer, the bidder's commercial position (including, where applicable, notarized joint venture agreements), Referencing arrangements, or samples of materials, considered necessary by the Employer for the purpose of a full and fair assessment. Should the Bidder not provide the information or material called for, by the time for submission stated in the Employer's request, the Employer will regard the tender offer as being non-responsive. 5.5.9. Certificates (Cl. F.2.23) The following certificates are to be provided with this tender: a) CSD Report, b) Compensation Fund registration certificate, c) Certificate of Contractor Registration issued by the Construction Industry Development Board or a copy of the application Form for registration in terms of the Construction Industry Development Board Act (Form F006). A minimum grading of 7CE is required. Important Note: Failure to provide the required particulars as per the above-listed certificates implies a non-responsive tender and warrants rejection of the tender on account of non-compliance with the requirements of the Tender Data.
OPENING TENDER SUBMISSIONS F.3.4	OF Tenders will be opened immediately after the closing time of tenders at Sekhukhune District Municipality

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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EVALUATION OF TENDER OFFERS F.3.11	Technical adjudication and General Criteria • Tenders will be adjudicated in terms of inter alia: • Compliance with Tender conditions • Technical specifications If the Bidder does not comply with the Tender Conditions, the Bid may be rejected. If technical specifications are not met, the Bid may also be rejected. With regard to the above, certain actions or errors are unacceptable and warrants REJECTION OF THE TENDER, for example: • Pages to be completed, removed from the Tender document, and have therefore not been submitted. • If tender document is not fully completed as required and as stipulated in the tender data. • Failure to complete the schedule of quantities as required – only lump sums provided. • Scratching out without initialling next to the amended rates or information. • Writing over / painting out rates / the use of tippex or any erasable ink, e.g., pencil. • The Tender has not been properly signed by a party having the authority to do so, according to the – “Authority for Signatory”, No authority for signatory submitted. • A Resolution by a Board of Directors of the Company authorizing the Bidder to sign the Tender document on behalf of the Company. Particulars required in respect of the Tender have not been provided – non-compliance of Tender requirements and/or specifications. • The Bidder's attempts to influence or has in fact influenced the evaluation and/or awarding of the Contract. • The Tender has been submitted after the relevant closing date and time
	Evaluation of Tenders The Bidders notice is drawn to the fact that the evaluation, adjudication and awarding of this tender will be in terms of the Supply Chain Management Policy of the SDM. Clause 36.5 of the Supply Management Policy which entails balance between financial offer and functionality (Method 3) The following steps will be followed in evaluation; 1. Determination of whether or not tender offers are complete. 2. Determination of whether or not tender offers are responsive. 3. Determination of the reasonableness of tender offers. 4. Determination of expertise and experience of bidders. 5. Awarding of points for functionality. 6. Ranking of bidders according to the total points. 7. Performance of risk analysis by checking the capacity of the bidders.
ACCEPTANCE AND OFFER F3.13.1	Tender offers will only be accepted if: a) the Bidder has in his or her possession a valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

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	to meet outstanding tax obligations; b) the Bidder is registered with the Construction Industry Development Board in an appropriate Contractor grading designation; c) the Bidder or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; d) the Bidder has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous Contract and has been given a written notice to this effect; and e) has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Bidder's ability to perform the Contract in the best interests of the employer or potentially compromise the tender process.
PROVIDE COPIES OF THE CONTRACTS F.3.17	The number of paper copies of the signed Contract to be provided by the employer is one.

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

1. EVALUATION OF TENDERS**Evaluation Criteria**

Municipal Supply Chain Management Policy will be used for evaluation of Prospective Service Provider as per the approved scoring system by the specification committee.

The Construction Firm's tender responsiveness in relation to points is therefore summarized as follows:

Organising and Staffing	35
Plant	15
Experience of Firm	30
Programme and cashflow	10
Locality	10
Sub-Total	100

A firm must obtain a minimum of 60 points out of the 100 points above. The functionality points shall be distributed as follows below:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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Reference no: SK8/3/1-07/2022/23

Project Manager / Contracts Manager (Maximum points obtainable 10; minimum 0)

Name:

Evaluation Criteria	Minimum Required	Points obtainable	Points Claimed
Academic Qualifications			
Academic Qualifications Attained	NQ7-Degree in Civil or equivalent and LIC NQF Level 5	3	
	Diploma in Civil or equivalent and LIC NQF Level 5	2	
	Diploma in Project Management or equivalent and LIC NQF Level 5	1	
	Matric	0	
Sub-total		3	
Involvement of Project Manager / Contracts Manager in water reticulation or similar projects.			
Number of comparable projects involved in.	0	0	
	1 – 2	1	
	3 – 4	2	
	5 upwards	4	
Sub-total		4	
Years of Experience in water reticulation or similar projects			
Involvement in comparable projects (Technical)	0	0	
	1 – 2	1	
	3 – 4	2	
	5 upwards	3	
Sub-total		3	
Total		10	

Attach CV and certified copies of qualifications

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

Site Agent: *(Maximum Points obtainable 10, minimum 0)*

Name:

Evaluation Criteria	Minimum Required	Points obtainable	Points Claimed
Academic Qualifications			
Academic Qualifications Attained	NQ7-Degree in Civil or Equivalent and LIC NQF Level 5	3	
	Diploma in civil works or equivalent and LIC NQF Level 5	1.5	
	No formal Education in Construction and LIC NQF Level 5	0	
Sub-total		3	
Involvement of Site Agent in water reticulation or similar projects.			
Number of comparable projects involved in.	0	0	
	1 – 2	1	
	3 – 4	2	
	5 upwards	4	
Sub-total		4	
Years of Experience in water reticulation or similar projects			
Years of experience in water reticulation projects	0	0	
	1 – 2	1	
	3 – 4	2	
	5 upwards	3	
Sub-total		3	
Total		10	

Attach CV and certified copies of qualifications

Note: Should the Site Agent be the same as Contractor Manager zero points will be allocated.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Site Foreman: _____ (*Maximum Points obtainable 10; minimum 2.5*)

Name:

Evaluation Criteria	Minimum Required	Points obtainable	Points Claimed
Academic Qualifications	N6 in Civil or NQF Level 4, "National Certificate: Supervision of Civil Engineering Construction Processes".	3	
	Matric	1.5	
Sub-total		3	
Involvement of Foreman in water reticulation or similar projects.			
Number of comparable projects involved in.	0	0	
	1 – 2	1	
	3 – 4	2	
	5 upwards	4	
Sub-total		4	
Years of Experience in water reticulation or similar projects			
Years of experience in water reticulation or similar projects after qualification	1-4	1	
	4 – 9	2	
	10 upwards	3	
Sub-total		3	
Total		10	

Attach CV and certified copies of qualifications

Note: Should the Site Foremen be the same Site Agent and Team leader zero points will be allocated

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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Safety Officer: (Maximum Points obtainable 5; minimum 3)**Name:**

Evaluation Criteria	Minimum Required	Points obtainable	Points Claimed	
Academic Qualifications	Occupational Health and Safety Certificate or equivalent (SAMTRAC)	2		
Sub-total		2		
Years of experience in comparable projects after qualification	1-4	1		
	5-9	1.5		
	10 upwards	3		
Sub-total		3		
Total		5		

Attach CV and certified copies of qualifications

Note: Should the Safety Officer be the same as Contracts Manager, Site Agent, Site Foreman zero points will be allocated.

ORGANISING AND STAFFING/PERSONNEL		
PERSONNEL	TOTAL	SCORES
Project Manager/Contracts Manager	10	
Site Agent	10	
Site Foreman	10	
Health and Safety Officer	5	
TOTAL	35	

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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PLANT (Maximum Points obtainable 15)

It must be noted that total points of 15 are obtainable by the Construction Firm in relation to the requirements as mentioned on the table below, failure to submit evidential supporting documents is not an eliminating factor BUT a zero point will be scored. Letter of intent/Lease agreement or quotation from the lessor must be attached.

Evaluation Criteria	Minimum Required	Points obtainable (Own)	Points obtainable (leased)	Points Claimed
Firm's plant and equipment – Note: Proof of ownership of the firm's equipment must be attached and failure to do so will result in forfeiting the plant points	LDV (1 ton or equivalent)	1	0.5	
	Excavator (Min 20 Ton) x 1	5	2.5	
	TLBs (4x4) x1	5	2.5	
	Tipper Truck x1	2.5	1.25	
	Firm's number of Walk behind Roller x1	1.5	0.75	
Sub-total		15	7.5	
Total		15	7.5	

Attach letter of intent/Lease agreement and/or proof of ownership of plant.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

EXPERIENCE OF FIRM (Maximum Points obtainable 30)

Note: Company's previous completed projects

It must be noted that the experience of the firm carries a maximum of **30 points** as indicated in the table below. If proof of testimonials and appointment letters, in reference to Form E not provided, then the bidder shall obtain zero points on the experience of the firm.

Provide proof of the company's previous completed projects which is in the form appointment letters and completion certificates. Verifiable references (**appointment letters and completion certificates**) with contact details must be attached.

Similar projects are for construction of water reticulation & sewage reticulation works only. (Including vat)

Evaluation Criteria	Evaluation Criteria	Points obtainable	Points Claimed
Company experience in terms of projects of a similar scope completed (Max 5 projects) undertaken in the last 10 years.	Project of similar scope (<i>pipelines / water reticulation</i>) with minimum value R0.5 to R3m - 2 points each	10 (max)	
	Projects of similar scope (<i>pipelines / water reticulation</i>) with minimum value of R3.0 to R7 m – 4 points each.	20 (max)	
	Projects of similar scope (<i>pipelines / water reticulation</i>) with minimum value of above R7m - 6 points each	30 (max)	
Sub-Total		30	
TOTAL(Max)		30	

Attach proof of company's previous completed projects (appointment letter and completion certificate)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Programme and cashflow (Maximum Points obtainable 10)

It must be noted that total points of **10** are obtainable by the Construction Firm in relation to the requirements as mentioned on the table below, failure to submit evidential supporting documents is not an eliminating factor **BUT** a zero point will be scored.

Evaluation Criteria	Minimum Required	Points obtainable (Own)	Points Claimed
Cashflow	Cashflow linked to milestones	5	
	Cashflow not linked to programme and unbalanced	2	
Sub-total		5	
Programme	Programme with sub activities showing linkages and critical path	5	
	Programme without sub activities and linkages	2	
Sub-total		5	
Total		10	

Locality	
10 point – Points are allocated for locality as shown below	
Locality	Points
Firms within Sekhukhune District Municipality	10
Firms within Limpopo Province	5
Firms outside Limpopo Province	2

Attach proof of company's address. Failure to attach proof of company address shall warrant for scoring zero (0) in this category

TOTAL **SCORE:** _____/100

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T1.3 Standard Conditions of Tender**F.1 General Conditions****F.1.1 Actions**

F.1.1.1 The Employer and each Bidder submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

F.1.1.2 The Employer and the Bidder and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Bidders shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the Employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

F.1.2 Tender Documents

The documents issued by the Employer for the purpose of a tender offer are listed in the tender data.

F.1.3 Interpretation

F.1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

F.1.3.2 These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any Contract arising from the invitation to tender.

F.1.3.3 For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

- a) **comparative offer** means the Bidder's financial offer after the factors of non-firm prices, all unconditional discounts and any other tendered parameters that will affect the value of the financial offer have been taken into consideration
- b) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the Employer or his staff or agents in the tender process; and
- c) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a Contract arising from a tender offer to the detriment of the Employer, including collusive practices intended to establish prices at artificial levels

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Reference no: SK8/3/1-07/2022/23

d) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and Employer's agent

Each communication between the Employer and a Bidder shall be to or from the Employer's Agent only, and in a form that can be read, copied and recorded. Writing shall be in the English language. The Employer shall not take any responsibility for non-receipt of communications from or by a Bidder. The name and contact details of the Employer's Agent are stated in the tender data.

F.1.5 The Employer's right to accept or reject any tender offer

F.1.5.1 The Employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a Contract. The Employer shall not accept or incur any liability to a Bidder for such cancellation and rejection but will give written reasons for such action upon written request to do so.

F.1.5.2 The Employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the Bidder.

F.2 Bidder's obligations**F.2.1 Eligibility**

Submit a tender offer only if the Bidder complies with the criteria stated in the tender data and the Bidder, or any of his principals, is not under any restriction to do business with Employer.

F.2.2 Cost of tendering

F.2.2.1 Accept that, the Employer will not compensate the Bidder for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer comply with requirements.

F.2.3 Check documents

Check the tender documents on receipt for completeness and notify the Employer of any discrepancy or omission.

F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the Employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

F.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of Contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the Employer may issue, and if necessary, apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

F.2.7 Clarification meeting

Attend, where required, a clarification meeting at which Bidders may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

F.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the Employer at least five working days before the closing time stated in the tender data.

F.2.9 Insurance

Be aware that the extent of insurance to be provided by the Employer (if any) may not be for the full cover required in terms of the conditions of Contract identified in the Contract Data. The Tenderer is advised to seek qualified advice regarding insurance.

F.2.10 Pricing the tender offer

F.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful Bidder, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.

F.2.10.2 Show VAT payable by the Employer separately as an addition to the tendered total of the prices.

F.2.10.3 Provide rates and prices that are fixed for the duration of the Contract and not subject to adjustment except as provided for in the conditions of Contract identified in the Contract Data.

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of Contract identified in the Contract Data may provide for part payment in other currencies.

F.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the Employer, or necessary to correct errors made by the Bidder. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

F.2.12 Alternative tender offers

F.2.12.1 Submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the Bidder proposes.

F.2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the Employer.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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F.2.13 Submitting a tender offer

F.2.13.1 Submit a tender offer to provide the whole of the works, services or supply identified in the Contract Data and described in the scope of works, unless stated otherwise in the tender data.

F.2.13.2 Return all returnable documents to the Employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.

F.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the Employer.

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The Employer will hold all authorized signatories liable on behalf of the Bidder. Signatories for Bidders proposing to Contract as joint ventures shall state which of the signatories is the lead partner whom the Employer shall hold liable for the purpose of the tender offer.

F.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the Employer's address and identification details stated in the tender data, as well as the Bidder's name and contact address.

F.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the Employer's address and identification details stated in the tender data, as well as the Bidder's name and contact address.

F.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the Employer's address and identification details as stated in the tender data.

F.2.13.8 Accept that the Employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

F.2.14 Information and data to be completed in all respects

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

F.2.15 Closing time

F.2.15.1 Ensure that the Employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Proof of posting shall not be accepted as proof of delivery. The Employer shall not accept tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the tender data.

F.2.15.2 Accept that, if the Employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

F.2.16 Tender offer validity

F.2.16.1 Hold the tender offer(s) valid for acceptance by the Employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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F.2.16.2 If requested by the Employer, consider extending the validity period stated in the tender data for an agreed additional period.

F.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the Employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the total of the prices or substance of the tender offer is sought, offered, or permitted. The total of the prices stated by the Bidder shall be binding upon the Bidder.

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the Contract with a preferred Bidder following a competitive selection process, should the Employer elect to do so.

F.2.18 Provide other material

F.2.18.1 Provide, on request by the Employer, any other material that has a bearing on the tender offer, the Bidder's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the Employer for the purpose of a full and fair risk assessment. Should the Bidder not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the Employer's request, the Employer may regard the tender offer as non-responsive.

F.2.18.2 Dispose of samples of materials provided for evaluation by the Employer, where required.

F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

F.2.20 Submit securities, bonds, policies, etc.

If requested, submit for the Employer's acceptance before formation of the Contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of Contract identified in the Contract Data.

F.2.21 Check final draft

Check the final draft of the Contract provided by the Employer within the time available for the Employer to issue the Contract.

F.2.22 Return of other tender documents

If so, instructed by the Employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.

F.2.23 Certificates

Include in the tender submission or provide the Employer with any certificates as stated in the tender data.

F.3 The Employer's undertakings

F.3.1 Respond to clarification

Respond to a request for clarification received up to five working days prior to the tender closing time stated in the Tender Data and notify all Bidders who drew procurement documents.

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each Bidder during the period from the date of the Tender Notice until seven days before the tender closing time stated in the Tender Data. If, as a result a Bidder applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, will then notify it to all Bidders who drew documents.

F.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the Bidder concerned.

F.3.4 Opening of tender submissions

F.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of Bidders' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the opening held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each Bidder whose tender offer is opened, the total of his prices, preferences claimed and time for completion, if any, for the main tender offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 Two-envelope system

F.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of Bidders' agents who choose to attend at the time and place stated in the tender data and announce the name of each Bidder whose technical proposal is opened.

F.3.5.2 Evaluate the quality of the technical proposals offered by Bidders, then advise Bidders who remain in contention for the award of the Contract of the time and place when the financial proposals will be opened. Open only the financial proposals of Bidders, who score in the quality evaluation above the minimum number of points for quality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to Bidders whose technical proposals failed to achieve the minimum number of points for quality.

F.3.6 Non-disclosure

Not disclose to Bidders, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a Contract, until after the award of the Contract to the successful Bidder.

F.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a Bidder to influence the processing of tender offers and instantly disqualify a Bidder (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

F.3.8 Test for responsiveness

Determine, on opening and before detailed evaluation, whether each tender offer properly received:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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-
- a) meets the requirements of these Conditions of Tender,
 - b) has been properly and fully completed and signed, and
 - c) is responsive to the other requirements of the tender documents.

A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- change the Employer's or the Bidder's risks and responsibilities under the Contract, or
- affect the competitive position of other Bidders presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

F.3.9 Arithmetical errors

Check responsive tender offers for arithmetical errors, correcting them in the following manner:

- Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- If bills of quantities (or schedule of rates) apply and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the line-item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line-item total as quoted shall govern, and the unit rate will be corrected.
- Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the Bidder's addition of prices, the total of the prices shall govern and the Bidder will be asked to revise selected item prices (and their rates if a bill of quantities applies) to achieve the tendered total of the prices.

Consider the rejection of a tender offer if the Bidder does not correct or accept the correction of his arithmetical errors in the manner described above.

F.3.10 Clarification of a tender offer

Obtain clarification from a Bidder on any matter that could give rise to ambiguity in a Contract arising from the tender offer.

F3.11 Evaluation of tender offers**F3.11.1 General**

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

F3.11.2 Method 1: Financial offer

In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer.

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

- b) Recommend the highest ranked Bidder for the award of the Contract, unless there are compelling and justifiable reasons not to do so.
- c) Re-rank all Bidders should there be compelling and justifiable reasons not to recommend the highest ranked Bidder and recommend the highest ranked Bidder, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F3.11.3 Methods 2: Financial offer and preference

In the case of a financial offer and preferences:

- a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of 3.11.7 and 3.11.8.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_P$$

Where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with 3.11.7;

N_P is the number of tender evaluation point awarded for preferences claimed in accordance with F3.11.8.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the Bidder with the highest number of tender evaluation points for the award of the Contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all Bidders should there be compelling and justifiable reasons not to recommend the Bidder with the highest number of tender evaluation points, and recommend the Bidder with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F3.11.4 Method 3: Financial offer and quality

In the case of a financial offer and quality:

- a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F3.11.7 and F3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_Q$$

Where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F3.11.7;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

N_Q is the number of tender evaluation point awarded for preferences claimed in accordance with F3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- a) Recommend the Bidder with the highest number of tender evaluation points for the award of the Contract, unless there are compelling and justifiable reasons not to do so.
- b) Rescore and re-rank all Bidders should there be compelling and justifiable reasons not to recommend the Bidder with the highest number of tender evaluation points and recommend the Bidder with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F3.11.5 Method 4; Financial offer, quality and preferences

In the case of a financial offer, quality and preferences:

- a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of 3.11.7 to 3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_P + N_Q$$

Where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with 3.11.7

N_P is the number of tender evaluation points awarded for preferences claimed in accordance with 3.11.8

N_Q is the number of tender evaluation points awarded for quality offered in accordance with 3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the Bidder with the highest number of tender evaluation points for the award of the Contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all Bidders should there be compelling and justifiable reasons not to recommend the Bidder with the highest number of tender evaluation points and recommend the Bidder with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F3.11.6 Decimal places

Score financial offers, preferences and quality, as relevant, to two decimal places.

F3.11.7 Scoring Financial Offers

Score the financial offers of remaining responsive tender offers using the following formula:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

$$N_{FO} = W_1 \times A$$

Where: N_{FO} is the number of tender evaluation points awarded for the financial offer.

W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.

A is a number calculated using the formula and option described in Table 1 as stated in the Tender Data.

Table 1: Formulae for calculating the value of A

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a
1	Highest price or discount	$A = \left(1 + \frac{(P - P_m)}{P_m} \right)$	$A = P / P_m$
2	Lowest price or percentage commission / fee	$A = \left(1 - \frac{(P - P_m)}{P_m} \right)$	$A = P_m / P$
P_m is the comparative offer of the most favourable comparative offer. P is the comparative offer of the tender offer under consideration.			

F3.11.8 Scoring preferences

Confirm that Bidders are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where Bidders are not eligible for such preferences.

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

F3.11.9 Scoring quality

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

$$N_Q = W_2 \times \frac{S_o}{M_s}$$

Where: S_o is the score for quality allocated to the submission under consideration;
 M_s is the maximum possible score for quality in respect of a submission; and
 W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data.

F.3.12 Insurance provided by the Employer

No insurance is provided by the Employer

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

F.3.13 Acceptance of tender offer**F3.13.1 Tender Offers will only be accepted on condition that:**

- a) the tender offer is signed by a person authorised to sign on behalf of the Bidder;
- b) a valid Tax Clearance Certificate is included with his tender;
- c) Bidder's declaration of compliance with the Occupational Health and Safety Act No. 85 of 1993 and the construction Regulations 2014 as well as the Bidder's health and safety plan, in included with his tender submission;
- d) a Bidder who submitted a tender as a Joint Venture has included an acceptable Joint Venture agreement with his tender;
- e) the Bidder or a competent authorised representative of the Contractor who submitted the tender has attended the compulsory clarification meeting or site inspection;
- f) The Contractor who submits the tender has been registered with the Construction Industry Development Board in accordance with the Construction Industry Development Board Act No. 38 of 2000 and the CIBD Regulations 2014 promulgated in terms of the Act, or if the Contractor can submit proof or evidence that he will be able to register within 10 days of the closing date for submission of tenders;
- g) The Bidder or any of its principals is not listed on the register of Tender Defaulters in terms of the Prevention and Combating of Corrupt activities Act of 2004 as a person prohibited from doing business with the public sector;
- h) The Bidder has not abused the Employer's Supply chain Management System or has failed to perform on any previous Contract and has been given a written notice to his effect;
- i) The Bidder or any of its principals, directors or managers is not employed in the service of the State or any municipality. In the event that such principals are involved, official approval from the Executing Authority regarding carrying out remunerative work outside of the public service must be included in the tender submission.
- j) The Employer is satisfied that the Bidder or any of his principals have not influenced the tender offer and acceptance by the following criteria:
 - (a) having offered, promised or given a bribe or other gift or remuneration to any person in connection with the obtaining or execution of this Contract;
 - (b) having acted in a fraudulent or corrupt manner in obtaining or executing this Contract;
 - (c) having approached an officer or employee of the Employer or the employer's Agent with the objective of influencing the award of a Contract in the Bidder's favour;
 - (d) having entered into any agreement or arrangement, whether legally or not, with any other person, firm or company to refrain from tendering for his Contract or as to the amount of the Tender to be submitted by either party;
 - (e) having disclosed to any other person, firm or company other than the Employer, the exact or approximate amount of his proposed Tender;

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

- (f) The Employer may, in addition to using any other legal remedies, repudiate the Tender offer and acceptance and declare the Contract invalid should it have been concluded already.

F.3.13.2 Notify the successful Bidder of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a Contract between the employer and the successful Bidder as described in the form of offer and acceptance.

F.3.14 Notice to unsuccessful Bidders

After the successful Bidder has acknowledged the employer's notice of acceptance, notify other Bidders that their tender offers have not been accepted.

F.3.15. Prepare Contract Documents

If necessary, revise documents that shall form part of the Contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents,
- c) other revisions agreed between the employer and the successful Bidder, and
- d) the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Issue final Contract

Prepare and issue the final draft of Contract Documents to the successful Bidder for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of tender require the Bidder to submit, after acceptance by the employer, shall be included.

F.3.17 Complete adjudicator's Contract

Unless alternative arrangements have been agreed or otherwise provided for in the Contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main Contract is signed.

F.3.18 Provide copies of the Contracts

Provide to the successful Bidder the number of copies stated in the Tender Data of the signed copy of the Contract as soon as possible after completion and signing of the form of offer and acceptance.

3.19 Provide written reasons for actions taken

Provide upon request written reasons to Bidders for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of Bidders or might prejudice fair competition between Bidders.

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J

T2.1 LIST OF RETURNABLE DOCUMENTS

	Generic	Tick if completed
1	Authority for Signatory (Compulsory).	
2	Certificate of Authority for Joint Venture (Compulsory where applicable).	
3	Certified copy of identity documents for directors (Compulsory).	
4	Compulsory Enterprise Questionnaire- Form O (Compulsory).	
5	Copy of Company Registration Documents or CK1 for Close Corporations (Compulsory).	
6	Form of offer to be properly signed (Compulsory).	
7	Declaration of Interest (MBD4) (Compulsory).	
8	Declaration of Bidder's Past Supply Chain Management Practices (MBD8) (Compulsory).	
9	Valid Tax Clearance Certificate Issued by the South African Revenue Service. (Compulsory) or PIN issued by SARS.	
10	MBD 5 (Compulsory) . Documentation if Tender Exceeds R10 Million -If the bidder is required by law to prepare AFS for Auditing, the AFS for the past three years or since the establishment if Establishment during the past three years -A certificate signed by the bidder certifying that the bidder has no undisputed commitments for municipal services towards a Municipality or other service provider in respect of which Payment is overdue for more than 30 days. In case where the Company or Director is from rural areas where the rates are not paid, please attach proof from Local Authority indicating that he/she does not pay municipal rates, this must also be supported by an affidavit from SAPS.	
11	CSD Registration/CSD Summary Report (Compulsory).	
12	Valid Letter of Good Standing (COIDA) (Compulsory).	
13	Copy of Certificate of Contractor Registration as proof of his registration with the CIDB as a Category 7CE or Higher Contractor. Or Written proof of his application to the CIDB for registration as a Contractor in the category listed above (Compulsory).	
14	All pages must be initialed (Compulsory).	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2 RETURNABLE SCHEDULES

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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T2.2.1 FORM A: SCHEDULE OF PROPOSED SUB-CONTRACTORS

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

If we are awarded a Contract, we agree that this notification does not change the requirement for us to submit the names of proposed Sub-Contractors in accordance with requirements in the Contract for such appointments. If there are no such requirements in the Contract, then your written acceptance of this list shall be binding between us.

	Name and address of proposed Sub-Contractor	Nature and extent of work
1.		
2.		
3.		
4.		
5.		

Signature of person authorised to sign the Bid:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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T2.2.2 FORM B: SCHEDULE OF PLANT AND EQUIPMENT

The following are lists of major items of relevant equipment that I/we presently own or lease and will have available for this Contract or will acquire or hire for this Contract if my/our Bid is accepted.

- (a) Details of major equipment that is owned by and immediately available for this Contract.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

- (b) Details of major equipment that will be hired, or acquired for this Contract if my/our Bid is acceptable.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signature of person authorised to sign the Bid:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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T2.2.3 FORM C: RECORD OF ADDENDA TO BID DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this Bid offer, amending the Bid documents, have been taken into account in this Bid offer:

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

Attach additional pages if more space is required.

Signature of person authorised to sign the Bid:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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T2.2.4 FORM D: CERTIFICATE OF BIDDER'S ATTENDANCE OF COMPULSORY CLARIFICATION MEETING

This is to certify that I,.....
representative of (Bidder).....
of (address)
.....
Telephone No :
Fax No :
attended a compulsory clarification meeting on theday of20.....
in the company of (Employer's Agent's representative)

Signature of person authorised to sign the Bid:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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T2.2.5 FORM E: KEY PERSONNEL AND NON-LOCAL WORKERS TO BE EMPLOYED

The Bidder shall insert in the spaces below, the name of non-local key personnel and non-local workers to be engaged on the Contract.

CATEGORY OF EMPLOYEE	NAME OF EMPLOYEE	Academic Qualifications	Professional Registration	YEARS EXPERIENCE
Construction Project Manager				
Site Agent				
Foreman				
Health & Safety Officer				

Attach additional pages if more space is required.

* The Contractor must fill in the various categories, e.g., Site, Agent, Foreman, Trainers, Plant Operators, Clerks, Technicians, Laboratory Assistants, etc. as required.

Signature of person authorised to sign the Bid:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Part T2: Returnable Documents

T2.2 Returnable Schedules

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T2.2.6 FORM F: SCHEDULE OF WORK CARRIED OUT BY THE BIDDER

The Bidder shall list in the spaces provided below a completed list of Water reticulation related Contracts of similar nature awarded to the Bidder. This information may be deemed to be material to the award of this Bid. Proof should be submitted with this Bid e.g., **Appointment and Completion certificates.**

Description Nature of Work	Value (R) VAT excluded	Period work executed		Reference			
		Appointment Date	Completion Date	Name		Organisation	Tel no and email address
				Employer			
				Consultant			
				Employer			
				Consultant			
				Employer			
				Consultant			
				Employer			
				Consultant			
				Employer			
				Consultant			
				Employer			
				Consultant			
				Consultant			

Signature of person authorised to sign the Bid:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

Should the Bidder desire to have any departures from, or modifications to the General Conditions of Contract, Specifications, Bill of Quantities or Drawings considered, or to qualify his Bid in any way, he shall set out his proposals clearly hereunder or alternatively state them in a covering letter attached to his Bid and referred to hereunder.

[illegible]

Date:

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

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T2.2.8 FORM H: AUTHORITY OF SIGNATORY

(i) AUTHORITY FOR SIGNATORY

Signatories for companies must establish their authority by attaching to this form a copy of the relevant resolution by their Board of Directors, duly signed and dated.

An example is shown below:

"By resolution of the Board of Directors taken on20

Mr/Ms/Mrs/Prof/Dr.....

Has been duly authorized to sign all documents in connection with Contract No.
.....

And any Contract which may arise there from on behalf of (block capitals)
.....

SIGNED ON BEHALF OF THE COMPANY:

IN HIS CAPACITY AS:

DATE:

SIGNATURE OF SIGNATORY:

***PLEASE NOTE THAT, THIS IS JUST AN EXAMPLE OF AUTHORITY FOR SIGNATORY. YOU ARE REQUIRED TO SUBMIT A COPY OF A RELEVANT RESOLUTION OF THE BOARD OF DIRECTORS.**

THIS APPLIES TO COMPANIES WITH MORE THAN ONE MEMBERS

FAILURE TO SUBMIT A COPY OF A RELEVANT RESOLUTION OF THE BOARD OF DIRECTORS, SHALL DISQUALIFY THE TENDER.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

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T2.2.9 FORM I: QUALITY MANAGEMENT SYSTEMS

Briefly describe the construction quality system incorporated by the Bidder in his organisation and which will be applicable to this Contract.

	Internal	External	Name of responsible Company /or Person (In case of Person give years' experience and qualification)
Survey: Setting out of the works and control			
Testing Laboratory			
Additional quality systems			

Signature of person authorised to sign the Bid:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The Bidder shall, in the table below, state the estimated cash flow on the Contract based on his preliminary programme, his Bidded unit rates and his submission of payment certificates to the Employer. Amounts for Contract Price Adjustment shall not be included.

[illegible]

From what sources will you fund the above amount (e.g., funds internally available, bank overdraft, loan, partner (his source), etc.)

.....

.....

Date:

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

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T2.2.11 FORM K: CONSTRUCTION PROGRAMME

An initial, suitable and realistic construction programme shall be submitted with this Bid document. The initial start date for the purpose of the programme is **2 September 2022**. The programme shall be in the form of a Gantt chart and shall include the following details:

- A work breakdown structure, identifying the major activity groups.
- For each activity group further details shall be provided with regard to the scheduled start and end dates of individual activities.
- The linkages between activities shall be clearly indicated and the logical network upon which the programme is based.
- The critical path(s) shall be clearly indicated and floats on non-critical activities shall be shown.
- The Contractor shall indicate the working hours per day, night, week and month allowed for in the programme.
- Where relevant the Contractor shall state the production rates for key activities, e.g. earthworks, etc.

Together with the programme as detailed above the Bidder shall submit a cash flow projection, indicating projected monthly invoice amounts. The cash flow projection should relate to **FORM K** above.

Failure to submit initial construction programme and cashflow are not eliminating factors but zero (0) will be scored.

Signature of person authorised to sign the Bid:

Date:

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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T2.2.12 FORM L: COMPLIANCE WITH OHSA (ACT 85 OF 1993)

Bidders are required to satisfy the Employer and the Employer's Agent as to their ability and available resources to comply with the above by answering the following questions and providing the relevant information required below.

1. Is the Contractor familiar with the OHSA (ACT 85 of 1993) and its Regulations? **YES / NO**

2. Who will prepare the Contractor's Health and Safety Plan? (Provide a copy of the person/s curriculum vitae/s or company profile).

3. Does the Contractor have a health and safety policy? (If yes, provide a copy). How is this policy communicated to all employees? **YES / NO**

4. Does the Contractor keep records of safety aspects of each construction site? If yes, what records are kept? **YES / NO**

5. Does the Contractor conduct monthly safety meetings? If yes, who is the chairperson of the meeting, and who attend these meetings? **YES / NO**

6. Does the Contractor have a safety officer in his employment, responsible for the overall safety of his company?
If yes, please explain his duties and provide a copy of his CV. **YES / NO**

7. Does the Contractor have trained first aid employees? If yes, indicate, who. **YES / NO**

8. Does the Contractor have a safety induction training programme in place? (If yes, provide a copy) **YES / NO**

Signature of Bidder:

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.13 FORM M: COMPANY INFORMATION FOR BIDS GREATER THAN R10 MILLION**This document must be signed and submitted together with your Tender****A. THE NATIONAL INDUSTRIAL PARTICIPATION PROGRAMME****INTRODUCTION**

The National Industrial Participation (NIP) Programme, which is applicable to all government procurement Contracts that have an imported content, became effective on the 1 September 1996. The NIP policy and guidelines were fully endorsed by Cabinet on 30 April 1997. In terms of the Cabinet decision, all state and parastatal purchases / lease Contracts (for goods, works and services) entered into after this date, are subject to the NIP requirements. NIP is obligatory and therefore must be complied with. The Industrial Participation Secretariat (IPS) of the Department of Trade and Industry (DTI) is charged with the responsibility of administering the programme.

1 PILLARS OF THE PROGRAMME

- 1.1 The NIP obligation is benchmarked on the imported content of the Contract. Any Contract having an imported content equal to or exceeding US\$ 10 million or other currency equivalent to US\$ 10 million will have a NIP obligation. This threshold of US\$ 10 million can be reached as follows:
- (a) Any single Contract with imported content exceeding US\$10 million, Or
 - (b) Multiple Contracts for the same goods, works or services each with imported content exceeding US\$3 million awarded to one seller over a 2-year period which in total exceeds US\$10 million. or
 - (c) A Contract with a renewable option clause, where should the option be exercised the total value of the imported content will exceed US\$10 million. or
 - (d) Multiple suppliers of the same goods, works or services under the same Contract, where the value of the imported content of each allocation is equal to or exceeds US\$ 3 million worth of goods, works or services to the same government institution, which in total over a two (2) year period exceeds US\$10 million.
- 1.2 The NIP obligation applicable to suppliers in respect of sub-paragraphs 1.1 (a) to 1.1 (c) above will amount to 30 % of the imported content whilst suppliers in respect of paragraph 1.1 (d) shall incur 30% of the total NIP obligation on a *pro-rata* basis.
- 1.3 To satisfy the NIP obligation, the DTI would negotiate and conclude agreements such as investments, joint ventures, sub-Contracting, licensee production, export promotion, sourcing arrangements and research and development (R&D) with partners or suppliers

A period of seven years has been identified as the time frame within which to discharge the obligation

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2. REQUIREMENTS OF THE DEPARTMENT OF TRADE AND INDUSTRY

- 2.1 In order to ensure effective implementation of the programme, successful Tenderers (Contractors) are required to, immediately after the award of a Contract that is in excess of **R10 million** (ten million Rands), submit details of such a Contract to the DTI for reporting purposes.
- 2.2 The purpose for reporting details of Contracts in excess of the amount of R10 million (ten million Rands) is to cater for multiple Contracts for the same goods, works or services; renewable Contracts and multiple suppliers for the same goods, works or services under the same Contract as provided for in paragraphs 1.1.(b) to 1.1. (d) above.

3 TENDER SUBMISSIONS AND CONTRACT REPORTING REQUIREMENTS OF TENDERERS AND SUCCESSFUL TENDERERS (CONTRACTORS)

- 3.1 Tenderers are required to sign and submit this Standard Tendering Document (SBD 5) together with the Tender on the closing date and time.
- 3.2 In order to accommodate multiple Contract s for the same goods, works or services; renewable Contract s and multiple suppliers for the same goods, works or services under the same Contract as indicated in sub-paragraphs 1.1 (b) to 1.1 (d) above and to enable the DTI in determining the NIP obligation, successful Tenderers (Contractors) are required, immediately after being officially notified about any successful Tender with a value in excess of R10 million (ten million Rands), to contact and furnish the **DTI with the following information:**
- Tender / Contract number.
 - Description of the goods, works or services.
 - Date on which the Contract was accepted.
 - Name, address and contact details of the government institution.
 - Value of the Contract.
 - Imported content of the Contract, if possible.
- 3.3 The information required in paragraph 3.2 above must be sent to the Department of Trade and Industry, Private Bag X 84, Pretoria, 0001 for the attention of Mr Elias Malapane within five (5) working days after award of the Contract. Mr Malapane may be contacted on telephone (012) 394 1401, facsimile (012) 394 2401 or e-mail at Elias@thedti.gov.za for further details about the programme.

4 PROCESSES TO SATISFY THE NIP OBLIGATION

- 4.1 Once the successful Tenderer (Contractor) has made contact with and furnished the DTI with the information required, the following steps will be followed:

(a) the Contractor and the DTI will determine the NIP obligation;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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-
- (b) the Contractor and the DTI will sign the NIP obligation agreement;
 - (c) the Contractor will submit a performance guarantee to the DTI;
 - (d) the Contractor will submit a business concept for consideration and approval by the DTI;
 - (e) upon approval of the business concept by the DTI, the Contractor will submit detailed business plans outlining the business concepts;
 - (f) the Contractor will implement the business plans; and
 - (g) the Contractor will submit bi-annual progress reports on approved plans to the DTI.

4.2 The NIP obligation agreement is between the DTI and the successful Tenderer (Contractor) and, therefore, does not involve the purchasing institution

Tender number Closing date:.....

Name of Tenderer.....

Postal address

.....

Signature..... Name (in print)

Date.....

1. The Bidder is required by law to prepare annual financial statements for auditing, their audited annual financial statements:

- i) for the past three years; or
- ii) since their establishment or established during the past three years.

Indicate whether these have been included in the Bid. Yes/No

2. Does the Bidder have any undisputed commitments for Municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days?

NO ☐ YES ☐

If so, state particulars:

.....

.....

3. Has any Contracts been awarded to the Bidder by an organ of state during the past five years?

NO ☐ YES ☐

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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If so, state particulars:
.....
.....

4. Has there been any material non-compliance or dispute concerning the execution of such Contract?

NO ☐ YES ☐

If so, state particulars:
.....
.....

5. Is any portion of the goods or services expected to be sourced out from outside the Republic?

NO ☐ YES ☐

If so, state what portion and whether any portion of payment from the Municipality is expected to be transferred out of the Republic.

.....
.....

Signature of Bidder:

Date:

CERTIFICATION

I, THE UNDERSIGNED (NAME)

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Tenderer

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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T2.2.14 FORM N: COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, **separate** enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Tax reference number

Section 6: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

☐ a member of any municipal council ☐ a member of any provincial legislature ☐ a member of the National Assembly or the National Council of Province ☐ a member of the board of directors of any municipal entity ☐ an official of any municipality or municipal entity	☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) ☐ a member of an accounting authority of any national or provincial public entity ☐ an employee of Parliament or a provincial legislature
--	---

If any of the above boxes are marked, disclose the following:

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

☐ a member of any municipal council ☐ a member of any provincial legislature ☐ a member of the National Assembly or the National Council of Province ☐ a member of the board of directors of any municipal entity ☐ an official of any municipality or municipal entity	☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) ☐ a member of an accounting authority of any national or provincial public entity ☐ an employee of Parliament or a provincial legislature
--	---

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise:

- authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- confirms that I / we are not associated, linked or involved with any other Tendering entities submitting Tender offers and have no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed		Date	
Name		Position	
Enterprise name			

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.16 FORM O: TAX CLEARANCE REQUIREMENTS

IT IS A CONDITION OF BIDDING THAT -

1. The taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with the Receiver of Revenue to meet his / her tax obligations.
2. The attached form "Application for Tax Clearance Certificate (in respect of bidders)", must be completed in all respects and submitted to the Receiver of Revenue where the bidder is registered for tax purposes. The Receiver of Revenue will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of twelve (12) months from date of issue. This Tax Clearance Certificate must be submitted in the original together with the bid. Failure to submit the original and valid Tax Clearance Certificate may invalidate the bid.
3. In bids where Consortia / Joint Ventures / Sub-Contractors are involved each party must submit a separate Tax Clearance Certificate. Copies of the Application for Tax Clearance Certificates are available at any Receiver's Office.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2 Returnable Schedules

Reference no: SK8/3/1-07/2022/23

[illegible]

DATE: 20____ / ____ / ____

[MBD 2]

1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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MBD 4

T2.2.15 FORM P: DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state it is required that the bidder or their authorised representative declare their position in relation to the evaluation/adjudication authority and/or take an oath declaring his/her interest
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Full Name:

3.2 Identity Number:

3.3 Company Registration Number:

3.4 Tax Reference Number:

3.5 Vat Registration Number:

3.6 Are you presently in the service of the state? **YES / NO**

3.6.1 If so, furnish particulars.

.....
.....

3.7 Have you been in the service of the state for the past twelve months? **YES / NO**

3.7.1 If so, furnish particulars

.....
.....

3.8 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.8.1 If so, furnish particulars

.....
.....

3.9 Are you, aware of any relationship (family, friend, other) between a bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.9.1 If so, furnish particulars

.....
.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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3.10 Are any of the company's directors, managers, principal shareholders or stakeholders in service of the state? **YES / NO**

3.10.1 If so, furnish particulars

.....
.....

3.11 Is any spouse, child or parent of the company's directors, managers, principal shareholders or stakeholders in service of the state? **YES / NO**

3.11.1 If so, furnish particulars

.....
.....

DECLARATION / CERTIFICATION

I, THE, UNDERSIGNED (NAME)

.....

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT. I ACCEPT THAT THE MUNICIPALITY MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

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

(a) a member of –

- (i) any municipal council
- (ii) any provincial legislature; or
- (iii) the national Assembly or the national Council of Provinces;

(b) a member of the board of directors of any municipal entity;

(c) an official of any municipality or municipal entity;

(d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);

(e) a member of the accounting authority of any national or provincial public entity; or

(f) an employee of Parliament or a provincial legislature.

.....
Contractor

.....
Witness 1

.....
Witness 2

.....
Employer

.....
Witness 1

.....
Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

MBD 6.2

T2.2.17 FORM Q: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. Any Bid may be rejected if that Bidder, or any of its directors have:

- abused the Municipality's / Municipal entity's supply chain management system or committed any improper conduct in relation to such system;
- been convicted for fraud or corruption during the past five years;
- willfully neglected, reneged on or failed to comply with any government, Municipal or other public sector Contract During the past five years; or
- been listed in the Register for Bid Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).

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

Item	Question	Yes	No
2.1	Is the Bidder any of its directors listed on the National Treasury's database as a company or persons prohibited from doing business with the public sector? (Companies for persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied).	Yes ☐	No ☐
2.1.1	If so, furnish particulars:		
2.2	Is the Bidder or any of its directors listed on the Register for Bid Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? (To access this Register enter the National Treasury's website, www.treasury.gov.za , click on the icon "Register for Bid Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012)3265445)	Yes ☐	No ☐
2.2.1	If so, furnish particulars:		
2.3	Was the Bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
2.3.1	If so, furnish particulars:		
2.4	Does the Bidder or any of its directors owe any Municipal rates and taxes or Municipal charges to the Municipality / Municipal entity, or to any other Municipality / Municipal entity, that is in arrears for more than three months?	Yes ☐	No ☐
2.4.1	If so, furnish particulars:		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

Item	Question	Yes	No
2.5	Was any Contract between the Bidder and the Municipality / Municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or to comply with the Contract ?	Yes ☐	No ☐
2.5.1	If so, furnish particulars:		

CERTIFICATION

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

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

.....
SIGNATURE

.....
DATE

.....
POSITION

.....
NAME OF BIDDER

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.18 FORM R: CERTIFICATE OF INDEPENDENT BID DETERMINATION**MBD 9**

- 1 This Municipal Bidding Document (MBD 9) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a Contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the Contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J

in response to the invitation for the bid made by:

SEKHUKHUNE DISTRICT MUNICIPALITY

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

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. 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 consortium³ will not be construed as collusive bidding.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 9

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. 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.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and Contract s, 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.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a Contract .

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

T2.2.19 FORM S: LOCALITY

Attach proof of company address

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J**

Reference no: SK8/3/1-07/2022/23

PORTION 2: AGREEMENTS AND CONTRACT DATA

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

C1.1 Form of Offer and Acceptance

Offer

The employer, identified in the acceptance signature block, has solicited offers to enter into a Contract in respect of the following works: DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/STEELPOORT PARK) : CONTRACT J, REFERENCE NUMBER: SK8/3/1-07/2022/23

The Bidder, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

.....

..... Rand (in words);

R (in figures)

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Bidder before the end of the period of validity stated in the tender data, whereupon the Bidder becomes the party named as the Contractor in the conditions of Contract identified in the Contract Data.

Signature Date

Name

Capacity

for the Bidder

(Name and
address of
organization)

Name and
signature
of witness

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

Acceptance

By signing this part of this form of offer and acceptance, the employer identified below accepts the Bidder's offer. In consideration thereof, the employer shall pay the Contractor the amount due in accordance with the conditions of Contract identified in the Contract Data. Acceptance of the Bidder's offer shall form an agreement between the employer and the Bidder upon the terms and conditions contained in this agreement and in the Contract that is the subject of this agreement.

The terms of the Contract , are contained in:

- Part C1: Agreements and Contract Data, (which includes this agreement)
- Part C2: Pricing data
- Part C3: Scope of work.
- Part C4: Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the Bidder and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The Bidder shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of Contract identified in the Contract Data. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the Bidder receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the Bidder (now Contractor) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding Contract between the parties.

Signature Date

Name

Capacity

for the

Employer

SEKHUKHUNE DISTRICT MUNICIPALITY
Corner Riebeeck and Chris Wiid Street
Private Bag 8611
Groblersdal
0470

Name and
signature

of witness Date.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

Schedule of Deviations

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender;
2. A Bidder's covering letter shall not be included in the final Contract Document. Should any matter in such, letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of, offer and acceptance, the outcome of such agreement shall be recorded here;
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the Contract shall also be recorded here;
4. Any change or addition to the tender documents arising from the above agreements and recorded here shall also be incorporated into the final draft of the Contract .

1 Subject

Details

.....

.....

.....

2 Subject

Details

.....

.....

.....

3 Subject

Details

.....

.....

.....

4 Subject

Details

.....

.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

5 Subject

Details

By the duly authorised representatives signing this agreement, the employer and the Bidder agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder and the employer during this process of offer and acceptance.

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J**

Reference no: SK8/3/1-07/2022/23

C1.2 CONTRACT DATA

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C1.2.2	DATA PROVIDED BY THE EMPLOYER.....	77
C1.2.3	DATA PROVIDED BY THE CONTRACTOR	80
C1.2.4	VARIATIONS AND ADDITIONS TO THE GENERAL CONDITIONS OF CONTRACT (SPECIAL CONDITIONS OF CONTRACT).....	81

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

C1.2 Contract Data

C1.2.1 GENERAL CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works Third Edition, 2015, published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685 is applicable to this Contract. Copies of these conditions of Contract may be obtained from www.saice.org.za.

Each party to the Contract shall purchase its own copy of the GCC 2015 that applies to this Contract, available from its publisher:

South African Institution of Civil Engineering
Private Bag X200
Halfway House
1685
South Africa

Tel +27 (0)11 805 5947

Note 1

The General Conditions of Contract for Construction Works make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the Contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of Contract.

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purpose of interpretation, the priority of the documents shall be in accordance with the following order of precedence:

- (a) The Form of Offer and Acceptance.
- (b) Amendments to the General Conditions of Contract within the Contract Data.
- (c) Additional conditions to the General Conditions of Contract within the Contract Data.
- (d) Corrigenda to the General Conditions of Contract.
- (e) The General Conditions of Contract.
- (f) The Specifications, Drawings, Schedules and other documents forming part of the Contract (in that order) contained in the Scope of Work and the Site Information.

If any ambiguity or discrepancy is found in the documents, the Engineer needs to be contacted to issue any necessary clarification or instruction.

Note 2

Certain pro-forma forms and pro-forma agreements contained in the GCC 2015 have been adapted for this particular Contract. Those pro-forma forms and pro-forma agreements contained in the GCC 2015 do not apply where replaced by similar pro-forma forms and pro-forma agreements in this document.

Each item of data given below is cross-referenced to the clause in the General Conditions of Contract for Construction Works to which it mainly applies.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

C1.2.2: Contract Data completed by the Employer

Clause	Data
1.1.1.15	The name of the Employer is the Sekhukhune District Municipality
1.2.1.2	The address of the Employer is: Address (physical): Riebeeck Street and Chris Wiid Street Bareki Mall Address (postal): Private Bag X8611 Groblersdal 0470 Telephone: 013 262 7535
1.1.1.16	The name of the Employer's Agent is: HWA Engineers and Project Managers
1.2.1.2	The address of the Employer's Agent is: Address (physical): 24A Rissik Street Polokwane 0700 Address (postal): P.O Box 3472 Polokwane 0700 Telephone: 015 297 5906 Facsimile: (086) 246 0744 Email: admin@hwaeng.co.za
1.1.1.14	The works shall be completed within 12 months exclusive of year end break.
1.1.1.27	The Pricing Strategy is Re-measurement Contract
3.1.3	The Employer's Agent is required to obtain the specific approval of the Employer before executing any of the following functions or duties: 1. Nominating the Employer's Agent's Representative in terms of cl 3.3 2. Delegation of Employer's Agent's Representative authority in terms of cl 3.3.4 3. Providing consent for Sub-Contracting part of the Contract in terms of cl 4.4.2 4. The issuing of further drawings or instructions in terms of cl 5.9.2 5. The issuing of instructions for dealing with fossils and the like in terms of cl 4.7. 6. Authorizing the Contractor to repair and make good excepted risks in terms of cl 8.3. 7. The issuing of a variation order in terms of cl 6.3. 8. Issuing of instructions to carry out work on a day work basis in terms of cl 6.5. 8. Granting permission to work during non-working times in terms of cl 5.8.1. 9. Suspend the progress of the works in terms of cl 5.11.2. 10. The issuing of an instruction to accelerate progress in terms of cl 5.12.4. 11. The reduction of a penalty for delay in terms of cl 5.13.2 12. The determination of additional or reduced costs arising from changes in legislation in terms of cl 6.8.4. 13. The giving of a ruling on a Contractor's claim in terms of cl 10.1.5 14. The agreeing of an extension to the 28 period in terms of cl 10.1.5.1 15. The inclusion of credits in the next payment certificate in terms of cl 10.1.5.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

	16. The agreeing of the adjustment of the sums for general items in terms of cl 5.12.3
4.9.1	The Contractor shall deliver to the Employers Agent's, on a monthly basis, a detailed inventory of Construction Equipment kept on Site, full particulars given for each day of the month. Distinction shall be made between Owned Equipment and Hired Equipment as well as Equipment in working order and Equipment out of order. Such inventory shall be submitted by the seventh day of the month following the month to be reported.
4.10.2	The Contractor shall deliver to the Employers Agent's, on a monthly basis, a return in detail of supervisory staff and the number of categorized classes of labour employed each day for the said period by the Contractor for execution of the Contract. Such return shall be submitted by the seventh day of the month following the month to be reported.
5.3.1	The documentation required before commencement with Works execution are: • Health and Safety Plan (Refer to Clause 4.3) • A signed Agreement between the Employer and the Contractor for the Works to be completed by the Contractor in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act No.85 of 1993) and the Construction Regulations promulgated thereunder (Refer to Clause 4.3). • Proof of payment to the Employer, that the Contractor has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act, No 130 of 1993 (Refer to Clause 4.3). • Initial programme (Refer to Clause 5.6). • Security (Refer to Clause 6.2). • Insurance (Refer to Clause 8.6).
5.3.2	The time to submit the documentation required before commencement with Works execution is 14 days .
5.4.2	The access and possession of Site shall not be exclusive to the Contractor but shall be as set out elsewhere in the Contract.
5.8.1	The non-working Days are Saturdays and Sundays. The special non-working Days are: Statutory public holidays; and All annual year-end shutdown periods as recommended by the South African Federation of Civil Engineering Contractors (SAFCEC), and which commence after the Commencement Date and which commence before the Due Completion Date.
5.13.1	The penalty for failing to complete the Works is 0,1 percent of Contract price per calendar day.
5.14.5.2	The Defects Liability Period is 12 months from the issue of a Certificate of Completion.
5.16.3	The latent defect period is 10 years, commencing on the Day after the date of certification of Practical Completion.
6.8.2	Contract Price Adjustment: The Contract shall not be subject to Contract Price Adjustment.
	The percentage allowance to cover overhead charges is: 50 per cent for labour; and 15 per cent for materials
6.8.3	Price adjustments for variations in the costs of special materials are not allowed .
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%. Proof of ownership is required.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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6.10.3	The limit of retention money is 10% of the value of the Contract Price. A Retention Money Guarantee is compulsory. A penalty will be applied for non-delivery of the Retention Money Guarantee as required. The penalty will be 10% of the value of the completion Retention Money Amount per calendar month for late delivery of the said Retention Money Guarantee.
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance sum is nil .
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is a maximum of 10% (ten percent) of the Contract Sum.
8.6.1.3	The limit of indemnity for liability insurance is equal to the contract amount.
10.5.1	Dispute resolution shall be by standing adjudication, use GCC 2015, Appendix 5.
10.7.1	The determination of disputes shall be by arbitration.
	Payment for labour-intensive component of the works <i>Payment for works identified in the Scope of Works as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.</i>
	Linkage of payment for labour-intensive component of works to submission of project data <i>The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoices shall not be paid until all pending labour information has been submitted.</i>
	Applicable Labour Laws <i>The current Ministerial Determination (also downloadable at www.epwp.gov.za), Expanded Public Works Programmes, issued in terms of the Basic Condition of Employment Act of 1997 by the Minister of Labour in Government Notice, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled workers.</i>

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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C1.2.3: Data provided by the Contractor

Clause																											
1.1.1.9	The name of the Contractor is:																										
1.2.1.2	The address of the Contractor is: Address (physical): Address (postal): Telephone: Facsimile:																										
6.8.3	The variation in cost of special materials is: <table border="1"> <thead> <tr> <th rowspan="2">Special material</th> <th colspan="2">Unit on which variation will be determined</th> <th rowspan="2">Price for base month ex-factory, excluding transport, labour or any other costs.</th> </tr> <tr> <th>Containers</th> <th>Delivered in bulk</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> *State unit in appropriate column	Special material	Unit on which variation will be determined		Price for base month ex-factory, excluding transport, labour or any other costs.	Containers	Delivered in bulk																				
Special material	Unit on which variation will be determined		Price for base month ex-factory, excluding transport, labour or any other costs.																								
	Containers	Delivered in bulk																									

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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C1.2.4 Variations to the General Conditions of Contract

Clause	Data
2.5.1	Cession <i>Amend Clause 2.5.1 as follows:</i> <i>Delete the words "without the written consent of the other"</i>
5.14.5.1	Consequences of Completion <i>Amend Clause 5.14.5.1 as follows:</i> <i>In the second line, substitute the word 'Guarantor' with 'Contractor'.</i>
6.2	Security <i>Replace Sub-Clauses 6.2.1 and 6.2.2 with:</i> "The Contractor shall deliver to the Employer within such time as may be stated in the Contract Data, a Demand Guarantee, of an Insurance Company registered in terms of the Short-term Insurance Act (Act 53 of 1998) or of a registered Commercial Bank, in a sum equal to the amount stated in the Contract Data. The Demand Guarantee shall be issued by an entity subject to the approved of the Employer, and shall conform in all respects to the format contained in the Contract Data. The security to be provided by the Contractor shall be a Demand Guarantee of 10% of the Contract Sum. Wherever a joint venture constitutes the Contract ing party, the Demand Guarantee shall be issued on behalf of the joint venture. Failure to produce an acceptable Demand Guarantee within the period stated in the Contract Data, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 with specific reference to Sub-clause 9.2.2.5 as amended in the Contract Data."
6.3	Variations <i>Amend Clause 6.3, as follows:</i> <i>In the first paragraph, third line, after the words "or for any reason appropriate", add the phrase</i> ", including the limiting of Contract expenditure so as not to exceed the Employer's budgeted project funding, " <i>Add the following phrase to the last paragraph of Clause 6.3.1.6, after the words "ascertaining the amount of the Contract Price":</i> ", and no such variation shall give reason for consideration of any claim in terms of Clause 6.11."
6.3.2	Orders for Variations to be in writing Omit the words "Provided that" under Clause 6.3.2 and omit Clause 6.3.2.1.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

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6.9.2	Definition of “materials” <i>Amend Clause 6.9.2, as follows:</i> <i>Substitute the word ‘plant’ with ‘Plant’.</i>
6.10.1	Interim Payments <i>Amend Clause 6.10.1.5 as follows:</i> <i>In the third line, add the words ‘not yet’ before the words ‘built into’</i>
6.10.5	Payment of retention money <i>Amend Clause 6.10.5 as follows:</i> <i>In the second line, add the words ‘, if any,’ after the words ‘Defects Liability Period’</i>
6.10.6	Set-off and delayed payments <i>Amend Clause 6.10.6.2 as follows:</i> <i>Delete the words ‘Contractor’s Bank’ and substitute with the words ‘Employer’s Bank’</i>
6.11	Variations exceeding 15 per cent <i>Replace the marginal heading with:</i> “Variations exceeding 20 per cent” <i>Replace “15 per cent” with “20 per cent” in the text of this Sub-Clause</i>
7.8.2	Cost of making good of defects <i>Amend Clause 7.8.2.1 as follows:</i> <i>In the first line, correct the spelling of ‘therefore’.</i>
8.3.1	Excepted risks <i>Amend Clause 8.3.1.12 as follows:</i> <i>In the second line, delete the words ‘Employer or any of their’ and substitute with ‘or any of its’.</i>
8.6.6	Contractor to produce proof of payment “The Contractor shall before commencement of the Works produce to the Employer’s Agent: 8.6.6.1 The policies by which the insurances are effected, 8.6.6.2 Proof that due payment of all premiums there under, covering the full required period has been made, and 8.6.6.3 Proof of continuity of the policies for the required period.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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	Should, during the currency of the Contract, the required period of insurance be extended for any reason, the Contractor shall timeously extend (so as to maintain) the said insurances for the full extended duration. The Employer's Agent shall be empowered to withhold all payment certificates until the Contractor has complied with his obligations in terms of this Clause 8.6.6."
8.6.7	Remedy on Contractor's failure to insure <i>Delete sub-clause 8.6.7 and substitute with:</i> "Failure on the part of the Contractor to effect and keep in force any of the insurances referred to in Clause 8.6.1 and its sub-clauses, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 and with specific reference to sub-clause 9.2.2, as amended in the Contract Data."
9.1.2	State of emergency <i>In the <u>fourth</u> line, delete the words 'supply of' and substitute with 'availability of'.</i>
9.2	Termination by Employer <i>Delete the contents of Clause 9.2 and substitute with:</i> "9.2.1 The Employer may terminate the Contract by written notice to the Contractor if: 9.2.1.1 Sequestration of the Contractor's estate is ordered by a Court with due jurisdiction, or 9.2.1.2 The Contractor publishes a notice of surrender or presents a petition for the surrender of his estate as insolvent, or makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or (being a company) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or if the Contractor assigns the Contract without having first obtained the Employer's consent in writing, or if execution is levied on his goods, or 9.2.1.3 The Contractor, or anyone on his behalf, or in his employ, offers to any person in the employ of the Employer or the Employer's Agent, a gratuity or reward or commission, or 9.2.1.4 The Contractor furnished materially inaccurate information in his Tender, which had a bearing on the award of the Contract, or 9.2.1.5 The Contractor has abandoned the Contract. 9.2.2 If the Contractor: 9.2.2.1 Has failed to commence the Works in terms of Clause 10 hereof, or has suspended the progress of the Works for fourteen (14) days after receiving from the Employer's Agent written notice to proceed, or 9.2.2.2 Has failed to provide the Guarantee in terms of Clause 7 within the time stipulated in the Contract Data, or

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

	9.2.2.3 Has failed to proceed with the Works with due diligence, or 9.2.2.4 Has failed to remove materials from the Site or to pull down and replace work within fourteen (14) days after receiving from the Engineer written notice that the said materials or work have been condemned and rejected by the Employer's Agent in terms of these conditions, or 9.2.2.5 Is not executing the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract, or 9.2.2.6 Has, to the detriment of good workmanship or in defiance of the Employer's Agent's instructions to the contrary, sublet any part of the Contract, or 9.2.2.7 Has assigned the Contractor any part thereof without the Employer's consent in writing, then the Employer may give the Contractor 14 days' notice to rectify the default, and if the Contractor fails to rectify the default in said 14 days, then, without further notice, notify the Contractor in writing of the termination of the Contract and expel the Contractor and order the Contractor to vacate the site within 24 hours of issue of the Notice of Termination and to hand the Site over to the Employer, and the Employer may then enter upon the Site and the Works without affecting the rights and powers conferred on the Employer or the Employer's Agent by the Contract and the Employer may himself complete the Works or may employ another Contractor to complete the Works, and the Employer or such other Contractor may use for such completion so much of the Construction Equipment, Temporary Works and materials brought onto the Site by the Contractor as the Employer may think proper, and the Employer may at any time sell any of the said Construction Equipment, Temporary Works and unused materials and apply the proceeds of sale towards payment of any sums that may be due or become due to the Employer by the Contractor under the Contract . In such circumstances the Contractor shall forthwith vacate the Site and shall not be entitled to remain on the Site on the grounds that he is entitled to do so on a right of retention until amounts due to him have been paid, neither will the Contractor be entitled to any further payments in terms of this Contract. 9.2.3 If the Contractor, having been given notice to rectify a default in terms of 9.2.2 above, rectifies said default, but later repeats the same or substantially the same default, then the Employer may notify the Contractor of the immediate termination of the Contract, and proceed as stated in the paragraph following the word 'writing' in Clause 9.2.2.7 above. 9.2.4 Should the amounts that the Employer must pay to complete the Works, exceed the sum that would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the difference, and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly. Provided that should the Contractor on demand not pay the amount of such excess to the Employer, such sum may be determined and deducted by the Employer from any sum due to or that may become due to the Contractor under this or any previous or subsequent Contract between the Contractor and the Employer."
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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

C.1.2.4.1 Additional clauses to the General Conditions of Contract:

Clause	Data
1.1	Definitions
	<i>Add the following at the end of Sub-Clause 1.1.1:</i>
1.1.1.35	"Client", as used in the Occupational Health and Safety Act - Construction Regulations, means Employer.
1.1.1.36	"Principal Contractor", as used in the Occupational Health and Safety Act - Construction Regulations, means Contractor.
4.12	Contractor's superintendence
	<i>Add the following sub-clause 4.12.4 to Clause 4.12:</i>
	"Where a form is included in the Contract Data for this purpose, the Tenderer shall fill in the name of the person he proposes to entrust with the post of Construction Manager on this Contract in the space provided therefore. Previous experience of this person on work of a similar nature during the past five (5) years is to be entered on the form.
	The Contractor's Construction Manager shall be on Site at all times when work is being performed.
	The person shall be subject to approval of the Employers Agent's in writing and shall not be replaced or removed from Site without the written approval of the Employers Agent'.
5.6	Programme
	<i>Add the following sub-clause 5.6.6 to Clause 5.6:</i>
	"Failure on the part of the Contractor to deliver to the Employers Agent, the
	- programme of the Works in terms of Clause 5.6.1 and - supporting documents in terms of Clause 5.6.2
	Within the period stated in the Contract Data, shall be sufficient cause for the Employer's Agent to retain 25 per centum of the value of the Fixed Charge and Value-related items in assessment of amounts due to the Contractor, until the Contractor has submitted aforementioned first Programme of the Works and Supporting Documents".
5.9.7	Employers Agent's to approve Contractor's Designs and Drawings
	<i>Add the following at the end of Sub-Clause 5.9.7</i>
	"All designs, calculations, drawings and operation and maintenance manuals shall be fully endorsed by a third party registered engineer, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor.
	Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Employers Agent's, the Employer, their agents and assigns, against all claims howsoever arising out of the said design, whether in Contractor delict".

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

5.11	Suspension of the Works <i>Add the following sub-clause 5.11.7 to Clause 5.11:</i> “If the Contractor does not receive from the Employer the amount due under an Interim Payment Certificate within 28 days after expiry of the time stated in sub-clause 6.10.4 within which payment is to be made (except for deductions in accordance with sub-clauses 6.10.1.6 and 6.10.1.7), the Contractor may, after giving 14 days’ notice to the Employer, suspend the progress of the Works. The Contractor’s action shall not prejudice his entitlements to a claim in terms of Clause 10.1 and to cancellation of the Contract in terms of Clause 9.3. If the Contractor subsequently receives full payment of the amount due under such Interim Payment Certificate before giving a notice of cancellation of the Contract, the Contractor shall resume normal working as soon as is reasonably practicable.”
5.12	Extension of Time for Practical Completion <i>Add the following at the end of Sub-Clause 5.12.2.2:</i> “The extension of time to be allowed due to abnormal rainfall shall be calculated separately for each calendar month or part thereof in accordance with the following formula: $V = (Nw - Nn) + \left(\frac{Rw - Rn}{x} \right)$ where V = Extension of time in calendar days for the calendar month under consideration Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded Nn = Average number of days in the relevant calendar month, as derived from existing rainfall records, as stated in the Site Information, on which a rainfall of 20mm or more has been recorded for the calendar month. Rw = Actual recorded rainfall for the calendar month Rn = Average rainfall for the calendar month, as derived from existing rainfall records x = 20 The rainfall records which shall provisionally be accepted for calculation purposes are: Based on records taken at: Rainfall Station: Burgersfort Year of record: 2020

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

Month	The average number of days	Average Rainfall
January	2.5	80
February	2.3	57
March	2	49
April	0.9	25
May	0.2	9
June	0.1	2
July	0	4
August	0.1	6
September	0.3	11
October	1.3	37
November	2.2	65
December	3.2	7

The factor (Nw - Nn) shall be considered to represent a fair allowance for days during which rainfall exceeds 10 mm and the factor (Rw - Rn)/x shall be considered to represent a fair allowance for those days when rainfall does not exceed 10 mm but wet conditions prevent or disrupt work.

The total extension of time shall be the algebraic sum of all monthly totals for the contract period, but if the algebraic sum is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for a part of a month shall be calculated using pro rata values of Nn and Rn."

For this project the rainfall formula will only apply as background information, or dispute resolution. Extension of time for rainfall will only be granted on Actual Delays experienced; noted and agreed upon by the engineer.

6.10

Add the following at the end of Sub-Clause 6.10.1:

"The Contractor shall complete the 'Contractor's Monthly Report Schedule', which pro forma documentation is obtainable from the Employer's Agent. Pursuant to Sub-Clause (1), these, duly signed by all concerned, together with the Contractor's statement and a VAT invoice in original format are to be submitted to the Employer's Agent. Issue by the Employer's Agent to the Employer and Contractor of any signed payment certificate is conditional to this information being fully endorsed, accurately and timeously submitted to the Employer's Agent".

"All documentary evidence of such materials shall be unambiguous with respect to ownership having fully passed to the Contractor on or before the date of submittal of the Contractor's monthly statement.

Should the Contractor fail to supply unambiguous documentary evidence, he shall, prior to submittal of his monthly statement, deliver to the Employer a Guarantor Guarantee in the form contained in the Appendices to the Contract Data."

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

9.3	Termination by the Contractor <i>Add the following at the end of Sub-Clause 9.3:</i>
	9.3.5 "In addition to, or as an alternative to the rights to termination contained in this Clause 9.3, the Contractor may notify the default to the Employer, with a copy to the Employer's Agent, and if the default is not rectified within 10 days the Contractor may suspend progress of the works until a date 7 days after the default is rectified. The Contractor shall be entitled to extension of time to the extent of delay caused by or resulting from such suspension, and to payment of additional costs caused by or resulting from the suspension. Such extension of time and additional costs shall be promptly ascertained by the Employer's Agent, who shall then grant the extension of time and include the additional costs in all future payment certificates. Such suspension, extension of time and/or payment of additional costs, shall not prejudice the Contractor's rights to cancel the Contract ."

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J

C1.3 Form of Guarantee (not to be completed at tender stage)

In accordance with clause 6.2.1 of General Conditions of Contract, 3rd Edition 2015

Contract No: -----

Description of Contract: -----

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means: -----

----- (Please put name of firm)

Physical address: -----

Postal address: -----

Tel:-----

Fax: -----

"Employer" means: **SEKHUKHUNE DISTRICT MUNICIPALITY.**

"Contractor" means: -----

----- (Please put name of firm)

"Guarantee sum" means: 10% of the Contract amount

"Employer's Agent" means: -----

"Works" means: Permanent works together with temporary works

"Site" means: The land and other places, made available by the Employer for the purpose of the Contract, on under over in or through which the works are to be executed or carried out.

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

"Contract Sum" means: The accepted amount inclusive for tax of R-----

Amount in words: -----

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

“Expiry Date” This Guarantee shall expire upon the issue of the Completion Certificate issued by SEKHUKHUNE DISTRICT MUNICIPALITY signed by the Director of ENGINEERING Services, as such date is advised to the Guarantor in writing confirmed by the Employer.

CONTRACT DETAILS

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. Expiry Date" This Guarantee shall expire upon the issue of the final completion certificate issued by SEKHUKHUNE DISTRICT MUNICIPALITY signed by the Director of Engineering Services, as such date is advised to the Guarantor in writing confirmed by the Employer
The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on the Certificate of the works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1. 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 surety ship;
 - 3.2. Its obligation under this Performance Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1. A copy of a first written demand issues by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent and/ or Employer 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;
 - 4.2. A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address and / or postal address with a copy to the Contractor stating that period of seven (7) days has elapsed since the first written demand terms of 4.1 and the sum certificate has still not been paid;
 - 4.3. A copy of the aforesaid payment certificate which entails the Employer to receive payment in terms of the Contract sum in 4.
5. Subject to the Guarantor's maximum liability referred to in 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 and/ or postal address calling up this Performance Guarantee, such demand stating that:
 - 5.1. The Contractor has been termination due to the Contractor's default and this performance Guarantee is called up in terms of 5; or
 - 5.2. 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 5; and
 - 5.3. 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.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the guarantor.
8. Payment by Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
9. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from his Performance Guarantee on account alleged to be prejudicial to the Guarantor.
10. The Guarantor chooses the physical address and postal address as stated above for the service of all notices for all purposes in connection herewith.
11. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after on claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
12. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
13. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Court 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

Sign at -----

Date -----

Guarantor's signatory (1) -----

Capacity -----

Guarantor's signatory (2) -----

Capacity -----

Witness signatory (1) -----

Witness signatory (2) -----

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

RETENTION MONEY GUARANTEE
(Not to be completed at tender stage)

In accordance with clause 6.2.1 of General Conditions of Contract, 3rd Edition 2015

Contract No: -----

Description of Contract: -----

GUARANTOR DETAILS AND DEFINATIONS

"Guarantor" means: -----

----- (Please put name of firm)

Please address: -----

Postal address: -----

Tel:-----

Fax: -----

"Employer" means: SEKHUKHUNE DISTRICT MUNICIPALITY.

"Contractor" means: -----

----- (Please put name of firm)

"**Guarantee sum**" means: 10% of the Contract amount

"**Employer's Agent**" means: HWA ENGINEERS AND PROJECT MANAGERS

"**Works**" means: Permanent works together with temporary works

"**Site**" means: The land and other places, made available by the Employer for the purpose of the Contract, on under over in or through which the works are to be executed or carried out.

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

"**Contract Sum**" means: The accepted amount inclusive for tax of R-----

Amount in words: -----

"**Expiry Date**" This Guarantee shall expire upon the issue of the Final Completion Certificate issued by Sekhukhune District Municipality signed by the Director of Engineering Services, as such date is advised to the Guarantor in writing confirmed by the Employer.

CONTRACT DETAILS

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

RETENTION GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. Expiry Date" This Guarantee shall expire upon the issue of the final completion certificate issued by SEKHUKHUNE DISTRICT MUNICIPALITY signed by the Director of ENGINEERING Services, as such date is advised to the Guarantor in writing confirmed by the Employer.
The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on the Certificate of the works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1. 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 surety ship;
 - 3.3. Its obligation under this Retention Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1. A copy of a first written demand issues by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent and/ or Employer 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;
 - 4.2. A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address and / or postal address with a copy to the Contractor stating that period of seven (7) days has elapsed since the first written demand terms of 4.1 and the sum certificate has still not been paid;
 - 4.3. A copy of the aforesaid payment certificate which entails the Employer to receive payment in terms of the Contract sum in 4.
5. Subject to the Guarantor's maximum liability referred to in 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 and/ or postal address calling up this Performance Guarantee, such demand stating that:
 - 5.1. The Contractor has been terminated due to the Contractor's default and this Retention Guarantee is called up in terms of 5; or
 - 5.2. A provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Retention Guarantee is called up in terms of 5; and
 - 5.3. 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.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the guarantor.
8. Payment by Guarantor in terms of 5 will only be made against the return of the original Retention Guarantee by the Employer.
9. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from his Retention Guarantee on account alleged to be prejudicial to the Guarantor.
10. The Guarantor chooses the physical address and postal address as stated above for the service of all notices for all purposes in connection herewith.
11. This Retention Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after on claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
12. This Retention Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
13. Where this Retention Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Court 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

Sign at -----

Date -----

Guarantor's signatory (1) -----

Capacity -----

Guarantor's signatory (2) -----

Capacity -----

Witness signatory (1) -----

Witness signatory (2) -----

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

C1.4 OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

This agreement is mandatory for all Contractors appointed by the Sekhukhune District Municipality or any other institution that do work for or on behalf of Municipality.

This agreement is between:

**Sekhukhune District Municipality
(HEREINAFTER REFERRED TO AS THE MUNICIPALITY)**

herein represented by _____

in his capacity as _____

of the Municipality, he being duly authorised thereto hereinafter

and

(hereinafter referred to as the Mandatory)

herein represented by _____

in his capacity as _____

of the Mandatory, he being duly authorised thereto

WHEREAS:

- a) The Municipality and the mandatory entered into a written, alternatively oral agreement on the.....Day of20..... in terms of which the Mandatory undertook to carry out the following work for the Municipality, viz. (give a short description of the type of Contract work to be done as well as the address where work will be done) *Construction of reticulation networks at Maepa and Ratau*

(The said Contract work is hereinafter referred to as the **Work**)

- b) The Occupational Health and Safety Act, Act 85 of 1993 as amended (hereinafter referred to as **the Act**) contains amongst others certain provisions with regard to the health and safety of people at work and in connection with the usage of plant and machinery, as well as the protection of other persons than persons at work against hazards to health and safety that originates from or in connection with the activities of persons at work.
- c) Section 37(2) of the Act makes provision for the exclusion by the parties, by way of a written agreement, of supposition and accompanying liability of the Municipality as stipulated in section 37(1) of the Act.
- d) The parties have reached consensus with regard to the terms and conditions to which they agree in terms of the provisions of section 37(2) of the Act.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1. DEFINITIONS

- 1.1 **CONTRACTOR** Means the "Contractor" as defined in the "Principal Contract".
Annexed hereto in his capacity as mandatory.
- 1.2 **MANDATORY** Includes an agent, contractor or subcontractor for work to be done or service rendered, but without derogating from his status in his own right as an employer of people or user of equipment, machinery, tools or materials.
- 1.3 **THE PRINCIPAL CONTRACT** Means the contract annexed hereto as annexure "A".
- 1.4 **COUNCIL** Means the Sekhukhune District Municipality
- 1.5 **RISK CONTROL OFFICER** A person appointed in writing by Council.
- 1.6 Any definitions contained in any Statute hereinafter mentioned shall have the meaning allocated to it by the specific statute.

2. OBJECTIVE

- 2.1 Whereas Council and the Contractor have entered into a contract for service (work) as fully indicated in the "Principle Contract" and whereas the "Contractor" agreed to indemnify Council against the risks stated hereunder whether foreseeable or not, and, whereas it is agreed between the parties that it is of cardinal importance to safeguard both Council and the Contractor's obligation in terms of relevant legislation as well as to extend the obligation as a company and/or legal person and/or person as an entity concerned with health, safety and the environment.
- 2.2 These rules are applicable to all contractors performing work for Council within the jurisdictional area of the Council and on any premises, which are owned, rented or developed by the Council.
- 2.3 The Council acts through those officials or persons who are generally or specifically charged with the responsibility, in terms of legislation, as well as any other official or person who is generally or specifically charged with the control and supervision of the project.

IT IS HEREBY AGREED AS FOLLOWS:**3. INDEMNITIES**

- 3.1 The "Contractor" hereby indemnifies the "Council" against any loss in respect of all claims, proceeding, damages, costs and expenses arising out of any claim or proceeding pertaining to the non-compliance by the "Contractor" of any statutory requirements and/or requirements regarding the following Acts in particular pertaining to the provisions of:
- 3.1.1 The Occupational Health and Safety Act 85 of 1993 (as amended), including the Construction Regulations, 2014 as promulgated on 7 February 2014, in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), in Government Gazette No. 25207 and Regulation Gazette No. 7721. See Annexure B.
- 3.1.2 The Health Act 63 of 1977.
- 3.1.3 Road Traffic Act 29 of 1989 (as amended).
- 3.1.4 Environment Conservation Act 73 of 1989.
- 3.1.5 The National Water Act 36 of 1998.
- 3.1.6 The Criminal Procedure Act 51 of 1977.
- 3.1.7 The Explosives Act 26 of 1956.
- 3.1.8 The Arms and Ammunition Act 75 of 1969.
- 3.1.9 Compensation for Occupational Injuries and Diseases Act 130 of 1993.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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-
- 3.1.10 The Labour Relations Act 66 of 1995.
- 3.1.11 The Unemployment Insurance Act 30 of 1966 (as amended).
- 3.1.12 The Basic Conditions of Employment Act 75 of 1997 (as amended).
- 3.1.13 Standards Act 29 of 1993.
- 3.1.14 any statutory provisions in any act and/or any law or bylaw of any local government and/or any published official standard incorporated into any statute or bylaw relating to the completion of the work set out in the "Principal Contract".
- 3.1.15 Any other health and safety standard prescribed by the "Council".
- 3.2 The "Contractor" shall ensure that he familiarizes himself with the requirements of the above legislation and that he, his employees and any subcontractor will comply with all the statutory provisions contained in them.
- 3.3 The "Contractor" shall indemnify the "Council" in respect of any physical loss or damage to any plant, equipment or other property belonging to the "Contractor" or for which he is responsible and he hereby indemnifies the "Council" against any loss in respect of all claims, proceedings, damages, costs and expenses consequent upon the loss of or damage to any plant, equipment or other property belonging to, or which is the responsibility of, any subcontractor, agent or employee of the subcontractor.
- 3.4 The "Contractor" shall and hereby indemnifies the "Council" against any liability, loss, claim or proceedings whatsoever, whether arising in common law or by statute, consequent on personal injuries to or the loss of health or death of any person whosoever arising out of or in the course of or caused by the execution of the "Principal Contract".
- 3.5 The "Contractor" shall and hereby indemnifies the "Council" against any liability, loss, claim or proceedings consequent on loss of or damage to any movable or immovable property arising out of or in the course of or caused by the execution of the "Principal Contract" and due to any act or omission of the "Contractor", his agents, servants or subcontractors.
- 4. PERFORMANCE SAFE WORKING PRACTICE**
- 4.1 The "Council" requires a high standard of safe work performance from all employees and expects that the standard be maintained by the "Contractor" within the "Council's" jurisdictional area or on its premises.
- 4.2 Irrespective of human considerations, the maintaining of these health and safety rules shall be the execution of the prescribed legal requirements. These rules are not to hinder the "Contractor" in rendering services or indemnify the "Contractor" from any legal responsibility to ensure healthy and safe work circumstances.
- 4.3 The "Council" shall assist the "Contractor" in any practical considerations to accommodate the healthy and safe execution of work and therefore require co-operation in the execution of these safety rules.
- 5. LOCK OUT PROCEDURE**
- 5.1 When power or air driven machines or equipment, electrical apparatus or pipe lines are examined, repaired, adjusted, cleaned, lubricated or serviced in any other way than normal servicing, then all isolating switches, -levers, valves or appliances must be put in the "off" or "closed" position and locked.
- 5.2 Should more than one team work on a machine, then each person in control of a team, must put a separate lock on the switch, lever, valve or appliance.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

6. CRANES, VEHICLES AND HOISTING

- 6.1 For each crane or hoisting equipment used, the "Contractor" must submit a valid and recent test certificate or other form of the last examination of the machine or equipment, to the "Council".
- 6.2 Only trained personnel with written permission and where determined by Law, with a valid driver's license, may be allowed to operate any electrical diesel or petrol driver overhead crane, hydraulic or electrical hoisting equipment, self-driven forklift, tractor or any other crane or vehicle. No employee of the "Contractor" may perform any overhead work or work on an overhead crane or hoisting equipment or work near cranes or crane rail, before:
- i) An agreement was concluded with the "Council".
 - ii) Approval has been obtained from the "Council" to perform the work.
 - iii) All applicable danger – and warning symbolic signs are put into position, or exemption, if applied for, is in operation.
- 6.3 The "Contractor" shall be wholly responsible for any loss or damage to cranes, hoisting equipment, plant, machines or equipment brought onto the work site by the "Contractor".

7. MACHINE VALANCES, PROTECTION AND FENDING

- 7.1 No machine valances, protection or fending may be removed from machines, manholes, etc. without the written permission of "Council" if applicable exemption procedures were not appropriated.

8. SCAFFOLD, LADDERS, TOOLS AND EQUIPMENT

- 8.1 No equipment or appliance belonging to "Council" may be used without written permission from "Council".
- 8.2 Unless prior arranged, "Contractors" must bring sufficient tools and equipment to the site to finish the contract, including offices and storerooms. The mentioned equipment remains the responsibility of the "Contractor" with respect to loss, damage and theft.
- 1.3 In exceptional cases, where tools and equipment belonging to "Council" are used to finish the contract, the said equipment and tools are used on own risk and the "Contractor" indemnifies "Council" from any claims that may arise. The said indemnity must be in writing, as well as information regarding the loan period, identification and condition of tools and equipment. The "Contractor" is responsible for the returning of said tools and equipment in the same condition or better. The "Contractor" is responsible to "Council" for any damage or excessive wear of such tools or equipment and material.

2. EXCAVATIONS

- 9.1 Before any excavations commence, written permission must be obtained from "Council" to confirm the location of existing electrical cables, water pipes, etc.
- 9.2 All excavations and obstructions in floor, tar and dirt surfaces must be fenced effectively and safeguarded between sundown and sunup with a sufficient amount of red/yellow warning lights and symbolic signs.
- 9.3 The surrounding area must be kept clean, safe and tidy during excavation. Excess material may not obstruct unnecessarily.
- 9.4 If any property is in danger during excavation, it must be supported and the proposed support work must be submitted to the Department of Labour (OHS) and "Council" for approval.
- 9.5 Written permission must be obtained from "Council" to grant admittance to restricted areas as well as areas where dangerous or poisonous gases are present.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3. FIRST AID

- 10.1 The "Contractor" must provide and maintain a first aid box equipped according to legal requirement where more than (5) five persons are employed. The first aid box must be in the care of a person with a competency certificate from one of the following organizations:
- (i) SA Red Cross Association;
 - (ii) St Johns Ambulance;
 - (iii) SA First Aid League; or
 - (iv) A person or organization approved by the Chief inspector for this purpose.
- 10.2 A visible notice must be put up on any work premises with the name of the person responsible for first aid. In an emergency "Council's" Ambulance / Fire Department or emergency services may be contacted at (015) 290 2000.

4. FLAMMABLE LIQUIDS

- 11.1 The "Contractor" shall be held responsible for the necessary precautionary fire prevention measures. No smoking signs must be put up where applicable. The "Contractor's" employees must be informed of "Council's" fire prevention measures and evacuation procedures.

5. COMPENSATION BY CONTRACTOR

- 12.1 The "Contractor" shall be held responsible for all loss of and damage to property, the death or injury of persons, the resultant loss or damage suffered as well as all law suits, claims, costs, charges, fines and expenses due to negligence, violation of statutory liability or neglect of the "Contractor" or the "Contractor's" employees.

13. TRANSGRESSION OF RULES AND MISBEHAVIOUR

- 13.1 The "Contractor" is warned that any act(s) leading to damage or loss of employees of the "Contractor" or the "Council" shall not be tolerated. The "Council" may (without any reason) demand that any employee of the "Contractor" be withdrawn from the principal "Contract" or site.

14. INCIDENT REPORTING

- 14.1 All incidents referred to in Section 24 of the Occupational Health and Safety Act and or other incidents shall be reported, by the "Contractor", to the Department of Labour, as well as to the "Council" and should such an incident take place outside normal working hours, on a Saturday, Sunday or Public holiday provided with a written report relating to any incident.
- 14.2 The "Council" will obtain an interest in the issue of any formal inquiry conducted in terms of the Occupational Health and Safety Act in any incident involving the "Contractor" and/or his employees and/or his subcontractors.
- 14.3 The "Contractor" undertakes to report to "Council" anything deemed to be unhealthy and/or unsafe and that he undertakes to verse his employees and/or subcontractors in this regard.

15. LIAISON AND SUPERVISION

- 15.1 The "Contractor" hereby undertakes to liaise on a regular basis with the designated Risk Control Officer and "Council" representative regarding any hazards or incidents that may be identified or encountered during the performance of the "Principal Contract".

16. SERVICE INTERRUPTION

- 16.1 Should any work done by the "Contractor" cause a possible interruption, written permission must be obtained from "Council", before such work commences. The "Contractor" may not switch on or

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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off any compressed air, steam, oxygen, vacuum supply or electrical supply without written permission from the "Council".

17. CONFIDENTIALITY

- 17.1 The "Contractor" and his employees shall regard all data, documentation and information of the contract and related documentation as confidential.
- 17.2 Lost documentation/plans or related documentation shall immediately be reported in writing to the "Council".
- 17.3 The "Contractor" shall not put up any advertisements or billboard at the site without permission.
- 17.4 The "Contractor" shall not take photographs of the contract site or part thereof or any work process or part thereof, without written permission from the "Council", or have photographs taken, published or let it be published.

18. CONTRACT SITE AND PRESERVATION

- 18.1 Employees of the "Contractor" shall not be allowed entrance to the site unless a valid identity document, issued by "Council", is displayed. The mentioned documents shall only be valid for a limited period, where after it must be renewed.

19. COMPLETION OF WORK

- 19.1 The "Contractor" or his employees shall not leave the contract site before the "Council" is satisfied that the contract is completed according to the requirements and standards set out in the contract and that the working site is left in a satisfactory and safe condition.

20. LIQUOR, DRUGS, DANGEROUS WEAPONS AND FIREARMS

- 20.1 The "Contractor" shall ensure that no liquor, drugs, dangerous weapons or firearms be brought onto the premises.

21. SEARCHES

- 21.1 The "Contractor" and any person engaged in the contract work may at any time be searched by "Council" appointed security personnel and all packages, suitcases, etc. must be presented to the access control point for examination prior to them being brought onto the property or leaving the property.

22. GENERAL CONDITIONS

- 22.1 Notwithstanding anything to the contrary in this agreement, it is hereby specifically determined that the "Contractor"-
- 22.1.1 Shall have acquainted himself and be conversant with the contents of all statutory provisions applicable to the health and safety of workers and other persons on the site including the execution of the work, and in particular the conditions contained in the Occupational Health and Safety Act, 1993 (Act 85/1993), and the regulations promulgated in terms thereof, and shall comply therewith meticulously and in all aspects and/or take care that it is complied with;
- 22.1.2 Shall be obliged to immediately execute all instructions given to him by an authorized representative of "Council" in order to ensure and uphold the implementation and enforcement of the provisions referred to in sub-paragraph 1, to the satisfaction of the said representative;
- 22.1.3 Shall indemnify the "Council" against any or all liability which may be incurred by the "Council" as a result of the omission of the "Contractor", his employees, sub-contractors and/or representatives to comply with the provisions referred to in sub-paragraph 1, or to ensure that it shall be complied with;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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22.1.4 Shall undertake to pay upon demand any and/or all legal costs and other expenses which "Council" may have incurred as a consequence of any criminal charges or other proceedings pending against, or involving the "Council" as a result of the contravention or non-compliance by the "Contractor", his employees, sub-contractors and/or representative of any of the statutory provisions referred to in sub-paragraph 1.

22.1.5 Should the "Contractor" neglect to immediately execute any health and safety written orders issued to him, or to his employee in charge of the works, in terms of the stipulations of sub-paragraph 2, the "Council" shall be entitled to suspend the execution of the works and take the necessary steps to execute or have such order executed. Under these circumstances the contractor shall be obliged to pay "Council", upon demand, all costs and expenses incurred by "Council", in order to execute or have the said orders executed.

22.1.6 Should the abovementioned steps not establish a healthy and safe work environment the "Council" will be entitled to terminate the contract without incurring any further costs or claims from the contractor?

23. "CONTRACTOR" IDENTIFICATION BOARD

23.1 The "Contractor" shall provide on any work premises a temporary identification board containing at all worksites the following information:

- Company name on behalf of which division/department the work is being done.
- The contact number and name of the person representing the "Contractor".
- The contact number and name of the person representing "Council"

24. ACKNOWLEDGEMENT

24.1 The "Contractor" hereby acknowledges that he has read and received a copy of the "Principal Contract" and agrees to be bound by and undertakes to observe all the terms and conditions of the "Principal Contract". This appointment is made in terms of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993.

25. EXCEPTIONS AND OMISSIONS

26. REMARKS

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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Reference no: SK8/3/1-07/2022/23

THE CONTRACTOR

SIGNED AT ON THIS DAY OF

WITNESSES:

..... 1.
THE CONTRACTOR
..... 2.

THE COUNCIL

SIGNED AT ON THIS DAY OF

WITNESSES..... 1.
THE COUNCIL
..... 2.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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Reference no: SK8/3/1-07/2022/23

b) INDEMNITY CERTIFICATE

Contractor.....

Employer: Sekhukhune District Municipality

Contract.....

I/we

Hereafter the "Contractor"

"Contractor" hereby indemnifies the Sekhukhune District Municipality (Council) against any claim of whatever sort which may arise directly or indirectly from the execution by me/us of the above-mentioned contract and which may be instituted against "Council", as well as of any loss or damage which the "Council" suffers or expenditure the "Council" incurs to prevent responsibility for such claim, loss or damage, whatever the cause of such claim may be or whatever loss or damage the "Council" suffers.

THUS, done and signed at on this..... Day

of..... 20.....

WITNESSES:

1. **CONTRACTOR**

2. **COUNCIL**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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c) ACKNOWLEDGEMENT CERTIFICATE

I, in my capacity as.....

Duly authorized heretorepresenting

.....Contractors, acknowledge receipt of a copy of the Sekhukhune District Municipality's safety manual for contractors and the under mentioned person as my supervisor regarding all works and services which must be executed by the Contractor. The appointment is done in terms of the Occupational Health and Safety Act, 1993 (Act 85/1993).

SIGNED AT ON..... 20.....

I, accept the abovementioned appointment, and declare that I am familiar with the contents of the Sekhukhune District Municipality's Safety Manual for contractors.

CASUALTIES REGISTRATION NUMBER

SIGNED AT ON..... 20.....

SIGNATURE:

WITNESSES: 1.

2.

A copy of this certificate shall be submitted to the "Council" before any work commences.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C1.5: Agreement with Adjudicator

This agreement is made on the.....day of 20.....between: The Employer

(name of company / organisation) of

(address).....

.....and the Contractor

(name of company /organisation)

of (address).....

.....(hereinafter called **the Parties**)**and**

(name).....of (address)

..... (hereinafter
called **the Adjudicator**)

Disputes or differences may arise/have arisen* between the Parties under a Contract dated.....

and known as Contract No.....

(Contract title)

and these disputes or differences shall be/have been* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "**the Procedure**") and the Adjudicator may be or has been requested to act.

(* Delete as necessary)

IT IS NOW AGREED as follows:

1. The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
2. The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3. The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
4. The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5. The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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Reference no: SK8/3/1-07/2022/23

SIGNED BY:

(Signature): (Signature): (Signature):

Name:

who warrants that he/ she is
duly authorised to sign for and
on behalf of the **First Party** in
the presence of

Witness:

(Signature).....(Signature).....(Signature).....

Name:

who warrants that he/ she is the
duly authorised to sign for
and on behalf of the **Second
Party** in the presence of

Witness:

Name:

Adjudicator in the
presence of

Witness:

Name:

Address:

.....

Date:

Name:

Address:

.....

Date:

Name:

Address:

.....

Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

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SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**PROJECT DESCRIPTION: DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY)
- RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J**

PART C2.1 PRICING DATA

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

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C2.1 Pricing Instructions

- 1 The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work (as amended) published and issued by the Association of South African Quantity Surveyors (Sixth Edition (Revised)), 1999. Where applicable the:
 - a) civil engineering work has been drawn up in accordance with the provisions of the latest edition of SANS 1200 Standardized Specifications for Civil Engineering Works.
 - b) mechanical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Refrigeration, Air-Conditioning and Ventilation Installations, published by the South African Association of Quantity Surveyors, July 1990).
 - c) electrical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
- 2 The agreement is based on the General Conditions of Contract for Construction Works Third Edition, 2015, published by the South African Institution of Civil Employer's Agenting. The additions, deletions and alterations to the General Conditions of Contract for Construction Works as well as the Contract specific variables are as stated in the Contract Data. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.
- 3 Preliminary and general requirements are based on the various parts of SANS 1921, Construction and management requirements for works Contract s. The additions, deletions and alterations to the various parts of SANS 1921 as well as the Contract specific variables are as stated in the Specification Data in the Scope of Work. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.
- 4 It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards).
- 5 The drawings listed in the Scope of Works used for the setting up these Bills of Quantities are kept by the quantity surveyor and can be viewed at any time during office hours up until the completion of the works.
- 6 Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
- 7 Where any item is not relevant to this specific Contract, such item is marked N/A (signifying "not applicable")
- 8 The Contract Data and the standard form of Contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminary and General) of the Bills of Quantities
- 9 The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.
- 10 The amount of the Preliminary and General Section to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount for the Preliminary and General Section and any amount in respect of Contract price adjustment provided for in the Contract.
- 11 Where the initial Contract period is extended, the monthly charge shall be calculated on the basis as set out in 10 but taking into account the revised period for completing the works.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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- 12 The amount or items of the Preliminary and General Section shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Bills of Quantities:
- a) an amount which is not to be varied, namely Fixed (F)
 - b) an amount which is to be varied in proportion to the Contract value, namely Value Related (V); and
 - c) an amount which is to be varied in proportion to the Contract period as compared to the initial construction period excluding revisions to the construction period for which no adjustment to the Contractor is not entitled to in terms of the Contract, namely Time Related (T).
- 13 Where no provision is made in the Bills of Quantities to indicate which of the three categories in 12 apply or where no selection is made, the adjustments shall be based on the following breakdown:
- a) 10 percent is Fixed;
 - b) 15 percent if Value Related
 - c) 75 percent is Time Related.
- 14 The adjustment of the Preliminary and General Section shall apply notwithstanding the actual employment of resources in the execution of the works. The Contract value used for the adjustment of the Preliminary and General Section shall exclude any contingency sum, the amount for the Preliminary and General Section and any amount in respect of Contract price adjustment provided for in the Contract. Adjustments in respect of any staged or sectional completion shall be prorated to the value of each section.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J

C2.1 Pricing Instructions

DAY WORK SCHEDULE

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

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

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

B. LABOUR AND MATERIALS

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

C. PLANT AND EQUIPMENT

All plant provided by the Contractor for the execution and maintenance of the works shall be of a character comparable with the scope of the works.

The Contractor shall provide and maintain sufficient plant to meet all Contract ual requirements and shall not remove any of this plant from the site without the written permission of the Engineer. He shall, however, remove unsuitable, obsolete or worn-out plant from the site when ordered to do so by the Engineer and replace these with plant approved by the Engineer.

The approval of any plant on the site by the Engineer shall in no way relieve the Contractor of any of his obligations under the Contract.

The rates for plant items not listed in the schedule will be the ruling plant hire rates, inclusive of fuels and lubricants but exclusive of labour charges for the operators, inclusive of a 7,5% handling charge. It is therefore in the Tenderers interest to ensure that the list is complete.

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

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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D. LABOUR

DESIGNATION		RATE	
		R	C
Foreman/ Section leader	per hour		
Surveyor	per hour		
Surveyor's assistant	per hour		
Truck driver	per hour		
Labour - unskilled	per hour		
- semi-skilled	per hour		
- skilled	per hour		

E. PLANT AND EQUIPMENT

ITEM	DESCRIPTION	NON-WORKING RATE*		OPERATING RATE		PER
		R	c	R	C	UNIT
	Excavator (20 Ton minimum)					
	LDV (1 Ton or equivalent)					
	Tipper 10 cubic meter					
	Grader (140G or equivalent)					
	Roller (Walk behind)					
	Water Tanker (Litres specified)					
	TLB					
	Water truck (Litres specified)					

*Only applicable on authority of the Employer's Agent.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J**

C2.2 BILL OF QUANTITIES

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE-HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO) : CONTRACT J

CONTRACT No: SK8/3/1-07/2022/23

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	SABS 1200 A	<u>PRELIMINARY AND GENERAL</u>				
1.1	P SA 5.1	<u>FIXED-CHARGE ITEMS</u>				
1.1.1	5.1.1	Contractual Requirements	Sum	1		
1.1.2	P.S A 5.1.2	Establishment of facilities on site				
1.1.2.1	PS A 5.1.2.1	Facilities for the Engineer				
		(a) Furnished offices Not Less Than 18m ²	Sum	1		
		(b) Telephone	Prov Sum	1	15 000.00	15 000.00
		(c) Nameboards	No	1		
		(d) Survey Assistant	Sum	1		
		(e) Survey Equipment	PC Sum	1	15 000.00	15 000.00
		(f) Overheads on item 1.1.2.1 (b)	%	30 000.00		
1.1.2.2	PSA 5.1.2.2	Facilities for the Contractor				
		(a) Workshops and Storage Sheds	Sum	1		
		(b) Workshops	Sum	1		
		(c) Laboratories	Sum	1		
		(d) Living accommodation	Sum	1		
		(e) Ablution and latrine facilities	Sum	1		
		(f) Tools and equipment	Sum	1		
		(g) Water supplies, electric power and communications	Sum	1		
	PSA 3.4	(h) Dealing with water	Sum	1		
		(i) Access	Sum	1		
1.1.3	PS A 5.1.3	Other fixed-charge obligations (including protection of all property entered upon)	Sum	1		
1.1.4	PS A 5.3.4	Removal of Contractor's and Engineer's site establishment on completion	Sum	1		
	1200 A	TOTAL SECTION 1 CARRIED FORWARD				

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		Brought Forward				
1.1.5	PSA B 5.3.6	<u>Occupational Health and Safety</u>				
		(a) Preparation of Health and Safety Plan	Sum	1		
		(b) Health and Safety Training	Sum	1		
		(c) Personal Protective Clothing and Equipment	Sum	1		
		(d) Fences, Signs and Barricades	Sum	1		
		(e) Establishment of Safety Administration	Sum	1		
		(f) Compliance to Covid 19 risk mitigation inclusive of all facilities and PPE	Sum	1		
1.2	PS A 5.2.2	<u>TIME-RELATED ITEMS</u>				
1.2.1	5.2.1	Contractual requirements	Sum	1		
1.2.2	PS A 5.2.2	<u>Operation and maintenance of facilities on the site for the duration of construction period except otherwise where stated</u>				
1.2.2.1	PS A 5.2.2.1	<u>Facilities for the Engineer</u>				
		(a) Furnished offices	Sum	1		
		(b) Telephone	Prov Sum	1	10 000.00	10 000.00
		(c) Overheads for (a) and (b) above	%	10 000.00		
1.2.2.2	PS A 5.2.2.2	<u>Facilities for the Contractor</u>				
		(a) Offices and storage sheds	Sum	1		
		(b) Workshops	Sum	1		
		(c) Laboratories	Sum	1		
		(d) Living accommodation	Sum	1		
		(e) Ablution and latrine facilities	Sum	1		
		(f) Tools and equipment	Sum	1		
	1200 A	TOTAL SECTION 1 CARRIED FORWARD				

DE-HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO) : CONTRACT J

CONTRACT No: SK8/3/1-07/2022/23

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		Brought Forward				
1.2.3		(g) Water supplies, electric power and sewer	Sum	1		
		(h) Dealing with water	Sum	1		
		(i) Access	Sum	1		
		Time related obligations				
	PS A 5.2.3	a) Construction supervision	Months	12		
1.2.4	PS A 5.2.4	b) Head Office Overhead costs for duration of the project	Months	12		
	PSA B 5.3.5	Contractor's time-related obligations in respect of Occupational Health and Safety Act Regulations inclusive of Covid 19 Regulations.	Month	12		
1.2.5		Contractor's time-related obligations in respect of environmental plans and specifications.	Month	12		
1.3	PSA 5.3	Sums stated provisionally by the engineer:				
	PSA 5.3.1	(a) Monthly payment of salary for the Community Liason Officers (1 CLO)	Prov Sum	1	80 000.00	80 000.00
		(b) Monthly payment of PSC Members Seating for meetings. R200/person/seating for a maximum of 10 People for 16 months	Prov Sum	1	32 000.00	32 000.00
		(c) Overheads, charges and profit on item 1.3 (a) and (b) above	%	112 000.00		
	PSA 5.3.6	(d) Engineer's Administration to the Contractor and monitoring of OHS requirements on the project	Prov Sum	1	240 000.00	240 000.00
	PSA 5.3.6	(e) Engineer's Administration to the Contractor and monitoring of environmental management plan requirements on the project	Prov Sum	1	160 000.00	160 000.00
		(f) Social Facilitation	Prov.Sum	1	320 000.00	320 000.00
		(g) Overheads, charges and profit on item 1.3 (d), (e) and (f) above	%	720 000.00		
	1200 A	TOTAL SECTION 1 CARRIED FORWARD				

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		Brought Forward				
1.4	PSA 5.3.4	(h) Training of local labour				
		i) Generic skills	Prov Sum	1	80 000.00	80 000.00
		ii) Entreprenaural skills	Prov Sum	1	60 000.00	60 000.00
		iii) Monthly payment of salary for Students in training (1 Student) @ R6000.00	Prov Sum	1	96 000.00	96 000.00
		iv) Payment of labourers whilst under training for 5 days @ R191.60 per Labourer	Prov Sum	1	25 000.00	25 000.00
	PSA 5.5	(i) Overheads, charges and profit on item 1.3 (h) above	%	261 000.00		
		(j) Accomodation for Engineer's Representative	Prov Sum	1	104 000.00	104 000.00
		(k) Overheads for item (j) above	%	104 000.00		
	PSA8-5	Prime cost sums:				
	8.6	(a) Additional tests required by the Engineer	PC Sum	1	200 000.00	200 000.00
		(b) Charge required by Contractor on sub item 1.4 (a) above	%	200 000.00		
	1200 A	TOTAL SECTION 1 CARRIED TO SUMMARY				

ITEM NO	PAYMENT REFERS TO	CBS / LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2.1	SABS 1200C		<u>SECTION C: SITE CLEARANCE</u>				
2.1.1	PS C 3.1.1		Clear and grub:				
		CBS	(a) Strips for water pipeline of 2m wide	m	33900		
2.1.2	PS C 3.1.2		Remove and grub large trees and tree stumps of girth:				
			(a) Over 1,0 m and up to and including 2,0 m	No	8		
2.1.3	PS C 3.1.4		Take down and reinstate existing fences	km	10		
2.1.4	8.2.6		Clear hedge or fence or both where not scheduled separately	m	2500		
2.2			SECTION DB : TRENCH EXCAVATION				
2.2.1	SABS 1200 DB		Excavation				
2.2.1.1	PS DB 5.2.2		Excavate in all materials for trenches, backfill backfill, compact and dispose of surplus material for watermain of:				
		CBS	(a) Pipes up to 160 mm dia for depths:				
			Over and Up to				
			(i) 0,0 m 1,0 m	m ³	3390		
			(ii) 1,0 m 2,0 m	m ³	36612		
			(b) extra over item (a) above for				
			(i) Intermediate excavation	m ³	5492		
			(ii) Hard rock excavation	m ³	1831		
2.2.2	PS DB 4.2.3		Excavation ancillaries				
2.2.2.1	8.3.3.1		Make up deficiency in backfill material:				
			(a) From other necessary excavations on Site	m ³	129		
			(b) By importation from designated borrow pits	m ³	2563		
			TOTAL SECTION 2 CARRIED FORWARD				

DE-HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO) : CONTRACT J

CONTRACT No: SK8/3/1-07/2022/23

SECTION 2: KUTULLO WATER RETICULATION

ITEM NO	PAYMENT REFERS TO	CBS / LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
2.3	1200 DB		(c) By importation from commercial or off-site sources selected by Contractor	m ³	312		
			(d) Opening up and closing down of designated borrow pits	Sum	1		
2.3.1	8.3.8.1 PS DB 4.2.5		Location of existing services: Supply of specialist equipment for the detection of existing services	Prov Sum	1	250 000.00	250 000.00
2.3.2			Protect existing services	Prov Sum	1	20 000.00	20 000.00
			Overhead charges for item 2.3.1 and 2.3.2	%	270 000		
2.3.4		LI	Excavate by hand in soft material to expose existing services	m ³	424		
2.4	1200 DB		Finishing				
2.4.1	8.3.6.1		Reinstate road surfaces complete with all courses:				
			(a) Gravel on shoulders	m ²	40		
			(b) Gravel on roads	m ²	80		
			(c) Asphalt of thickness of up to 30mm in roadway	m ²	25		
2.5	SABS 1200 LB		<u>SECTION LB: BEDING (PIPES)</u>				
2.5.1	8.2.1		Provision of bedding from trench excavation within 0.5km:				
			(a) Selected granular material	m ³	1017		
			(b) Selected fill material	m ³	2441		
2.5.2	8.2.2		Supply only of bedding by importation:				
2.5.3	8.2.2.1		(a) From other necessary excavations within 0,5 km: (Provisional)				
			(i) Selected granular material	m ³	678		
			TOTAL CARRIED FORWARD				

SECTION 2: KUTULLO WATER RETICULATION

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
	8.2.2.2		(ii) Selected fill material	m ³	1627		
			(b) From borrow pits within 0,5 km: (Provisional)				
			(i) Selected granular material	m ³	1356		
			(ii) Selected fill material	m ³	3254		
	8.2.2.2		(c) From commercial sources within 0,5 km: (Provisional)				
			(i) Selected granular material	m ³	339		
			(ii) Selected fill material	m ³	814		
2.5.4	8.2.4		Encasing of pipes in concrete (Grade 25 Mpa)	m ³	15		
2.5.5	8.2.5		Overhaul of Bedding and Selected fill Blanket	m ³ km	1153		
2.6	SABS 1200L		<u>SECTION L: PIPEWORK</u>				
2.6.1		LI, CBS	Labour intensive excavation				
2.6.1.1	PG4		Excavation by labour intensive methods in all materials for trenches, backfill, compact and dispose of surplus material for:				
			a) Pipes up to 160 mm dia for depths:				
			Over and Up to				
			(i) 0,0 m 1,0 m	m ³	4000		
2.6.2	8.2.1	LI	RETICULATION				
2.6.2.1			Supply, handle, lay, joint, well, bed, test and disinfect pipes complete with spigot and socket joints:				
			a) 110mm dia HDPE class 10	m	915		
			b) 63mm dia HDPE class 10	m	1183		
			c) 50mm dia HDPE class 12	m	31768		
			TOTAL CARRIED FORWARD				

SECTION 2: KUTULLO WATER RETICULATION

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
2.6.2.2			Supply, handle, lay, joint, well, bed, test and disinfect pipes complete with flange connections:				
			a) 50mm dia FBE coating with carboline 891 lining or any other approved lining for potable drinking water	m	305		
2.6.3	8.2.4		BENDS				
2.6.3.1	8.2.4		Supply, handle, lay, joint, bed, test, disinfect and join to the system pipe socket ended bends:				
			a) 50mm dia HDPE class 10				
			i) 11.5°	No	27		
			ii) 22.5°	No	21		
			iii) 45°	No	62		
			iv) 90°	No	65		
			b) 63mm dia HDPE class 10				
			i) 11.5°	No	3		
			ii) 22.5°	No	5		
			iii) 45°	No	4		
			iv) 90°	No	2		
			c) 110mm dia HDPE class 10				
			i) 11.5°	No	3		
			ii) 22.5°	No	2		
			iii) 45°	No	2		
			iv) 90°	No	4		
			TOTAL CARRIED FORWARD				

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SECTION 2: KUTULLO WATER RETICULATION

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
2.6.6	8.2.5 & 8.2.13		b) HDPE class 12 i) 50mm x 50mm dia	No	27		
2.6.6.1			ISOLATION VALVES Rates include supply, lay and bed Class 16 RSV socket ended, clockwise closing gate valves to SABS 664 with non-rising spindles including all fittings to be enclosed in a round valve box 250mm lid x 260 depth to Drg No 21008-P2B-06				
			a) 50mm	No	4		
			b) 65mm	No	2		
			c) 75mm	No	2		
2.6.7	8.2.5		PRESSURE REDUCING VALVE				
2.6.7.1			Rates include supply and install, CLA-VAL new globe type PRV, fusion bonded epoxy coated with red braum. Flanged & drilled SABS 1123 table 20 including auxiliary pipework with stainless steel tubing, fittings, stainless steel CRD pressure reducing pilot, sealing disc Dp @ gt; 15bar @ amp; pressure gauge as shown on the drawings including all fittings according to Drg No 21008-P2B-11				
			a) 50mm	No	1		
			b) 75mm	No	1		
			c) 110mm	No	1		
			d) 200mm	No	1		
			TOTAL SECTION 2 CARRIED FORWARD				

SECTION 2: KUTULLO WATER RETICULATION

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
2.6.8	8.2.4		END CAPS				
2.6.8.1			Supply, handle, lay, joint, bed, test, disinfect and join to the system pipe end caps including all couplings where necessary				
			a) HDPE				
			i) 63mm dia class 10	No	10		
			ii) 50mm dia class 12	No	80		
2.6.9	8.2.11		ANCHOR/THRUST BLOCKS AND PEDESTALS				
2.6.9.1			Excavate,Supply and place concrete class 20/19 according to Drg No 21008-P2B-07	m ³	130		
2.6.10	SABS 1200LF	LI	<u>SECTION LF: ERF CONNECTIONS</u>				
2.6.10.1			Supply, handle, lay, bed, test and disinfect and join to the pipe system HDPE Clas 12 pipes Rate to include excavation, bedding and backfilling.				
			a) Short house (0-2,0m) pipe connection using:				
			i) 25mm Double connections	No	580		
			ii) 25mm Single connections	No	211		
			b) long house (0-15,0m) pipe connection using:				
			i) 25mm Double connections	No	506		
			ii) 25mm Single connections	No	203		
2.6.11	8.2.8	LI	PIPELINE MARKERS				
2.6.11.1			Manufacture, supply, handle, install and paint marker posts inclusive the cost of listing and submitting a record of the installations to the Engineer	No	40		
			TOTAL SECTION 2 CARRIED TO SUMMARY				

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.1	SABS 1200C		<u>SECTION C: SITE CLEARANCE</u>				
3.1.1	PS C 3.1.1	CBS	Clear and grub:				
		CBS	(a) Strips for water pipeline of 2m wide	m	2989		
3.1.2	PS C 3.1.2		Remove and grub large trees and tree stumps of girth:				
			(a) Over 1,0 m and up to and including 2,0 m	No	10		
3.1.3	PS C 3.1.4		Take down and reinstate existing fences	km	15		
3.1.4	8.2.6		Clear hedge or fence or both where not scheduled separately	m	1000		
3.2			SECTION DB : TRENCH EXCAVATION				
3.2.1	SABS 1200 DB	CBS	Excavation				
3.2.1.1	PS DB 5.2.2		Excavate in all materials for trenches, backfill backfill, compact and dispose of surplus material for watermain of:				
		CBS	(a) Pipes up to 160 mm dia for depths:				
			Over and Up to				
		CBS	(i) 0,0 m 1,0 m	m ³	1196		
		CBS	(ii) 1,0 m 2,0 m	m ³	2153		
			(b) extra over item (a) above for				
			(i) Intermediate excavation	m ³	323		
			(ii) Hard rock excavation	m ³	108		
3.2.2	PS DB 4.2.3		Excavation ancillaries				
3.2.2.1			Make up deficiency in backfill material:				
			(a) From other necessary excavations on Site	m ³	94		
			(b) By importation from designated borrow pits	m ³	275		
			TOTAL SECTION 3 CARRIED FORWARD				

DE-HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO) : CONTRACT J

CONTRACT No: SK8/3/1-07/2022/23

SECTION 3: PUMPING MAIN

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
3.3	1200 DB		(c) By importation from commercial or off-site sources selected by Contractor	m ³	105		
			(d) Opening up and closing down of designated borrow pits	Sum	1		
3.3.1	PS DB 4.2.5		Location of existing services: Supply of specialist equipment for the detection of existing services	Prov Sum	1	200 000.00	200 000.00
3.3.2			Protect existing service	Prov Sum	1	30 000.00	30 000.00
			Overhead charges for item 3.3.1 and 3.3.2	%	230000		
3.3.4		LI	Excavate by hand in soft material to expose existing services	m ³	30		
3.4	SABS 1200 LB		<u>SECTION LB: BEDING (PIPES)</u>				
3.4.1	8.2.1		Provision of bedding from trench excavation within 0.5km:				
			(a) Selected granular material	m ³	180		
			(b) Selected fill material	m ³	216		
3.4.2	PS LB 8.2.2		Supply only of bedding by importation:				
3.4.3	PS LB 8.2.2.1		From other necessary excavations within 0,5 km: (Provisional)				
			(a) Selected granular material	m ³	120		
			(b) Selected fill material	m ³	144		
3.4.4	PS LB 8.2.2.3		From borrow pits within 0,5 km: (Provisional)				
			(a) Selected granular material	m ³	210		
			(b) Selected fill material	m ³	251		
			TOTAL SECTION 3 CARRIED FORWARD				

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
3.4.5	PS LB 8.2.2.3		From commercial sources within 0,5 km: (Provisional) (a) Selected granular material (b) Selected fill material	m ³ m ³	60 72		
3.4.6	PS LB 8.2.4		Encasing of pipes in concrete	m ³	5		
3.4.7	PS LB 8.2.5		Overhaul of Bedding and Selected fill Blanket	m ³ km	1716		
3.5	SABS 1200L		<u>SECTION L: PIPEWORK</u>				
3.5.1		LI, CBS	Labour intensive excavation				
3.5.1.1	PG4		Excavation by labour intensive methods in all materials for trenches, backfill, compact and dispose of surplus material for:				
		CBS	a) Pipes up to 160 mm dia for depths: Over and Up to				
		CBS	(i) 0,0 m 1,0 m	m ³	603		
3.6.2	SABS 1200L		MEDIUM PRESSURE PIPES				
3.6.2.1	8.2.1		Supply, handle, lay, weld bell joint preparation, bed, test and disinfect Grade X42 steel pipes Bitumen fibre coating with liquidepoxy lining (4,5mm wall thickness). All to be class PN 25				
			a) 150 mm DN	m	500		
3.6.2.2			Supply, handle, lay, joint, bed, test and disinfect pipes complete with spigot and socket joints:				
			a) uPVC Class 25	m	2989		
			TOTAL SECTION 3 CARRIED FORWARD				

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
3.6.3	8.2.4		BENDS				
3.6.3.1	8.2.4		Supply, handle, lay, joint, weld, bed, test, disinfect and join to the system 150 mm DN Steel Pipelines bends including all couplings where necessary:				
			a) 150mm DN				
			i) 11.5°	No	2		
			ii) 22.5°	No	1		
			iii) 45°	No	2		
			iv) 90°	No	2		
3.6.3.2	8.2.4		Supply, handle, lay, joint, bed, test, disinfect and join to the system pipe socket ended bends:				
			a) 160mm dia uPVC Class 25				
			i) 11.5°	No	5		
			ii) 22.5°	No	4		
			iii) 45°	No	5		
			iv) 90°	No	4		
3.6.7			Valves				
3.6.7.1			Air Valves				
			(a) Supply, install PN 16 Air Valve Vent-O-Mat Type as shown on the drawings including all fittings for the following diameters:				
			i) 80 mm NB	No	7		
			TOTAL SECTION 3 CARRIED FORWARD				

SECTION 3: PUMPING MAIN

ITEM NO	PAYMENT REFERS TO	LI / CBS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
			BROUGHT FORWARD				
3.6.7.2			Scour Valves				
			a) Supply, install PN 25 Scour Valve Type as shown on the drawings including all fittings and isolation valves on the following pipes:				
			ii) 150 mm NB	No	3		
3.6.7.3			Isolating Valves				
			a) Supply, install PN 25 Isolating Valve Type as shown on the drawings including all fittings				
			ii) 150 mm NB	No	2		
3.6.8			Valve Chambers				
			Rate to include all concreting, formwork, excavation and steel reinforcement for:				
3.6.8.1			a) Air Valves	No	7		
3.6.8.2			b) Scour Valves	No	3		
3.6.8.3			c) Isolating Valves	No	2		
3.6.9			ANCHOR/THRUST BLOCKS AND PEDESTALS				
			Supply and place concrete of class 20/19 according to Drg No 21008-P2B-07	m ³	8		
3.6.10	8.2.9		Marker posts	No	5		
3.6.11			Crossings				
3.6.12			Road Crossings by Pipe Jacking				
3.6.12.1			a) Municipal tarred roads	No	1		
3.6.13			Stream and River Crossings				
3.6.13.1			a) Small rivers & Streams	No	1		
			TOTAL SECTION 3 CARRIED TO SUMMARY				

DE-HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO) : CONTRACT J**CONTRACT No: SK8/3/1-07/2022/23****SECTION 4: ACCESS ROAD**

ITEM NO.	PAYMENT REFFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4.1	SANS 1200 C	Site Clearance-Access Road				
4.1.1	PS C 3.1.1	Clear and grub reservoir site	ha	0.2		
4.1.2		Clear and grub access route 5 metre wide	m	1 100		
4.1.3		Take down existing stockproof fences	m	100		
4.1.4		Transport materials and debris to unspecified site and dump	m³.km	500		
4.1.5	8.2.10	Removal of topsoil to nominal depth of 150mm, stockpile and maintain	m³	825		
4.2	SANS 1200DA	EARTHWORKS (Small Works)				
4.2.1	8.3.1	Restricted Excavation				
4.2.1.1		Excavate in all materials. Material to be stockpiled for backfill or disposal on site. Backfill to be compacted in 150mm layers to 95% Mod AASHTO. Stabilization and stabilizing agent measured elsewhere.	m³	158		
4.2.1.2		Extra over Items 4.2.1.1 for:				
		Hard Rock excavation	m³	16		
4.3	8.3.2	Excavation				
4.3.1	8.3.2(a)	Excavate for access road in all materials, including stabilized backfill, backfill and compact, including disposal surplus/ unsuitable material within a freehaul distance of 1.1km:	m³	1 650		
4.3.2		Extra over Item 3.21. for:				
		Hard Rock excavation	m³	17		
4.4		Importing of Materials				
4.4.1	8.3.4	From borrow pits:	m³	825		
4.4.2	8.3.4	From commercial sources. Rate for material delivered to site.	m³	495		
		TOTAL SECTION 4 CARRIED FORWARD				

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ITEM NO.	PAYMENT REFFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
4.5	1200DM	Compaction				
4.5.1	8.3.3	Roadbed preparation and compaction of in-situ material to 93 %Mod AASHTO	m ²	1 650		
4.6	1200MFL	Stabilization Agent				
4.6.1	8.3.4	Supply, deliver and apply 4% SANS ENV-197-1 (CEMII 32,5) to compacted fill material .The Contractor to confirm the % stabilizing agent with the Engineer prior to construction.	t	17		
4.7		Stormwater drainage				
4.7.1	8.2.2	Supply and install 2m long x 1m wide x 0,3m height, with 80 x 100 mesh type and 2,5mm dia. Wire, galvanised to SANS 675 Class A, Reno Mattresses filled with stone as per SANS 1200DK	m ³	12		
		TOTAL SECTION 4 CARRIED TO SUMMARY				

SECTION 5: STORAGE

ITEM NO.	PAYMENT REFFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5		PRESTRESSED STEEL TANKS				
5.1		<u>Supply and install prestressed steel tanks as follows:</u>				
5.1.1		Supply and erect 410 KL hot dipped galvanised pressed steel tank on 1m plinths, complete with roof decking, manhole with lock, roof ventilators, internal and external ladder, flanged 100mm diameter outlet and 200mm diameter overflow pipes, and 150mm diameter inlet connections, level control valve,	Sum	1		
5.1.2		Supply and install Class B Horizontal Woltman meters complete with fittings and meter chamber bi-directional meters to SABS 1529 complete with couplings and chamber	No	1		
5.2	8.2.3	LEVEL CONTROL VALVE				
5.2.1		Supply, join, test 150mm diam. Model 753-80 Refer Item k, inlet chamber. Bermad level control valve with altitude pilot complete with pressure sustaining normally closed with type F large control filter and V-port throttling plug, PN25.	No	1		
5.3		EXCAVATIONS				
5.3.1	8.3.1(b)	Restricted excavation for footings, trenches, anchor blocks etc.	m ³	25		
5.3.2		Extra over item 3.26.2.1 for excavation in hard rock material	m ³	50		
5.3.3		Import approved fill material from borrow pit and place in layers not exceeding 150mm and compact to 95% Mod. AASHTO density. (GM>1.5, PI<10, CBR>45 at 95% m.A.)	m ³	25		
		TOTAL CARRIED FORWARD				

SECTION 5: STORAGE

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SECTION 5: STORAGE

ITEM NO.	PAYMENT REFFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
5.8	SABS 1200DK 8.2.5	a) L = 1m W = 1m H = 1m Cell 1	m ³	10		
		b) L = 2m W = 0,5m H = 0,5m Cell 2	m ³	10		
5.8.1		Stone Pitching The rate shall cover the cost of trimming and preparing slopes and excavated surfaces, excavating footing trenches to a vertical depth not exceeding 1 m and backfilling and compacting, supplying, hauling and placing all stone, grout and wire netting, and the complete construction of the pitching as specified for plain pitching.	m ²	4		
5.9		Fencing				
5.9.1		Supply and Installation of Diamond mesh wire fence including, Setting out, barbed wire, Concrete work, fence lining , gate, stays, posts, droppers and overhangs.	m	150		
		TOTAL SECTION 5 CARRIED TO SUMMARY				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6.1	1200C	Site Clearance				
6.1.1		(a) Clear and grub on area earmarked for the new Package Water Treatment Plant	m ²	60		
6.1.2	8.2.2	Remove and grub large trees and tree stumps of girth:				
		(a) Over 1,0 m and up to and including 2,0 m	No	1		
6.2	1200D	Excavation for Concrete Platform				
6.2.1	8.3.2.a	Excavate for restricted foundations, footings in all materials, stockpile, maintain, and use for backfill compacted to 95% mod AASTHO	m ³	7		
6.2.2		Import G6 material from borrow and compacted to 95% Mod AASHTO	m ³	228		
6.2.3		Extra over item 3.2.1 & 3.2.2 for excavation in hard rock material	m ³	2		
6.2.4		a) Intermediate excavation	m ³	2		
		b) Rock excavation	m ³			
6.3	1200 G	Concrete Works				
6.3.1	8.4.3	Strength concrete: 15MPa/19m to:				
	8.4.2	b) 15MPa Concrete to blinding - 50mm thick	m ³	40		
6.3.2	8.4.3	Strength concrete: 25MPa/19m to:				
	a)	25MPa Concrete in platform	m ³	72		
6.4		Reinforcement				
6.4.1		Supply and install steel mesh reinforcement (Ref 888)	m ²	460.00		
6.5		Brickwork				
6.5.1.		Face brick as per COROBRICK or equal approved in 1:4 cement mortar in.				
	a)	One brick wall (220mm wide) without opening.	m ²	80		
	b)	Damp proof course at top of platform wall	m	24		
	1200 A	TOTAL SECTION 1 CARRIED FORWARD				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				
6.6		PACKAGE PLANT				
6.6.1	PSET 6.1	Supply, install & commission a 1.5 Ml/day Package Water Treatment Plant Surface Water from a river - clear water to comply with SANS 241: 2006 ED (6) Dwg 21008-P2B-17				
		a) Coagulant dosing system	Sum	1		
		b) pH dosing system	Sum	1		
		c) Mixing tanks	No	3		
		d) 2.6 circular clarifiers	No	3		
		e) Duty standby filter pumps	No	2		
		f) Control panel and electrical	No	1		
		g) 4 x Conn 120 stretch 800mm Glass Media filtration system with all pipework, valves, and fittings	Sum	1		
		h) 4 X Conn 1400mm stretch GAC filtration system with all pipework, valves and fittings	Sum	1		
		i) Filter media - Glass media, GAC and graded Silica sand	Sum	1		
		j) Hypochlorite disinfection system	No	1		
		k) Interconnecting pipework and fittings as per Dwg	Sum	1		
6.6.2		Supply and install of a portal frame with all fittings, bolts and sundry members to be coated with eppoxy in accordance with SANS 12944				
		a) 203 x 203 x 46 kg/m H-section for columns	m	48		
		b) 203 x 113 x 25 kg/m I-sections for beams	m	80		
		c) 125 x 65 x 15 kg/m Leaped channel section	m	140		
		d) Galvanised corugated iron sheets (6m x 0.47m)	No	40		
		TOTAL SECTION 6 CARRIED FORWARD				

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SECTION 6: PACKAGE WATER TREATMENT PLANT

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.6.3		BRICKWORK Face brick as per COROBRICK or equal approved in 1:4 cement mortar in. a) One brick wall (220mm wide) without opening.	m ²	45		
6.3.4		Supply and install a 1.5m high galvanised mesh wire fence complete with a single gate of 2.5m high and 1.2m wide	m	35		
6.7		BOOSTER PUMPSTATION				
6.7.1		Pump Room				
		Concrete (Structural)				
6.7.1.1	1200 G	Concrete				
	8.4.3	a) Strength concrete: i) 30MPa Concrete in roof slabs ii) 30MPa Concrete in pump plinths	m ³ m ³	80 10		
	8.4.4	b) Unformed surface finish i) Wood float finish to roof slab to receive screed	m ²	150		
	8.1.1	c) Formwork and Finish				
	8.2.2	i) Formwork to narrow widths 150mm -300mm	m ²	5		
	8.2.2	ii) Formwork Smooth: Vertical sides	m ²	150		
	8.2.2	iii) Formwork Smooth: Horizontal, roof - straight Exceeding 3.5m but not exceeding 5.0m	m ²	30		
	8.2.2	iv) Formwork Smooth: Horizontal, roof - straight Exceeding 5.0m but not exceeding 7.5m	m ²	6		
		TOTAL SECTION 6 CARRIED FORWARD				

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SECTION 6: PACKAGE WATER TREATMENT PLANT

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.1.2	8.2.2	v) Plinths	m ²	40		
	8.1.2	d) Reinforcement				
	8.1.2.4	iii) Supply and fix mesh ref 917	m ²	50		
	8.2.6	Openings through concrete walls for manufactured steel fittings with puddle flanges for the following diameters:				
	a)	200mm	No	4		
		Chamfers				
	a)	100 x 100 mm in roof slab	m	130		
	6.7.3	SANS 1200 H Structural Steelwork (small works)				
	6.7.3.1	Supply and install gantry beam for hoisting pumps				
	a)	11m long, I - beam 305x203x60kg/m and M20 Gr 8.8, 400mm long holding down bolts. Rate to include load testing	Sum	1		
6.7.4		MISCELLANEOUS				
6.7.4.1	1200L 8.2.11	Construction of anchor blocks (plinths) and pipe supports.				
	a)	30MPa Concrete to thrust blocks	m ³	2		
	b)	Formwork smooth .	m ²	6		
	c)	Supply & fix all dia high tensile reinforcement	t	0.2		
6.7.5		Door and Windows all in accordance to details on Dwg.				
6.7.5.1		Supply, deliver and install:				
	a)	Double steel transformer door complete with steel frame for 220mm thick wall with modifications where needed to accommodate security door	No	1		
		TOTAL SECTION 6 CARRIED FORWARD				

SECTION 6: PACKAGE WATER TREATMENT PLANT

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.7		SCHEDULE 4B: MECHANICAL				
6.7.7.1		Supply and install (laser aligned), high pressure centrifugal pump and motor set mounted on a baseplate with combined efficiency of at least 70% (4p/400V/IP55 electric motor, 3 phase; 1450 rpm, induction, squirrel cage). Client preference: KSB or similar approved. Refer to mechanical specifications. The Engineer shall give prior approval before a purchase order is placed.				
		a) Low pressure centrifugal pump and motor set. Duty : 26m³/h @ 180 m static head.	No	2		
6.7.7.2		Pump performance test at supplier in accordance with BS5316 Class B	Sum	1		
6.7.7.3		Commissioning and testing on site	Sum	1		
6.7.7.4		Pipe Specials				
		(a) Supply and install				
		i) install inlet and outlet pipework as shown on 14017/120 complete with all fittings (Table 16) including gate valves, non return valves, bermad valves	Sum	1		
6.7.7.5		Supply maintenance and operational manuals	Sum	1		
6.7.7.6		Supply and install to wall - fire extinguishers in 4.5kg DCP	No	2		
6.7.7.7		Supply and install to wall - fire extinguishers in 4.5kg CO 2	No	2		
6.7.7.8		Supply and install wall mounted steel box 600x300x150 with locable front door supplied with first aid industrial type according to safety act.	Sum	1		
6.7.7.9		Supply and install wall mounted toolbox 600x300x300 with locable front door	Sum	1		
6.7.7.10		Supply cleaning mutton cloth for the pumps maintenance 4x500gr. packets	Sum	1		
		TOTAL SECTION 6 CARRIED FORWARD				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.7.11		Supply valve steel tee key	Sum	2		
6.7.7.12		Supply pumps log book	Sum	2		
6.7.7.13		Supply grease gun, 5- litres of grease and 5 -litres cleaning liquid for the pumps maintenance.	Sum	2		
6.7.7.14		Pipework drawing wall mounted behind glass in aluminium frame with all as build information.	Sum	1		
6.7.7.15		Statutory notices.				
		i) Non metallic notice prohibiting the entrance to pump station by unauthorised persons	Sum	1		
		ii) Non metallic notice prohibiting unauthorised persons tampering with or handling the switchgear	Sum	1		
		iii) Sign board with instructions for treatment of electrical shock	Sum	1		
		iv) A notice with instructions in case of fire	Sum	1		
6.7.7.16		Supply and install gantry beam as specified	Sum	1		
6.7.8		Pump House Electrical Installations				
6.7.8.1		Distribution Boards				
		Supply, delivery, storage and installation of small power (lighting and socket points) electrical installation				
		a) Install 4 x 2.5 foot LED flourescent light and wiring with 2.5mmSQ wire	Sum	2		
		b) install 2 x normal socket 3 pin and wiring with 4mmSQ wire	Sum	3		
		c) Install 6 pin socket and wiring with 4mmSQ wire	Sum	3		
		d) Install 1 x DB 6 way with earthleakage and circuit breakers	Sum	1		
		e) Install 8 x 200W Wall Mounted LED Floodlights	No	4		
		TOTAL CARRIED FORWARD				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.8.2		f) Supply, delivery and installation of Surface mounted architrave steel type power distribution boards complete with surface trays, doors ,switch gear mounting trays, copper busbars for control of circuits of the small power installations Light Switches	Sum	1		
6.7.8.3		a) Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas i) 1 Lever 1 way ii) 2 Lever 1 way	No No	1 2		
6.7.8.3		Socket Outlets a) Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. i) 20A 3Phase male / female socket outlets ii) 16A 3 pin double socket outlets	No No	2 2		
6.7.8.3		Light Voltage Reticulation <u>Trenching</u>				
6.7.8.4		a) Excavating, bedding, backfilling, consolidating and making good as specified, Total length of LV Trench i) Pickable soil 600/1000V PVC SWA cables, in trenches and sleeves, including labels a) 120mm ² 4core	m ³ m	500 100		
		TOTAL CARRIED FORWARD				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.9		b) 70mm ² 4core	m	120		
		c) 50mm ² 4core	m	150		
		d) 25mm ² 4core	m	300		
		e) 16mm ² 4core	m	150		
		f) 16mm ² 3core	m	150		
		g) 10mm ² 4core	m	50		
		h) 6mm ² 4core	m	50		
		i) 95mm ² BCEW	m	150		
		j) 70mm ² 3 BCEW	m	200		
		k) 25mm ² BCEW	m	200		
		l) 6mm ² BCEW	m	100		
		<u>MCC & Other Electrical Installations</u>				
		a) Supply, delivery to site and installation of the below specified motor control center with soft starter panels complete with fixing material, mounting and testing & commissioning. Allowance must be made in the rates for all the required fixing materials and accessories. All Drawings (Hard and Soft copies in dwg format) and documentation must be provided				
		The starter panel must be floor mounted IP 55. The dimensions are to be approved by Engineer prior to ordering. It must be complete for each drive with d. Start / Stop & Emergency Stop pushbuttons and can be operated in a manual and automatic mode with level control with a Pump Selection Selector Switch and Neon lights. Colour must be electric Orange. The starter panel must have all drives complete with integrated RFI filter and AC Choke as standard. A PID Controller and Communications (Fieldbus) Kit, I/O Expansion board must be included				
		TOTAL CARRIED FORWARD				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
		i) 45kW * 2 and 2 Blank Panels for future drives , 400V Main and 230V (Control) Soft Starters Panel Duty / Standby b) Supply and insall 600/1000V PVC SWA cables to power the motors, in cable along racks and ducting ,including labels i) 120mm² 4core ii) 70mm² 4core c) Connection and commisioning of (45kW * 2, 22kW * 4) Electric motors including all terminations and sundry electrical materials like Accessories lugs,insulation tape etc d) Cable Management Racks, Trays, Ducting and e) No Flow switch f) Pressure switch	each m m No Sum No. No.	1 50 100 1 1 2 2		
		CARRIED FORWARD				

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.10		Guard House Building				
6.7.10.1		BRICKWORK				
		Face brick as per COROBRICK or equal approved in 1:4 cement mortar in.				
		a) One brick wall (220mm wide) without opening.	m ²	80		
		b) Half brick wall (110mm wide) without opening.	m ²	15		
		c) Damp proof course at top of external concrete wall.	m	24		
		d) Precast prestressed concrete lintels over doors and windows.	m	5		
		e) Supply and build in air vents.	No			Rate Only
		e) Granolithic floor screed finish cast to fall 25mm to minimum 20mm thick.	m ²	25		
6.7.10.2		ROOF COVERING				
		a) Supply and installation of SABS roof timber complete with nutek fascia boards as per engineer's design (roof timber to be treated with creosote or any approved) and roof cover comprising galvanised roof sheeting	m ²	25		
6.7.10.3		Door and Windows all in accordance to details on Dwg.				
		<u>Supply, deliver and install:</u>				
		a) Timber door complete with steel frame for 220mm thick wall with modifications where needed to accommodate security door	No	1		
		b) Timber door complete with steel frame for 110mm thick wall with modifications where needed to accommodate security door	No	1		
		c) Standard type steel residential window frame with 4mm clear float glass puttied in with steel window putty, 2 x standard chrome plated fittings to suit opening sashes:				
		TOTAL CARRIED FORWARD				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.10.4		i) NE1	No	1		
		ii) ND10	No	1		
		iii) ND11	No	2		
		d) Standard type window burglar proof Valmatex type VEM 486/14m 35x120x4,5 thick diamond shaped meshes welded to sides of window frame for:				
		i) NE1	No	1		
		ii) ND10	No	1		
		iii) ND11	No	2		
		Door and Window Finishes				
		a) Gloss enamel on steel:				
		i) Coat factory applied red oxide.	m ²	4		
		ii) Coat zinc-chromate primer.	m ²	4		
		iii) 1 universal under coat.	m ²	4		
		iv) 2 coats approved gloss enamel paint in approved colour	m ²	4		
		b) Window sill:				
		i) External face brick on edge.	m	4		
6.7.10.5		Guard House Building Electrical Wiring				
		a) Install 4 x 2.5 foot florentcent light and wiring with 2.5mmSQ wire	Sum			Rate only
		b) install 1 x normal socket 3 pin and wiring with 4mmSQ wire	Sum			Rate only
		c) Install 6 pin socket and wiring with 4mmSQ wire	Sum			Rate only
		d) Install 1 x DB 6 way with earthleakage and circuit breakers	Sum			Rate only
		TOTAL CARRIED FORWARD				

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ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.10.6		Light Voltage Reticulation				
		<u>Trenching</u>				
		a) Excavating, bedding, backfilling, consolidating and making good as specified. Total length of LV Trench in all material	m³	25		
6.7.10.7		Supply and installation of 600/1000V PVC SWA cables, in trenches and sleeves, including labels				
		a) 16mm² 3core	m	20		
6.7.10.8		Plumbing				
		a) Sewers and Water Supply				
		i) Site Clearance	m²	50		
		ii) Pipe trenches for sewer pipes	m³	80		
		iii) Supply, lay, bed and test Ø 100mm uPVC class 34 sewer pipes	m	50		
		vii) Supply and install manhole chambers complete for rodding eyes not exceeding 1,5m deep	No	4		
		v) Supply, lay, bed and test Ø 20mm HDPE class 10 water pipes	m	30		
		b) Plumbing fixtures				
		i) Supply and install flush toilet set complete with cisten and fittings	No	1		
		ii) Supply and install wash trough complete with cupboards	No	1		
		iii) Supply shower and pipe fittings	Sum	1		
		iv) Supply all materials and install plumbing complete for water supply and sanitary pipework	Sum	1		
		TOTAL CARRIED FORWARD				

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ITEM NO	REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
6.7.10.9		Finishings a) Ceiling 6mm cladit fibre cement ceiling nailed to 38x38mm sap battens at max. 400mm c/c with galvanised clout nails. Provide galvanised h-profile jointing strips to be pre-painted. Prepare and apply 1xuniversal undercoat & two coats Plascon Polvin Super acrylic PVA paint. b) Cornice 75mm gypsum coved cornice nailed to wall and ceiling At 450mm centers max. And to receive paint finish to match ceiling c) Stainless Steel - Low Pressure 100L Solar Geyser With Auxiliary Tank 100L, 0.31mm SUS304 s/steel tank with stainless steel outer shell, Flat/pitched roof stand (1.5mm galvanized and painted)10 x 2mm vacuum tubes (designed for 38mm diameter hail) and Stainless steel auxiliary tank. Complete with Plumbing fittings, piping Element & thermostatElement plug	Sum			Rate only
6.7.10.10		SEPTIC TANK Foundation excavations, masonry and concrete works, plastering, backfilling with compaction, associated pipeworks This items includes supplying of needed material. See Dwg for Details	sum	1		Rate only
6.7.10.11		ELECTRICITY SUPPLY a) Supply material and erect a three phase electricity power line to the new plant b) Supply and Instal 315Kva transformer	km	4.5		
6.7.10.12		TESTING AND COMMISSIONING a) Testing and commission the treatment plant	No	1		
		TOTAL SECTION 6 CARRIED TO SUMMARY				

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SECTION 7: SUB-CONTRACTING PROCUREMENT AND SUPERINTENDENCE

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
7.1	PCBS 2.1	PROCUREMENT OF COMMUNITY BASED SUB-CONTRACTORS (a) Procurement process for the totality of all tenders <u>amounting to 30% of section 2 and section 3 bid price</u> to be concluded for the appointment of community based sub-contractors (minimum CIDB grading 1CE)	Lump Sum	1	150 000.00	150 000.00
7.2	PCBS 2.4	CONSTRUCTION WORKS FOR COMMUNITY BASED SUB-CONTRACTORS (a) Overheads, charges and profit on payment associated with scope of works amounting to <u>30% of Section 2 and section 3 bid price</u> recommended to be carried out by community based sub-contractors	%			
7.3	PCBS 2.2	TRAINING OF COMMUNITY BASED SUB-CONTRACTORS a) Generic skills	Prov Sum	1	R 120 000	120 000.00
		b) Entreprenaural skills	Prov Sum	1	R 120 000	120 000.00
		c) Engineering skills	Prov Sum	1	R 120 000	120 000.00
		(d) Overheads, charges and profit on item 4.3 (a), (b) and (c) above	%	360000		
7.4	PCBS 2.3	MANAGEMENT OF COMMUNITY BASED SUB-CONTRACTORS (a) Superintendence of sub-contracted works i.e supervising, checking,approving and taking over works completed by community basedsub-contractors	Months	12		
		TOTAL SECTION 7 CARRIED TO SUMMARY				

SUMMARY OF BILLS

SECTION	DESCRIPTION	AMOUNT
SECTION 1	PRELIMINARY AND GENERAL	
SECTION 2	STEELPORT (KUTULLO) WATER RETICULATION	
SECTION 3	PUMPING MAIN	
SECTION 4	ACCESS ROAD	
SECTION 5	STORAGE	
SECTION 6	PACKAGE WATER TREATMENT PLANT	
SECTION 7	SUB-CONTRACTING PROCUREMENT AND SUPERINTENDENCE	
SUB-TOTAL 1		
ADD CONTIGENCIES @ 10%		
SUB-TOTAL 2 INCLUDING CONTIGENCIES		
ADD 3% CPA		
SUB-TOTAL 3 INCLUDING CPA		
ADD VAT @15%		
TOTAL CARRIED TO FORM OF TENDER		

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PART C3 SCOPE OF WORK

As much as is economically feasible all work shall be implemented by employing Labour Intensive Construction methods. Over and above the normal Building and Allied works to be implemented by employing skilled and unskilled labour the works specified in the "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)" shall be undertaken using Labour Intensive Construction methods.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C3: SCOPE OF WORK

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 Employer's objectives

The employer's objectives are to deliver public infrastructure using labour intensive methods and sub-Contractors where possible. The works in this Contract are to be executed by using both conventional construction and labour –intensive construction methods according to the special public works programme (SPWP) as prescribed in the guidelines of the Expanded public works program (EPWP).

The following prerequisites will apply for the appointment of sub-Contractor:

- Sub-Contractor will preferably be from the community where the works are executed.
- Otherwise, sub-Contractors will be from the Sekhukhune District Municipality Regions in the proximity of the community where the works are executed or other Madibeng Regions.
- Prior to site establishment, the successful Bidder will submit details of the sub-Contractors to be used in the execution of the Works.

Labour intensive works

Labour intensive construction methods shall be implemented using unemployed local works who are temporarily employed in terms of the project specification. The main Contractor must provide NAF2 level training to the Sub-Contractors.

Labour-intensive competencies of supervisory and management staff

Contractors shall engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/Supervisors at NQF "National Certificate: Supervision of Civil Engineering Construction Processes" and Construction Manager /Manager at NQF level 5 "Manage labour-intensive Construction Processes" or equivalent QCTO qualifications.

C3.1.2 Overview of the works

The work will be carried using Labour- Intensive approach as much as possible. Labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be Constructed using local workers who are temporarily employed in terms of this Scope of Work.

C3.1.3 Extent of the works

The construction of DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J includes the following:

- Establishment of Contractor's camp site.
- The excavation and backfilling of pipeline trenches

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
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- Installation of reticulation Networks Kutullo/ Steelpoort Park as shown on the table on page C3.1.3.
 - Installation of yard connections
 - Installation of pipeline markers
 - Construction of a Package Treatment Plant
 - Installation of a ground tank
 - Conducting compaction and hydraulic pressure tests
- The extent and configuration of the reticulation and yard connections to be installed are shown in the tables below.

1	PIPELINES		
1.1	KUTULLO RETICULATION	UNIT	QTY
1.1.1	150mm dia Steel	m	3485
1.1.2	110mm dia HDPE class 10	m	915
1.1.3	63mm dia HDPE class 10	m	1183
1.1.4	50mm dia HDPE class 12	m	31768
1.1.5	50mm dia Steel	m	915

1.4 Location of the works

The limits of the project are as shown on the locality plan bound into the book of drawings to be received together with this document. The site of works is located at;

Table 1: Village GPS Locations			
No.	Settlement	Latitude	Longitude
1	Kutullo/ Steelpoort	24°54'44.10"S	29°59'38.36"E

The site shall not only include the works area for the construction of the new services, but shall be extended in the broader sense to take account of all areas occupied by the Contractor, be it deliberate or unintentional, in the execution of the Contract.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C3.2 ENGINEERING

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.2 ENGINEERING**C3.2.1 STANDARDS AND CODES OF PRACTICE**

The following design standards for civil engineering infrastructure will apply:

- I. Guideline for Human Settlement planning and design (2000) compiled under the patronage of the Department of Housing and published by the CSIR Building and Construction Technology (New Red Book).
- II. General Condition of Contract for construction works (2015) (Third Edition) by the South African Institution of Civil Engineers.
- III. Technical Guidelines (2004) by the Department of water and Sanitation.
- IV. SANS 1200 Standardized specifications.

C3.2.2 DESIGN AND SPECIFICATIONS

The standard specifications on which this Contract is based are:

SANS 1200 A 1986	:	General
SANS 1200 C 1980 (Amended 1982)	:	Site Clearance
SANS 1200 D 1989	:	Earthworks
SANS 1200 DB 1989	:	Earthworks (Pipe works)
SANS 1200 L 1983	:	Medium Pressure Pipes
SANS 1200 LB 1983	:	Bedding
SANS 1200 LF 1983	:	Erf Connection
SANS 1200 GA 1982	:	Concrete (Small Works)
SANS 1200G	:	Concrete
SANS 1200H	:	Structural Steelwork
SANS 1200HC	:	Corrosion Protection
SANS 1200LC	:	Cable Ducts
SANS 1200MM	:	Ancillary Works

(Note: "SABS" has been changed to "SANS"; the SABS 1200 specifications are due to be replaced in the foreseeable future by SANS 1200)

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SANS) in Pretoria:

SANS 1921 – 1 (2004): Construction and Management Requirements for Works
Contracts Part 1: *General Engineering and Construction Works*

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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Where Contractor is to supply the design of designated parts of the permanent Works or temporary Works, he shall supply full working drawings supported by a professional engineer's design certificate.

Table 1:

Item No.	DESCRIPTION	DESIGN CRITERIA
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		

C3.2.3: Drawings (Read with SANS 1921 – 1: 2004 clauses 4.1.7; 4.1.11 and 4.1.12)

The reduced drawings form part of the tender documents as mentioned under Part T1 and shall be used for tendering purposes only.

The Contractor shall be supplied with three complete paper copies of the construction drawings free of charge. The Contractor shall at his own expense re-produce further paper prints required for the construction of the work.

At the completion of the Contract, the Contractor shall return to the Employer's Agent all drawings, provided or made, during the Contract period.

Any information which the Contractor has control over and which is required by the Resident Engineer to complete the as built drawings shall be made available to the Resident Engineer before the Certificate of Completion is issued.

Only written dimensions may be used. Dimensions are not to be scaled from drawings unless ordered by the Engineer. The Employer's agent will supply all figures / dimensions which are not shown on the drawings. The levels or dimensions given on the drawings are subject to confirmation on site. The Contractor shall submit all levels and dimensions to the Employer's agent for confirmation before he commences with any structural construction work. The Contractor shall also check all dimensions which are given on the drawings and inform the Employer's Agent of any conflicting dimensions.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C3.2.4: LIST OF DRAWINGS

DRAWING NO	DESCRIPTION	REFERENCE NO.:
000	DRAWING LIST	21008-P2B-00
001	NAMEBOARD	21008-P2B-01
002	OVERALL LAYOUT	21008-P2B-02
003	KUTULLO/STEELPOORT PARK WATER RETICULATION LAYOUT	21008-P2B-03
004	ROAD CROSSING DETAILS	21008-P2B-04
005	YARD CONNECTION DETAILS	21008-P2B-05
006	ISOLATION VALVE AND PIPE BEDDING DETAILS	21008-P2B-06
007	THRUST BLOCK DETAILS	21008-P2B-07
008	FLOW CONTROL VALVE DETAILS	21008-P2B-08
009	RIVER CROSSING DETAILS	21008-P2B-09
010	SCOUR VALVE DETAILS	21008-P2B-10
011	PRESSURE REDUCING VALVE DETAILS	21008-P2B-11
012	BULKPIPELINE FROM PWTP TO PROPOSED STORAGE	21008-P2B-12
013	410KL GROUND STEEL TANK	21008-P2B-13
014	DIAMOND MESH FENCE DETAILS	21008-P2B-14
015	PWTP BOUNDARY FENCE DETAILS (TAMPER PROOF)	21008-P2B-15
016	AIR VALVE DETAILS	21008-P2B-16
017	PACKAGE WATER TREATMENT PLANT LAYOUT	21008-P2B-17
018	PACKAGE WATER TREATMENT PLANT LAYOUT	21008-P2B-18
019	ACCESS ROAD	21008-P2B-19
020	PIPE MARKER DETAILS	21008-P2B-20

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C3.3 PROCUREMENT

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C3.3 PROCUREMENT

C 3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES

All bids received shall be evaluated in terms of the Supply Chain Management Regulations, Sekhukhune District Municipality Supply Chain Management Policy (on request from Municipality), and other applicable legislations

C 3.2.2 SUBCONTRACTING (CBS)

The commitment of the Employer to Government Policy concerning the empowerment of the CBS shall be noted and adhered to by the main Contractor.

It is the intention of The Client that the minimum targeted participation goal for the local sub-Contractors is for but not limited to the full value of sub-Contracting works identified by the Employer as covered in the Bill of Quantities. The onus is upon the main Contractor to handle and manage the procurement process of the sub-Contractors and once appointed, should be dealt with in accordance with the provisions of Clause 4.4 of the General Conditions of Contract 2015.

The identified scope of work by the Employer includes but not limited to the following:

- Excavation and backfilling of trenches for water reticulation;
- Installation of Pipe Markers;
- Installation of Gabions;
- Installation of erf connections;
- Construction of Stone pitching (on areas identified by the Employer's Agent);
- Any other task identified on site and approved by the Employer's Agent on site;

The minimum requirements for selection of the targeted enterprise sub-Contractors are as follows:

1. Valid CK registration;
2. Certified SA ID copies of owners;
3. Active CIDB membership: **minimum grading 1CE**;
4. Valid Tax clearance certificate;
5. COIDA certificate;
6. Company Profile including similar experience and skilled personnel CVs;
7. Health and Safety Plan;
8. Proof of locality;
9. A qualified plumber with at least 3 years of experience;

The Contractor is:

to enter into Contract with any (nominated, selected) sub-Contractor(s) in accordance with the requirements of Clause 4.4 in the General Conditions of Contract for Civil engineering Works (2015), 3rd edition. The number of sub-Contractor(s) will be determined by the main Contractor depending on the Sub-Contracting Scope of Work and the amount of work that is to be carried out under this Contract as outlined above and in the Bill of Quantities.

- a) Required to utilise local Sub-Contractors (or regional if he fails to find suitable Sub-Contractors from within the project locality)
- b) Responsible for all work executed (including **QUALITY, CONTRACTUAL LIABILITIES**) on his behalf or under his supervision and/or management by all sub-Contractors, including nominated or selected sub-Contractors.

Note:

- **Local** Sub-Contractors are Sub-Contractors from within the project suburb or ward;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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- **Regional** Sub-Contractors are Sub-Contractors from within the region as per the Sekhukhune District Municipality demarcation of the regions;
- **CBS** refers to Community Based Contractors;

The Contractor shall be expected to enter into a Contract with the nominated or selected Sub-Contractor(s) in accordance with the requirements of Clause 4.4 the General Conditions of Contract. The Employer must be supplied with a copy of the Contract /agreement for records.

NOTA BENE: The Employer's Agent shall not negotiate directly with sub-Contractors and all problems relating to programming, workmanship, etc., as they are matters between the Contractor and his sub-Contractors.

In the execution of the Sub-Contract Work, the Contractor shall ensure that the Sub-Contractor(s) comply with all relevant legislation and regulations including, but not confined to, the Occupational Health and Safety Act. The Contractor hereby indemnifies the Employer against any loss, damage, or claim for Sub-Contract Works set out for this specific project arising out of the former's failure to comply with instructions issued to him in regard to these requirements.

C 3.3.2.1 PERFORMANCE AND EXECUTION OF THE SUB-CONTRACT WORK

The main Contractor must ensure that his Sub-Contractors shall supply sufficient, suitable resources (e.g. equipment, labour, material) to execute all the Sub-Contract Work including the portion identified by the Employer as outlined in the Scope of Work and Bill of Quantities.

The Contractor shall also ensure that the Sub-Contractor(s) shall execute the Sub-Contract Work in accordance with the Scope of Work and Programme to the reasonable satisfaction of the Employer.

C 3.3.2.2 QUALITY OF THE SUBCONTRACT WORK

In accordance with the requirements of Clause 4.4 in the General Conditions of Contract for Civil engineering Works (2015), 3rd edition, it is the responsibility of the Contractor to ensure that the Sub-Contractor shall be capable of executing the Sub-Contract Work efficiently and in accordance with the Scope of Work.

C 3.3.2.3 LAWS AND REGULATIONS

The Contractor shall ensure that the Sub-Contractor(s) complies with the paying of all amounts due in respect of his employees and himself in terms of all relevant legislation and regulations including, but not confined to the following:

- Income Tax Act, the
- Compensation for Occupational Injuries and Diseases Act,
- Unemployment Insurance Act,
- Basic Conditions of Employment Act,
- Occupational Health and Safety Act Construction Regulations

C 3.3.2.4 RESOURCES TO COMPLETE SUB-CONTRACT WORK

Although it is preferred by Employer's Agent that the Contractor ensure that the Sub-Contractor(s) supply all required resources such as labourers, equipment, hand tools, power-driven tools if need be, which are required by him for the execution of the Sub-Contract Work, however the onus is upon the Contractor to determine the extent of resources the Sub-Contractor shall supply to ensure that the works are completed in time. The agreement between the Contractor and Sub-Contractor is the Contractor's responsibility and Employer's Agent is indemnified from any agreements entered between Contractor and his Sub-Contractor (s)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C 3.3.2.5 PRICING

The Employer has estimated that the value of work apportioned for community-based sub-contractors amounts to 30% of the total value of work. It shall be the Contractor's responsibility to ensure that the Community Based Sub-Contractors' works meets the 30% threshold.

C 3.3.2.6 PAYMENT

The Contractor shall ensure that sub-Contractor(s) are paid within stipulated time as per the Agreement with the Sub-Contract failure which the Contractor can be reported to the Employers' Supply Chain Department and may prejudice his future employment with The Client.

C 3.3.2.7 RETENTION MONIES

The Employer will deduct Retention money for the overall works including the Sub-Contract work at the percentage stated in the Contract Data.

C 3.3.2.8 RESOLUTION OF DISPUTES

Should any dispute between the Contractor and the Sub-Contract arise out of the provisions of the Sub-Contract, or the execution of the Sub-Contract Work, every effort shall be made by the Parties to resolve the matter themselves without the intervention of the Employer. The agreement signed between the Contractor and sub-Contractor should state dispute resolution procedure.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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C3.4 CONSTRUCTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.4 CONSTRUCTION**C3.4.1 Works specifications**

The applicable "Standard Specifications" shall be the document "Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005", read together with the Particular Specifications.

Bidders, Contractors and Sub-Contractors shall obtain their own copies of the document "Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005", for tendering purposes and for use for the duration of the Contract from the Sekhukhune District Municipality and shall bear all expenses in this regard.

The Standard Specifications have been written to cover all types of municipal civil engineering works and it may therefore cover work not applicable to this Contract.

The Particular Specifications together with the Drawings and Bill of Quantities clearly indicate the sections of the Standard Specifications which apply to this Contract

C3.4.1.1 Particular Specifications

The following Particular Specifications for work not covered by the SANS 1200 Standardized Specifications are also included hereunder:

PC: Trimming of site

PD: Maintenance

PE: Contingencies

PLI: Particular Specification for Generic Labour-intensive Specification

Section C3.6 covers references to the Particular Specifications in the Standard Specifications as well as variations and additions to the Standard Specifications.

Section C3.7 covers corrections and amendments to the Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005

C3.4.1.2 Variations and Additions to the SANS 1200 Standardized Specifications

Variations and additions to the following SANS 1200 Standardized Specifications listed in C3.4.1 are given in section C3.4.6.

C3.4.2 Site Facilities**1. Water Supply**

Potable water supply available

A reticulated potable water supply is to be installed as part of the Contract. The current tariffs applicable are available from the water and sanitation division. The Contractor can only draw water from fire hydrants specified by the municipality in exceptional circumstances and then only after written authority had been granted. When permission is granted, the water must be drawn through a metered stand pipe issued by the water and sanitation division.

The Contractor shall cease to operate until other arrangements have been made for the supply of water. No claims for delay so caused will be considered.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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No warranty is offered or given by the Employer that the existing available reticulated water supply will necessarily be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

All charges as may be levied by the responsible water supply authority in respect of water consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of subclause C3.4.2.2(b), be deemed to be included in the sums bided by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities, as well as in the rates bided by the Contractor for the various other items listed in the Schedule of Quantities which require the consumption of water.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible water authority have been promptly paid in full.

2. Electricity power Supply

The Contractor shall make his own arrangements for the supply of electricity power to suit his own and the Employer's Agent's requirements and operations. The cost of providing connections any transformer sub-stations and switch gear, generators fuel and and/or overhead power lines or underground cables required to supply the electric power shall be included in the rates entered in the Schedule.

The cost of electric power consumption for construction, rock drilling. Machinery operations a lighting, ventilation and domestic use are to be included in the rates in the schedule of Quantities for the various construction and operations.

3. Access Roads

Where the locality of works requires it, the Contractor shall grade or construct. And keep in good and constant repair, temporary access roads connecting public roads in the vicinity with the works. Such roads must be of a sufficiently high standard for reliable access of heavy transport vehicle in all weathers and shall communicate with all parts of the works.

4. Use of Site

All notice boards. Sign boards and advertisement at the site shall be subject to the Employer's Agents approval. The Contractor shall take all precautions to preserve trees other than those which, of necessity, must be removed for the purpose of fulfilling the Contract.

The Contractor shall maintain the site in a clean, orderly and sanitary condition and shall take all necessary steps and precautions to prevent the pollution of the surrounding area by his employees or animals in any way. These steps and precautions shall be to the satisfaction of the Employer's Agent and Medical Officer of Health of Madibeng.

5. Precautions against Nuisance

The Contractor's attention is drawn to the fact that operations are being conducted in a semi-urban area and in the presence of traffic. Special precautions must be taken to protect the public and to prevent unnecessary noise, dust or other nuisance.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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Plant used on the works shall be as efficiently silenced as possible and noisy operations will be permitted only between the hours of 7H00 am and 5H00 pm. Any work outside normal hours will be permitted only on the written authority of the Employer's Agent.

Whenever machinery is excavating or loading material which is liable to form a dust nuisance, an effective method of spraying water over the cut area and loaded material shall be installed. Tarpaulins shall be provided to cover trucks and prevent dust blowing from loads during transport.

Any rock or debris falling from trucks on the roads in use by the public shall be removed immediately. Precautions shall be taken to prevent fouling of public roads of completed construction by trucks transporting muddy material. The Employer's Agent may order the Contractor continuously to broom off and clean roads where the mud tracking of vehicles or falling debris may constitute a danger to the travelling public.

6. Sanitary Accommodation

The Contractor shall provide, maintain, move to position as required and finally remove proper sanitary accommodation at each work. Front sanitary accommodation shall be properly screened and its use strictly enforced. The situation of sanitary accommodation prescribed in terms of the Sanitary General By-Laws shall be approved by the Employer's Agent as being convenient for the person whose use it is intended.

The sanitary accommodation provided must be adequately ventilated. Properly disinfected and kept in a thoroughly clean condition at all times.

The Contractor shall make arrangements for the provision of the sewer connection in the case of water closets or the removal of pails in the case of pail closets.

The Contractor shall bear all costs associated with the provision of sanitary accommodation. Compensation for these costs will be made under the relevant item the schedule of Quantities.

7. Work in Servitudes

The Contractor shall give 7 days' advance notice to both the Employer's Agent and the property owner of his intention to commence work in servitude. The Contractor shall not permit his workmen and labourers to use the servitude as a temporary right-of-way and shall carry out the expeditiously and with minimum inconvenience to the occupiers and to owners of adjacent property.

The Contractor shall take all necessary precautions for the protection of person's livestock, buildings and property. The soil shall be kept segregated and all gardens, fences, path etc. shall be reinstated to their former condition.

Where acquisition of servitude has been finalized it may not be possible to obtain continuity of the work. The Contractor will be required temporarily to omit such sections until instructed that the work may proceed.

No extra payment will be made to the Contractor should it be necessary to omit sections and return to them later. It is not intended, however, that the Contractor should be called upon to return to the Site after all

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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other sections of the Contract have been completed and the Contractor has removed his plant and equipment.

Trees removed in servitude shall remain the property of the stand owners if required by them.

8. Access to Premises

The Contractor shall maintain adequate access to all public and private properties at all times unless otherwise sanctioned by the Employer's Agent. Details of the proposed methods of providing access shall be submitted to the Employer's Agent for approval before such access is restricted. Any claims arising from impeded access shall be wholly the responsibility of the Contractor.

Provision shall be made to allow sanitary services to stand to be unimpeded.

Where necessary to permit access or egress, the Contractor shall provide for the laying of planks or other excavated and filled works or even concrete or asphalted surfaces in order to protect the work from damage.

Any temporary wooden bridges shall be provided with suitable tubular or other hand rail and horizontal member shall be placed at 0,3m, 0.9m and 1,2m above the level of the boards.

Vehicular access shall be maintained to properties at the end of each day's work unless the Contractor as made alternative arrangement with the owners.

9. Waterways

Free waterways shall be maintained in gutter, drains streams. Etc. and existing conditions shall not be changed by deposition spoil in waterways or by diverting water into private property

The Contractor shall settle all claims and make good any damage at his own expense should flooding of public property occur through waterways being obstructed or diverted as a result of his operations.

10. Permits and wayleave

The Contractor shall be responsible to obtain all the wayleave required under this Contract. A separate payment item has been included under Section 1200 A of the Schedule of Quantities to compensate the Contractor for all his expenses to obtain the wayleave.

The wayleave to be obtained by the Contractor consists mainly of the following:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C3.4.3 Features requiring special attention**(a) Site maintenance**

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

(b) Testing and quality control**(I) CONTRACTOR TO ENGAGE SERVICES OF AN INDEPENDENT LABORATORY**

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Contract. These results will be taken into consideration by the Employer's Agent in deciding whether the quality of materials utilised, and workmanship achieved by the Contractor comply with the requirements of the Specifications. The foregoing shall apply irrespective of whether the specifications indicate that the said testing is to be carried out by the Engineer or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Engineer with copies of the results of all such testing carried out by the independent laboratory.

The Contractor shall inform the Engineer of any control testing to be done at least 48 hours before such tests are required and must allow in his program for the time necessary for the tests and the processing of the results thereof.

The test results for tests conducted each month shall be submitted together with the interim payment certificate for that month. Failure to conduct the tests as per the specifications will result in non-payment of the Contractor's claim until such tests are conducted and results certified to have met requirements.

The handling, storage, transport, and erection of equipment, machinery, and materials shall be strictly in accordance with the requirements of the supplier and/or manufacturer. All materials shall be new and of the best quality available unless otherwise specified. They must function satisfactorily under prevailing climate and weather conditions at the place of installations.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" (as defined in subclause PSA 7.2) which is not under the management or control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

(II) ADDITIONAL TESTING REQUIRED BY THE ENGINEER

In addition to the provisions of subclause C3.4.2.5(b)(i): Contractor to engage services of an independent laboratory, the Engineer shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any such tests, additional to those described in subclause C3.4.2.5(b)(i), at such times and at such locations in the Works as the Engineer shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Engineer, and copies of the test results shall be promptly submitted to the Engineer.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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(III) **COSTS OF TESTING**

(a) Tests in terms of subclause C3.4.2.5(c)(i)

The costs of all testing carried out by the independent laboratory in accordance with the requirements of subclause C3.4.2.5(c)(i), above shall be borne by the Contractor and shall be deemed to be included in the bidded rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms of the Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of subclause C3.4.2.5(c)(i).

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (eg re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

(b) Additional tests required by the Engineer

The costs of any additional tests required by the Engineer in terms of subclause C3.4.2.5(b)(i): Additional testing required by the Engineer, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Engineer, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor

(c) Sub-Contract's

All matters pertaining to Sub-Contract's (including Nominated Sub-Contract's) and the work executed by them shall be dealt with directly between the Employer's Agent and the Contractor in the context of all Sub-Contract work being an integral part of the Works for which the Contractor is responsible. The Employer must be supplied with a copy of the contract/agreement for records.

The Engineer will not liaise directly with any Sub-Contract's nor will he issue instructions concerning the Sub-Contract works directly to any Sub-Contract.

All matters arising from the Sub-Contract agreements shall be dealt with directly between the Contractor and the Sub-Contract's and the Employer's Agent will not become involved.

(d) Opening up and closing down of designated borrow pits

Measurement and payment for opening up and closing down designated borrow pits, including removing and stockpiling overburden and restoring the Site, shall be made under item 8.3.4 of SANS 1200 D. This item applies to all borrow material required under this Contract.

The requirements of subclause 5.2.2.2 of SANS 1200 D regarding the opening up, maintenance and closing down of borrow pits shall be adhered to.

C3.4.4 Plant and construction equipment

The Contractor is encouraged to hire plant and construction equipment from local community where possible.

All items of plant used on the works shall be approved, mordent, efficient plant, well suited to the purpose for which the Contractor uses them and shall be properly maintained items of plant which leak oil or which, in the opinion of the Employer's Agent's generate excessive noise, smoke, or other nuisance shall be removed from the works. The Employer's Agent's decision in this respect shall be final and binding upon the Contractor

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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All vehicles used on the works are to be sound mechanical condition and shall conform to and be operated in accordance with the Northwest Provincial Ordinance and the Northwest Provincial Road Traffic regulations. All vehicles must be fully insured against accident or loss including third party risk and the Contractor shall produce evidence of this if required by the Employer's Agent.

The Contractor shall be deemed to have established the extent to which mechanical plant can be used for excavating and refilling before the submission of its tender. The Employer's Agent's authority to use mechanical plant will not be unreasonably withheld, but if in the Employer's Agent's opinion, circumstances exist which make it desirable that the use of plant should be suspended either temporarily or permanently, the Contractor shall change the method of performing the work affected at his own cost and he shall be deemed to have no cause for claim if any order issued by the Employer's Agent results in the mechanical plant having to stand idle for a period of any duration whatsoever or having to be removed.

In particular, where it is impossible due to proximity to existing structures or services to excavate except by hand methods then in such cases it shall be deemed reasonable for the purpose of this clause for the Employer's Agent to withhold authority to use mechanical plant.

C3.4.4.1 Facilities provided by the Contractor

(a) Facilities for the Engineer

The Contractor shall provide on the Site, for the duration of the Contract and for the exclusive use of the Engineer and/or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in terms of this specification shall constitute grounds for the Engineer to withhold payment of the Contractor's bidded Preliminary and General items until the facility has been provided or restored as the case may be.

i). Office accommodation

The Contractor shall provide on the Site One office for the exclusive use of the Engineer. Such office shall comply with and be furnished in accordance with the requirements of subclause 3.2 of SANS 1200 AB. The Contractor shall maintain the office(s) in accordance with the requirements of subclause 5.2 of SANS 1200 AB. Such office accommodation shall be provided within the Contractor's site establishment facilities.

iii). Contract nameboards

The Contractor shall provide, erect and maintain one Contract name board at such positions and locations as are directed by the Employer's Agent, in accordance with the requirements set out in SANS 1200 AB (as amended).

The Contractor shall before order or manufacturing any such Contract nameboard, obtain the Employer's Agent's written approval in respect of all names and wording to appear on the Contract nameboard.

iv). Survey equipment and assistants

• Survey equipment

The Contractor shall, in accordance with the requirements of SANS 1200 AB (as amended) provide the following survey equipment for the exclusive use of the Engineer and his staff:

- 1 upright reading automatic level with tripod.
- 1 metric levelling staff with protective cover bag.
- 6 ranging rods.
- 1 100 metre Stilon tape measure.
- 1 ± 2 kg hammer.

Contractor

Witness 1

Witness 2

Employer

Witness 1

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Whenever reasonably required by the Engineer, the Contractor shall, in accordance with the requirements of SANS 1200 AB (as amended), make available to the Engineer or his representative, the following additional survey equipment:

- Survey assistants

The Contractor shall, in accordance with the requirements of subclause 5.5 of SANS 1200 AB, make available to the Engineer, two (2) survey assistants.

vi). All computer hardware shall be provided complete with the requisite connecting cables and all interfacing devices and software necessary for its efficient operation as an integral system.

The following software shall be properly installed on the computer, and the original licence agreements and disks shall be provided to the Engineer for safekeeping:

- (a) Microsoft Windows 10
- (b) MS-Office business/ Microsoft 365
- (c) Laptop -i7;16GB RAM; 500GB; SSD or 1TB HDD

All computer equipment provided shall be kept fully serviceable at all times by the Contractor. The Contractor shall have any defective equipment repaired or replaced at his own cost within 12 hours after notification by the Employer's Agent staff.

The Contractor shall further provide at his own cost, all paper and black ink cartridges and other consumables reasonably required by the Engineer.

- vii). Electricity supply for the Engineer

All electricity supply to the Employer's Agent office(s) and laboratory (if applicable), whether provided by the Contractor by way of a reticulated supply from a local authority or other authorised electricity supply, or by way of on-site generators, shall be regulated by the Contractor to within limits such as to prevent damage due to fluctuations in the electrical current supply that may occur to any electrical plant and equipment provided by the Contractor or the Engineer.

The Contractor shall be liable for and pay to the Engineer on demand, all costs that the Engineer may incur in the repair or replacement of any electrical equipment provided by the Engineer on the Site. Reliance by the Contractor on the regulation of the electrical supply by the supplier or on current regulators fitted to generators shall not absolve the Contractor of his liabilities in terms of this Subclause and, where appropriate, the Contractor shall provide and install at his own cost, all such electrical current-regulating equipment as is necessary to prevent damage to the said equipment.

- viii). Site instruction book

The Contractor shall keep a triplicate book for site instructions on the Site at all times.

- ix). Housing for Employer's Agent Representative (Example only)

The Engineer will provide housing for the Employer's Agent Representative. The housing and the relevant services and local authority rates and charges shall be paid by the Contractor on the written instruction of the Engineer, from a Prime Cost Sum included in Section 1200 A of the Schedule of Quantities for this purpose.

The Contractor is entitled to a percentage of the value of each payment to the Engineer to cover his expenses in this regard. (See item PSA 8.6.)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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C3.4.5 Materials

3.4.5.1 General

All material supplied shall be to SANS, JASWIC and the General Managers applicable specification as amended or where no such specification, to the approval of the Employer's Agent. Specification not contained in the document may be examined by arrangement at the water and sanitation Division. It will be required from each Contractor to supply proof of conformation to the relevant SANS specifications of all material envisaged to be used on the Contract to the Employer's Agent for his approval

C3.4.5.2 Storage

All materials shall be stored in storage areas which shall be agreed by Employer's Agent and shall be fenced with 1, 8 m high chain link fencing and a lockable gate. Pipes shall be stacked off the ground. Pipes shall be covered to prevent deterioration through ultra-violet attack.

C3.4.6 General Matters

1. Consumer Complaints

Save in respect of the liability arising from clause 21, the Contractor's responsibility in respect of no water or poor pressure complaints arising out of the execution of the Contract shall be limited to ensuring that an adequate cold-water supply exists to the complainant's property.

2. Advertisement in the Media and Notifications to consumers

The Employer's Agent will arrange any media advertisement necessary for warning the public of any shut down of supply necessary, in his opinion, for the proper execution of the works. The Contractor must however, give at least 14 (fourteen) days' notice to the Employer's Agent of his requirements in the respect. Specifically, media advertisements will be arranged when the number of consumers affected by a shutdown is such that issuing notices to individual consumers as provided hereunder is impracticable. Planned interruptions of water supply shall only be permitted between 09h00 and 15h00 unless otherwise authorized in writing by the Employer's Agent.

The Contractor shall give all consumers affected at least 24 hours' notice in writing of his proposals in regard to every planned interruption of water supply necessary for the execution of his work. Failure to do will result in the suspension of work for a period as determined by the Employer's Agent.

The Contractor shall give written notice to all consumers adjacent to the planned route of work to be done. This notice shall be given well in advance of the starting date of construction. The notice will inform the residence that all grass, irrigation and valuable must be removed beforehand.

3. Use of Explosives

Explosiveness shall not be used without the written permission of the Employer's Agent. A procedure must be issued prior to the works for approval by the Employer's Agent.

C3.4.7 Construction Issues

1. Excavation, backfilling and reinstatement

Excavation, backfilling and reinstatement shall be carried out in accordance with the project specification and the standard specification for municipal civil Engineer work all excavations shall be performed in terms of the construction Regulation 2014 of the occupational Health and safety Act.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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2. Clearing and Grubbing

If any paving is to be removed to place the new water pipeline in position the rate for the breaking out and removal of the paving shall be claimed under 8.3.2.1 section 1200D in the schedule of Quantity. No clearing and grubbing will be paid where the new pipelines are to be laid on the sidewalk (area between the road and the erf boundary fence)

It must be noticed that the area between the erf boundary and the road must be clean, with no stones or rocks which can damage any machine used to cut the lawn

3. Excavations

a) Trenches - General

Trenches shall be back filled level with adjacent surfaces immediately after completion of pipe laying. Should pipe laying not be complete before is due to cease for the day the Employer's agent shall be entitled to instruct the Contractor to backfill the trench and re-excavate it the following morning in order to complete pipe laying. The cost of the above shall be included in the Contractor's rates for excavation.

Pads shall be fitted to the outriggers of excavating plant to prevent damage to road surface. Damage to any surfaces beyond the trench widths specified shall be repaired at the Contractor's expense.

b) Trenches Across Roads

Even if a trenching machine is used road surfaces shall first be cut with a diamond tipped saw or other approved method. After the trench has been backfilled and compacted the road surface has to be cut again, 200mm from the edge on both sides of the trench.

The length of premiss cut shall be measured and paid for under the relevant item on the bill. Section 1200D as provided in the schedule of Quantities. The complete closure of any road shall not be permitted without the written consent of the Employer's Agent.

During the time that the trenches have been backfilled and the time that the Municipality reinstates the road surfaces, the Contractor will be responsible for the maintenance on the road.

The trench will be backfilled above the selected material with G4 material in 150mm layers stabilized with 3% cement, compacted to 95% MOD AASHTO and paid for under relevant item on the bill. Section 1200D as provided in the schedule of Quantities. No haulage will be paid separate but the rate for haulage must be included in 8.2.5 Section 1200LB.

c) Trenches – Paving and driveways act

The last 450mm of backing in the trench will be done with G4 material compacted to 95% MOD AASHTO payment will be in accordance with 8.3.21. Section 1200D, no haulage is payable.

d) Removal of Excavated Material

Excavated material shall not remain on the work site for more than 48 hours

The Contractor's scheduled rates shall cover the cost of complying with this restriction including inter alia the cost of removing off site to temporary and then returning to site, excavated material suitable for use as backfill or bedding No haulage will be paid separately but the rate for haulage must be included in 8.2.5. Section 1200LB.

e) Maintenance of Excavations

Existing mains are in general local at a cover depth from 0,6m to 1,5m and excavation to at least this depth will be required for tie-ins etc.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The Contractor shall be solely and entirely responsible for maintaining excavations in a safe condition and this responsibility shall be in no way diminished by any instruction by the Employer's Agent to take additional or improved protected or precautionary measures

It should be noted by Bidders that plastic tape is not regarded as adequate protection around excavations and its use for that purpose shall not be allowed.

Barricades with two (2) horizontal bars will be used. The top bar must be at least 1.2m high. Both bars must be chevron painted-red white. The rate must include full compensation for the moving and maintenance of all barricades for the duration of the Contract.

f) Classification For Excavation Purposes

The Engineer shall classify excavated materials as Soft Class and Rock will be measured individually as extra-over items.

TABLE 1: Classification Of Materials

CLASSIFICATION	DESCRIPTION
Soft	All material other than rock
Rock	Material which cannot be economically fragmented and loosened for removal by hand implements and pneumatic tools, except by drilling and blasting or the use of rock breaking equipment.

In the first instance, the classification shall be based on the descriptions given in Table 1. In the event of disagreement between the Contractor and the Engineer, the Engineer shall reclassify the material in accordance with relevant specifications and without being unreasonable to the Contractor. The decision of the Engineer on the classification shall then, subject to the provisions of the Contract, be final and binding.

The Contractor shall notify the Engineer of the presence of what he considers to be rock immediately upon discovery thereof. The Engineer will inspect the material and decide whether or not it warrants the use of pneumatic tools or rock breaking equipment. In the case of isolated boulders set in a soil matrix, the Engineer may order the Contractor to either widen the excavation or roll the boulders sideways or lift the boulders out from the trenches.

In the event that the Engineer decides that the use of pneumatic tools, rock breaking equipment, or blasting is necessary, he will classify the material accordingly and arrange for the quantity thereof to be measured. The Construction Manager will supply necessary pneumatic equipment and arrange for others to break up rock into manageable pieces.

g) Depth of Exactions

The minimum cover to new mains shall be 1 200mm.

h) Intermediate Material

Intermediate material will be classified as material where the use of pneumatic tools such as paving breakers before removal.

i) Hard Material

Hard material will be classified as material where mechanical plant, such as compressors and jack hammers or blasting is required.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4. Testing of Backfill Material

The compacted density of the backfill material shall be in accordance with section 202 of the standard specification.

If the required compacted density cannot be achieved with the excavated material, G4 material will be imported and compacted to the required density for base layers. Payment will be made under 8.3.21. Section 1200D of the Standard Specification and no haulage will be paid separately, but the rate for haulage must be included in 8.2.5. Section 1200LB

The Contractor will be required to submit at least 3 lab tests for compaction, or as required by the Employer's Agent, per block completed and one per road crossing. No payment will be approved if the tests have not been included in the rates. No additional payment will be done for the compaction tests.

5. Reinstatement

The Contractor shall be responsible for the maintenance and reinstatement of damage caused by him or his agents/deliveries to any property (Private or State Owned), fauna and flora and rights of way.

The Contractor shall take cognisance of the aforementioned items and should allow in his rates tendered for any costs that could be incurred due to damages by the Contractor.

6. INSPECTION AT INTERMEDIATE STAGES OF CONSTRUCTION

The Contractor shall call for an inspection of the works at the following remediate stages of construction.

- I) After completion of the trench excavation and of the trench bottom, and before any pipe is laid
- II) After the selected backfill, material has been placed around the pipe; and before the remainder of the trench is backfilled.

Work shall not progress through the specified stages without the approval of the Employer's Agent or his representative on site.

Failure to comply with the provision of this clause shall result in the suspension of work for a period as determined by the Employer's Agent.

7. EXTENSION OF TIME DUE TO UNPREDICTABLE WEATHER CIRCUMSTANCES

Extension of time will not be considered for normal adverse weather conditions but only for abnormal rainfall or saturated conditions and will be calculated in accordance with Sub-Clause 5.12.2.2 method 1 of the special Conditions of Contract.

The factor (Nw - Nn) shall be considered to represent a fair allowance for days during which rainfall exceeds 10 mm and the factor (Rw - Rn)/x shall be considered to represent a fair allowance for those days when rainfall does not exceed 10 mm but wet conditions prevent or disrupt work.

The total extension of time shall be the algebraic sum of all monthly totals for the Contract period, but if the algebraic sum is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for a part of a month shall be calculated using pro rata values of Nn and Rn."

For this project the rainfall formula will only apply as background information, or dispute resolution. Extension of time for rainfall will only be granted on Actual Delays experienced; noted and agreed upon by the engineer.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

8. PIPE AND MANHOLE TESTS

The Contractor shall arrange for his own process control tests. The Contractor will be expected of to employ the services of the existing established laboratory on site. T Contractor must submit the results of tests carried out on materials and workmanship when submitting work for acceptance by the Employer's Agent. The costs for these tests shall be deemed to be included in the relevant rates and no additional payment will be made for testing as required.

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Employer's Agent for acceptance control. However, before accepting any work, the Employer's Agent shall have his own acceptance control tests carried out by the laboratory. The cost of acceptance testing shall be to the account of the client.

9. Replacement of Leads (Pipe Jacking)**a) Trenchless Construction**

A horizontal boring or auger machine shall be used for the installation of pipes under paved surfaces and road crossing where soil condition permits any plant used for the purpose of demonstrating whether trenchless construction is practical or not shall be in good order. Where soil conditions preclude the use of boring or auger machines under paved surfaces and road crossing. Leads shall be installed by open trenching.

Approval for open trenching must be obtained from the Employer's Agent under these circumstances' trenches shall be backfilled immediately after completion of pipe laying should pipe laying not be complete before work is due to cease for the day, the Employer's Agent shall be entitled to instruct the Constructor to backfill the trench and re-excavate it the following morning in order to complete pipe laying. The cost of the above shall be included in the Contractors rates for excavation.

If a trenching machine is used for road crossing. The road shall first be cut with a diamond tipped saw or other approved method, all trenches across the road shall be cut at right angles to the kerb. Damage to the road surface beyond the trench widths specified shall be repaired at the Contractors expense.

The length on premix cut shall be measured and paid for under item providing for in the schedule of quantities (refer to 8.3.2.1 Section 1200d)

C3.4.8 Contractor's Employees**1. MINIMUM EMPLOYMENT CONDITIONS FOR CONVENTIONAL CONSTRUCTION WORKS**

Contractors shall comply with the Basic Conditions of Employment Act (Act No 75 of 1997).

As a determination has not been made in terms of the aforesaid Act for the building sector, the minimum employment conditions which will apply to this Contract shall be guided by the Sectoral Determination: Civil Engineering Sector published in the Government Gazette dated 2 March 2001.

The following minimum conditions shall apply to this Contract and Contractors shall include such conditions in employment Contracts.

1.1 Employment Contracts

The Contractor shall enter into an employment Contract with every one of his/her employees, including short-term Contract s i.e., Contract s in which employment commencement and employment termination dates are specified. Short-term employment Contract s will also apply an employee employed for only one day (see proforma Contract on Annexure 1).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1.2 Normal working hours

Normal working hours are from 07:00 to 17:00 from Monday to Friday. A tea break is taken from 09:00 to 09:15 and lunch from 12:30 to 13:00.

Actual hours to work and be paid for is 9 hours per day. If a lunch break of one (1) hour is taken then the normal working day will be as follow:

Morning work sessions from 07:00 to 12:00, lunch break from 12:00 to 13:00, and afternoon sessions from 13:00 to 17:00.

1.3 Minimum wages

Minimum wages shall be according to the Government Gazetted rates for the Department of Labour. For a full day's work, the hourly rate shall be multiplied by 9. Normal 5-day week hours of work shall be 45 hours and the wage calculated according to the applicable hourly rate.

Overtime pay shall be 1.5 times the ordinary wage.

An employee shall be paid fortnightly.

1.4 Short time (excluding short time due to inclement weather)

If for reasons, which may be ascribed to the employee, e.g., arriving late for work or taking an afternoon off, the hours not worked shall be deducted from the daily wage calculation.

1.5 Short time resulting from inclement weather

i. If the Contractor informs his/her employees that no work will be done the following day due to inclement weather, no payment will be due to the employee for such a day.

ii. If the Contractor has not informed his/her employees that no work will be done due to inclement weather and no work or less than four (4) hours of work is possible during a day, the Contractor must pay the employee for four (4) hours of work. If more than four (4) hours of work is done, the Contractor shall pay the employee for the number of hours worked.

1.6 Vacation leave

If an employee has been in full time employment for more than four (4) months, he/she shall be entitled to 1 day's paid leave for every seventeen (17) days the employee worked or was entitled to payment.

1.7 Family responsibility leave

If an employee has been in full time employment for more than four (4) months, he/she shall be entitled to three days paid leave in a leave cycle of thirty-six (36) months of employment:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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- i. When the employee's child is born;
- ii. When the employee's child is sick;
- iii. In the event of death of the employee's spouse or life partner, parent, grandparent, child or grandchild.

The employee shall provide the required proof to the Contractor of the event, failing which the leave shall be unpaid leave

1.8 Maternity leave

At least four (4) months unpaid leave.

1.9 Sick leave

The employee shall be entitled to one (1) day's paid sick leave of normal wages for every twenty-six (26) days worked.

If an employee is absent for three (3) or more consecutive days, the employee shall provide a sick certificate from a registered medical practitioner to qualify for sick leave payment. If such certificate is not provided, no sick leave payment will be due to the employee.

1.10 Piece work

Irrespective of the quantity of work done under a piece work system during a working week, the employee shall be entitled to a minimum of a week's wages determined as if no piece work applied.

The Contractor or employee may terminate an employment Contract by giving notice of termination of not less than:

- i. On short period Contract s i.e., a Contract which states from which date work employment commences and on which day employment terminates, the terms of the employment Contract shall apply;
 - a. One week if employee has been employed for four (4) weeks or less, unless it is a short-term project;
 - ii. Two (2) weeks if employee has been employed for more than four (4) weeks but not more than one (1) year;
 - iii. Four (4) weeks if employee has been employed for more than one year.

2. EMPLOYMENT CONDITIONS FOR LABOUR INTENSIVE WORKS AND CONSTRUCTION

The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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This clause contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

2.1 Terminology

- (a) "Department" means any department of the State, implementing agent or Contractor;
- (b) "Employer" means any department, implementing agency or Contractor that hires workers to work in elementary occupations on a SPWP;
- (c) "Workers" means any person working in an elementary occupation on a SPWP;
- (d) "Elementary occupation" means any occupation involving unskilled or semi-skilled work;
- (e) "Management" means any person employed by a department or implementing agency to administer or execute an SPWP;
- (f) "Task" means a fixed quantity of work;
- (g) "Task-based work" means work in which a worker is paid a fixed rate for performing a task;
- (h) "Task-rated worker" means a worker paid on the basis of the number of tasks completed;
- (i) "Time-rated worker" means a worker paid on the basis of the length of time worked.

2.2 Terms of Work

- 2.2.1 Workers on a SPWP are employed on a temporary basis.
- 2.2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.
- 2.2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance ACT 30 of 1966.

2.3 Normal Hours of Work

- 2.3.1 An employer may not set tasks or hours of work that require a worker to work:

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

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

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

2.4 Meal Breaks

- 2.4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- 2.4.2 An employer and worker may agree on longer meal breaks.
- 2.4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is

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relieved of his or her duties during the meal break.

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

2.5 Special Conditions for Security Guards

- 2.5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.
2.5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

2.6 Daily Rest Period

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

2.7 Weekly Rest Period

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

2.8 Work on Sundays and Public Holidays

- 2.8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.
2.8.2 Work on Sundays is paid at the ordinary rate of pay.
2.8.3 A task-rated worker who works on a public holiday must be paid –
(a) the worker's daily task rate, if the worker works for less than four hours;
(b) double the worker's daily task rate, if the worker works for more than four hours.
2.8.4 A time-rated worker who works on public holiday must be paid –
(a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
(b) double the worker's daily rate of pay, if the worker works of more than four hours on the public holiday.

2.9 Sick Leave

- 2.9.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
2.9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's sick leave for every full month that the worker has worked in terms of a Contract.
2.9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.
2.9.4 Accumulated sick-leave may not be transferred from one Contract to another Contract.
2.9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
2.9.6 An employer must pay a time-rated worker the worker's daily rate for a day's sick leave.
2.9.7 An employer must pay a worker sick pay on the worker's usual payday.
2.9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the

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worker was unable to work on account of sickness or injury if the worker is –

- (a) absent from work for more than two consecutive days; or
- (b) absent from work on more than two occasions in any eight-week period.

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

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

2.10 Maternity Leave

2.10.1 A worker may take up to four consecutive month's unpaid maternity leave.

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

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

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

2.10.5 A worker may begin maternity leave –

- (a) four weeks before the expected date of birth; or
 - (b) on an earlier date –
 - (c)
 - i. if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - ii. if agreed to between employer and worker; or
 - (d) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- 2.10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- 2.10.7 A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.

2.11 Family Responsibility Leave

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

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

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2.12 Statement of Conditions

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

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

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

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

2.13 Keeping Records

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

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

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

2.14 Payment for the Labour-Intensive Component of the Works

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

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

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

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

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

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

2.14.6 Payment in cash or by cheque must take place –

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

2.14.7 An employer must give a worker the following information in writing –

- (a) the period for which payment is made;
- (b) the numbers of tasks completed or hours worked;

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(c) the worker's earnings;

(d) any money deducted from the payment;

(e) the actual amount paid to the worker.

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

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

2.15 Deductions

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

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

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

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

(a) repay any payment except an overpayment previously made by the employer by mistake;

(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or

(c) pay the employer or any other person for having been employed.

2.16 Health and Safety

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

2.16.2 A worker must –

(a) work in a way that does not endanger his/her health and safety or that of any other person;

(b) obey any health and safety instruction;

(c) obey all health and safety rules of the SPWP;

(d) use any personal protective equipment or clothing issued by the employer;

(e) report any accident, near-miss incident or dangerous behavior by another person to their employer or manager.

2.17 Compensation for Injuries and Diseases

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

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

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

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

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2.18 Termination

- 2.18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 2.18.2 A worker will not receive severance pay on termination.
- 2.18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the manager the employer in advance to allow the employer to find a replacement.
- 2.18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the Contract. However, the worker may be re-engaged if a position becomes available of the balance for the 24-month period.
- 2.18.5 A worker who does not attend required training events, without good reason will have terminated the Contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

2.19 Certificate of Service

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

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

2.20 Contractor's default in payment to Labourers and Employees

- (a) Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene.
- (b) The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.

2.21 Provision of Hand tools

- (a) The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions

2.21.1 Reporting

The Contractor shall submit monthly returns/reports as specified below:

- (a) Signed Muster rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance.
- (b) Copies of identity documents of workers
- (c) Number of persons who have attended training including nature and duration of training provided
- (d) Assets created, rehabilitated or maintained in accordance with indicators in the EPWP M&E framework
- (e) Plant utilization returns
- (f) Progress report detailing production output compared to the programme of works

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3. LABOUR INTENSIVE COMPETENCIES OF SUPERVISORY AND MANAGEMENT STAFF

Established Contractors shall only engage supervisory and management staff in labour intensive works who have either completed, or for the period 1 April 2004 to 30 June 2005, are registered for training towards, the skills programme outlined in Table 1.

Emerging Contractors shall have personally completed, or for the period 1 April 2004 to 30 June 2005 be registered on a skills programme for the NQF level 2-unit standard. All other site supervisory staff in the employ of emerging Contractors must have completed, or for the period 1 April to 2004 to 30 June 2005 be registered on a skills programme for, the NQF level 2-unit standards or NQF level 4-unit standards.

TABLE 1: SKILLS PROGRAMME FOR SUPERVISORY AND MANAGEMENT STAFF

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader/ supervisor	2	Apply Labour Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	any one of these 3-unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Foreman/ supervisor	4	Implement labour intensive Construction Systems and Techniques	This unit standard must be completed, and
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	any one of these 3-unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent/ Manager (i.e the Contractor's most senior representative that is resident on the site.	5	Manage Labour Intensive Construction Processes	Skills Programme against this single unit standard or part qualification.

Details of these skills programmes may be obtained from the CETA ETQA manager (e-mail: Gerard@ceta.co.za, tel: 011 265 5900)

 Contractor

 Witness 1

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 Employer

 Witness 1

 Witness 2

4. EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR-INTENSIVE WORKS**4.1 Requirements for the Sourcing and Engagement of Labour**

4.1.1 Unskilled and semi-skilled labour require for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

4.1.2 The rate pay set for the SPWP is R R191.60 per day.

4.1.3 Tasks established by the Contractor must such that:

- (a) the average worker completes 5 tasks per week in 40 hours or less; and
- (b) the weakest worker completes 5 tasks per week in 55 hours or less.

4.1.4 The Contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 4.1.3.

4.1.5 The Contractor shall, through all available community structures, inform the local community of the labour-intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

- (a) where the head of the household has less than a primary school education;
- (b) that have less than one full time person earning an income;
- (c) where subsistence agriculture is the source of income;
- (d) those who are not in receipt of any social security pension income.

4.1.6 The Contractor shall endeavor to ensure that the expenditure on the employment of temporary workers is at least 35% of local labour and in the following proportions:

- (a) 55 % women;
- (b) 55 % youth who are between the ages of 18 and 35; and
- (c) 2 % on persons with disabilities.

4.2 Specific Provisions Pertaining to SANS 1914-5 2002**4.2.1 Definitions**

Targeted labour: Unemployment persons who are employed as local labour on the project.

4.2.2 Contract participation goals

4.2.2.1 there is no specified Contract participation goal for the Contract. The Contract participation goal shall be measured in the performance of the Contract to enable the employment provided to targeted labour to be quantified.

4.2.2.2 The wages and allowances used to calculate the Contract participation goal shall, with respect to both time-related and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

4.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written Contract s shall be entered into with targeted labour.

4.2.4 Variations to SANS 1914-5

4.2.4.1 The definition for net amount shall be amended as follows:

Financial value of the Contract upon completion, exclusive of any value added tax or sales tax which the

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law requires the employer to pay the Contractor.

4.2.4.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of formal trainings provided to targeted labour.

4.3 Training of Targeted Labour

A suitably capable Training consultant (consultants based within SDM are to be given first preference) is to be employed on this project.

Their duty is to identify suitable persons and train them for the following:

- i) Employee Training – community-based labour
- ii) Employer Training – community-based Contractors
- iii) Committee Training – maintenance and operation of the Works (this however falls outside the scope of this Contract)

4.3.1 The Contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the Contract in a manner that does not compromise worker health and safety.

4.3.2 The cost of the formal training of targeted labour, shall be measured and paid for in the schedule of quantities of this Contract Document.

4.3.3 The Contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.

4.3.4 An allowance equal to 100 % of the task rate or daily rate shall be paid by the Contractor to workers who attend formal training, in terms of 4.3.4 above.

Proof of compliance with the requirements of 4.3.2 to 4.3.4 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

Typical training that will be given by the Training Consultant is:

i) Community based Contractors

- Preparation phase – using a calculator, numeracy, using a scale ruler, reading a building plan, handling administrative tasks in the building industry.
- Estimating and tendering – marketing the services of a company, seeking, selecting, collecting and studying tender documents, investigating and assessing a site, developing a bill of quantities from building plans, calculating the cost of a project, finalizing tender prices, completing and submitting a tender.
- Project planning – introducing to planning techniques, pre-tender planning, planning Contract activities, Contract planning, executing a Contract programme.
- Executing the project – managing the finances of the company, managing materials, administering record systems, managing manpower, completion and handover.

ii) Community based labour

Local labour will be taught the following skills:

- Excavation if possible, bedding, selected backfill and backfill
- Pipe laying, valves and fittings
- Valve boxes, manholes, anchor blocks etc.

Again, the Contractor and Training Consultant will have to work closely together to identify what their requirements are and when this labour is needed.

Community based labour training will take place on site before actual production starts. Allowance needs to be made for wages, food or travelling during training.

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Training of community-based Contractors will take place at a central point. The Provincial Sum allowed in the Schedule of Quantities, makes allowance for travelling and meals for the training of community-based Contractors.

5. COMMUNITY LIAISON OFFICER

5.1 The successful Bidder shall enter into an agreement with the Ward Councilor/Ward Committee whereby the Ward Councilor shall provide to the Contractor the following if necessary:

- a) A Community Liaison Officer (CLO) for liaison with the recipient community, who as part of his/her duties will also act as a Labour Desk Officer (LDO) for labour recruitment.

5.2 The CLO shall attend all site and other meetings concerning the project.

5.3 The agreement shall make provision for the payment by the Contractor to the CLO a maximum amount calculated as follows:

Salary per month = R 5000.00

5.4 Only one CLO shall be appointed per project. If the project spans over more than one Ward or villages, the relevant Ward Councilors shall agree on one CLO to be appointed by the Contractor. Should no agreement be found as envisaged, the relevant Project Manager together with the Executive Director: Integrated Community Development, or their nominees, will interview prospective appointees and in their discretion appoint such CLO.

Notwithstanding the above, if the vastness of the project requires the use of more than one CLO, this will be permitted provided that the total monthly sum paid to all CLO's shall not exceed the amount allowed for in the BOQ.

5.5 Should the Contractor experience any difficulties with the community, these difficulties shall immediately be brought to the attention of the Department/Project Manager who shall arrange a meeting with the relevant Ward Councilor(s) and the CLO to resolve such difficulties.

5.6 The main Contractor shall ensure that any Sub-Contractor he may appoint shall adhere to these conditions but also subject to the proviso's applicable to the duration of such sub-Contract.

5.7 Should any of the above conditions be less favorable than any Bargaining Council Agreement or Act applicable to the Contractor, the more favorable condition will apply.

6 Existing services

The Contractor shall protect all existing services

7 Site establishment

a) Contractor's Camp site

The Contractor shall provide a suitable site for his camp and for accommodating the work force. The choice of the site for the establishment of the camp, offices and the layout thereof, shall be approved.

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The camp site shall be cleared and grubbed and properly fenced with a security fence around the perimeter. The Contractor is to provide his own security at the camp or on the site if required, at his own expense. No trees may be removed and the Contractor must provide his own firewood.

After completion of the Contract, the Contractor shall remove all his temporary buildings, plant and equipment. The site shall be made good and be left in a neat and tidy condition before the certificate of practical completion shall be issued.

b) Water Supply

The Contractor shall make his own arrangement for potable and construction water. It shall be the responsibility of the Contractor to apply for a water connection for his site camp. The Contractor shall be responsible for payment of all water used. Although there are water reticulation pipes in the village, the water supply is not consistent and water from the Steelpoort river may be used for construction purposes. Water quality shall be verified before use in concrete is allowed.

c) Power Supply

The Contractor shall make his own arrangements.

d) Ablution Facilities

The Contractor shall, at each construction area, provide sufficient portable chemical latrine units. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the approval of the Employer's Agent. No separate payment shall be made for this requirement and the costs thereof shall be deemed to be included in the rates billed for the Contractor's time-related obligations.

e) Cellular Telephone

It is a requirement of the Contract that the Contractor shall equip his site agent(s) with a cellular telephone to allow for effective communication between the Contractor's supervisory personnel and the Employer's Agent's supervisory staff. All the applicable contact details must be made available to the Employer as well as the staff on site. All costs associated with the provision of cellular telephones for the Contractor's personnel shall be deemed to be included in rates billed for time-related charges.

f) Site Facilities required by the Employer's Agent

One site office of approximately 30m² complete with sufficient lighting and power points.

- Two desks, ten chairs, one conference table and two steel filing cabinets.
- Three carports for his exclusive use, a net shade cover will suffice.
- An ablution unit for his exclusive use.
- The Employer's agent does not require housing for personnel or laboratory facilities.

g) PPE (Printing on PPE)

PPE (Overalls) shall be Pantone Orange with/without reflective tape and shall be branded as follows:

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- Implementer's Logo (printed or embroidered) on the left front pocket location i.e. over the heart position. (full colour)
- EPWP logo on the right front pocket (printed or embroidered) location (full colour)
- The letters EPWP on the back of the PPE in BLACK
- The program name eg Vuk'uphile is to be printed on the right sleeve of short sleeved apparel and need not be placed on long sleeved apparel.
- Where required, lime green safety vests are to be branded with similar specification above. In this instance the Overalls may not necessarily
- be branded provided that the use of high visibility vests is mandatory.
- All artwork and PPE samples shall be approved and signed off by the consultant prior to printing/embroidering

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE 1 – PRO FORMA EPWP CONTRACT OF EMPLOYMENT

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

PRO FORMA

EXPANDED PUBLIC WORKS PROGRAMME
CONTRACT OF EMPLOYMENT BETWEEN

CONTRACTOR

Name:

Address:

ID:

AND

WORKER

Name:

Details:

ID:

1. I am pleased to confirm that you have been appointed to work on a task based employment contract within the Expanded Public Works Programme (EPWP) project. Within this employment contract you will undertake numerous groups of tasks.
2. This employment contract must be read in conjunction with the standard terms and conditions of employment on EPWP attached herewith.
3. The project where you will be employed is located at.....
4. This employment contract will start on.....
and on end on
5. You must be aware that this employment contract is a limited term contract and not a permanent job. This employment contract may be terminated for any one of the following reasons:
 - a) The contractor does not get additional contracts through the EPWP.
 - b) Funding for the programme in your area comes to an end.
 - c) You repeatedly do not perform in terms of the tasks set out in your work programme.
 - d) You have worked a maximum of 24 months within a 60 month cycle.
6. You will be employed as a within the team.
7. While you are working you will report to.....
8. Payment
 - a) You will be paid a fixed amount of R..... for completing a fixed amount of work.
 - b) The amount of work required for the agreed rate of pay will vary from task to task. You will be informed at the beginning of each task or group of tasks how much work you are expected to complete per day.
 - c) You will only be paid for work completed.
9. In addition to the conditions above, all the terms and conditions of employment on EPWP apply to your employment. If you breach any of these terms your contract may be terminated.
10. Signatures:

Signed on this day of.....

Contractor: Date:

Worker: Date:

Witness: Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (MAEPA & RATAU): CONTRACT C

Reference no: SK8/3/1-01/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J

C3.5 MANAGEMENT

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.5 MANAGEMENT**1. Construction Programme Clause 5.6 of the General Conditions of Contract**

The Contractor shall submit within the period stated in the Contract Data a suitable and realistic construction programme for the consideration of the Employer's Agent.

The programme shall be in the form of a Gantt chart and shall include the following details:

- A work breakdown structure, identifying the major activity groups.
- For each activity group further details shall be provided with regard to the scheduled start and end dates of individual activities.
- The linkages between activities shall be clearly indicated and the logical network upon which the programme is based shall be separately submitted to the Employer's Agent if requested. Any constraints shall be classified as being time-related or resource-related.
- The critical path(s) shall be clearly indicated and floats on non-critical activities shall be shown.
- The Contractor shall indicate the working hours per day, night, week and month allowed for in the programme.
- Where relevant the Contractor shall state the production rates for key activities, e.g. earthworks, etc.

Together with the programme as detailed above the Contractor shall submit to the Employer's Agent a cash flow projection, indicating projected monthly invoice amounts. The cash flow projection shall be updated at monthly intervals to reflect actual payments to date and anticipated further payments.

The programme will be reviewed at the monthly site meetings at which the Contractor shall provide sufficient detail that will allow the comparison of completed work per activity that has fallen behind. The updated programme shall be submitted to the Employer's Agent at least two days prior to the monthly meetings.

If the programme has to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the Works within the time for completion as defined in Clause 5.6.1 of the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant on site, or by using the available labour and plant on site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit the programme or to work according to the programme or revised programmes shall be sufficient reason for the Employer's Agent to take steps as provided in Clause 5.7.1 of the General Conditions of Contract.

The approval by the Employer's Agent of any programme shall have no Contractual significance other than that the Employer's Agent will be satisfied that the work is carried out according to such programme and that the Contractor undertakes to carry out the work in accordance with the programme. It shall not limit the right of the Employer's Agent to instruct the Contractor to vary the

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-01/2022/23

programme if required by circumstances. The Contractor is also referred to Clause 5.6.2 of the General Conditions of Contract when drawing up his programme.

2. Sequence of the works

The sequence of the works will be in the accordance with the approved programme. The works should be programmed to allow for the installation of the pipeline network to suit the budgeted cash flow and construction period.

3. Accommodation of traffic

The following contain the Employer's general requirements for accommodating the traffic during construction:

The travelling public shall have the right of way on public roads and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

Failure to maintain road signs, warning signs, etc, in a good condition shall constitute ample reason for the Employer's Agent to bring the works to a stop until the road signs, etc, have been repaired to his satisfaction.

The Contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual Volume 2 Chapter 13.

The Contractor shall submit proposals in connection with directional signs to the Employer's Agent for approval prior to construction.

Sufficient signage shall be provided, erected and relocated as necessary by the Contractor to reroute traffic onto the deviations.

4. Extension of time on account of abnormal rainfall

- (a) Extension of time in respect of delays resulting from wet climatic conditions on the Site will only be considered in respect of abnormally wet climatic conditions and shall be determined for each calendar month or part thereof, in accordance with the formula given below:

$$V = (Nw - Nn) + (Rw - Rn)/X$$

in which formula the symbols shall have the following meanings:

V = Potential extension of time in calendar days for the calendar month under consideration:
If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.
When the value of V for any month exceeds the number of days in the particular month, V will be the number of days in the month.

Nw = Actual number of days in the calendar month under consideration on which a rainfall of Y mm or more was recorded on the Site

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-01/2022/23

N_n = Average number of days, derived from existing records of rainfall in the region of the Site, on which a rainfall of Y mm or more was recorded for the calendar month

R_w = Actual rainfall in mm recorded on the Site in an approved rain gauge for the calendar month under consideration

R_n = Average rainfall in mm for the calendar month, derived from existing records of rainfall in the region of the Site

The factor ($N_w - N_n$) shall be deemed to be a fair allowance for variations from the average number of days during which the rainfall exceeds Y mm.

The factor $(R_w - R_n)/X$ shall be deemed to be a fair allowance for variations from the average number of days during which the rainfall did not exceed Y mm but wet conditions prevented or disrupted work.

- (b) The annual rainfall in the area varies between 500mm and 650mm. A vast amount of land is covered by the savannah veld in the Marea. The Sekhukhune district municipal area is characterized by flat to gently sloping Bushveld/ Savannah vegetation in the north and central parts, and a mountainous area to the south which forms the border of the Thembisile local municipality. Cultivated areas (permanent and temporary dry and irrigated land) cover less than 15% of the municipality. Urban areas cover 14% of the municipality.

The potential extension of time V has been calculated for each month and year of the period concerned to indicate the possible effect of the rainfall formula. The values of V were obtained by applying the rainfall formula and using the actual rainfall figures and the calculated values of R_n and N_n indicated in the table.

- (c) The Contractor shall, at his own cost, provide and erect on the Site at a location approved by the Engineer, an approved rain gauge, which shall be fenced off in a manner which will prevent any undue interference by workmen and others. The Contractor shall, at his own cost, arrange for the reading of the rain gauge on a daily basis for the duration of the Contract. The gauge readings, as well as the date and time at which the reading was taken shall be recorded in a separate record book provided by the Contractor for this purpose. All entries in the rainfall record books shall be signed by the person taking the reading and the gauge shall be properly emptied immediately after each reading has been taken. If required by the Engineer, the Engineer shall be entitled to witness the reading of the gauge.
- (d) The Contractor's claims in terms of Subclause 10.1 of the Conditions of Contract for extension of time in respect of delays resulting from wet climatic conditions on the Site during each month, shall be submitted in writing to the Engineer monthly;

provided always that

- (i) the period allowed to the Contractor in terms of Clause 10.1.1.1 of the Conditions of Contract in which to submit his claim for each month shall be reduced to seven (7) days, calculated from the last day of the month to which the claim applies; and
- (ii) the 28-day period allowed to the Employer's Agent in terms of Subclause 10.1.5 of the Conditions of Contract in which to give his ruling on the claim, shall be reduced to fourteen (14) days.

The Contractor's monthly claim shall be accompanied by a copy of the signed daily rainfall readings for the applicable month.

- (e) The extent of any extension of time which may be granted to the Contractor in respect of wet climatic conditions (whether normal or abnormal) shall be determined as the algebraic sum of the "V" values for each month between the Commencement Date and the Due Completion Date of the Contract, calculated in accordance with subclause 4(a) above;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-01/2022/23

provided always that

- (i) rainfall occurring within the period of the Contractor's Christmas shut-down period (referred to in Subclause 1.6 of the Conditions of Contract) shall not be taken into account in the calculation of the monthly "V" values;
 - (ii) rainfall occurring during any period during which the Contractor was delayed due to reasons other than wet climatic conditions on the Site, and for which delay an extension of time is granted by the Employer's Agent, shall not be taken into account in the calculation of the monthly "V" values;
 - (iii) if the algebraic sum of the "V" values for each month is negative, the time for completion will not be reduced on account of subnormal rainfall, and
 - (iv) where rainfall is recorded only for part of a month, the "V" value shall be calculated for that part of the month using pro rata values for Nn and Rn.
- (f) The Employer's Agent shall, simultaneous with granting any extension of time in terms of this clause, revise the Due Completion Date of the Contract to reflect an extension of time having been granted in respect of wet climatic conditions, to the extent of the algebraic sum of all the "V" values for all the preceding months of the Contract, less the aggregate of the "Nn" values for the remaining (unexpired) months of the Contract (viz less aggregate of the potential maximum negative "V" values for the remaining Contract Period). Thus, provided that where such period is negative, the Due Completion Date shall not be revised.
- (g) Any extension of time in respect of wet climatic conditions granted in terms of this clause shall not be deemed to take into account delays experienced by the Contractor in repairing or reinstating damage to or physical loss of the Works arising from the occurrence of abnormal climatic conditions. Extension of time in respect of any such repairs or reinstatement regarding damage shall be the subject of a separate application for extension of time in accordance with the provisions of Clause 5.12 and Clause 10.1 of the Conditions of Contract.

ALTERNATIVE 2 (Critical path method)

- (a) A claim for extension of time in respect of delays suffered by the Contractor in consequence of wet climatic conditions will be considered by the Employer's Agent in terms of Clause 5.12 of the Conditions of Contract and in accordance with provisions set out hereunder.
- (b) For the purposes of extension of time, a delay caused by wet climatic conditions will be regarded as a delay only if, in the opinion of the Employer's Agent, all progress on an item or items of work on the critical path of the Contractor's working programme as approved in terms of Clause 5.6 of the Conditions of Contract has been brought to a halt.
- (c) Unless it is customary to carry out the work, in respect of which a delay was suffered, by rotary shifts or by day and by night, only delays to critical path items experienced as a result of wet climatic conditions during normal working hours (as defined in Clause 5.8 of the Conditions of Contract) will be taken into account for extension of time. This will apply notwithstanding the fact that a delay may have occurred on a portion of the Works on the critical path due to wet climatic conditions, which work was being executed outside the said normal hours with the permission of the Employer's Agent, granted in terms of Subclause 5.8.1.1 of the Conditions of Contract.

RAINFALL TABLE

- (d) The Contractor shall make due allowance within his programme submitted in terms of Clause 5.6 of the Conditions of Contract, for a total anticipated delay to items on the critical path resulting from wet climatic conditions, of Fifteen (15) normal working days (as defined in Clause 5.8 of the Conditions of Contract) during the Contract.
- (e) Extension of time, if granted by the Employer's Agent, will be determined as the aggregate number of normal working hours for which all progress on the item or items on the critical

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

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path was brought to a halt as a result of wet climatic conditions, less the number of normal working days specified in subclause (d) above.

- (b) In determining the revised Due Completion Date of the Contract, the Employer's Agent shall add the equivalent number of normal working days delay determined in accordance with subclause (e) and all intervening normal non-working days to the prevailing Due Completion Date.

5. Community participation

Community participation consists of engagement of Project Steering Committees (PSC). A PSC will be established for the town by the Ward Councilor. The functions of the PSC will be to:

- Assist in monitoring the project.
- Ensure that the community provide assistance to the Contractor to ensure that he can execute the Contract in accordance with the specifications and within time.
- Encourage the community to participate in the Labour-Intensive construction.
- Identify skills, skilled personnel and suppliers in the towns.

The PSC will not have the power to:

- Give any instructions to the Contractor, except through the Employer's Agent.
- Become involved in the daily operations of the Contractor or interfere with the Contract works.

A monthly meeting will be held with the PSC to discuss relevant matters. The site agent and resident Employer's Agent will attend the meetings. The Contractor will have to report on progress, deviations from the programme, financial matters community related aspects, general problems and co-operation at the meeting. The PSC members will not receive any remuneration for attending, and they must provide their own transport.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J

C3.6 PARTICULAR SPECIFICATIONS AND VARIATIONS AND ADDITIONS TO THE STANDARD SPECIFICATIONS

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.6 PARTICULAR SPECIFICATIONS AND VARIATIONS AND ADDITIONS TO THE STANDARD SPECIFICATIONS**PSA GENERAL (SANS 1200 A)****Interpretations****Definitions****(a) General**

Add the following definitions: -

“General Conditions: The General Conditions of Contract specified for use with this Contract and the Special Conditions of Contract as applicable.

Specified: As specified in the Standardised Specifications, the Drawings or the Project Specifications. Specifications shall have the corresponding meaning, as provided for in sub-clause 1(1)(u) of the General Conditions of Contract”.

Measurement and Payment

Replace the definitions for fixed charge, time-related charge and value-related charge with the following:

“Fixed Charge: A charge that is not subject to adjustment on account of variation in the value of the Contract amount or the Contract time for completion.

Time-related Charge: A charge, the amount of which is varied in accordance with the time for completion of the work as adjusted in accordance with the provisions of the Contract.

Value-related Charge: A charge, the amount of which is varied pro rata the final value of the measured work executed and valued in accordance with the provisions of the Contract.

PSA 1 MATERIAL (Subclause 3.1)**PSA 1.1 QUALITY**

Substitute the second sentence of the first paragraph of A 3.1 with the following:

Materials shall bear the official mark of the appropriate standard.

Substitute the second paragraph with the following:

The Contractor is responsible for the cost of all testing to ascertain that the materials do comply with the relevant minimum requirements and all such costs shall be deemed to be included in the tendered rates. The cost of control tests done by the Employer’s Agent and of which the results do not comply with the minimum requirements shall be for the Contractor’s account. The Contractor shall inform the Employer’s Agent of any control testing to be done at least 48 hours before such tests are required and must allow in his program for the time necessary for the tests and the processing of the results thereof. The handling, storage, transport, and erection of equipment, machinery, and materials shall be strictly in accordance with the requirements of the supplier and/or manufacturer.

All materials shall be new and of the best quality available unless otherwise specified. They must function satisfactorily under prevailing climate and weather conditions at the place of installations.

PSA 2 PLANT**PSA 2.1 CONTRACTOR’S OFFICES, STORES AND SERVICES (Subclause 4.2)**

Add the following to this subclause:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSA 2.1.1 Storage

The Contractor shall supply sufficient protection for perishable materials to the satisfaction of the Employer's Agent, and all materials shall be used in the order in which it was delivered. Cement older than three months shall be removed from the site and shall not be used in the Works.

PSA 2.1.2 RESTRICTIONS ON EMPLOYEE ACCOMMODATION

No housing is available for the Contractor's employees, and the Contractor shall make his own arrangements to house his employees and transport them to site.

The Employer will place at the disposal of the Contractor an area to enable him to erect his site offices, workshops, stores, and any temporary housing the Contractor may wish to erect for his personnel. The temporary housing and ablution facilities shall comply with the requirements of the local Authority.

PSA 2.2 CAPACITY OF PLANT AND EQUIPMENT (Clause 4)

Add as Clause 4.3:

The Contractor shall supply plant and equipment in sound working condition and of adequate capacity to complete the Works well within the period or periods specified or stated in the appendix to the tender.

In addition, he shall have available on the Site adequate standby plant to ensure that operations designed to be executed continuously are not disrupted because of breakdown of any plant provided for such operations.

PSA 3 CONSTRUCTION**PSA 3.1 DETAILED SETTING OUT (Subclause 5.1.1)**

The Contractor shall be solely responsible for the execution of the works to the correct line and level.

The Contractor shall carefully set out the works, employing a capable surveyor to the lines and levels gleaned from information provided.

The proposed network pipes must be placed 2,0m away from the erf boundaries in the road reserve. The tolerance allowed in setting out shall be 10mm either way.

Work set out by the Contractor shall be checked by the Employer's Agent whereafter any errors be rectified by the Contractor.

The Contractor shall provide at least three days' notice of such a check to the Employer's Agent. The Contractor shall supply any material and labour required for the control survey work by the Employer's Agent including the supply of and placing the necessary pegs, sight rails, etc.

Any discrepancy shall immediately be reported in writing to the Employer's Agent. Any costs or subsequent costs arising from discrepancies, which had not been reported to the Employer's Agent, shall be the sole responsibility of the Contractor.

Any assistance, including checking, rendered to the Contractor by the Employer's Agent shall not be held as relieving the Contractor of his responsibility in this respect. Should any portion of these works be constructed incorrectly, the Contractor shall at his own expense rectify the work to the satisfaction of the Employer's Agent.

The Contractor shall be held solely responsible for the protection of all bench marks, reference pegs and level pegs.

The Contractor shall establish at least three benchmarks at selected points.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSA 3.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS**(Subclause 5.2)**

Add the following to this subclause:

The Contractor shall ensure that he complies with all the requirements of the authorities concerned with respect to the safety of the works and labourers, including the provision and wearing of protective clothing. Any negligence or non-compliance of any of these requirements shall be viewed in a serious light and shall be sufficient reason for the Employer's Agent to order the immediate suspension of the total extent of the Works.

The Contractor shall provide for artificial lighting for any part of the Works that may be required for the proper execution of the work.

The crossing of existing tar and dirt roads must be done in half widths, while the total traffic is accommodated on the other lane. Road traffic signs shall comply with the requirements of the "South African Road Traffic Signs Manual" and shall be approved by the Employer's Agent before construction commences.

PSA 3.3 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES (Subclause 5.4)

Add the following to the subclause:

Before commencing any excavation, the Contractor shall verify the position of all known or suspected obstacles by inspection of the site, examination of drawings or, where necessary by the excavation of trial holes. Any damage caused to existing services and works shall be repaired as expeditiously as possible by the Contractor at his own expense and shall be reported immediately to the Employer's Agent.

Where permanent protective works are ordered by the Employer's Agent, such works shall be valued as a variation. The Employer's Agent will supply the Contractor with such information as may be available concerning obstructions and services, but whilst such information is given in good faith, it shall not relieve the Contractor of any of his liabilities, obligations and risks under the Contract.

The Contractor shall be responsible for any damage to such public services and existing works in the execution of this Contract and shall reimburse the Public Authority or the Owner concerned for any repairs required or compensation for damage awarded.

Any alteration to public services shall be carried out by the Authority concerned.

The Contractor shall provide the necessary assistance during any operations necessary in connection with the removal, alteration or safeguarding of any public service.

The relevant authority and Employer's Agent shall be informed of any damages without delay.

PSA 3.4 DEALING WITH WATER ON WORKS (Subclause 5.5)

Add the following to the subclause:

The Contractor shall be responsible for the dewatering of excavations and the full and adequate protection of the works against damage by storm or water from any source whatever. He shall construct all necessary diversion works and drains to deal adequately with and bypass all water and carry out any necessary pumping of water and supply all tarpaulins or other covers which may be required to protect any section of the work during heavy rain or storm together with any other labour work and material which, in the opinion of the Employer's Agent is necessary to keep the work dry and safe at all times.

Full risk and cost of dealing with water shall be borne by the Contractor.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSA 3.5 POLLUTION (Subclause 5.6)

Add the following to the subclause:

The Contractor shall maintain all access roads and the area where the offices, stores and workshops are situated to the satisfaction of the Employer's Agent. It shall be kept damp to limit dust and inconvenience or disturbance to the residents in the neighbourhood of the Works to a minimum.

PSA 3.6 DEGREE OF ACCURACY (Subclause 6.2)

Delete this subclause and replace with the following:

The Contractor shall construct each of the various parts of the Works to the degree of accuracy specified in the relevant standardized specification.

PSA 4 TESTING**PSA 4.1 APPROVED LABORATORIES (Subclause 7.2)**

Add the following to this subclause:

No laboratory facilities are required on site. The Contractor shall use an independent laboratory for the necessary tests. Unless otherwise stated in the Bill of Quantities, the cost of all tests shall be for the account of the Contractor and no additional payment will be made for them.

PSA 5 MEASUREMENT AND PAYMENT (Clause 8)**PS A 5.1 Fixed-Charge and Value-Related Items****PSA5.1.1 Contractual Requirements..... Unit: Sum**

The sum shall cover the Contractor's initial costs of providing sureties, insurance of the works and plant, third party or public liability insurance and unemployment insurance to cover his compliance with the requirements of the Workmen's Compensation Act, 1941 (Act NO. 30 of 1941) and any other initial financing obligations of a preliminary and general nature, such as contributions to the CEITB. The tendered amounts for fixed-charge and value-related items will not be increased, if extension of time for the completion of the works is awarded.

PS A 5.1.2 Establishment of Facilities on the Site**PS A 5.1.2.1 Facilities for Engineer**

- a) Furnished office (No)Unit: Sum
- b) Carport.....Unit: Sum
- c) Name-board (No.)Unit: Sum
- d) Telephone.....Unit: Sum
- e) Survey Assistant.....Unit: Sum
- f) Survey Equipment.....Unit: Sum

PS A 5.1.2.2 Facilities for the Contractor

- (a) Offices and storage sheds Unit: Sum
- b) Workshops Unit: Sum

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

c) Laboratories	Unit: Sum
d) Living accommodation	Unit: Sum
e) Ablution and latrine facilities	Unit: Sum
f) Tools and equipment	Unit: Sum
g) Water supplies, electric power and communications	Unit: Sum
h) Dealing with water	Unit: Sum
i) Access	Unit: Sum

PSA 5.1.3 Other Fixed-Charge Obligations..... Unit: Sum

This item as listed under Schedule A of the bill of quantities is as specified in the standardised specification SANS 1200 A.

PSA 5.1.4 Removal of Site Establishment..... Unit: Sum

The sum shall cover the cost of the demolition on and the removal from the surface of the site of all items established in terms of 8.3.2 and 8.3.3, and shall provide for the making good and the restoring of the Site to the satisfaction of the Engineer

PS A 5.2 TIME-RELATED ITEMS

The tendered amount for a time-related item will be increased; if an extension of time for the completion of the works is awarded with cost on the condition that the activity related to the item tendered for must be sustained during the extended period. The ratio between the increased amount for a time-related item and the tendered amount must be the same as the ratio between the extension of the time period for the completion of the works and the original time period allowed for completion of the works. If the works is completed before the end of the original time period allowed for completion of the works, the tendered amount of a time related item that is influenced by the earlier completion would be reduced similarly.

PS A 5.2.2 SCHEDULED TIME RELATED ITEMS**PS A 5.2.2.1 Facilities for Engineer**

a) Furnished office (No)	Unit: Sum
b) Carport.....	Unit: Sum
c) Name-board (No.)	Unit: Sum
d) Telephone.....	Unit Sum
e) Survey Assistant.....	Unit Sum
f) Survey Equipment.....	Unit Sum

PSA 5.2.2.2 Facilities for Contractor Unit: Sum

The sum shall cover the Contractor's time related costs of providing sureties, insurance of the works and plant, third party or public liability insurance and unemployment insurance to cover his compliance with the requirements of the Workmen's Compensation Act, 1941 (Act NO. 30 of 1941) and any other initial financing obligations of a preliminary and general nature, such as contributions to the CEITB. Establishment of Facilities on the Site Facilities for Engineer

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PS A 5.2.2.2 Facilities for Contractor

- a) Offices and storage sheds.....Unit: Month
- b) Workshops Unit: Month
- c) Laboratories Unit: Month
- d) Living accommodation Unit: Month
- e) Ablution and latrine facilitiesUnit: Month
- f) Tools and equipmentUnit: Month
- g) Water supplies, electric power and communications Unit: Month
- h) Dealing with water Unit: Month
- i) Access Unit: Month

PSA 5.2.3 Supervision for Duration of Construction..... Unit: Sum

The sum shall cover the costs of on-site supervision and such local administration as the Contractor considers necessary for the proper completion of the Works, and shall cover the cost of the salaries, wages and allowances paid to the site agent, general foreman, section foremen (where applicable), site surveyors, timekeepers, assistants and other site supervisory staff, and of transport incurred in connection with such staff. Plant (designated plant or plant for designated operations or plant for use during Supervision for Duration of Construction).

PSA 5.2.4 Company and Head Office Overhead Costs for the Duration of the Contract...Unit: Sum

The sum shall cover the Contractor's company and head office overhead costs.

PS A 5.3 SUMS STATED PROVISIONALLY BY ENGINEER**PS A 5.3.1 Community Liaison OfficerUnit: P/Sum**

The Contractor must pay a salary to a person appointed as the Community Liaison Officer for the project. The amount of payment and payment dates will be determined as soon as the Community Liaison Officer is appointed.

PSA 5.3.2 PSC Meetings Attendance Unit: P/Sum

The tendered rate shall cover the compensation of all members of Project Steering Committee for attending meetings. The amount of payment and payment dates will be determined on the commencement date of the project. The Employer's Agent should authorise payment before it is made. Proof of payment has to be submitted to Employer's Agent before claim can be certified.

PS A 5.3.3 Overheads, charges and profit on (1) above Unit: %

Handling cost and profit in respect of sub-item 5.3.1&2. A percentage of the payment made to the Community Liaison Officer and PSC Meeting attendance will be paid to the Contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the Community Liaison Officer and PSC members. No payment will be made under this item before payment to the Community Liaison Officer and PSC members.

PS A 5.3.4 Training Unit: P/Sum

Provisional sum for training services supplied by the Training Company. The name and contact details of the Training Company, to be appointed by the Contractor, will be supplied to the Contractor by the Employer or Employer's Agent.

- i. Generic Skills.....Unit:P/Sum
- ii. Entreprenaural skills..... Unit:P/Sum

PS A 5.3.5 Overheads, charges and profit on (1) above Unit: %

Handling cost and profit in respect of sub-item 8.5(b)1. A percentage of the payment made to the Training Company will be paid to the Contractor. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Training Company. No payment will be made under this item before any payment is made to the Training Company.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PS A B.5.3.6 Occupational, Health and Safety Act.....Unit: Sum

Handling cost in respect of sub-item 8.3.5. A percentage of the payment made to the Occupational health and safety act will be paid to the Contractor under this section. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Occupational health and safety act.

1. Provision for safety officer

The Contractor should appoint the safety officer who will be full time responsible for all safety issues on site, and he or she should be full time on site.

The tendered rates include the full compensation for that part of the provision of safety officer in terms of the Occupational Health and Safety Act and the construction regulation which are mainly a function of time. Payment shall be made monthly.

Handling cost in respect of sub-item 8.3.5.2 (a). A percentage of the payment made to the Safety Officer will be paid to the Contractor. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Safety Officer.

PS A B.5.3.7 Contractor's time related obligation in respect of the OH&S Act and Construction regulation

The tendered lump sum shall represent full compensation for that part of the Contractor's general obligations in terms of Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. The lump sum will be paid monthly only after payment for item 1.3.3 and item 1.1.5 has been made Payment of the lump sum shall be made monthly (calculated by the division of the lump sum by the number of months remaining).

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PSAB : EMPLOYER'S AGENT OFFICE**PSAB 1 MATERIALS****PSAB 1.1 NAMEBOARDS (Subclause 3.1)**

Add the following to the subclause:

Notwithstanding the provisions of Subclause 3.1 of SANS 1200 AB, the standard nameboards complying with the recommendations of the South African Association of Consulting Engineers shall be provided. Details of the nameboard will be available from the Engineers.

PSAB 1.2 OFFICE BUILDINGS (Subclause 3.2)

Delete this subclause and replace with the following:

The Contractor shall provide the following furnished offices for the use of the Engineer and the Client. Each office shall consist of one room with the following floor area:

- i) Engineers' office : 18 m²

The clear height of all offices between floor and ceiling shall be 2,5m minimum. All windows shall be of the type that can be open over the full window area.

Each office shall be weatherproof, shall have a concrete floor and shall be provided with a ceiling and a lining to the walls, or equivalent insulation, with an acceptable type of door with a secure lock, and two opening windows of glazed area at least 3m². Each office shall be well ventilated and shall be so insulated as to provide comfortable working conditions. The internal furnishings of each office shall include:

- a) one trestle table, 2m long x 1m wide x 0,9m high, with a smooth top;
- b) one table or desk having a top of size at least 1,5m x 0,9m and at least one lockable drawer;
- c) one high stool;
- d) two chairs;
- e) a lockable upright steel cabinet with three shelves or a steel filing cabinet with four drawers;
- f) shelving of total length 3m and of nominal width 300mm;
- g) an acceptable blind on each window,
- h) a wash-hand basin;
- i) acceptable lighting;
- j) provision for heating in winter and cooling in summer;
- k) one conference type steel table with folding legs of size at least 4,0m x 0,9m.

The Contractor shall also supply a toilet for the exclusive use of the Engineer.

PSAB 1.2 CAR PORTS (New Subclause 3.2 (k))

The Contractor shall provide two permanent car ports for the use of the Engineer. The car ports shall be so constructed that the vehicles parked under them will at all times be shaded from direct sunlight. The car ports shall be at least 20m² in area and shall have a hard stand of crushed stone.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

PSAB 2 CONSTRUCTION**PSAB 2.1 SURVEY EQUIPMENT (Subclause 5.5)**

Add the following:

The Contractor shall provide the following survey equipment on the site from the commencement to the completion of the Works:

1. 1x Tachometer capable of reading 20 seconds of arc (Total Station);
2. 1x Employer's Agent's level and level staff;
3. 2x Tachometer staffs graduated metrically (Total Station);
4. 1x Steel tape of length 30m.

The tachometer may be shared by arrangement between the Contractor and the Employer's Agent's Representative, but the remaining instruments shall be provided for the exclusive use of the Employer's Agent's Representative. The Contractor shall keep the equipment continuously insured against any loss, damage, or breakage and he shall indemnify the Engineer and the Employer against any claims in this regard. Upon completion of the whole of the Works, the ownership of the equipment shall revert to the Contractor.

The Contractor shall maintain the equipment in good working order and keep it clean throughout the Contract period.

PSAB 2.2 CELLULAR PHONE (New Subclause 4.2)

The Contractor shall supply the Engineer with a cellular phone for the Employer's Agent's sole use. The Contractor shall be responsible for the supply, maintenance, payment of accounts, etc. of the cellular phone. Ownership of the equipment shall be given to the engineer at the end of the Contract.

PSAB 2.3 MEASUREMENT AND PAYMENT OF SURVEY EQUIPMENT

Provide and maintain survey equipment..... SUM

The rate shall cover the charges for the provision, insurance and maintenance of the equipment.

PSAB 3 SURVEY ASSISTANTS (Subclause 5.5)

Add the following:

The Contractor shall make available to the Engineer two suitably trained survey assistants for use on and about the SITE at all reasonable times for the duration of the Contract.

PSC: SITE CLEARANCE**PSC 1 MATERIALS (Clause 3)****PSC 1.1 DISPOSAL OF MATERIAL (Subclause 3.1)**

Add to this sub-clause:

Material obtained from clearing and grubbing and from the demolition of structures shall be disposed of in a borrow pit indicated by the Engineer and shall be finished to the satisfaction of the Engineer.

PSC 2 CONSTRUCTION (Clause 5)**PSC 2.1 INDIVIDUAL TREES (Subclause 5.2.3.2)**

Add to this sub-clause:

Should the Contractor remove or damage any tree marked to be preserved, a penalty of R1000,00 per tree shall be payable.

PSC 2.3 EXISTING FENCING

The fencing parallel to the pipeline routes must only be removed and re-erected at the positions as indicated and approved by the Employer's Agent and repaired where it was damaged. When the pipeline routes cross fencing or gates temporary wire gates must be provided that must be kept closed. After completion of the work these fences or gates must be repaired to the same condition as before commencement of the work.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PS C 3 MEASUREMENTS AND PAYMENT**PS C 3.1 SCHEDULED ITEMS****PS C 3.1.1 Clear and grub (0.8m wide) Unit: m**

The removal of all rocks and boulders on site over 0,15m³ will be paid under sub-clause PS DB 8.3.2(b). The removal of hard rock other than boulders will be paid under sub clause PS DB 8.3.2(b).

PSC 3.1.2 Remove and grub large trees and tree stumps of girth

a) over 1 m and up to and including 2 m Unit: No

b) over 2 m and up to and including 3 m Unit: No

The girth of a tree or stump will be measured at the narrowest point of the tree or stump in the first metre of its height above ground level. Trees and stumps of girth exceeding 1 m will be measured individually and classified according to site in increments of 1 m as indicated above.

The rate shall cover the cost of clearing and grubbing trees and stumps of all sizes, cutting branches, backfilling holes, and removing, transporting, and disposing of all such trees, stumps, and branches and associated material.

PSC 3.1.3 Remove and grub all trees and tree stumps regardless of girth Unit: No

In exceptional circumstances, where construction is carried out through plantations or where the quantity of trees or girth exceeding 1 m renders individual measurement impracticable the project specification may provide that the clearing and grubbing of trees be measured in hectares. If this method of measurement is used the areas to which it is applicable will be defined clearly on the drawings and the reason for adopting the method of measurement will be stated in the project specification. The rate shall cover the cost of all operations specified.

PSC 3.1.4 Take down existing fence..... Unit: m

The rate shall cover the cost of taking down the fences, coiling wire, sorting and stacking all material at sites indicated by the Engineer and the cost of loading, transporting and offloading such material.

PSDB: EARTHWORKS (Pipe Trenches)

This specification covers earthworks for trenches for all types and sizes of pipes. It covers excavation, the preparation of a trench bottom, backfilling and the reinstatement of surfaces.

PSDB 1 MATERIALS (Subclause 3)**PSDB 1.1 CLASSIFICATION OF EXCAVATED MATERIAL (Subclause 3.1)**

Delete this subclause and replace with the following:

Distinction shall be drawn, for payment purposes, between excavation in hard and soft material. All excavation for pipe trenches shall be classified in accordance with the following classification.

PSDB 1.1.1 Soft excavation

Soft excavation shall be excavation in all existing fill material as well as excavation in material which can be efficiently removed by any of the following plant.

A bulldozer having a mass, including the mass of the ripper if fitted of 35 ton and having a flywheel power of approximately 220 kW or a back tractor having 0,15 kW per millimetre bucket width.

PSDB 1.1.2 Hard excavation

Hard excavation shall be excavation in material which cannot be efficiently ripped by plant as described in PSDB 1.1.1. This excavation generally includes material such as formation of weathered rock which can only be removed after blasting or boulders of 0,5 m³ or larger in volume.

The Contractor shall be at liberty to use any method he wishes to excavate any class of material, but the method of excavation shall, however, not dictate the classification of the excavation.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

The Engineer shall decide under which one of the above classes any excavation shall be classified and paid for. In the first instance the classification shall be based on inspection of the material to be excavated and the method of excavation proposed by the Contractor. In the event of disagreement between the Contractor and the Engineer, the Contractor shall, if required, make available such mechanical equipment as specified in order to test the reasonable removability or otherwise of the material. The decision of the Engineer as to the classification shall thereafter be final and binding.

The Contractor shall immediately inform the Engineer as and when the nature of the material being excavated changes to the extent that a new classification for further excavation is warranted. Failure on the part of the Contractor to timeously advise the Engineer shall entitle the Engineer to classify, in his sole discretion, such excavation as may have been executed in material of a different nature.

PSDB 1.2 FREEHAUL (Subclause 5.6.8)

Delete this subclause and replace with the following:

The free haul distance within which the Contractor will be required to move material without separate compensation shall be 2,0km. Overhaul will be paid for the moving of material beyond that distance.

PS DB 2 PLANT (Subclause 4.1)**PS DB 2.1 EXCAVATION EQUIPMENT**

Add the following to DB 4.1:

An adequate number of suitable tools, including hand stampers, wheelbarrows and hosepipes shall be provided by the Contractor. The Contractor will supply mechanical compaction equipment and when required pneumatic and rock breaking equipment. All excavations exceeding the specified widths shall be backfilled with approved selected material. No payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

PSDB 3 CONSTRUCTION (Clause 5)**PSDB 3.1 PRECAUTIONS****PS DB 3.1.1 Water in Trenches**

Water in pipe trenches may cause movement of the pipes as a result of flotation and backfilling must therefore be executed as quickly as possible. If movement of the pipes does occur the Contractor must, unless otherwise instructed by the Engineer, remove the pipes from the trench and reinstall it at his own expense.

PS DB 3.2 EXCAVATION

Add the following to DB 5.4:

"Excavation and backfilling of pipe trenches on sidewalks in the residential area shall be done in such a manner as to ensure the least possible disruption to the public and access to the properties. No additional payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

PS DB 3.3 TRENCH BOTTOM

Substitute "90 %" in the second paragraph of DB 5.5 with "93 %".

PS DB 3.3.1 Over Excavation of Trenches

Where pipe trenches are excavated deeper than specified or shown on the drawings, these excavations must be backfilled with suitable approved selected material in layers of not more than 150mm uncompacted thickness and must be compacted to the thickness of the adjoining in-situ material or as prescribed by the Engineer. Over excavation shall be on the Contractor's account.

PS DB 3.4 BACKFILLING**PS DB 3.4.1 General**

Backfilling in road reserves must be compacted in 150mm layers up to natural ground level.

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

Where prescribed by the Engineer all surplus material must be neatly piled over the real trench width to a height not more than 150mm higher than the adjoining level.

PS DB 3.4.2 Disposal of Soft Excavation Material

Add the following to DB 5.6.3:

All surplus and unsuitable material as described in DB 5.6.3 shall be disposed of at the spoil site, (as described in PS D 5.2.2.3) and levelled.

PS DB 3.5 COMPACTION

PS DB 3.5.1 Areas Subject to Traffic Loads

Add the following to DB 5.7.2:

All pipe trenches within road crossings, accesses to services, farms and camps that fall within the road reserve, will be regarded as areas subject to traffic loads. Backfilling of trenches that are subject to traffic loads will be executed in layers of 150mm as follows:

Item	% mod AASHTO	Final Layer Thickness
Approved Backfill	93%	150mm
Main Backfill up to road layers	96%	150mm
Sub-base	97%	150mm
Base	98%	150mm

PS DB 3.6 REINSTATEMENT OF SURFACE

PS DB 3.6.1 Private Property and Commonage

Add the following to DB 5.9.2:

Gardens and lawns shall be repaired to the original standard where they were crossed. Grass and plants shall be taken out of the ground, temporarily stocked, watered during construction, and replanted after backfilling.

PSDB 4 MEASUREMENT AND PAYMENT (Subclause 8)

PSDB 4.1 BASIC PRINCIPLES (Subclause 8.1.1)

Change the following in this subclause:

The free haul distance will be 2,0km and not 0,5km.

PSDB 4.2 CALCULATION OF QUANTITIES (Subclause 8.2.3)

Change the first sentence of the subclause to read as follows:

Where volumetrically measurement is necessary, the volume will be computed from the difference in level between natural ground level and 100mm below pipe invert level as shown on the drawings.

PS DB 4.2.1 Shoring

Add the following to DB 8.2.4:

Shoring will only be measured and paid for, if the Engineer gives written approval before it is installed.

PSDB 4.2.2 Excavation

(a) Excavation in all material for trenches, backfill, compact and dispose of surplus material..... Unit (m)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

Item will be provided for various pipe diameters in steps not greater than those specified in 5.2 and various depths in increments of 1.0 m measured to the bottom of the bedding layer (see attached drawings). Where measured volumetrically in terms of 8.1.2 (a), the volume of excavation will be computed in accordance with 8.2.2 and 8.2.3

The rate shall cover the cost of the same operation in heading where the Contractor elects to use such a method of excavation. The volume or length will be measured for payment on the assumption that normal trench excavation has been carried out. The volume or length in the undisturbed prism of material between the top of the tunnel and ground level will be classified as soft excavation in terms of 3.1. No additional payment will be made for such headings and no deductions will be made for reduced excavation quantities.

(b) Extra-over item (a) above for:

1. Intermediate excavation Unit: m³
2. Hard rock excavation..... Unit: m³
3. Hand excavation and backfill where ordered by the engineer..... Unit: m³
4. Soil Crete backfilling were directed by the engineer. Unit: m³

Separate items will not be provided for depth increment, volume will be computed from the trench width determined in accordance with 8.2.3 and the depth from the top of the intermediate or hard rock excavation, as the case may be, either to the bottom of the same material or to the bottom of the trench as specified in (a) above, whichever is the lesser (see Drawing DB 5

The rates shall cover the additional cost of the excavation and hauling of the more difficult material of unsuitable material. The Contractor must obtain written approval for all stages on item (b) (a) 1 to 4.

c) Excavate and dispose of unsuitable material from trench bottom (provisional... Unit: m³

The volume will be computed from the trench width determined in accordance with 8.2.3 and m³ the additional depth ordered.

The rate shall cover the cost of the excavation of the additional depth in any material, the disposal of the unsuitable material as specified for soft: excavation in 5.6.3 within free haul distance and the backfilling of the additional depth with suitable material from the side of the trench.

PSDB 4.2.3 EXCAVATION ANCILLARIES**PSDB 4.2.3.1 Make up deficiency in backfill material**

- a) from other necessary excavations on siteUnit: m³
- b) by importation from-designated borrow pits Unit: m³
- c) by importation from commercial or off-site sources selected by the Contractor Unit: m³

Items (b) and (c) above will not be measured for payment unless importation has been ordered in writing. The volume will be computed from the trench width determined in accordance with 8.2.3 and the depth from the top of the backfill to the top of the bedding as shown on Drawing DB-1 or the actual depth of backfill used to make up the deficiency or the depth of additional excavation ordered in terms of B.3.2(c), as applicable.

The rate for material from other necessary excavations on site shall cover the cost of selection of suitable material, the moving of the material to points alongside the trench spaced to suit the Contractor's method of working, and the disposal of the material that is replaced, all within free-haul distance.

The rate for material from designated borrow pits shall cover the cost of royalties, if applicable, excavation and selection of suitable material, the moving of the material to points alongside the trench spaced to suit the Contractor's methods of working, and the disposal of the material that becomes surplus as a result of the importation, all within free-haul distance.

The rate for material from commercial or off-site sources selected by the Contractor shall cover the cost of the acquisition of the material (including royalties, if applicable), the moving of the material to points alongside the trench spaced to suit the Contractor's methods of working, and the disposal of the material that becomes surplus as a result of the importation, all within free-haul distance (see Subclause 5.2.5.1 of SANS 1200 D or Subclause 5.2.6.1 of SANS 1200 DA, as applicable).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

PS DB 4.2.3.2 Opening up and closing down of designated borrow pitUnit: Sum

This item will only be scheduled when a new borrow pit has to be established or when access to an existing borrow pit has to be established.

With the exception of the cost of the removal and spreading back of the topsoil (if scheduled), the sum shall cover the cost of opening up and of restoring the Site as specified in Subclause 5.2.2.2 of SANS 1200 D or Subclause 5.2.2(f) of SANS 1200 DA, as applicable.

PS DB 4.2.5 Existing Services

Existing Services-that Intersect or Adjoin a Pipe Trench (see Sub-clauses 5.1.2 and 8.3.8 of SANS 1200 D or Sub-clauses 5.1.3 and 8.3.5 of SANS 1200 DA, as applicable.) (See Subclauses 5.1.2 as applicable.)

(i) Services that intersect a trench (angles between centre-lines in plan of 45°)..unit (No)

Except where water pipes are to be recovered, existing water pipes, sewers, stormwater pipes, concrete-lined channels and drains, box culverts, electric cables, ducts, kerbs, channels, erf connections and various sizes of pipes and services that intersect a trench of specified width and require various degrees of care, whether or not their presence is known before they are uncovered, will be measured separately. The unit refers to one service, but services that are so grouped that they can be contained within a horizontal dimension of 200 mm measured at right angles to the axis of the services will be measured as one unit.

(b) Services that adjoin a trench (parallel to or at an angle between centre-lines in plan of less than 45 degrees) Unit No)

In a case where a trench of specified width

1 runs parallel to or at an angle (in plan) of less than 45° to an existing service, and is such that the nearer side of the bottom of the trench lies at least partly between a vertical plane and a plane that lies at an angle of 45° below the horizontal, both planes passing through the axis of the service, the length of service within the minimum base width of the trench, determined in accordance with 5.2, will be measured for payment under this item and the remaining length, the side of the trench which, in the opinion of the Engineer, is rendered liable to collapse because of the existence of such service, will be measured for shoring (see 8.3.4(a)).

The rate for an item scheduled in terms of (a) and (b) above shall cover the additional cost of

- i) care in excavation necessitated by the presence of such service in or across the trench;
- ii) protecting and maintaining such service in operation by means of temporary supports or shoring, as necessary;
- iii) delays and disruption of the progress of the work due to the existence of the service¹ and
- iv) repairs necessitated by damage caused by the Contractor.

PS DB 4.2.6 Finishing**PS DB 4.2.6.1 Reinstate road surfaces complete with all courses Unit: m²**

Replace DB 8.3.6.1 with the following:

a) Gravel..... Unit: m²

The area will be calculated from the length of finished road or paved surfaces as applicable and with the trench width taken as 0,8m. Payment for finishing will be additional to that for excavation covered by 8.3.2.

The rate shall cover the cost, selective excavation (including the equipment that is required to break up, remove and, if necessary, stockpile the original surface material), and subsequently of reinstating and compaction and shall include the cost of delays and the cost of any risk of having to repair damage as specified in DB 5.10. Compaction to be according to PS DB 5.7.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSL MEDIUM PRESSURE PIPELINES

This specification covers the supply and installation of pipelines of diameter up to 1 000 mm, complete with ancillary works, for transporting water and sewage under working pressures of up to 2.5 MPa.

PSL 1 MATERIALS**PSL 1.1 GENERAL**

Replace the first sentence of L 3.1 with the following:

HDPE pipes, where relevant, will be used in the water pipelines.

Pipes and fittings shall be of the types specified in the schedule or in the project specification and, unless otherwise required in terms of the project specification, they and their couplings shall be capable of withstanding the applicable test pressure specified in 7.3.1. All pipes and fittings shall be supplied complete with couplings and jointing material.

Satisfactory temporary end covers shall be provided for the protection of threads, flanges, and prepared ends of plain-ended pipes and fittings, and to prevent damage to internal lining during transportation and during handling on Site.

Pipeline materials shall be so transported, stored, and handled that pipe are not overstressed at any time and fittings are not damaged in any way. HDPE pipes to be stored under shade for the period between delivery to site and pipe laying and backfilling. All thin-walled, flexible, and soft-coated pipes shall be handled with particular care and shall be so stored that they are not subject to concentrated pressure from stones or other objects. Pipes damaged or cracked in any way shall be removed from the Site.

PS L 1.2 STEEL PIPES, FITTINGS AND SPECIALS**PS L 1.2.3 Pipes of Nominal Bore over 150mm*****ADD THE FOLLOWING PARAGRAPHS:***

"All mild steel pipes and fittings other than screwed and socketed pipes, shall comply with the requirements of SANS 719 grade A. Specials shall be manufactured from straight pipes in accordance with the relevant requirements of BS534. All welding in pipes and specials shall be electric fusion welding.

Before leaving the factory, all mild steel pipes and fittings shall be protected against corrosion in accordance with the relevant Particular Specification.

Plain ends of pipes and fittings shall be covered and protected against damage while being transported from the factory to the Site.

The Contractor is responsible for preparing detailed dimensioned pipe schedules for the approval of the Engineer prior to the start of fabrication of the pipes, fittings and specials.

The Engineer will supply a general arrangement drawing of each pipeline showing its start and end points as well as its horizontal and vertical alignment together with positions of valves and other specials

The Contractor will be responsible for detailing each individual pipe and pipe special. Site welding shall not be permitted due to its deleterious effect on linings and coatings. All pipes and specials shall be eminently suitable for receiving internal linings as specified.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Welding and visual examination of mild steel piping shall be carried out in accordance with BS 4871 Part 1, BS 2633 or BS 2571 as appropriate. Dye penetration examination shall be undertaken on not less than 10 % of all welds.

PS L 1.2.4 Fittings and Specials

ADD THE FOLLOWING TO THIS SUB-CLAUSE:

"All pipe specials shall be accurately made to the sizes and dimensions specified or given on the drawings and/or Schedule.

Unless otherwise specified, segmented steel bends shall be made with a radius equal to 2.0 times the pipe diameter. If details of segmented bends are not provided, the bends shall have one mitre weld each, up to and including a deflection angle of 22.5° and two mitre welds each up to and including 45°, and three mitre welds each up to and including 90°.

All other fittings and specials (excluding pipe bends) to be in accordance with SANS 719 unless otherwise indicated on the drawing.

The vertical axis of all fabricated steel items shall be accurately identified by using paint marks on the pipe ends."

PS L 1.2.5 Welding Operators and Procedures

ADDITIONAL CLAUSE AFTER 3.4.4:

PS L 1.2.5.1 Competence of Workmen

"The Contractor shall employ only competent and coded welders and shall submit certificates proving the competence of welders. The Engineer will ask for additional competence tests if and when required."

PS L 1.2.5.2 Welding Procedure

Welding is to conform to the latest edition of API 1104 and BS 4515 field welding of carbon steel pipelines.

Before the start of any welding work under this Contract, the Contractor shall submit his proposed welding procedures of the various types of welds to the Engineer for approval. The Engineer may require procedures to be qualified by destructive testing.

Once the welding procedures have been approved, no modifications will be allowed without the consent of the Engineer in writing.

No welding shall be done until the welding procedures and welders have been properly qualified in accordance with the procedure and performance qualification test requirements of SANS 044. Exception may be allowed if the fabricator can submit records of such tests which have been made by an independent inspection authority.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PS L 1.3 JOINTING MATERIALS**PS L 1.3.1 Flanges and Accessories**

ADD THE FOLLOWING TO THIS SUB-CLAUSE:

“The requirements of SANS 1123 are applicable.

All flanges for pipes of nominal bore up to 150mm shall be full face slip-on flanges made of ASTM A 105 grade 1 steel to ANSI B16.5.

All flanges for pipes of nominal bore exceeding 150mm shall be full face flanges made of grade 43 steel to BS 4360 (or equal). Bolts shall be made from grade B steel to ASTM A307.

Stainless steel bolts are to be used for all stainless-steel flanges. Wall or puddle flanges shall be made of flat iron, 75mm X 8mm thick, welded to pipe specials on both sides of the flange. Where stainless steel flanges are to be bolted to mild steel flanges, isolating bushes and washers are to be used to electrically isolate two connected pipe sections. Gaskets used shall have adequate isolating capacity in terms of cathodic protection requirements.

Flange drilling to conform to SANS 1123/2001 (Table as indicated on the Drawings). It is the Contractor's responsibility to ensure that the flange sizes and drilling match.

Material for gaskets on flanged joints shall comply with the requirements of BS 4865 and be cut to the full width of the flange. The material shall be selected to accommodate the maximum conditions of temperature, pressure, and to be compatible with the material conveyed.”

PS L 1.3.2 Loose Flanges

ADD THE FOLLOWING TO THIS SUB-CLAUSE:

“Slip-on flanges, when required, shall be welded inside and outside. There shall be a distance from the face of the flange to the pipe end equal to the pipe wall thickness plus 3mm. The seal weld shall be applied so that the flange face shall be free of weld spatter and does not require re-facing. Unless otherwise indicated, the flange bolt holes shall be orientated to straddle the vertical centreline in the case of vertical flange face. For horizontal flange face, bolt holes shall straddle the north-south centrelines.”

PS L 1.3.3 Bolts, Nuts and Fasteners

ADD THE FOLLOWING NEW SUB-CLAUSE:

“Bolts, nuts and other fasteners for the assembly and installation of fabricated components and standard flanges other than anchor bolts shall be hexagon head type complying with the requirements of SANS 135 with ISO threads of the coarse pitch series. Except where high tensile fasteners are required the material shall be of equal or better corrosion or coating than the items being fastened.

Washers of the same or compatible material as the bolts shall be provided at each nut. The use of multiple washers will not be accepted. Spring washers together with flat washers shall be fitted to all nuts subject to vibration. Bolts shall project not less than 3mm and not more than 8mm from the head of the nuts after tightening. Projections on individual and common flange sets shall be identical.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

Bolts, nuts and washes shall be hot dip galvanised as a minimum level of corrosion protection unless stainless steel is specified. Plated nuts, bolts and washers shall not be used on the permanent Contract Works.

High tensile bolts shall only be used when it is essential and shall be coated to a system approved by the Engineer."

PS L 1.3.4 Couplings

ADD THE FOLLOWING NEW SUB-CLAUSE:

"General purpose flexible couplings for M.S. and 3CR12 pipelines shall be "Viking Johnson" or similar type as approved by the Engineer and manufactured from the same material as the pipes to be coupled. Nuts and bolts shall comply with Sub-clause PSL 3.8.8.

All buried couplings shall be completely wrapped in "Denso" or equal approved mastic impregnated tape after installation and testing.

All exposed couplings shall be coated to the same specification as the pipeline in which they are used."

PSL 1.4 CORROSION PROTECTION

PSL 1.4.1 Protection of Steel Pipes and Accessories

All the pipe items of steel with diameters from 100mm and more must, unless otherwise specified be provided of three coats of epoxy paint (KSIR 88 or similar) to provide a final film of 300-micron dried thickness. Application must be according to the suppliers' prescription and must be on the inside and outside. Steel pipe items with diameters smaller than 100mm must be protected using galvanising or epoxy paint.

PSL 1.5 VALVES (Subclause 3.10)

Delete this clause and replace with the following:

Valves shall comply with the requirements of SANS 664. All valves shall be tested hydraulically to the specified pressure. During testing the valves shall meet two conditions: firstly, with the pressure applied with the valve completely open and thereafter to either side of the gate with the valve completely closed.

All valves shall be coated with a protective layer of paint or solution applied in an approved manner. All valves shall close in an anticlockwise direction when viewed from above on the spindle. All cap tops supplied on the range of valves, shall be of the same size in order that ne size valve key may be used.

PSL 2 CONSTRUCTION

PSL 2.1 LAYING

PSL 2.1.1 General

Where connecting to the existing pipeline the position of the existing pipeline must be established by excavating test holes (hand excavation) before any trench excavation to the planned connection point is undertaken. The Contractor will not be compensated for excavation and any other work that is executed and proves to be unnecessary because this specification was not followed.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSL 2.1.2 Depth and Covering (Subclause 5.1.4)

Delete this clause and replace with the following:

Except where permitted in PSL 2.1.2 hereafter, water pipes shall be positioned in such a way as to maintain a minimum cover of 1 000mm from the finished surface to the top of the pipe.

Where stormwater pipes and/or sewer pipes cross the water pipe, the minimum free distance between the outside of any of the pipes and the outside of the coupling of the water pipe shall be 150mm. Should, at the specified minimum cover, the free distance be less than 150mm, the water pipe will be lowered to the required level ensuring the free distance for a minimum distance of 1,0m, either side of the centre line of the stormwater- or sewer pipe, beyond which the pipe will be sloped back to the required level according to PSL 2.1.1 as detailed in subclause 5.1.4.2 of SANS 1200 L.

PS L 2.2 JOINTING METHODS**PS L 2.2.1 Flanges (Steel Pipelines)**

ADD THE FOLLOWING TO THIS SUB-CLAUSE:

Pipes shall not be aligned and levelled such that the pipes, specials and valves strain the flexible couplings. All precautions shall be taken to ensure watertightness for every type of coupling.

Where specified, pipes on both sides of flexible couplings shall be anchored across the coupling with tie rods or straps to prevent them pulling out.

PSL 2.2 CONNECTION AT EXISTING PIPES

Add the following to this clause as subclause 5.11:

All the consumers concerned as well as the Engineer and the Statutory Authority shall be notified in writing at least one week before the existing water supply is interrupted. Arrangements for the interruption of the water supply shall be made in advance with the Statutory Authority and the Contractor shall not be entitled to lodge any claims as a result of problems caused by non-compliance. Under no circumstances shall employees of the Contractor be allowed to interrupt the water supply at any time.

All activities during the interruption of the water supply shall be planned and co-ordinated beforehand and all the preparations possible shall be completed before the interruption to minimise the inconvenience to the consumers. The Engineer has the authority to stop or to postpone the interruption and the Contractor will not be entitled to any claims in this regard, should the Engineer be of the opinion that the interruption was prolonged more than necessary as a result of bad planning by the Contractor.

PS L 2.3 SETTING OF VALVES, SPECIALS AND FITTINGS

ADD THE FOLLOWING TO THIS SUB-CLAUSE:

Valves shall be jointed such as to remain operative when the downstream pipe is removed.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

All valves shall be placed as and were indicated on the drawing.

PSL 2.4 CONCRETE ENCASING

Replace the first sentence of L 5.4 with the following:

Concrete encasing with concrete with strength of 20 MPa/19mm, must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the concrete encasing. The length of concrete encasing will be determined by means of site instructions from the Engineer.

PSL 2.4.1 Soil Crete Encasing

Add the following:

A mixture of Portland cement and gravel of base quality that is mixed in a ratio of 1:10 must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the soilcrete encasing. The length of soilcrete encasing will be determined by means of a site instruction from the Engineer.

PSL 2.5 VALVE CHAMBERS

PSL 5.6.1 General

Substitute the first sentence of L 5.6.1 with the following:

The drawings of valve chambers, which are bound into the document, shall supersede the corresponding drawings in the standard specification.

Valve chambers, to the relevant specified sizes and specifications, shall be installed at all the new positions as indicated on the detailed drawings.

PSL 2.7 CLEANING OF PIPE

Sub clauses (a), (b) and (c) must be adhered to.

PSL 2.8 PIPE MARKERS

Pipe markers shall be installed at 50m intervals on the pipeline route, at all the newly installed isolation and scour valves as indicated on the detailed drawings as well as at all positions where the pipeline route deviates from the horizontal.

PSL 3 TESTING (Clause 7)

PS L 3.1 GENERAL

ADD THE FOLLOWING SUB-CLAUSES:

PS L 3.1.1 Inspection (Additional Clause 7.1.1 under 7.1)

The Contractor shall be responsible for supplying pipes and specials which comply with the specification in every way and he shall arrange for such inspection of his own work as well as work done by others as may be necessary to ensure this.

All welded steel items shall receive a 100% visual inspection of all welds after they have been cleaned and all visible defects shall be rectified.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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The Employer reserves the right to appoint suitable qualified inspectors to inspect all stages of the manufacturing process in the Contractor's workshop and in those of his suppliers, on either a part time or a full time basis. The Contractor shall have no claim for moderate inconvenience due to the inspection procedure.

PS L 3.1.2 Standard of Acceptance (Additional Clause 7.1.2 under 7.1)

The Standard of acceptance of welding shall be laid down in API 1104: Standard for welding pipe lines and related facilities, for API 5L line pipe.

PS L 3.1.3 Marking (Additional Clause 7.1.3 under 7.1)

All individual pipe fittings and pipe specials shall be clearly marked with the appropriate reference numbers for identifying purposes. Reference numbers shall be legibly painted and also stamped on the one end of each pipework item.

The position of a weld test shall be clearly recorded and related to a pipe number.

PS L 3.2 INITIAL TESTS ON WELDING STEEL PIPES**PS L 3.2.1 Dye-Penetrant Test**

ADD THE FOLLOWING TO THIS SUB-CLAUSE:

The Contractor shall perform non-destructive testing on complete welds being not less than 10% of the total welding performed, in addition to every weld for steel specials.

PS L 3.2.4 Paraffin Test (Additional Clause after 7.2.2)

All fabricated steel bends, fittings and specials which cannot readily be pressured tested in the works shall receive a paraffin test on all welds to ensure that they are completely watertight. Alternatively, other liquid penetrants may be used.

PS L 3.2.5 Destructive Tests (Additional Clause after 7.2.2)

The Engineer receives the right to call on the Contractor to perform destructive tests such as transverse tensile, root bend and flatter tests on test specimens cut from the pipes.

Separate payment will be made for such tests if they are called for, but the Contractor shall accept that the cutting out of a specimen and its testing may cause a moderate disruption of his work.

PSL 3.3 STANDARD HYDRAULIC PIPE TEST (Subclause 7.3.1)**PSL 3.3.1 Test pressure and time of test**

Add the following to L 7.3.1.1:

Pipes shall not be tested against isolating valves. Special blank flanges or end caps, fully anchored, shall be provided for testing.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSL 4 MEASUREMENT AND PAYMENT (Clause 8)**PSL 4.1 SCHEDULED ITEMS****PSL 4.1.1 Supply, Lay and Bed Pipes complete with couplingsUnit: m****PSL 4.1.1.1 HDPE Class 16 pipes**

The pipes should be the type with a spigot at one end and a socket with tying rubber at the other. All pipes to have the class and diameter clearly marked, in addition to Manufacturer's details.

PSL 4.2.1.2 Steel Pipes

The pipes should be threaded at both ends and supplied fitted with one threaded socket. The pipes will thus be jointed using threaded sockets except on advice of Engineer or where drawings details indicate otherwise.

PSL 4.2.2 Extra-over 8.2.1 for the Supplying, Laying, and Bedding of Specials Complete with Couplings.....Unit: No

These shall be measured and paid for per installation, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings complete as shown on the drawings.

PSL 4.2.2.1 Extra-over 8.2.1.1 for the Supplying, Laying, and Bedding of Specials Complete with Couplings for Steel pipes and adaptors to HDPE

Bends, Tees and Reducers shall be steel, be flanged and drilled to Table 16 at all ends. End caps to be flanged at the open end. Bends to be long radius. Steel - HDPE Adaptors to be flanged at end linking to the steel pipe and spigot ended at end linking the HDPE pipe. The spigot end to match the diameter of PVC piping. Separate flanges to be drilled to Table 16 with threading to match the steel pipe threading.

PSL 4.2.2.2 Extra-over 8.2.1.2 for the Supplying, Laying, and Bedding of Specials Complete with Couplings for HDPE pipes

All bends, reducers, tees, end caps etc for HDPE sections to be HDPE, unless indicated on the drawings. All bends to be long radius with one end socketed and the other spigot end. The rest of the fittings/ specials to be socketed at all ends, unless the drawings or Engineer suggests otherwise.

PSL 4.2.3 Extra-over 8.2.1 for the Supply, Fixing and Bedding of ValvesUnit: No

Add the following to L 8.2.3:

Valves are measured and paid for per installation, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings complete as shown on the drawings.

PSL4.2.4 Cut into and Connect to Existing Mains.....Unit: No

The number of each type and diameter of pipe cut into small measure the cutting into existing mains.

The Tendered rate shall include full compensation for all arrangements with the relevant authorities, isolating the main, cutting into the main to accommodate the connecting fitting, dewatering, excavating, removing of excess

Contractor

Witness 1

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Employer

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material, taking steps to prevent the ingress of soil, stones and other material into the main as well as all material and labour to connect the pipe.

PSLB BEDDING (Pipes)

Add the following to LB 1.1:

This specification also covers the bedding required for sleeve pipes.

PSLB 1 MATERIALS (Clause 3)**PS LB 1.1 SELECTED GRANULAR MATERIAL**

Substitute LB 3.1 with the following:

Selected granular material shall be an aggregate, sand or granular material, all of a non-cohesive nature and free from any organic material, of which the grading analysis shows 100 % passing a 13, 2 mm sieve and not more than 5 % passing a 0,075 mm sieve.

Only if approved by the Engineer may sand from the trench excavations be used as selected material

PS LB 1.2 SELECTED FILL MATERIAL

Substitute LB 3.2 with the following:

The requirements of PS LB 3.1 shall apply mutatis mutandis.

PS LB 1.3 BEDDING

Add the following to LB 3.3:

All pipes shall be classified as flexible pipes and shall have a bedding of selected granular material and selected fill material.

PS LB 1.4 SELECTION**PS LB 1.4.1 Suitable Material from Trench Excavation Available**

Replace the first sentence of LB 3.4.1 with the following:

Notwithstanding the requirements DB 3.7 and LB 3.4.1 relating selected excavation methods, the Contractor must follow selected excavation methods and provide or use plant that will prevent material that is suitable and necessary for bedding being contaminated.

PSLB 1.5 SUITABLE MATERIAL NOT AVAILABLE FROM TRENCH EXCAVATIONS (Subclause 3.4.2)

Change the free haul distance in this subclause from 0,5 km to 2,0 km.

PSLB 2 MEASUREMENT AND PAYMENT**PSLB 2.1 FREEHAUL (Subclause 8.1.6)****PS LB 2.2 PRINCIPLES****PS LB 2.2.1 Provision of Bedding from Trench Excavation**

a) Selected granular materialUnit: m³

b) Selected fill material Unit: m

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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The rates shall cover the cost of acquiring, from within 0,5 km, bedding that complies with the relevant requirements of the specification, of delivering it to points alongside the trench spaced to suit the Contractor's methods of working, and of disposing of displaced material within a free haul distance of 0,5 km.

In terms of the standardized specifications covering pipelines, the rate for the supply and laying of pipelines covers the cost of handling bedding material from alongside the trench and placing it under and around the pipeline

PSLB 2.2.2 Supply only of Bedding by Importation

From other necessary excavations

a) Selected granular materialUnit: m

b) Selected fill material Unit: m

PSLB 2.2.3 From commercial sources

a) Selected granular material Unit: m

b) Selected fill material Unit: m

The rate shall cover the cost of acquiring, regardless of distance, the required bedding from commercial sources (see Subclause 8.3.4 of SANS 1200 D or Subclause 8.3.4 of SANS 1200 DA, as relevant), of delivering it to points alongside the trench spaced to suit the Contractor's methods of working, and of delivering it to points alongside the trench spaced to suit the Contractor's methods of working, and of disposing of material displaced by such importation, within a free haul distance of 0,5 km.

PSLB 2.2.4 Encasing of Pipes in Concrete Unit:

Separate items will be scheduled for each size of pipe and for each grade of concrete specified.
The volume will be computed from the dimensions of the concrete as given on the drawing.

The rate shall cover the cost of dealing with any excavation (in all materials including disposal of surplus) that is additional to that measured under the item for pipe trench excavation, the cost of encasing the pipe in concrete including the cost of formwork (if any), etc., and the cost of formwork to form flexible joints at 4 m centres.

PS LB 2.2.5 Overhaul of material for Bedding cradle and selected fill blanket Unit: m³.km

Substitute LB 8.2.5 with the following:

a) Limited overhaul (0,5 km to 1,0 km) Unit: m³

b) Long overhaul Unit: m³.km

Except that the volume is calculated according to LB 8.1.3, the requirements of D 8.3.6 or DA 8.3.3, as applicable, shall apply for overhaul.

SANS 1200 GA: CONCRETE (SMALL WORKS)

This specification covers the requirements for concrete (plain and reinforced) for small works associated with pipelines, roads, railways, pump stations, etc. It covers the basic materials, the plant and formwork required, the quality, manufacture, and curing of concrete, tolerances in workmanship, testing, and the methods by which the finished structure is to be measured for the purposes of payment

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSGA 1 MATERIAL**PSGA 1.1.1 Applicable Specifications**

Add the following to G 3.2.1:

Portland cement that conforms to SANS 471

PSGA 1.1.2 Storage of Cement

Add the following to G 3.2.2:

Consignments of cement shall be used in the same sequence as that in which they are delivered to site. No cement shall be used which has been stored on site for a longer period than 6 (six) weeks. All cement so stored for a longer period than 6 (six) weeks, all cement damaged in any way, and all cement which does not comply with the specification, shall be removed immediately and permanently from the site.

PSGA 2 PLANT**PSGA 2.1 Formwork****PSGA 2.1.1 Ties**

Add the following to G 4.4.3:

No ties will be allowed in vertical walls and permanent metal ties shall have a minimum concrete cover of 40 mm. Tie holes shall be filled with an approved non-shrink epoxy grout.

PSGA 3 CONSTRUCTION**PSGA 3.1 REINFORCEMENT****PSGA 3.1.2 Cover**

Substitute G 5.1.3 with the following:

The cover of concrete over reinforcement, unless otherwise indicated on the drawings, shall be not less than 40 mm.

PSGA 3.3 FORMWORK**PSGA 3.3.1 Classification of Finishes**

Add the following to G 5.2.1:

The following surface conditions are required in the various portions of the finished concrete:

(a) Rough

Concealed surfaces and surfaces lower than 100 mm below finished ground level.

(b) Smooth

All surface finishes not classified as "rough" in paragraph (a) shall be classified as "smooth". All exposed edges unless otherwise indicated on the drawings, shall be chamfered 20 mm x 20 mm by means of triangular fillets fixed to the formwork.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PSGA 3.4 CONCRETE**PSGA 3.4.1 Quality****PSGA 5.4.1.2 Consistency**

Add the following to sub clause G 5.5.1.2(a):

The slump of concrete used in water retaining structures may not be less than 30mm and not more than 60mm.

PSGA 3.4.1.2 Strength concrete

Add the following to G 5.5.1.7:

The grade of strength concrete and the maximum nominal size of coarse aggregate for each portion of the works, unless otherwise indicated on the drawings, shall be as follows:

(a) Blinding layers and encasing of pipes	15 MPa/19 mm
(b) Benching	25 MPa/19 mm
(c) Screeds	25 MPa/10 mm
(d) Reinforced concrete	35 MPa/19 mm

PSGA 3.4.1.3 Durability

Concrete shall be so proportioned to ensure that the water/cement ratio does not exceed 0,5 and, to ensure workability, water-reducing admixtures of approved manufacture shall be used in preference to increasing the cement content.

PSGA 3.4.2 Concrete Surfaces

Add the following to GA 5.4.8.1:

Concrete surfaces under screeds, granolithic finishes or benching shall be brought up to a plane, uniform surface with a suitable screed board.

PSGA 3.4.3 Construction Joints

The use of construction joints must be minimised and may only be placed as shown on the drawings or at positions as approved by the Engineer. At all construction joints in walls a PVC water stop without a centre bulb must be placed as shown on the drawings. Alternative materials with similar properties may be proposed but may only be installed after approval of the Engineer.

PSGA 3.4.4 Wood-floated finish

Where wood floating is specified or scheduled, the surface shall first be given a finish as specified in G 5.5.10.1 and after the concrete has hardened sufficiently; it shall be floated to a uniform surface free from trowel marks. The screed surface shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screed marks.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSGA 3.4.5 Steel-floated finish

Where steel floating is specified or scheduled, the surface shall be treated as specified in PS G 5.5.10.4 except that, when the moisture film has disappeared and the concrete has hardened sufficiently to prevent laitance from being worked to the surface, the screed surface shall be steel-trowelled under firm pressure to produce a dense, smooth, uniform surface free from trowel marks.

PSGA 4 Measurements and Payment (Clause 8)**PSGA 8.1.1 Formwork**

Formwork, other than formwork covered by 8.1.1.2 and 8.1.4, will be measured as the net area of the face of the concrete to be supported during the deposition of concrete. No deduction will be made for fillets and splays of size up to 50 mm x 50 mm or for openings of diameter up to 0,7 m or of area up to 0.5 m².

Formwork in continuous lengths of narrow widths and of fillets or splays over 20 mm x 20 mm will be measured by length, the width or range of widths being stated in the schedule. Boxing-out, the forming of holes, and other such operations will be measured by number, basic dimensions, perimeters, or drawing references, as stated in the schedule.

The unit rate shall cover the cost of all parts of formwork in contact with the concrete, and the necessary bearers, struts, and other supports, plus the labour and plant necessary to erect and strike such formwork.

PSGA 8.1.2 Reinforcement

Steel for normal reinforced concrete will be measured net by mass of all bars, including supporting steel detailed on the reinforcing schedules. The mass will be computed from the nominal bar size and nominal mass per unit length. No allowance will be made for cutting, waste, spacer devices (materials other than steel bars), or binding wire.

Steel reinforcement for precast concrete units will not be measured unless so scheduled (see 8.6). Welded mesh will be measured by area as shown on the drawings, no allowance being made for cutting, waste, laps, or deductions for end cover. The areas measured will be those of the concrete floor or slab being reinforced by means of mesh. In the case of continuous unit partly reinforced by mesh, the area will be computed from the outside dimensions of the area covered by mesh regardless of whether or not additional reinforcing steel is present in the same area. Steel off cuts resulting from the cutting and bending of reinforcement in accordance with the bending schedules shall be deemed to be the property of the Contractor.

PSGA 8.1.3 Concrete

a) Concrete will be measured net to the dimensions shown on the drawings or to the dimensions cast, whichever are the smaller. Structural elements that are undersized will be measured for payment only if they are accepted by the Engineer

b) No allowance will be made for concrete required to make up overbreak in soft excavation, but payment will be made for additional concrete or formwork, or both, ordered in writing by the Engineer to replace unsuitable material or overbreak in hard rock or in intermediate excavation.

The unit rates shall cover the cost of the provision of concrete (made with ordinary portland cement unless otherwise scheduled), mixing, testing, placing, compacting, the forming of stop-ends and unforeseen construction joints,

Contractor

Witness 1

Witness 2

Employer

Witness 1

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striking of for levelling as applicable, and curing and repairing where necessary, together with the cost of all parts of formwork in contact with the concrete aid the necessary bearers, struts, and other supports, plus the layout and plant necessary to erect and strike such formwork.

PSE.11. MANUALS

PSE.11.1 Three complete sets of maintenance and operator manuals shall be supplied at first handover.

PSE.11.2 The manual shall include at least the following for all the equipment:

- Sales pamphlets
- Full technical information
- Connection diagrams
- As built drawings
- Calibration and commissioning information.

PSE.12. DRAWINGS

PSE.12.1 Workshop drawings shall be submitted to the engineer for approval before any manufacturing commences.

C3.6 PARTICULAR SPECIFICATIONS**PSE.13. QUALITY OF MATERIAL**

PSE.13.1 Only new material and equipment of the highest quality will be accepted.

C3.4.1.2 Particular Specifications

The following Particular Specifications for work not covered by the SANS 1200 Standardized Specifications are also included hereunder:

PC TRIMMING OF SITE**PC1 SCOPE**

This work shall consist of the finishing of the entire site affected by the Contractor's operations before the issue of the Completion Certificate.

PC2 REQUIREMENTS

After completion of the work covered by this Contract, the entire area affected by the Contractor's operations shall be finished off and cleared up and all loose rock shall be removed, if required, and disposed of as directed by the Engineer.

Under no circumstances shall the Contractor use machines for trimming.

All loose stones, roots or other waste matter exposed on fill or excavation slopes, which are liable to become loosened shall be removed and all debris and muck from clearing operations shall be disposed of and the area affected by the Contractor's operations and all camp sites left in a neat and presentable manner.

All false work, temporary supports and structures, casting yards or platforms and equipment shall be removed from the site and from all ground occupied by the Contractor in connection with the work. All parts of the work and adjacent ground shall be left in a neat and presentable condition, all to the satisfaction of the Engineer.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PC3 MEASUREMENT AND PAYMENT

Measurement and payment for complying with the above requirements will not be made separately, and would be regarded as being provided for in full by relevant payment items under 1200 A - General.

PD MAINTENANCE**PD1 MAINTENANCE DURING CONSTRUCTION**

From the time of taking over the site by the Contractor, as set out in the Special Conditions of Contract until the acceptance of the work and the issue of the Completion Certificate, the Contractor shall be responsible for the maintenance of the work and shall rebuild, repair, restore and make good at his own expense all injuries or damages to any portion thereof whether occasioned by the action of the elements or any other cause.

PD2 MAINTENANCE OF COMPLETED WORK**Periods of Maintenance**

The periods of maintenance for each completed section of work shall extend for twelve months from the time of acceptance of the work and the issue of the relevant Completion Certificate for that section of the work as the case may be as set out in Clause 5.3 of the General Conditions of Contract.

PD2.1 Work during Period of Maintenance

The Contractor shall be responsible for the repair at his own expense, of all defects in any of the works constructed by him, or affected by him during construction, all in terms of Clause 53 of the General Conditions of Contract.

PD3 MEASUREMENT AND PAYMENT

Measurement and payment for maintenance as described above shall be deemed to be included in the prices tendered and paid for the various items for which payment is made in terms of this Contract and such prices shall be full compensation for the supply of all supervision, labour, materials, equipment, plant and work necessary for the maintenance thereof.

The retention monies as set out in the General Conditions of Contract, Clause 49 (3) shall be released only upon Final Settlement of the Contract as set out in Clause 52 of the General Conditions of Contract

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PE CONTINGENCIES**PE1 CONTINGENCIES**

An amount to be spent in part or in whole at the complete discretion of the Engineer. This amount shall not form part of the 15% as is defined in Clause 50 of the General Conditions of Contract.

PLI: Particular Specification for Generic Labour-intensive Specification

PLI: PARTICULAR SPECIFICATION FOR GENERIC LABOUR-INTENSIVE SPECIFICATION

B 1231 LABOUR BASED CONSTRUCTION METHODS

Bidders must take into consideration that the following works may only be constructed using labour-based construction methods:

- a) Excavation to expose existing services.
- b) Preparation of bedding material for water pipes.
- c) Laying of pipes.
- d) Installation of pipe markers
- e) Installation of Gabions
- f) Erf Connection

Where Bidders propose to use additional labour-based methods, the methods must be stated as well as the activities. It will reflect positively on the Bidder's bid if he should use more labour-based methods.

PLI 1 Scope

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- (a) trenches having a depth of less than 1,5 metres

PLI 2 Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

PLI 3 Hand excavatable material

Hand excavatable material is material:

(a) Granular materials:

- (i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or
- (ii) where the material is a gravel having a maximum particle size of 10 mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100 mm.

(a) Cohesive materials:

- (i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- (ii) where the material is a gravel having a maximum particle size of 10 mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100 mm;

Contractor

Witness 1

Witness 2

Employer

Witness 1

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Note:(1) A boulder, a cobble and gravel is material with a particle size greater than 200 mm, between 60 and 200 mm.

(2) A dynamic cone penetrometer is an instrument used to measure the insitu shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400 mm and drives a cone having a maximum diameter of 20 mm (cone angle of 60° with respect to the horizontal) into the material being used.

Table 1: Consistency of materials when profiled

Granular materials		Cohesive materials	
Consistency	Description	Consistency	Description
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30 - 40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation.	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point.

PLI 4 Trench excavation

All hand excavateable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

PLI 5 Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100 mm. Each layer shall be compacted using hand stampers

(a) to 90% Proctor density;

(b) such that in excess of 5 blows of a dynamic come penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10 mm and contains no isolated boulders, or

(c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

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PLI 6 Excavation

All hand excavateable material including topsoil classified as hand excavateable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

PLI 7 Clearing and grubbing

Grass and small bushes shall be cleared by hand.

PLI 8 Shaping

All shaping shall be undertaken by hand.

PLI 9 Loading

All loading shall be done by hand, regardless of the method of haulage.

PLI 10 Haul

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150 m.

PLI 11 Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage.

PLI 12 Spreading

All material shall be spread by hand.

PLI 13 Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved.

PLI 16 Manufactured elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320 kg. In addition, the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper handhold on them.

SCHEDULES OF QUANTITIES

Note: Labour-intensive works must be highlighted in the schedules/bills of quantities for the payment items relating to labour-intensive works.

The following wording, as appropriate, may be included in the preamble or pricing instructions to the schedules/bills of quantities in the Contract with the Contractor:

- Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column or as a prefix or suffix against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a deviation from the contract. The items marked with the letters 'LI' are not necessarily an exhaustive list of all the activities which

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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.

- 2 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.

The following payment items should be included in the bill of quantities:

Training allowance paid to targeted labour in terms of formal training

Extra over for the administration of payment of training allowances to targeted labour

Transport and accommodation of workers for training where it is not possible to undertake the training in close proximity to the site.

(Provisional sum)

Person days

Person days

Sum

(insert quantity)

(as above)

(insert provisional sum)

(insert specified day rate)

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PCBS CONSTRUCTION WORKS FOR COMMUNITY BASED SUB-CONTRACTORS**PCBS 1 SCOPE**

The works covered in this section are works that have been proposed to be executed by Community Based Sub-Contractors. The identified scope of work by the Employer includes but not limited to the following:

- Excavation and backfilling of trenches for water reticulation;
- Installation of Pipe Markers;
- Installation of Gabions;
- Installation of erf connections;
- Construction of Stone pitching (on areas identified by the Employer's Agent);
- Any other task identified on site and approved by the Employer's Agent on site;

PCBS 2 REQUIREMENTS**PCBS 2.1 Procurement**

The Contractor shall handle and manage the procurement process of the sub-Contractors and once appointed, should be dealt with in accordance with the provisions of Clause 4.4 of the General Conditions of Contract 2015. The procurement process for the Community Based Sub-Contractors shall entail advertising, evaluation and selection of successful bidders.

PCBS 2.2 Training

Training for the successful Community Based Sub-Contractors must be conducted before commencement of any works on site.

PCBS 2.3 Management of Community Based Sub-Contractors

The Contractor shall be responsible for management of the Community based Sub Contractors including all works executed (including Quality, Contractual Liabilities).

The Contractor shall be expected to enter into a Contract with the nominated or selected Sub-Contractor(s) in accordance with the requirements of Clause 4.4 the General Conditions of Contract. The Employer must be supplied with a copy of the Contract /agreement for records.

In the execution of the Sub-Contract Work, the Contractor shall ensure that the Sub-Contractor(s) comply with all relevant legislation and regulations including, but not confined to, the Occupational Health and Safety Act. The Contractor hereby indemnifies the Employer against any loss, damage, or claim for Sub-Contract Works set out for this specific project arising out of the former's failure to comply with instructions issued to him in regard to these requirements.

PCBS 2.4 Overheads, charges and profit for payment associated with Community Based Sub-Contractor's works.

The Contractor shall charge a percentage for handling works associated with works executed by Community Based Sub-Contractors.

PCBS 3 MEASUREMENT AND PAYMENT

Measurement and payment for works implemented by Community Based Sub-Contractors will not be made separately, and would be regarded as being provided for in full by relevant payment items under applicable standards.

PCBS 3.1 Procurement Of Community Based Sub-Contractors

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Procurement process for the totality of all tenders
amounting to 25% of section 2 and section 3 bid price
community based sub-contractors to be concluded for
the appointment of (minimum CIDB grading 1CE).....Unit: Lump Sum

PCBS 3.2 Training of Community Based Sub-Contractors

- a) Generic Skills.....Unit: Prov Sum
b) Entrepreneurial skills.....Unit: Prov Sum
c) Engineering skills.....Unit: Prov Sum
d) Overheads, charges and profit on items 4.3 a,b,c, and d.....Unit: %

PCBS 3.3 Management Of Community Based Sub-Contractors

Superintendence of sub-contracted works i.e
supervising, checking, approving and taking over works
completed by community based sub-contractorsUnit: Months

PCBS 3.4 Construction works for Community Based Sub-Contractors

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out by community based sub-contractors.....Unit: %

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SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK) CONTRACT J

C 3.7 HEALTH AND SAFETY SPECIFICATIONS

C3.7.1 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES

(a) Construction Regulations, 2003

The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2003 (the regulations) as promulgated in Government Gazette No 25207 and Regulation Gazette No 7721 of 18 July 2003. (A copy of the Construction Regulations is included as an Annexure in this Volume). Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the Works.

The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the Project Specifications, Bill of Quantities and Drawings, as well as in the Employers' health and safety specifications (regulation 4(1)) of the Construction Regulations 2003, which are included in this section.

The Contractor shall in terms of regulation 5(1) provide a comprehensive health and safety plan detailing his proposed compliance with the regulations, for approval by the Employer.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the above-mentioned plan or regulations.

A payment item is/Payment items are included in the Schedule of Quantities to cover the Contractor's cost for compliance with the OHS Act and the above-mentioned regulations.

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Notification of Construction work

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1. INTRODUCTION AND BACKGROUND

1.1. Background to the Health and Safety Specifications

The Construction Regulations (February 2014) places the onus on Sekhukhune District Municipality to prepare coherent health & safety specifications, highlighting risks not successfully eliminated during design. The Sekhukhune District Municipality also has the opportunity to set the tone and standard of occupational health & safety on the construction site.

1.2. Responsibility and Accountability

It is imperative to understand the process of determining legal accountability, as the OHS-Act is the only criminal Act still administered by the Department of Labour. It *assumes* that the CEO is overall accountable even though he may delegate some of his responsibilities. This principal is entrenched in Section 37(1) of the Act. This is generally referred to as the REASONABLE MAN TEST. SECTION 37: Acts or omissions by employees or Mandataries

1.3. Purpose of the Health and Safety Specifications

The purpose of this specification document is to provide the relevant Principal Contractor (and sub-contractor) with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and of persons in connection with the use of plant and machinery during Construction work.

1.4. Implementation of the Health and Safety Specifications

To brief the Principle and Sub Contractor on the significant health and safety requirements and aspects of the project. This shall include the provision of the following information and requirements namely:

- safety considerations affecting the site of the project and its environment;
- health and safety aspects of the associated structures and equipment;
- required submissions on health and safety matters from the Principal Contractor (and Sub Contractor);
- the Principal Contractor's (Sub - Contractors) health and safety plan.

To serve to ensure that the Principal Contractor (and Sub Contractors) is fully aware of what is expected from them with regards to the Occupational Health and Safety Act, 85 of 1993 and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 8 and 44 of the Act.

To inform the Principal Contractor that the Occupational Health and Safety Act, 85 of 1993 in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations promulgated on 7 February 2014 and incorporated into the above Act by Government Notice R 84, published in Government Gazette 37305 shall specifically apply to all persons involved in the construction work pertaining to this project.

"Purpose of the Act" –To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"Agent" –means a competent person who acts as a representative for a Sekhukhune District Municipality;

"Sekhukhune District Municipality" –means any person for whom construction work is performed;

"Construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site;

"Construction site" means a work place where construction work is being performed;

"Construction supervisor" means a competent person responsible for supervising construction activities on a construction site;

"Construction work" means any work in connection with –

- a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a

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building or any similar structure; or 6

b) The construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

“Contractor” means an employer who performs construction work;

“Designer” means-

a) A competent person who- Prepares a design; Checks and approves a design;

Arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or Designs temporary work, including its components;

b) An architect or engineer contributing to, or having overall responsibility for a design;

c) A building services engineer designing details for fixed plant;

d) A surveyor specifying articles or drawing up specifications;

e) A contractor carrying out design work as part of a design and building project; or an interior designer, shop-fitter or landscape architect;

“Health and Safety File” –means a file, or other record containing the information by the Construction Regulations;

“Health and Safety Plan” –means a site, activity or project specific documented plan in accordance with the Sekhukhune District Municipality’s health and safety specifications;

“Health and Safety Specification” –means a site, activity or project specific document prepared by the Sekhukhune District Municipality pertaining to all health and safety requirements related to construction work;

“Method Statement” –means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

“Principal contractor” means an employer appointed by the Sekhukhune District Municipality to perform construction work;

“Risk Assessment” –means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

1.5 Abbreviations:

- GMR: General Machinery Regulations
- OHS Act: Occupational Health & Safety Act. Act 85 of 1993 Constr Reg: Construction Regulation 2014
- ORHVS: Operating Regulations for High Voltage Systems PPE: Personal Protective Equipment

2. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

2.1 ROLES

Sekhukhune District Municipality / Agent

- Prepare a baseline risk assessment and issue a health and safety specification to the Principal Contractor, Designer and include the specification in tender documentation.
- The Sekhukhune District Municipality or the appointed Sekhukhune District Municipality Agent will appoint each Principal Contractor for this project or phase/section of the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations.
- The Sekhukhune District Municipality or the appointed Sekhukhune District Municipality Agent shall discuss, negotiate and approve the contents of the specified project health and safety plan submitted by the Principal and Sub Contractor.
- The Sekhukhune District Municipality or his Agent will take reasonable steps to ensure that the health and safety plan of the Principle and Sub Contractor is correctly implemented and maintained. Monthly audits shall be conducted to monitor the compliance.

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- e) In the event of design changes the Sekhukhune District Municipality or the appointed Agent on his behalf will ensure that enough resources will be provided to implement the work safely.
- f) The Sekhukhune District Municipality or his appointed Agent on his behalf will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:
- **have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;**
 - **have failed to implement or maintain their health and safety plan;**
 - **have executed construction work which is not in accordance with their health and safety plan;**
 - **have acted in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.**

Designer

- Must take into account the health and safety specifications of the Sekhukhune District Municipality.
- Before the tender process, the designer must make available a report to the Sekhukhune District Municipality about:
 - All the relevant health and safety information about the design of the relevant structure that might affect the pricing of the construction work.
 - The geotechnical –science aspects, where appropriate.
 - The loading that the structure is design to withstand.
- Inform the Sekhukhune District Municipality in writing of any known or anticipated dangers or hazards related to the project.
- Make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered.
- During the design take into account the hazards relating to any subsequent maintenance to be performed with the minimum risk.
- During the design stage cognizance of ergonomic design principals must be applied in order to minimize ergonomic related hazards in all phases of the life cycle of a structure.

2.2 Implementation of the Health and Safety Specifications (Drafting of the coherent Health & Safety Plan)

These health & safety specifications document forms an integral part of the contract, and the Principal Contractor is expected to use it when compiling its project-specific coherent health & safety plan. The Principal Contractor must forward a copy of these specifications to all Contractors at their bidding stage so that they can in turn prepare coherent health & safety plans relating to their operations.

3. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM ELEMENTS**3.1 Scope of the Project**

These Specifications set out the requirements for eliminating or if this is not possible, for minimising as far as reasonably practicable, the risk of incidents and injuries occurring at Sekhukhune District Municipality. **This document covers work to be undertaken of the project and sets out the rules and procedures for engagement on the project.** The scope also addresses legal compliance, Sekhukhune District Municipality standards, hazard identification and risk assessment, risk control, and the promotion of a health and safety culture amongst those working on the project. The health & safety specifications also make provision for the protection of those persons other than employees.

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

3.2 The Extent of the works:

- Establishment of Contractor's camp site.
- The excavation of the trenches and installation of the pipes will be done conventionally due to the depth of trenches.
- Installation of reticulation Networks in Kutullo/Steelport Park.

3.3 Interpretations**3.3.1 Application**

This specifications document is a legal compliance document compiled in terms of the OHS Act & Construction Regulations 2014 and is therefore binding. The document must be read in conjunction with other relevant legislation.

3.3.2 Definitions

The definitions as listed in the OHS Act 85/1993 and Construction Regulations (February 2014) shall apply.

3.4 Minimum Administrative Requirements**3.4.1 Notification of Intention to Commence Construction Work**

The Principal Contractor must notify the Provincial Director of the Department of Labour in writing before construction work commences. A copy of this notification must be held in the Principal Contractor's health & safety file on site. The fax transmission slip will serve as proof of notification.

See attached Annexure "F"

3.4.2 Assignment of the Principal Contractor's / Contractors' Responsible Persons to Supervise and Co-ordinate Health and Safety on Site

The Principal Contractor and all Contractors must make supervisory appointments as well as other relevant appointments in writing (as stipulated by the OHS Act and Construction Regulations 2014). See attached **Annexure 'B'** for more detail on what health & safety management appointments are relevant on this project.

3.4.3 Competence of the Principal Contractor's / Contractors' Appointed Competent Persons

The Principal Contractor and Contractors' competent persons for the various risk management portfolios must fulfil the criteria as stipulated in terms of the definition 'Competent' in accordance with the Construction Regulations (February 2014).

3.4.4 Compensation for Occupational Injuries and Diseases Act 130 of 1993(COIDA)

The Principal Contractor must have in its possession a letter of good standing issued by its Compensation Assuror as proof of registration.

Contractors must also hold proof of workman's compensation assurance registration in the form of a letter of good standing and forward a copy to the Principal Contractor before they begin work on site. Contractors must be in good standing at all times while carrying out work on site.

3.4.5 Health and Safety Organogram

Including all appointed risk management competent persons. In cases where appointments have not yet been made, the organogram shall reflect the intended positions.

Contractor

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Employer

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The organogram must be updated when there are changes in the Site Management Structure, and dated accordingly. The organogram merely serves as a quick reference to who is responsible for what risk portfolio in what area.

3.4.6 Preliminary Hazard Identification and Risk Assessments, Progress Hazard Identification and Risk Assessments Reviews.

The Principal Contractor must cause preliminary hazard identification and risk assessment to be performed under the leadership of a competent person before commencement of construction work. On this project detailed task-specific risk assessments based on the proposed sequence of work (method of work) must be compiled. Generic risk assessments will not be accepted.

The assessed risks, together with written safe work procedures for the 'medium & high-risk' rated activities must form part of the coherent site specific health and safety plan submitted for approval by House of Safety. The risk assessments must include:

- a) A list of hazards identified as well as potentially hazardous tasks;
- b) The risks which may result based on the list of hazards and tasks;
- c) A set of safe work procedures to be implemented with the aim of eliminating or if this is not possible, reducing and/or controlling the risks as far as reasonably practicable to ALARP (as low as reasonably practicable);
- d) A monitoring and review procedure of the risk assessments as they change
i.e. how will the risk assessments be reviewed, when will they be reviewed and by whom.

The Principal Contractor must ensure that all Contractors inform, instruct and train their workers regarding any hazards, the associated risks and the related safe work procedures to be implemented before any work commences and thereafter at regular intervals as the risks change and as new risks develop. This training should be carried out in the form of toolbox health & safety talks. Contractors must conduct their own toolbox talks and submit proof of these talks in the form of attendance registers to the Principal Contractor at least every two weeks. Every worker on site must undergo such toolbox safety talks with the attendance registers kept in the Principal Contractor's safety file.

Contractors must conduct their own hazard identifications and risk assessments specific to their operations and forward a copy to the Principal Contractor.

The Principal Contractor when required must report on the status of these Contractor risk assessments to the Sekhukhune District Municipality i.e. at audits.

3.4.7 General Record Keeping

The Principal Contractor and all Contractors must keep and maintain all the necessary Health and Safety records to demonstrate compliance with these Coherent Specifications, the OHS Act 85/1993, and the Construction Regulations (February 2014). The Principal Contractor must also ensure that all records of incidents/injuries, emergency procedures, training, planned maintenance inspections, monthly contractor audits, etc. are kept in the health & safety file(s) held in the site office. The Principal Contractor must ensure that every Contractor keeps its own health & safety file, maintains the file and makes it available on request (the file must include the Contractor's health & safety plan and all relevant records). Such 'Contractor safety files' must be audited by the Principal Contractor on a monthly basis with audit reports kept as proof.

3.4.8 Injury / Incident Reporting and Investigation

Injuries are to be categorised into first aid; medical; disabling (lost day); and fatal. When reporting injuries to the Sekhukhune District Municipality, these categories must be used. The Principal Contractor must investigate all injuries. All Contractors must report injuries to the Principal Contractor immediately and the Principal Contractor must inform the Sekhukhune District Municipality immediately. All incidents reportable in terms of the provisions of Section 24 of the OHS Act must be reported to the local Dept. of Labour in the prescribed manner.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3.4.9 Consolidation of Health & Safety Documentation

It is the duty of the Principal Contractor to ensure that all documentation required to be kept or generated during the construction phase is consolidated into one set of documents that must be handed over to the Sekhukhune District Municipality upon completion of the construction work. This consolidated safety file(s) should include instructions from the design team that will be required for the continued safe operation and maintenance of the new structure(s).

3.4.10 Offences and Penalties

Penalties may be imposed on the Principal Contractor and Contractors for ongoing non-compliance with the provisions of the Sekhukhune District Municipality 's coherent health & safety specifications, the Principal Contractor's coherent health & safety plan, site health & safety procedures and rules. Non- compliances identified during safety agent audits and visits will be categorised into one of three levels based on severity. These will be as follows: Life threatening situation - a prohibition order will be issued by means of a written instruction in the site instruction book or an explanation in an audit report. This activity must be seized immediately and corrective measures taken. Serious injury possible – a contravention notice will be issued with a time frame for compliance stipulated. Minor or no injury may result – an improvement notice will be issued. The corrective measures stipulated in the audit report must be taken. The methodology used to decide the above levels will be directly linked to the risk assessments of the Principal Contractor and contractors, Sekhukhune District Municipality Standards. The decision of the safety Agent will be final.

3.5 Principal Contractors, Contractors and Sub-contractors

3.5.1 Principal Contractor's and Contractors' Requirements

The Principal Contractor must ensure that all Contractors appointed by them comply with these Specifications, the Principal coherent health & safety plan as well as the OHS Act, Construction Regulations (February 2014), and other relevant legislation that may relate to the activities directly or indirectly. A Contractor, when appointing other Contractors as 'Sub-contractors', shall mutatis mutandis ensure compliance as if it was the Principal Contractor.

The Principal Contractor may only allow a Contractor to begin work on site after receiving a coherent health & safety plan which must include a project specific hazard identification, risk assessments and safety measures. The Principal Contractor must test competency and finally approve his sub – contractor coherent site specific health and safety plan. The Principal Contractor must audit each of its contractors on a monthly basis, with audit reports kept in the health & safety file on site. The audit must include an administrative assessment as well as a physical inspection of the contractor's site activities.

The Principal Contractor must stop any Contractor from carrying out construction work that is not in accordance with the Principal Contractor's and/or Contractor's health & safety plan or if there is an immediate threat to the health and safety of persons.

The Principal Contractor shall take all reasonable steps necessary to ensure co-operation between all contractors to enable each of those contractors to comply with the provisions of the Construction Regulations;

The Principal Contractor shall take all reasonable steps to ensure that each contractor's coherent health and safety plan is implemented and maintained on the construction site: Provided that the steps taken shall include periodic audits at intervals mutually agreed upon between the Principal Contractor and contractors, but at least once every month;

The Principal Contractor must ensure that where changes are brought about to the design and construction, that sufficient health and safety information and appropriate resources are made available to contractors so as to allow them to execute the work safely;

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The Principal Contractor must ensure that every contractor is registered and in good standing with a recognised compensation fund or with a licensed compensation insurer prior to work commencing on site;

The Principal Contractor must ensure that potential contractors submitting tenders have made provision for the cost of health and safety measures during the construction process;

The Principal Contractor shall discuss and negotiate with the contractor the contents of the coherent health and safety plan and shall finally approve that plan for implementation;

The Principal Contractor shall hand over a consolidated health and safety file to the Sekhukhune District Municipality upon completion of the construction work and shall include a record of all drawings, designs, materials used and other similar information concerning the completed structure;

The Principal Contractor may only appoint a contractor to perform construction work when such Principal Contractor is reasonably satisfied that the contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely and that the contractor is an approved Sekhukhune District Municipality contractor.

3.5.2 Principal Contractor / Contractor Competency Assessment

The Principal Contractor must be reasonably satisfied that the contractors it intends to appoint have the necessary competencies and resources to safely conduct the work they will be appointed for. This should be established at tender stage and before appointments are made. One of the preferred ways of determining whether a contractor is competent is to make sure the contractor is an accredited contractor for Sekhukhune District Municipality. Once the contractor is appointed, but before it begins work on site a site-specific safety plan must be discussed and negotiated with the Principal Contractor. Such safety plan must be approved for implementation by the Principal Contractor.

The Principal Contractor and Contractors should submit the following documentation for perusal and verification by the Sekhukhune District Municipality and Principal Contractor respectively:

- Coherent health & safety plan as compiled for this project; (including Risk assessments, safe work procedures, fall protection plan, PTW Issuer/PTW Holder certificates)
- Management Structure as envisaged at tender (organogram);
- Letter of Good Standing with the Compensation Commissioner or FEM;
- Proof of health & safety training and other related training; (CV and certificates) Legislative appointment letters
- Notification of Construction work; (proof notification was done)

3.5.3 Pricing for Occupational Health & Safety Compliance All parties bidding to do work on this construction project must ensure that they have made provision for the cost of complying with this Specifications document as well as with the OHS Act and incorporated Regulations as a minimum requirement in their tender documentation. It must also be taken into consideration that time is money, which implies that sufficient time must be allowed for the implementation of the minimum OHS standards. No additional claims will be entertained at a later stage should a compliance requirement be prescribed in the OHS Act, incorporated regulations or in this Specifications document.

3.5.4 Contractors' Coherent Health & Safety Plans [Construction Regulations 2014]

1. Introduction:

The Construction Regulations (2014) aims to improve overall management and co-ordination of Health, Safety and Welfare throughout the Construction Phase and reduce the large number of serious and fatal injuries and cases of ill health, which occur every year in the Construction Industry.

In terms of the Construction Regulations (2014), the Principal Contractor is required to develop a Health and Safety Plan before work commences on site and review it throughout the Construction Phase. The degree of detail required in the Health and Safety Plan and the time and effort in preparing it should be in proportion to the nature, size and level of Health and Safety risks involved in the project. Projects involving minimal risks will call for simple,

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straightforward plans. Large projects or those involving significant risks such as this project will need much more detail.

3.5.4 What should the construction health & safety plan cover?

The Construction Health and Safety Plan should set out the arrangements for ensuring the Health and Safety of everyone carrying out the construction work as well as all other persons who may be affected by it. The index of this plan must be in line with Annexure:

3.5.5 Communication and Management of the work

The Principal Contractor must indicate in its health and safety management plan that it has made provision for the following:

- a. Management structure and responsibilities
- b. Health and Safety goals for the project and arrangements for monitoring and review of Health and Safety performance i.e. safety meetings; contractor meetings; risk assessment review, etc
- c. Arrangement for:
 - i. Regular liaison between parties on site i.e. meetings
 - ii. Consultation with the work force i.e. toolbox talks
 - iii. The exchange of design information between the Sekhukhune District Municipality, designers, and Contractors on site
 - iv. Selection and control of Contractors i.e. selection criteria; inspections; audits, etc.
 - v. Site health & safety induction and onsite training i.e. toolbox talks
 - vi. Welfare facilities, first aid, emergency planning and fire prevention strategy
 - vii. The reporting and investigation of injuries and incidents including nearmisses what the intended system will be
 - viii. The production, approval and review of risk assessments, safe work procedures and method statements and how does the company's risk assessment system work.
- d. Site specific rules and procedures.

3.6 Sekhukhune District Municipality identified Hazards and Potentially Hazardous Situations

1. Existing services
2. Interface with the public
3. Hazardous chemical such as solvents, cleaning agents, cement, fuels, oils, epoxies, etc.
4. Site security and access control issues
5. Relocation and protection of existing services
6. Finishing trades

3.6.1 Unforeseeable Hazards

The Principal Contractor must immediately notify Contractors as well as the Sekhukhune District Municipality, in writing, of any hazardous or potentially hazardous situations that may arise during the performance of construction activities so that the necessary precautions may be taken before such work begins.

3.7 Site Operational Requirements

3.7.1 Health and Safety Representative(s)

The Principal Contractor and all Contractors must ensure that Health and Safety Representative(s) are appointed under consultation with the employees. The H&S representatives must be competent to carry out their functions. The appointments must be in writing. The Health and Safety Representatives should carry out monthly

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inspections, keep records of the inspections and report all findings to the Responsible Person or safety officer forthwith and at monthly health & safety committee meetings. At least one Health & safety representatives is required by all Employers on site.

3.7.2. Health and Safety Committees

The Principal Contractor must ensure that project health and safety committee meetings are held monthly with minutes kept. Meetings must be chaired by the Principal Contractor's Responsible Person [CR 7(1) person]. All Contractors' Responsible Persons and Health & Safety Representatives must attend the Principal Contractor's monthly health & safety meetings. The Principal Contractor's appointed supervisors must also attend health & safety meetings. The following topics must be tabled at meetings: management appointments and risk management portfolios; sub-contractor legal compliance issues; injuries and incidents; hazards and risk assessments (present and foreseen); safety procedures; method statements for upcoming activities; planned inspections and registers/record keeping, etc. The committee chairperson must sign off and date the minutes.

3.7.3 Health and Safety Training

3.7.3.1 Induction

The Principal Contractor must ensure that all site personnel including all sub-contractors undergo the agreed health & safety induction training session held and managed by the P/Contractor before any worker starts work on the project. A record of attendance must be kept in the health & safety file. Workers must carry proof of inductions on their person while on site i.e. identification passport cards or similar to be agreed.

3.7.3.2 Awareness

The Principal Contractor must ensure that, on site, periodic toolbox health & safety talks take place at least once every two weeks. All site personnel including all sub-contractors must attend safety talks at such intervals and keep proof thereof. These talks should deal with risks relevant to the construction work at hand i.e. they should be based on the job-specific risk assessments and safe work procedures. Records of attendance must be kept in the P/contractor's health & safety file. All contractors' employees must attend safety awareness toolbox talks carried out by their supervisors, the attendance registers must be copied to the Principal Contractor together with information on the information discussed at the session.

3.7.3.3 Competence

All competent persons must have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control and/or carry out. This must be assessed on a regular basis e.g. training, evaluation, and periodic audits by the Sekhukhune District Municipality, progress meetings, etc. The Principal Contractor is responsible to ensure that Competent Contractors are appointed to carry out construction work on site.

3.7.4 Health & Safety Audits, Monitoring and Reporting

The Principal Contractor is obligated to conduct monthly audits on all Contractors appointed by it and keep audit reports in its health & safety file. Contractors have to audit their sub-contractors and keep records of these audits in *their* health & safety files, made available on request. The Sekhukhune District Municipality /Agent will conduct monthly audits on the Principal Contractors' safety management plan.

3.7.5 Emergency Procedures

The procedure must detail the response procedures including the following key elements:

- List of key competent personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of the specific types of emergencies;
- Evacuation procedures: including routes and exits to be available on a drawing.

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- Emergency procedure(s) must include, but shall not be limited to: fire; spills; injury to employees; damage to material / equipment / plant; use of hazardous substances; bomb threats; major incidents/injuries; evacuation; etc.
- The Principal Contractor must advise the Sekhukhune District Municipality in writing forthwith, of any emergency situations, together with a record of action taken/action to be taken.
- A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and made available to site personnel.
- The emergency plan will need to be reviewed from time to time as conditions/environment changes i.e. as building work increases in extent.

3.7.6 First Aid Boxes and First Aid Equipment

The Principal Contractor and all Contractors must appoint First Aider(s) in writing. The Principal Contractor must appoint at least one First Aider to start with, which first aider must be certificated. Copies of valid certificates are to be kept on site. The Principal Contractor must provide at least 1 (one) first aid box, adequately stocked at all times. Due to the nature of this project i.e. satellite work stations/areas, further first aid boxes must be provided close to the various work stations to allow for quick, effective treatment of injured persons. As the work progresses and the structure increases in height, extra first aid

3.7.7 Personal Protective Equipment (PPE) and Clothing

The Contractor must ensure that all site workers are issued with and wear the appropriate PPE as indicated in their risk assessments. The Contractors must make provision and keep adequate quantities of SANS approved PPE on site at all times according to their risk assessments. Safety harnesses are

mandatory wherever work takes place in an elevated area where safe working platforms or ladders are not possible. Overalls clearly indicating the Contractor's logo must be worn and all sub-contractors must conform to this requirement. Eye protection must be worn by those working grinders, skill saws, and high pressure water cleaners. Even those workers in close proximity to these operations will also be required to wear such eye protection.

Safe footwear will be required by all workers. A high visibility vest is mandatory on a Sekhukhune District Municipality site.

3.7.8 Occupational Health and Safety (OHS) Signage

The Principal Contractor must provide adequate on-site OHS signage. Including but not limited to: 'construction work - no unauthorised entry', 'beware of overhead work', 'hard hat area', first aid – to be posted up at all work areas/zones.

Signage must also be posted up at strategic locations to warn the public of diversions, alternative through ways and other irregularities caused by construction work (pedestrians and motorists).

Signs are also required as per law e.g. scaffolding and other potential risk areas/operations such as exposed edges and openings and trenches/excavations where persons are at work. Safety signs and awareness posters will also be required in strategic locations on site such as frequently used access routes, stairways and entrances to structures and buildings where the workers will continuously be made aware of health & safety. Health & safety signage must be well maintained including weekly inspections, cleaning, replacement and repair.

3.7.9 Public and Site Visitor Health & Safety

Public walkways and roadways must be kept clean and free of construction materials so as to prevent any negative impact on the public. Public roadways and walkways will have to be cleaned on a regular basis – daily inspections to be conducted by the Principal Contractor with action to be taken without delay (daily).

Site visitors must be briefed on the hazards they may be exposed to as well as what measures are in place or should be taken to control these hazards. The Construction Regulations require that a record of these 'inductions' be kept on site. It is advised that a visitor book with site rules leaflet be kept at the reception/site office and all visitors to be directed to such point where they must read through the site safety information and sign the visitor

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book. It will be the Principal Contractor's prerogative to decide whether site visitors require supervision while on site. Visitor hard hats must be kept in the site office.

3.7.10 Access to Site

Where any permits are necessary from the local authorities, this will be the Principal Contractor's responsibility. The road surface of all public and private roadways and pavements/pedestrian walkways must remain in a reasonably clean state, free of excessive sand, stone, water or other construction related materials. The access gate(s) must be controlled and visitors must sign in and report to the site office for further instruction.

3.7.11 Night Work (After Hours)

No night work will be allowed within the hazardous zone on this project without prior approval from the Sekhukhune District Municipality /Sekhukhune District Municipality's Agent and the Construction Health and Safety Agent. Additional health and safety requirements will then be applicable.

3.7.12 Transport of Workers

The Principal Contractor and other Contractors may not transport:

Persons together with goods or tools unless there is an appropriate area or section to store the tools or equipment; Contractors must adhere to the National Road Traffic Act.

3.7.13 Construction Health & Safety Officer

A full-time construction safety officer (in terms of Construction Regulation 8) will be required on this project. **The construction health and safety officer must be registered with SACPCMP.** The construction officer will be required to carry out at least the following duties:

- a) Health & safety audits and inspections on site including administrative and Physical audits of all Contractors' health & safety plans, files and activities, and record findings in the form of audit reports to be kept in the health & safety file; b) Assess, and finally approve contractor safety plans;

3.8 Physical Requirements

3.8.1 Earthworks (including Trenching and excavations)

The Principal Contractor and relevant Contractors must make provision in their tender for the shoring of excavations where the soil conditions warrant it or if this is not possible cut it back -excavation walls must be battered back to a safe angle, termed the safe angle of repose.

The Principal Contractor has the following options: first option is to shore or brace the excavation, should this not be practical then such excavation must be battered back to the safe angle of repose (second option). Should the first two options not be deemed necessary by the Contractor, then permission must be given in writing by the appointed competent excavation supervisor (third option). Where uncertainty pertaining to the stability of the soil exists, the decision of a professional engineer or professional technologist competent in excavations shall be decisive. Such permission must be in writing.

The following is relevant to excavations:

- Excavations/trenches are inspected before every shift and a record of these inspections is kept;
- Safe work procedures have been communicated to the workers;
- The safe work procedures are enforced and maintained by the Principal Contractor's and Contractors' responsible persons at all times;
- Excavations next to permanent or temporary roadways - ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endangering the safety of any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- Ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of

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an excavation, steps are taken that may be necessary to ensure the stability of such building, structure or road as well as the safety of persons

- Cause convenient and safe means of access to be provided into every excavation in which persons are required to work and such access shall not be further than 6m from the point where any worker within the excavation is working;
- Ascertain as far as is reasonably practicable, the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed. The necessary steps must then be taken to render the circumstances safe for all persons involved;
- Cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or where the safety of persons may be endangered, to be
- Adequately protected by a barrier or fence of at least one meter in height and as close to the excavation as is practicable; and provided with warning illuminates or any other clearly visible boundary indicators at night or when visibility is poor;
- Cause warning signs to be positioned next to an excavation within which persons are working or carrying out inspections or tests

3.8.2 Deliveries, Waste Removal, Stacking/Storage of Materials

The Principal Contractor and other relevant contractors must ensure that there is an appointed stacking supervisor and all materials, formwork and all equipment is stacked and stored safely, on level, compact ground, out of access ways and no more than three times the minimum base width in height. Pallets of bricks may not be stacked more than two above each other and must be on timber pallets. No construction materials or equipment may be stacked or stored in public areas unless authorised by the Sekhukhune District Municipality and fenced off as per the Sekhukhune District Municipality's requirements. Waste materials must be kept within designated construction zones. The Principal Contractor will be responsible for co-ordinating and managing this function.

3.8.3 Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and relevant Contractors shall provide adequate, regularly serviced fire fighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. A minimum of four 9 kg dry chemical powder fire extinguishers must be available in and around the site office establishment and stores. Fire extinguishers must also be placed at all work zones/areas, in strategic locations. Wherever 'hot work' is taking place, additional fire extinguishers must be on hand. Contractors are responsible for ensuring compliance with hot work procedures and must be in possession of method statements detailing the safe working procedures. 'Hot work' includes all work that generates a spark or flame and may therefore result in a fire.

Further, during the finishing stages of the construction phase when the finishing trades are on site, fire extinguishers will be required at strategic locations within the work areas – to be supplied and managed by the Principal Contractor.

3.9 Plant, Machinery and Equipment

3.9.1 Construction Vehicles & Mobile Plant

"Construction Plant" includes all types of plant including but not limited to, cranes, piling rigs, excavators, construction vehicles, compaction plant, batch plants and lifting equipment.

The Principal Contractor must ensure that such plant complies with the requirements of the OHS Act, Construction Regulations (Feb 2014) and any manufacturers specifications. The Principal Contractor and all relevant contractors must inspect and keep records of inspections on construction vehicles and mobile plant used on site. Only authorised/competent persons in the possession of the necessary training certificates and in possession of a certificate of medical fitness may operate construction vehicles and mobile plant.

Appropriate PPE and clothing must be provided and maintained in good condition at all times.

Reverse alarms must be installed on construction vehicles i.e. trucks, digger loaders, etc.

Vehicles and pedestrian traffic must be safely separated, preventing any unnecessary interfacing.

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Any vehicle or mobile plant using any public road must be roadworthy and carry a certificate proving this. Likewise any operator of such construction vehicle or mobile plant will have to carry the necessary driver's license.

3.9.2 Pressure Equipment

The Principal Contractor and all relevant Contractors must comply with the Pressure Equipment Regulations, including:

Providing competency and awareness training to the operators/users; Providing the relevant PPE and clothing;

Inspecting equipment regularly (every 3 months) and keeping records of these inspections;

Providing appropriate fire fighting equipment (Fire Extinguishers) on hand;

Ensuring that oxygen and acetylene bottles are secured in an upright position, do not show signs of corrosion or damage and have flash back arrestors fitted on both torch & bottle ends of hoses.

3.9.3 Hired Plant and Machinery

The Principal Contractor must ensure that any hired plant and machinery used on site is safe for use and complies with the minimum legislated requirements. The necessary requirements as stipulated by the OHS Act and Construction Regulations shall apply. The Principal Contractor shall ensure that operators hired with machinery are competent and that competency and medical certificates are kept on site in the health & safety file. Any load test requirements and inspections in terms of legislation must be complied with and copies of load test certificates and inspections must be kept in the health & safety file. All relevant contractors

3.9.4 General Machinery

The Principal Contractor and relevant contractors must ensure compliance with the Driven Machinery Regulations, which includes carrying out risk assessments on the machines, inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE and relevant clothing, and training those who use machinery.

3.9.5 Electrical Installations and Portable Electrical Tools

The Sekhukhune District Municipality will ensure as far as possible that the Principal Contractor is made aware of the positions of all electrical power lines. The Principal Contractor must notify the Sekhukhune District Municipality should it not be sure of the location of any electrical power lines.

The Principal Contractor must comply with the Electrical Installation Regulations, the Electrical Machinery Regulations and the Construction Regulations (CR 24).

The Principal Contractor must keep a copy of the Certificate of Compliance (CoC) for its temporary electrical power supply. A revised CoC is required whenever the installation is altered or changed in any way. All temporary electrical installations must be inspected at least weekly by a competent person appointed in writing with records kept. Portable electrical tools and equipment

must be visually inspected daily with records kept. It is advised that the P/Contractor appoints the electrical contractor to inspect the temporary electrical installation on a weekly basis with feedback given in a report so that any maintenance and repairs can be undertaken. Such appointed inspector must 'stop' or isolate any distribution board that is unsafe for use.

3.10 Occupational Health

3.10.1 Industrial Hygiene (exposure to physical and chemical stress factors)

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and all Contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards. Prevent inhalation, ingestion, and adsorption through the skin of hazardous chemical substances.

3.10.1.1 Noise induced hearing loss is a highly underrated occupational condition. Occupational noise emitted by construction machinery and power tools must be controlled as far as possible by implementing engineering solutions

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such as noise dampening, regular maintenance, servicing and inspection, screening off the noise, and reducing the number of persons exposed. Personal protective equipment such as earmuffs and earplugs must also be used in conjunction with engineering controls so as to reduce noise exposure to below the acceptable levels.

3.10.1.2 Ergonomics is the study of how workers relate to their workstations. We advise the Principal Contractor and Contractors to take this into consideration when conducting risk assessments, thereby improving the worker-task relationship, which will in turn improve productivity and reduce chronic conditions such as back strains, joint problems and mental fatigue, amongst others.

3.10.2 Hazardous Chemical Substances (HCS)

The Principal Contractor and other relevant contractors must provide the necessary training and information as far as the use, transport, and storage of HCS. The Principal Contractor must ensure that the use, transport, and storage of HCS are carried out as prescribed in the HCS Regulations. The Principal Contractor and contractors must ensure that all hazardous chemicals on site have Material Safety Data Sheets (MSDS) on site and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the MSDS's and how to treat HCS incidents appropriately. Copies of the MSDS's must be kept in the first aid box and in the store. All containers must be clearly labelled.

Flammable substances must be stored separately, away from other materials, and in a well-ventilated area (appropriate cross ventilation). A competent person should be appointed to be in control of this portfolio.

Stores must be well ventilated, preventing the build-up of flammable and toxic gases/vapours. Should fuel storage containers be used, they must conform to the general environmental legislation and Environmental Management Plan (if a requirement on this site). The necessary safety signage must be posted up

– 'no naked flames', 'no smoking'. Two 9 kg DCP fire extinguishers must be placed near to the fuel containers, but not within 5 m of the containers. These extinguishers are over and above the minimum four required for the offices and stores.

3.10.3 Welfare Facilities

The Principal Contractor must supply sufficient toilets (1 toilet per 30 workers), clean, lockable changing facilities, hand washing facilities, soap, toilet paper, and hand drying material. Waste bins must be strategically placed around site and emptied regularly. Workers must not be exposed to hazardous materials/substances while eating and must be provided with adequate, sheltered eating areas complete with benches and tables. Stores may not double up a change rooms or mess areas.

3.10.4 Alcohol and other Drugs

No alcohol and/or other drugs will be allowed on site. No person may be under the influence of alcohol or any other drugs while on the construction site. Any person on prescription medication must inform his/her superior, who shall in turn report this to the Principal Contractor forthwith. Any person suffering from any illness/condition that may have a negative effect on his/her /anyone else's health or safety performance must report this to his/her superior, who shall in turn report this to the Principal Contractor forthwith. Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately, to report back the next day for a preliminary inquiry. The Contractor concerned must follow a full disciplinary procedure and a copy of the disciplinary action must be forwarded to the Principal Contractor for its records.

3.10.5 COVID-19

Documents that need to be updated

Document control will be a critical path to ensure that all employees know the exact risks and mitigation factors around the COVID 19 virus.

- Baseline risk assessment shall be written on COVID 19 to ensure all the risks are covered and discussed to the employees
- Health and safety policy would need to be changed to address the COVID 19 pandemic

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- All safe work procedures shall cover COVID 19
- COVID 19 guideline or procedure shall be drawn up and available in the safetyfile and discussed to all employees. This procedure will explain how the contractor will ensure that the virus does not spread during construction.
- A guideline on what the process will be if an employee or a visitor is showingsymptoms of the COVID 19 virus
- COVID 19 Toolbox talks shall be held with all employees to explain to theemployees what the COVID 19 virus is
- Applicable Checklist & register should be in place to ensure that all the measures that is stipulated in the Client OHS Spec , Baseline Risk assessment, COVID procedure and contractor OHS Plan
- Sign in register will need to be available at every site entrance where the employee or site security can write down the temperature of the employee orVisitor
- All Health and safety related policies will need to be revised to ensure thatCOVID 19 is cover and explained in all of them in the applicable manner
- COVID 19 manager shall be appointed on site. This employee shall be on sitefull-time.

Hand sanitation points

Hand sanitation points will need to be placed at strategic places as well as thehigh risk area. The first place where sanitation station shall be placed is at all site entrances. High risk areas will be identified by the following:

- Areas where employees are in frequent and/or close contact (i.e. within 1,5Meter of people)

The high risk areas will have additional sanitation stations, all employees shall wear mask or face shield when working closer than 1, 5 Meter from the nearest employee. Employees will be trained to wash hands more frequently or to use sanitizer more frequently.

The hand sanitizer that will be used shall have more than 70% of Ethyl alcohol.This needs to be ensured by the safety office on site as well as a Material Safety Data Sheet (MSDS) available close by for confirmation of the 70%. Thehazardous chemical register shall be available in the flammable store. This register shall also include the hand sanitizer.

Hand washing posters shall be available at all hand washing stations to ensure that all employees know what the correct way is of washing your hands to coverall the areas. Informational posters about COVID 19 shall also be visible at these areas to ensure that employees know how the virus spreads and how to prevent spreading. The sanitisation stations will need to be cleaned on a regularbasis.

Cleaning & disinfecting

All work surfaces need to be cleaned and disinfected on a regular basis. The chemical that will be used to clean the surfaces must have a minimum of 70% Ethyl Alcohol and the MSDS for that specific sanitizer must be available in the safety file under the MSDS's section. Plant, site offices & construction sites shallbe decontaminated before the start of the site. The contractor that decontaminated the site shall issue a certificate to explain it has been done and explain what chemicals was used.

Offices

- All offices must have a biochemical hazardous bin with a medical waste bag that can be sealed
- The offices need to be cleaned on a regular bases
- If disposable gloves is being used they must be discarded in the medical waste bin.
- Only employees that is working in the office will be allowed in the offices
- All visitors must arrange with office personnel if they have an appointment with one of the office employees to move outside and have the appointment outside or in a well-ventilated area and if possible keep social distancing distance (1,5 Meter)
- Cleaners must focus on cleaning the following areas: desks, printers, door handles, kettles, microwaves & office equipment (cabinets, staplers, punchers) etc.
- No utensils shall be shared

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- All employees shall sanitise their hands before and after using building plans Ablution Facilities
- All ablution facilities shall have a washing station or a sanitation station.
- Sufficient paper towels shall be available to dry off hands after sanitizing
- All ablution facilities must have a biochemical hazardous bin, with a medical waste bag that can be sealed
- Paper towels shall be discarded into the medical waste bin provided at the ablution facilities
- Ablution facilities must be cleaned on a more regular basis to ensure a clean surface at all times
- Chemical toilets ratio is reduced to 1-10 employees and flush toilets ratio is reduced 1-15 employees
- Cleaners must focus on the most touch areas when cleaning ablution facilities (toilet handles, door handles, taps, basins surfaces, toilet seats etc.)

Eating areas

The eating areas in construction is a high risk due to the fact that the employees under normal circumstances would have sit within 1, 5 Meter of each other.

- Eating areas will need to make bigger to accommodate all employees at once but still implement social distancing of 1, 5 Meter at least.
- All eating areas must have a biochemical hazardous bin, with a medical wastebag that can be sealed
- All Servite that was used or paper towels that was used to dry hands afterusing the sanitation station must be discarded in the hazardous bin.
- All eating areas shall have a washing station or a sanitation station
- Lunch breaks should be staggered between contractors / employees to ensure that during lunch the social distancing 1, 5 Meter can still be implemented.
- All chairs, Table tops and drinking water taps need to be cleaned after eachlunch break
- Notice board shall be placed at the eating area to ensure that all employeessee all posters and notices
- Clean drinking water need to be supplied to all employees at the eating areaWaste management

The waste management on site will be a critical path and will need to be monitored. The PPE and cleaning material that will be discarded will be seen asmedical (biological hazardous) waste. This will need to be separated from normal waste, all medical waste bins will need to have a waste bag that can seal and need to be removed by a registered service provider. Hazardous bins shall be foot operated to ensure employees do not touch the lid of the hazardous bin.

Paper towels

Paper towels shall be supplied to by the contractor at all sanitation stations andwashing stations for employees to dry their hands. These towel papers will be discarded in the medical waste bins. The contractor shall ensure that sufficient paper towels is in storage for a fast and effective replacements

PPE

All disposable PPE shall be discarded in these medical waste bins. DisposablePPE will be the following: dust masks, surgical masks etc.

Disinfectants

The sanitizers that will be available throughout the site if finished and not refilledwill be discarded as medical waste. The contractor must ensure that sufficient stock of hand sanitizer and soap is available in the storeroom. This chemicals and soap shall be recorded as it is booked out of the storeroom.

Wastewater

The water that will be used at the hand washing points will need be stored in acontainer with a lid. This infected water will then need to be treated before the water can be discarded in a normal municipal sewage system.

Biological hazardous waste bin

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

The hazardous waste bins that will be placed all over site will need to be a different colour from the normal waste bin. This hazardous waste bins will need the appropriate signage's as displayed below as well as a sealable bag inside. This is an example of the sign that needs to be visible on all hazardous waste bins on site:

The hazardous waste bin does not have a specific size that will be required, but the contractor will need to monitor the waste and accordingly let the registered service provider come and remove the waste. The waste can only be dumped at a Class 1 dumping site or be incinerated. The registered service provider will provide a certificate that it has been discarded at the class 1 dumping site or incinerated. Hazardous bins shall be foot operated to ensure employees do not touch the lid of the hazardous bin.

Personal Protective Equipment (PPE)

COVID 19 be prevented from spreading using the correct PPE. The COVID 19 virus is spread by small droplets that can be enter the body at the face through the nose, mouth and the eyes. This is the critical areas that must be protected at all cost to prevent the employees from getting the feared COVID 19 virus.

The disposable PPE will be treated as biological hazardous waste as explained above in waste management

The Contractor shall supply all employees with 2 cloth masks (1 to wear, 1 to wash). The cloth masks will be checked every morning at the entrance of the gate to ensure that employees are washing the cloth masks. This is an example of a cloth mask:

If the employees are working in a high risk area, the contractor will need to have a look at alternative measures to protect the employee's eyes as well as mouth and nose area. Face shields is a perfect example of an alternative way to protect our workers. There is different types of face shields on the market, from loose face shields with a strap to face shield and hard hat combination. Below is an example of these alternative equipment that will need to be in place in high risk areas when possible:

Employees will only be required to wear hand gloves when the task will require it (will be stipulated in the risk assessment). When for example the employee will do grinding work and the face shield will not last then the employee will be required to wear goggles and a normal dust mask.

Accommodation

When the contractor provides accommodation to the employees on site the following shall be in place:

- The quantity of employees must be looked at that is accommodated on site
- The restrictions on the number of employees using the same ablution facilities
- Cutlery & utensils shall not be shares between employees
- Social distancing between employees (at least 1,5 Meter) when in sleeping quarters and in cooking facilities.
- The employees shall practice good personal hygiene and shall sanitise areas that on a regular basis is used by all employees
- Employees shall not share any personal belongings with each other for example: clothes & towels

Transportation

The transportation of employees shall be monitored by the site safety officer as well as site management. Transportation will be arranged that all employees at all times implement the social distance of at least 1, 5 Meter from each other.

Employee using transportation as well as drivers will at all times wear mask to prevent the spread of the virus. Employees shall sanitize their hands before using transportation and after using transportation. Transporting employees in big quantities must at all times be prevented if possible. All transport shall be disinfected before and after use. If employees drives with personal transport, sufficient parking must be made available

COVID 19 Signage's

The applicable signage's shall be displayed at all the applicable places for example all the notice boards that is identified in this document. The contractor shall as far as reasonable practicable post posters about COVID 19 to ensure that all employees know the essential information of the virus. The signage's will be essential to show

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

Reference no: SK8/3/1-07/2022/23

employees with the use of pictograms what is the most important factors to keep in mind on site. All hand sanitation station shall have a sign that states it is a sanitation station and while have a poster to explain to employees exactly how to wash their hands to prevent getting infected.

This is examples of signs that shall be visible all over site to keep reminding employees of the risks. The site entrances shall get additional signage's to explain to visitor and employees the applicable PPE for the site. These signs is examples of signs that shall be visible at the site entrances:

COVID 19 Posters

The contractor will be responsible to display posters on all notice boards on site as stipulated to ensure that employees are informed of the COVID 19 virus. The responsibility is with the contractor to communicate these posters to the employees and the train them on all the precaution measures and the keep them informed.

4. Omissions from the Site Specific Health and Safety Specifications

Every endeavor has been made to address the most critical aspects relating to Health and Safety issues in order to assist the contractor in adequately providing for the Health and Safety of employees on site. However, the Principal Contractor is required to ensure they stay compliant with statutory requirements and construction programs and processes and include such aspects in their Health and Safety File.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE A

PRIMARY HEALTH AND SAFETY COMPLIANCE

The Principal Contractor and Contractors must submit compliance with Annexure 'A' before commencing on work on site. **Compliance with Annexure 'A' must be maintained and proven to the Safety Agent at audits.**

HSS Item no.	Requirement	Legal Reference	Compliance required:
A1	Health & Safety Plan (H& S Plan)	Constructions Regs.	Withing one weeks of receipt of these specifications
A2	Notification of intention to commence construction / building work	Complete schedule 1 (Construction Regs.)	Before commencement onsite
A3	Assignment of responsible persons to supervise construction work	OHS Act ~ Section 16(2) appointee ~ all written appointments under the construction regulations 2014	Before commencement onsite
A4	Competence of responsible persons in the form of CV's related work history of appointees	OHS Act ~ Section 16(2) appointee ~ all written appointments under the construction regulations 2014	Together with H & S Plan
A5	Compensation for occupational injuries and diseases – proof of registration and in good standing	COIDA or FEMA	Together with H & S Plan
A6	Health and safety organogram showing all safety management portfolios and positions	Sekhukhune District Municipality requirement	Together with H & S Plan
A7	Initial hazard identification and risk assessment document	Construction regulations	Together with H & S Plan
A8	Fall protection plan (first draft) as defined in the construction regulations	Construction regulations	Together with H & S Plan

HSS = health & safety specifications

OHS Act = occupational health & safety Act
CR = construction regulations

COIDA = compensation for occupational injuries and diseases Act

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE B

ASSIGNMENT OF PRINCIPAL CONTRACTOR'S AND CONTRACTORS' RESPONSIBLE PERSONS

The Principal Contractor must make all the management appointments as set out below. Compliance with annexure 'B' to be maintained and proven to the safety agent at audits (Further appointments could become necessary as the project progresses).

Item no	Appointment	Legal Reference	Requirement
B1	CEO Assignee	Section 16(2)	A competent person to assist the CEO in achieving compliance with the OHS Act – P/Contractor's / Contractor's Responsible person
B2	Construction Work Manager	CR 8(1)	A full time competent person to Supervise and be responsible for health & safety related issues on site. The person is appointed by the Section 16(2)
B3	Assistant Construction Work Manager	CR 8(2)	A full time competent person(s) to assist the CR 8(1) appointee with daily supervision of construction work safety. One of the CR8(2) appointees must be designated to fulfill the role of the CR6(1) when such person is not on site. Make this clear in the appointment letter
B4	Health & Safety Representative(s)	Section 17	A competent person(S) to be appointed to represent the workforce in H & S matters. Reps may attend safety meetings, conduct monthly site audits, attend incident / injury investigations and make recommendations as far as H&S goes.
B5	Health & Safety Committee Member(s)	Section 19	H&S reps, site supervisors / foreman and the safety officer should make up the committee, with the CR8(1) appointee chairing the committee.
B6	Incident Investigator	GAR 9	A competent person to head up the investigation team and co-ordinate incident / injury investigation on site.
B7	Risk assessment co-ordinator	CR9	A competent person to co-ordinate the drafting / reviewing / distribution of risk assessments on behalf of the principal contractor. The same applies to contractors. NQF Level 5

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

B8	Fall protection plan co-ordinator	CR10	A competent person to co-ordinate the drafting / reviewing / distribution of Fall Protection Plan. The same applies to contractors. NQF Level 4
B9	Emergency plan co-ordinator	Contractor Needs to be in line with service station ERP	A competent person to co-ordinate the drafting / reviewing / distribution of the site emergency procedures / evacuation plan. Such person must be fulltime on site so as to take charge of emergency situations.
B10	First Aider(s)	GSR 3	A certified person to address first aid situations and take charge of injuries. Level 1 certificate
B11	Lifting machine and lifting tackle supervisor	DMR 18	A competent P/Contractor employee to co-ordinate the management of lifting machines and tackle, ensuring that such equipment is safe for use at all times, inspected when necessary and repaired when required. The operators, banks men and contractors to liaise with this person
B12	Scaffolding inspector	SANS 10085 – 2004	A competent person to inspect scaffolding before use and every time after bad weather, etc.
B13	Scaffold supervisor (P/Contractor)	SANS 10085 – 2004	A competent P/Contractor employee to supervise all scaffolding on site, ensuring that scaffolds are safe for use, inspected, extended / altered, repaired when required and that all trades are co-ordinated and authorised to work on such scaffolds
B14	Scaffolding engineer	SANS 10085 – 2004	A competent person(s) to erect scaffolding – leader of the scaffold team
B15	Formwork & support work supervisor (Temporary Works)	CR12	A competent person to supervise all formwork & support work erection & dismantling. This person must also ensure that the equipment is safe and that all the necessary inspections (pre, during, post & every day thereafter) are carried out & records kept by the competent inspectors. Design drawings must be available to this supervisor.
B16	Excavation supervisor / inspector	CR13	A competent person to supervise & inspect excavation work (daily) and ensure that excavations are safe. Records of inspections must be kept by this person.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B17	Ladder inspector	GSR13A	A competent person to inspect ladders daily and ensure they are safe for use, keeping monthly record.
B18	Stacking supervisor	CR28	A competent person to supervise all stacking and storage operations
B19	Explosive powered tools inspector / supervisor	CR21	A competent person to inspect & clean the tool daily, store the tool in a safe location, ensure that cartridges are signed out and in, and control all operations thereof.
B20	Temporary electrical installations inspector	CR24	A competent person to inspect all temporary electrical installations. Including weekly inspections and record keeping.
B21	Portable Electrical Tool Inspector	CR 24	A competent person to co-ordinate / inspect portable electrical tools, leads and plugs.
B22	Fire-fighting equipment inspector	CR29	A competent person to co-ordinate & inspect fire fighting equipment. Including ad-hoc checks and monthly inspections with records kept.
B23	Construction vehicles & mobile plant supervisor	CR23	A competent person(s) to co-ordinate the safety of all construction vehicles & mobile plant. Ensuring that daily inspections are done and records kept, that safety measures are in place, that operators are certified and authorised to operate and that maintenance and services are carried out when required.
B24	Construction safety officer	CR8(6)	A competent person to fulfill the functions as set out in these HSS

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE C

GENERAL COMPLIANCE REQUIREMENTS

The Principal Contractor and Contractors must comply with but not be limited to the requirements tabled below: Prove compliance with annexure 'C' at audits conducted by the safety agent.

Item no.	What	When	Output	Reviewed by Sekhukhune District Municipality Agent
C1	Construction – phase Health & Safety Plan	Monthly review	Principal Contractor to indicate the status of Contractors health & safety plans	
C2	Health & Safety File(s)	Open file when construction begins and maintain throughout	Have file on hand at audits. Contractors to report on their file at monthly health & safety audits by the Principal Contractor.	
C3	OHS Act and relevant Regulations	Monthly review	To be kept in the health & safety file on site.	
C4	Health & Safety Induction training, PTW Procedures	Every worker before he/she starts work	Attendance registers to be kept	
C5	Awareness Training (Tool Box Talks)	At least once a week	Attendance registers to be kept	
C6	Health & Safety Meetings	Monthly	Meeting minutes to be kept	
C7	Health & Safety Reports	Monthly	<u>Report covering:</u> - Incidents / injuries and investigations - Non conformance by employees & Contractors – reports - Internal H&S audit reports	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C8	Audits on contractors	Monthly	<u>Report covering:</u> • H&S File / Plan • WCA status • Appointment letters • Section 37(2) agreements • Risk assessment & safe work procedures • Physical site inspection • Any other contractor specific requirements	
C9	Emergency procedure	Monthly evaluation of procedure	Compile written procedure as well as tel. Numbers	
C10	Risk assessments & fall protection plan	Updated and signed off	Documented risk assessments to be available	
C11	Method statements	Drawn up and distributed before workers are exposed to the risks	Documented set of method statements reviewed and signed off.	
C12	General Inspections	Daily	<u>Report OHS Act compliance:</u> • Excavations • Portable electrical tools • Formwork & support work • Explosive powered tools	
C13	General Inspections	Daily	• Scaffolding • Temporary Electrical Installations	
C14	General Inspections	Monthly	• Fire fighting equipment • Ladders	
C15	General Inspections	Monthly	• Lifting tackle • Oxy-acetylene cutting & welding sets • Fall prevention and arrest equipment	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C16	General Inspections	6-Monthly	Lifting machines	
C17	Load tests / performance tests	Annually / once erected, before use	Lifting machines	
C18	List of Contractors	List to be updated weekly	Compile a list of contractors: Name, supervisor, company tel. Numbers and trade.	
C19	Workman's Compensation	Ongoing	Compile a list of Contractors workman's Compensation proof of good standing.	
C20	Construction site rules & Section 37(2) Mandatory Agreements	Ongoing	Compile a list of all signed up Mandataries. Proof of agreement documents to be kept in H&S file.	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE D

OCCUPATIONAL HEALTH & SAFETY – HEALTH & SAFETY COSTS TO BE INCLUDED IN THE PRINCIPAL CONTRACTOR'S / CONTRACTORS' PRICE

In terms of the Construction Regulations (2014), it is the Sekhukhune District Municipality's duty to ensure that the cost for health & safety has been provided for by the Principal Contractor, before appointment. Acting on behalf of our Sekhukhune District Municipality, we require the following health & safety costs to be included by the Principal Contractor. It must be made very clear that these are just some of the health & safety costs to be included in your tender price. It is the duty of the Principal Contractor and Contractors to ensure that all aspects of the Occupational Health & safety Act 85/1993 and Construction Regulations are catered for.

Pricing for Occupational Health and Safety measures should include the following if applicable:

ITEM	DESCRIPTION
1	Supply of all items of Personal Protective Clothing/Equipment & ensure use thereof for full compliance
1.1	Steel toe capped safety boots
1.2	Overalls
1.3	Reflective vests(high visibility)
1.4	Hard hats
1.5	Dust masks
1.6	Hearing protection
1.7	Hand gloves
1.8	Any other :Principal Contractor to specify
2	Supply and provision of Equipment for working at Heights & ensure use thereof for full compliance
2.1	Fall protection equipment (Safety Harness)
2.2	Double lanyard harness
2.3	Fall protection plan
2.4	Scaffolding access ladders/toe boards/hand rails
2.5	Portable Ladders
2.6	Any other: Principal Contractor to specify :
3	Barricading: Supply & install, including removal upon completion to ensure full compliance to legislation
3.1	Rigid type barricading
3.2	Temporary fence barricading along perimeter of excavated area
3.3	Danger tape pre-warning tape
3.4	Any other: Principal Contractor to specify :
4	Related Training
4.1	First Aid Training

 Contractor

 Witness 1

 Witness 2

 Employer

 Witness 1

 Witness 2

4.2	Health and Safety Representative training
4.3	Emergency Rescue training(Height)
4.4	Hazard Identification Training
4.5	Training of Personnel working at heights
4.6	Construction Plant Training
4.7	Legal Liability(OHSACT) Training
4.8	COID ACT Training
4.9	Scaffold Erector and Inspector Training
4.10	Any other: Contractor to specify : Working at elevated
5	Occupational Health and Safety Administration
5.1	Develop of a Site Specific Health and Safety Plan and Hazard and Risk Assessment by Competent person.
5.2	Develop of Fall Protection and Rescue Plan by a Competent Fall Protection PlanDeveloper.
5.3	Competent Occupational Health and Safety Officer/Consultant.
6	Medical Surveillance
6.1	Medical Certificates of fitness for all Employees by an Occupational Health Practitioner.
6.2	Medical Certificates of fitness for all EPWP Employees by an Occupational Practitioner during the duration of the Construction Project.
7	Facilities and Equipment
7.1	Sanitary facility for each sex and for every 30 workers.
7.2	Changing facilities for each sex.
7.3	Sheltered eating areas
7.4	First aid boxes
7.5	Fire extinguishers
7.6	Waste bins
8	Safety Signage
8.1	Sufficient and adequate safety signage on constructions site and at all flammablestores.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE E

The Occupational health and Safety File must consist out of the following documentation:

INDEX

1	Appointment Letter from Sekhukhune District Municipality.
2	Notification of Construction work.
3	Letter of Good standing - COID
4	Copy of Public Liability Insurance Policy and UIF Registration
5	Health and Safety Specifications
6	Scope of Work
7	Tool and Machinery list
8	Method Statement of all work that will be conducted.
9	Risk Assessment Guide / Procedure
10	Baseline Risk Assessments
11	Safe Work Procedures for all Risks
12	Health and Safety Information from Designer
13	Medical Certificates/Copy of ID'S and Personal Information
14	All Health and Safety Related Policies
15	Section 37.2 Agreements
16	Induction Training Information
17	Site Specific Emergency numbers and Emergency Plan
18	Site Specific Covid – 19 Management Plan
19	Site Specific Health and Safety Plan
20	Incident / Accident Management Control
21	Traffic Management Plan
22	Contractor Control Procedures
23	Environmental Management
24	Hazardous Chemical Substance Register and MSDS
25	Example of Monthly Health and Safety Report
26	Health and Safety Organogram
27	Occupational Health and Safety (Construction) Appointments – With Competencies
28	Certificates for all lifting equipment
29	Sample of all registers that will be used on site.
30	Copy of Construction Building Plans (A4)
31	Copy of the Occupational Health and Safety Act and Construction Regulations 2014

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE F

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

(Regulation 4 of the Construction Regulations.

2014)NOTIFICATION OF CONSTRUCTION

WORK

1. (a) Name and postal address of principal contractor:

(b) Name and tel. No of principal contractor's contact person:

2. Principal contractor's compensation registration number:

3. (a) Name and postal address of Sekhukhune District Municipality :

(b) Name and tel. No of Sekhukhune District Municipality's contact person or agent:

4. (a) Name and postal address of designer(s) for the project:

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

(b) Name and tel. No of designer(s) contact person:

5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 8(1).

6. Name/s of principal contractor's sub-ordinate supervisors on site appointed in terms of regulation 8(2).

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 contractors on the construction site accountable to principal contractor: _____

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

13. Name(s) of contractors already selected.

Principal Contractor

Date

Sekhukhune District Municipality's Agent (where applicable)

Date

Sekhukhune District Municipality

Date

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

☐

Copies:

1. Original to **Department**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.8 REFERENCES TO THE SCOPE OF WORKS IN TERMS OF THE ENVIRONMENTAL MANAGEMENT PLAN**1. INTRODUCTION**

The EMP will address the environmental impacts during the design, construction and operational phases of a project. Due regard must be given to environmental protection during the entire road project. In order to achieve this a number of environmental specifications/recommendations are made. These are aimed at ensuring that the Contractor maintains adequate control over the project in order to:

Minimise the extent of impact during construction,
Ensure appropriate restoration of areas affected by construction.
Prevent long term environmental degradation.

The Contractor must be made aware of the environmental obligations that are stipulated in this document, and declares himself/herself to be conversant of all relevant environmental legislation. The Contractor should also be aware that the Engineer will monitor the implementation of the procedures.

2. POLICY STATEMENT

The construction will be to the best management practices as identified to minimize the environmental impact of activities associated with the development.

3. OBJECTIVES OF THE EMP

The EMP has the following goals:

Identifying those construction activities that may have a detrimental impact on the environment;
Detailing the mitigation measures that will need to be taken, and the procedures for their implementation;
Establishing the reporting system to be undertaken during the construction.

The EMP also serves to highlight specific requirements that will be monitored during the development and should the environmental impacts not have been satisfactory prevented or mitigated; corrective action will have to be taken. The document should, therefore, be seen as a guideline that will assist in minimising the potential environmental impact of activities.

4. DESIGNATED ENVIRONMENTAL OFFICER

For the purpose of the EMP, a nominated representative of the Contractor should be the designated environmental officer for the project. The nominated representative of the Contractor will therefore be responsible for ensuring that the provisions of the EMP are complied with. The Engineer will be responsible for issuing instructions to the Contractor where environmental considerations call for action to be taken. The environmental officer will submit monthly reports to the Engineer on site who will verify the information.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

5. LEGAL REQUIREMENTS

Under normal circumstances and EMP would be the end result or the final stage in the EIA procedure. However, a working agreement was negotiated between the National Department of Environmental Affairs and Tourism (DEAT) and the Sekhukhune District Municipality Metropolitan Municipality. The agreement stipulates the project types the Sekhukhune District Municipality Metropolitan Municipality need to submit to DEAT for approval and those project types the Sekhukhune District Municipality Metropolitan Municipality do not need to submit for approval. For those actions that do not need approval, the Sekhukhune District Municipality Metropolitan Municipality undertook to compile generic EMP's to assist to minimising degradation to the area. The following project types fall in this non-approval category: periodic maintenance, special maintenance, rehabilitation and specific upgrades.

6. MITIGATION MEASURES

In setting mitigation measures, the practical implications of executing these measures must be borne in mind. With early planning, both the cost and the impacts can be minimised.

6.1 Establishment of site offices**6.1.1 Site plan**

The Contractor shall provide the Engineer on site with a plan detailing the layout of site offices facilities, such as chemical toilets, areas for stockpiling of material, storage of hazardous materials and provision of containers. The site offices should not be sited in close proximity to steep areas as this will increase soil erosion. Preferred locations would be flat areas along the route. If the route traverses water courses, streams and rivers, it is recommended that the site, and in particular the ablution facilities, aggregate stockpiles and hazardous material stockpiles are located as far away as possible from any water course as possible.

The site plan shall be submitted before the site hand over meeting. Read with Standard Specifications for Municipal Civil Engineering Works: Section 001 and 002.

6.1.2 Vegetation

The vegetation surrounding the site offices is to be left as intact as possible and vegetation planted at the site should be indigenous. Only trees directly affected by the works and such others as may be indicated by the Engineer in writing may be sawn off/removed.

The project specification for the rehabilitation of the grass cover shall be strictly adhered to. Any proclaimed weed or alien invader plant shall be cleared by hand before seeding. Read with Specifications: 104 – Landscaping and grassing.

6.1.3 Rehabilitation

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

The site offices will require rehabilitation at the end of the Contract. All construction material, including concrete slabs and braai areas are to be removed from the site on completion of the Contract. Read with Specifications Sections 001, 002 and 104.

6.1.4 Water for human consumption

Water for human consumption must be tested and treated in accordance with recommendations.

6.2 Sewage treatment

Adequate toilet facilities are to be provided. Use of the veld for this purpose shall not, under any circumstances, be allowed. The Contractor shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the Engineer. Latrines shall be positioned within walking distance from wherever employees are employed on the works.

Save and effective sewage treatment will require one of the following sewage handling methods: septic tanks and soak always, dry composting toilets such as “enviro loos”, or the use of chemical toilets which are supplied and maintained by a Sub-Contract. The type of sewage treatment will depend on the geology of the area selected, the duration of the Contract and proximity (availability) of providers of chemical toilets is to be done in consultation with the Site Engineer.

Read with Specifications 104.

6.3 Waste management

Waste management and waste minimisation must be implemented at the outset of the Contract .

6.3.1 Litter

No littering by construction workers are allowed. During the construction period, the facilities shall be maintained in a neat and tidy condition and the site is to be kept free of litter. Read with Specifications Sections 001 and 002.

6.3.2 Removal of solid waste

Solid waste is to be stored in an appointed area for collection and disposal. A refuse control system must be established for the collection and removal of refuse to the satisfaction of the Engineer. Disposal of solid waste will be in a Department of Water Affairs and Forestry (DWAF) licensed landfill site.

6.3.3 Hazardous waste

Hazardous waste such as bitumen, tar, oils, etc. shall be disposed of in a Department of Water Affairs and Forestry approved landfill site. Special care must be taken when using tar products such as tar prime or pre-coating fluid to avoid water-soluble phenols form entering the ground or contaminating water.

6.4 Soil management

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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6.4.1 Topsoil

The Contract provides for the stripping and stockpiling of topsoil from the site for later reuse. Topsoil is considered to be of a minimum thickness of ± 300 mm of the natural soil, including all the vegetation and organic matter. The areas to be cleared of topsoil shall include the storage areas. Weeds appearing on the stockpiled topsoil shall be removed by hand before seeding. Soils contaminated by hazardous substances shall be disposed of in an approved Department of Water Affairs and Forestry waste disposal site.

6.4.2 Borrow material

The Contractor's attention is drawn to the requirements set forth by the Department of Mineral and Energy Affairs in terms of the submission of EMPR's for establishment, operation and rehabilitation of borrow pits and quarries. The cost of complying with the requirements shall be deemed to be included in existing rates in the schedule of quantities. Read with the Specification Section 203.

6.5 Discovery of archaeological sites, artifacts or graves

6.5.1 Archaeological site

If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately. The Contractor shall take reasonable precautions to prevent any person from removing or damaging any such article and shall immediately upon discovery thereof inform the Engineer of such discovery. The National Monuments Council must be contacted who will appoint an archaeological consultant. Work may only resume once clearance is given in writing by the archaeologist. Read with General Conditions of Contract.

6.5.2 Graves

If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker as well as the National Monuments Council should be contacted. The undertaker will place advertisements in the newspapers concerning the grave. He will also provide for the relocation of bones, should it be necessary. Read with General Conditions of Contract.

6.6 Stockpiled material

The Contractor shall so plan his activities that materials excavated from borrow pits and cuttings, in so far as possible, can be transported direct to and placed at the point where it is to be used. However, should temporary stockpiling become necessary, the areas for the stockpiling of excavated and imported material must be indicated and demarcated on the site plan and approved in writing by the engineer.

The area chosen shall be devoid of indigenous trees and shrubs. Care shall be taken to preserve all vegetation in the immediate area of these temporary stockpiles. After the stockpiled material has been removed, the site shall be reinstated as closely as possible to its original condition. All areas affected by stockpiling shall be landscaped, top soiled and grassed to the Employer's Agent's approval and at the Contractor's cost.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

Material milled out of the existing road surface that is temporarily stockpiled within the road reserve shall:

- be stockpiled so as to be as inconspicuous as possible
- be prevented from contaminating water courses,
- be cleared of weeds.

In all cases, the areas for stockpiling and disposal of construction rubble shall be approved by the Engineer before such operation commences.

Read with Series 2: Earthworks – Section 203.

6.7 Fuel, diesel and other hazardous materials

6.7.1 Hazardous materials

All hazardous materials i.e., bitumen binders shall be stored in an appointed area that is fenced and has restricted entry. Storage of bituminous products shall only take place using suitable containers to the approval of the Engineer.

Under no circumstances shall the spoiling of bituminous products on the site, over embankments, in borrow pits or any burying, be allowed. Unused or rejected bituminous products shall be taken to the supplier's production plant. No spillage of bituminous products shall be allowed on site. Affected areas shall be promptly reinstated to the satisfaction of the Engineer.

6.7.2 Fuel

Should any fuel storage tank be required on site, the Contractor shall ensure that he has complied with the necessary legal requirements for the erection of such tanks. Leakage must be avoided. The fuel and diesel must be stored in a bunded area with adequate containment (at least 1,5 times the volume of the fuel) for potential spills and leaks.

6.7.3 Oil, grease

Oil, grease and cleaning materials from the maintenance of vehicles and machinery shall be collected in a sump and sent back to the supplier or, otherwise disposed of at a registered site.

6.7.4 Cooking oil

The Contractor should ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.

6.7.5 Spillages

Streams, rivers and dams must be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous products. In the event of a spillage, prompt action must be taken by competent instances to clear the affected area.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a designated register and the response noted with the date and action taken. This record must be submitted with the monthly reports.

Any avoidable non-compliance with the above-mentioned measures may be considered sufficient ground for withholding payment of part or all amounts to be paid for the said item.

6. MEASUREMENT AND PAYMENT

The Contractor shall not be separately reimbursed or compensated in respect of his compliance with the provisions of this part of the Scope of Works. All costs so incurred shall, save and except to the extent provided for the schedule of quantities under SECTION 001: GENERAL REQUIREMENTS AND CHARGES, be deemed to be included in the rates tendered for the various items of work listed in the schedule of quantities.

TABLE 1 SUMMARY OF MITIGATION MEASURES

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
Establishment of site offices	Siting of offices	<i>Preferred areas would be flat areas along the route. Avoid steep areas as soil erosion could increase. Avoid water courses</i>	001 002.02.01
	Site Plan	<i>Contractor will provide engineer detail of layout of site facilities within two weeks of moving to the site i.e. chemical toilets, the demarcation of areas for stockpiling of materials, storage of hazardous materials and the provision of containers. The offices shall be fenced. The site plan will be submitted before the site hand over meeting.</i>	001 002
Site rehabilitation	Cleanup	<i>All construction material is to be removed from the site on completion of the Contract.</i>	001 002 104

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reference no: SK8/3/1-07/2022/23

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
Vegetation	On site	Vegetation planted on the site should be indigenous. Only trees directly affected by works as indicated in writing by Engineer, shall be sawn off/removed	104
	Weeds	Clearance of weeds must be done by hand before seeding.	104
	Grass cover	The grass cover surrounding the construction site is to be left as intact as possible or restored to its original condition.	104
Water	Available for human consumption	Water for human consumption must be tested and treated in accordance with recommendations.	
Soil management	Topsoil	The topsoil ($\pm$ 300 mm) of any excavation shall be removed and stockpiled separately from underlying material in an appointment area	203 104
	Borrow material	EMPR's for borrow pits to be submitted to the Department of Mineral and Energy Affairs for approval	201 203
Archaeological & Cultural sites	Discover of archaeological sites of artefacts	If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately and an archaeological consultant must be contacted. Work may only resume once clearance is given in writing by the archaeologist.	GCC
Graves	Discovery of graves	If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker should be contacted	GCC
Waste management	Solid & Construction waste	Solid waste is to be stored in an appointment area for collection and disposal. Disposal of waste will be in a DWAF licensed landfill, and no waste may be burnt on site.	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
	<i>Litter</i>	<i>The site is to be kept free of litter</i>	001
<i>Sewage treatment</i>	<i>Toilet facilities</i>	<i>Adequate toilet facilities are to be provided, and the siting of chemical toilets is to be done in consultation with the site engineer. Use of the veld for this purpose shall not be allowed.</i>	001 002
<i>Fuel, diesel & hazardous materials</i>	<i>Hazardous Materials</i>	<i>All hazardous materials i.e. bitumen binders will be stored in an appointed area that is fenced and has restricted entry. No spoiling of bituminous products on site, over embankments, in borrow pits or any burning. No spillage of bituminous products shall be allowed on site.</i>	
	<i>Fuels</i>	<i>All fuel tanks will be stored in an appointed area. Leakage will be avoided.</i>	
	<i>Cooking fuel</i>	<i>The Contractor should ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.</i>	
	<i>Oil, grease</i>	<i>Oil, grease and cleaning materials from maintenance of vehicles shall be collected in a sump and sent back to supplier.</i>	
	<i>Spillages</i>	<i>Streams, rivers or dams must be protected against spillages of pollutants mentioned in 6.7 (e). In the event of a spillage, prompt action must be taken to clear the affected area.</i>	
<i>General considerations</i>	<i>Lines of authority</i>	<i>A nominated representative of the Contractor will be the designated environmental officer for the site.</i>	RELEVANT SECTION IN SPECIFICATIONS
	<i>Reports</i>	<i>The environmental officer will submit monthly reports to the Engineer who will verify the information</i>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

<i>ENVIRONMENTAL COMPONENT</i>	<i>ACTIVITY</i>	<i>MITIGATION</i>	<i>RELEVANT SECTION IN SPECIFICATIONS</i>
	<i>Complaints</i>	<i>Complaints received regarding activities on the construction site pertaining to the environment should be recorded in a designated register, and the response noted with the date and action taken. This record must be submitted with the monthly report</i>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J**

C4 Site Information

C4.1 LOCALITY PLAN

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION (KUTULLO/ STEELPORT PARK)
CONTRACT J

Reference no: SK8/3/1-07/2022/23

SEKHUKHUNE DISTRICT MUNICIPALITY

LIMPOPO PROVINCE

**DE - HOOP/MALEKANA (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - RETICULATION
(KUTULLO/ STEELPORT PARK) CONTRACT J**

C4 Site Information

C4.2 TENDER DRAWINGS

Contractor

Witness 1

Witness 2

Employer

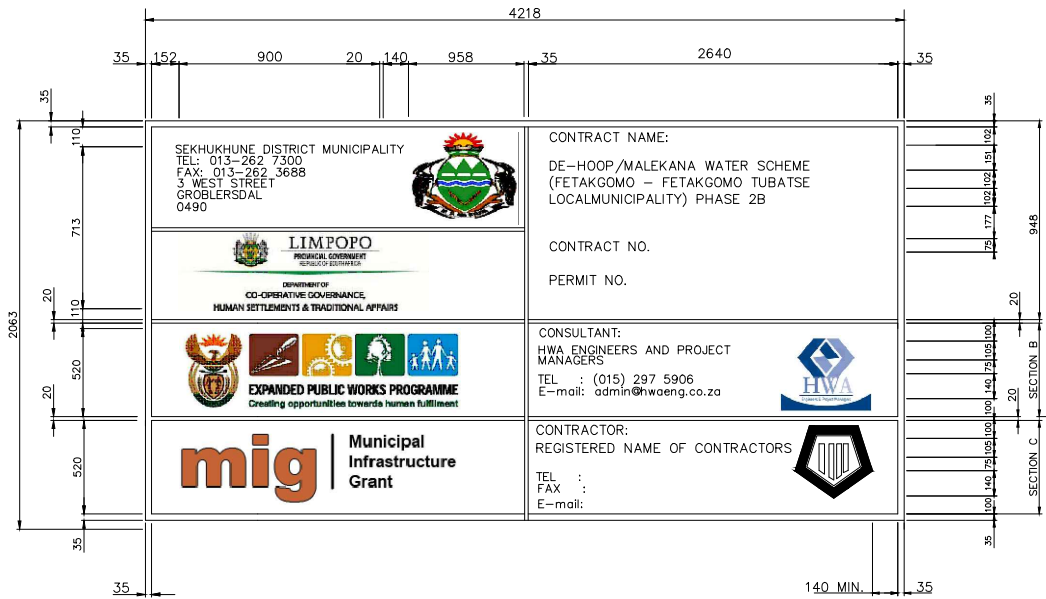
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Witness 2

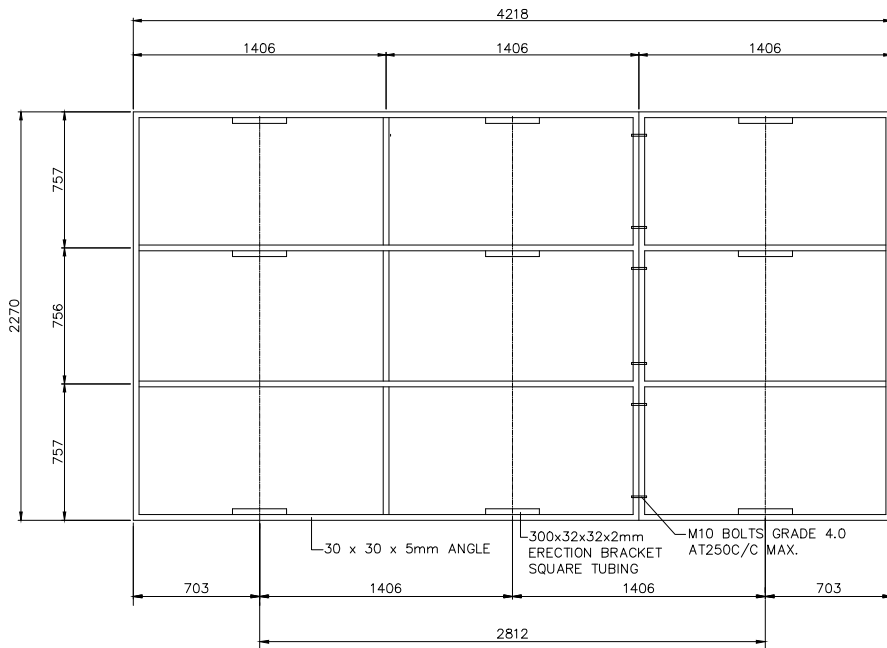
LIST OF DRAWINGS		
DRAWING No.	DESCRIPTION	SHEET No.
21008-P2B-00	DRAWING LIST	1 OF 1
21008-P2B-01	NAMEBOARD	1 OF 1
21008-P2B-02	OVERALL LAYOUT	1 OF 1
21008-P2B-03	STEELPOORT WATER RETICULATION LAYOUT	2 OF 2
21008-P2B-04	ROAD CROSSING DETAILS	1 OF 1
21008-P2B-05	YARD CONNECTION DETAILS	2 OF 2
21008-P2B-06	ISOLATION VALVE AND PIPE BEDDING DETAILS	1 OF 1
21008-P2B-07	THRUST BLOCK DETAILS	1 OF 1
21008-P2B-08	FLOW CONTROL VALVE DETAILS	1 OF 1
21008-P2B-09	RIVER CROSSING DEDAILS	1 OF 1
21008-P2B-10	SCOUR VALVE DETAILS	1 OF 1
21008-P2B-11	PRESSURE REDUCING VALVE DETAILS	4 OF 4
21008-P2B-12	BULK PIPELINE FROM PWTP TO PROPOSED STORAGE	4 OF 4
21008-P2B-13	410KL GROUND STEEL TANK PIPE, FOUNDATION AND REINFORCEMENT	3 OF 3
21008-P2B-14	DIAMOND MESH FENCE DETAILS	1 OF 1
21008-P2B-15	PWPT BOUNDARY FENCE DETAILS (TAMPER PROOF)	1 OF 1
21008-P2B-16	AIR VALVE DETAILS	1 OF 1
21008-P2B-17	PACKAGE WATER TREATMENT PLANT LAYOUT	1 OF 1
21008-P2B-18	PACKAGE WATER TREATMENT PLANT DETAILS	2 OF 2
21008-P2B-19	GROUND STEEL TANK ACCESS ROAD	1 OF 1
21008-P2B-20	PIPE MARKER DETAILS	1 OF 1

[illegible]

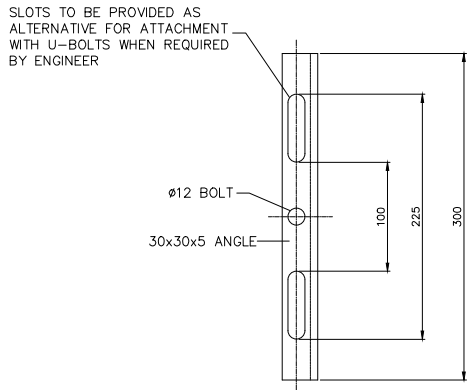
INFORMATION BOARD DETAILS



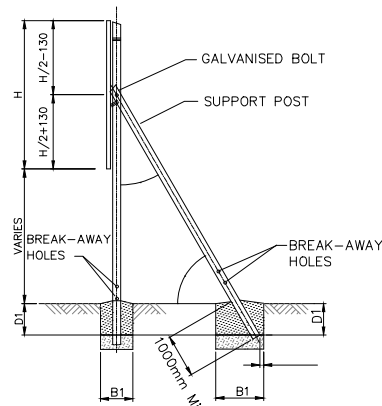
FRONT ELEVATION
SCALE 1:50



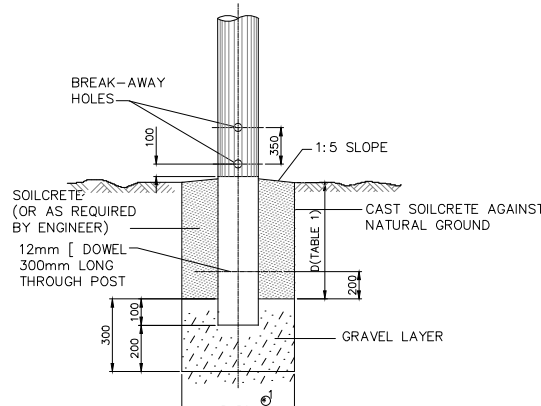
REAR SIDE BRACING
SCALE 1:50



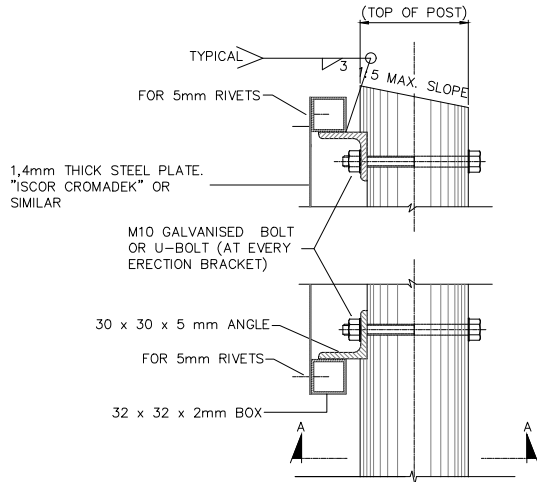
ELEVATION OF
ERECTION BRACKET
SCALE 1:25



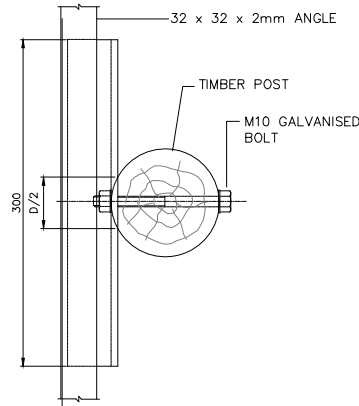
SIDE ELEVATION OF ROAD SIGN
SCALE 1:100



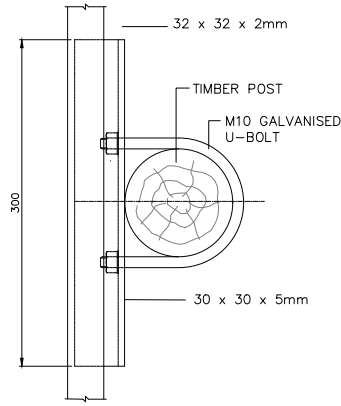
FOUNDATION DETAIL
SCALE 1:25



SIDE ELEVATION
SCALE 1:5



SECTION A-A
SCALE 1:5



SECTION A-A
(WITH U-BOLT)
SCALE 1:5

NOTES:

EMBLEM:

1. ALL EMBLEMS TO BE DISPLAYED IN FULL COLOUR ON A SEMI-MATT BACKGROUND.

LETTERS AND NUMBERS:

2. DESCRIPTION : MATT-BLACK, SERIES DIN B LETTERS AND NUMBERS ON A SEMI-MATT SMOKE-GREY BACKGROUND.

BORDERS:

3. BORDER : GREEN NON-REFLECTORIZED.

QUANTITY:

4. TWO SIGN BOARDS, SHALL BE ERECTED AT POSITIONS AS DETERMINED BY THE ENGINEER.

DESCRIPTION:

5. DESCRIPTION OF WORK (NUMBER OF KILOMETRES AND TYPE OF WORK, eg."13.5km RECONSTRUCTION OF ROAD 1974." DESCRIPTION STARTS CENTERED ON THE LEFT-HAND SIDE AND THE FIRST 105mm-DIMENSION BELOW "NORTHERN"

6. SAFCEC EMBLEM ONLY IF CONTRACTOR IS A MEMBEROTHERWISE BLANK.

7. NEW SAACE LOGO TO BE OBTAINED FROM SAACE, JOHANNESBURG.

TABLE 1: DETERMINATION OF POSTS & FOOTINGS				
ERECTION DETAILS				
TYPE OF POST	UPRIGHT	STAY	D	B(DIA)
TIMBER POST AND STAY	100mm	80mm	600mm	850mm
TIMBER POST	180mm	—	1000mm	1450mm
D SECTION STEEL POST	100mm x 4mm	—	1000mm	1450mm

DETERMINATION OF BREAK-AWAY HOLES	
POLE DIA (m)	HOLE DIA (mm)
< 14	NONE
141 – 170	40
171 – 200	50
201 – 225	65

No	DATE	REVISION	CONSULT	DIR
A	02/2022	FOR TENDER	J.M	

NOTES

STAMP

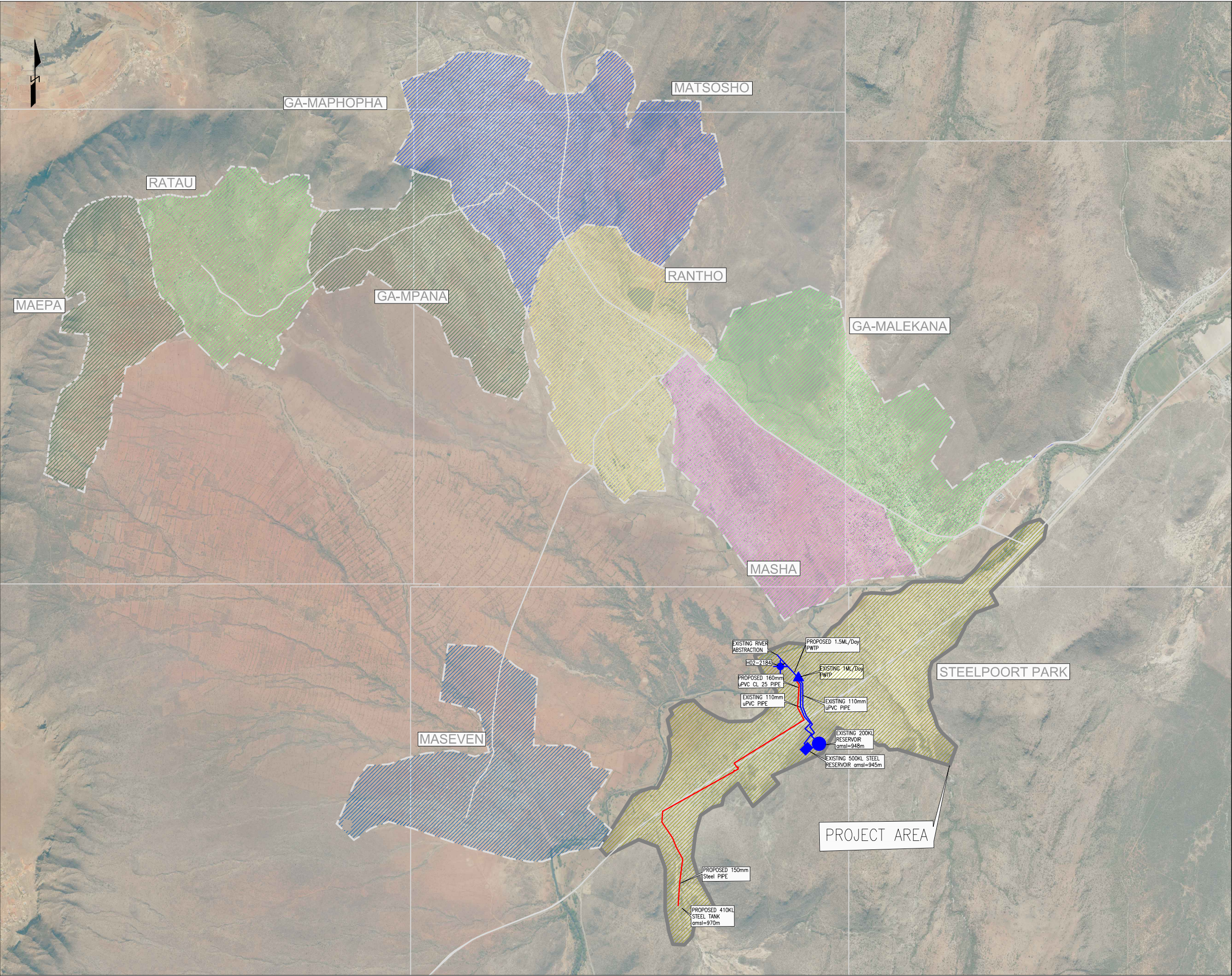
DESIGNED BY	F.M
CHECKED BY	A.C
DRAWN BY	T.S
CHECKED BY	A.C
APPROVED BY	ALEX CHIUSWA
SIGNATURE	

CLIENT
 SEKHUKHUNE DISTRICT MUNICIPALITY 3 WEST STREET GROBLERSDAL 0490
TEL: 013-262 7300 FAX: 013-262 3688

CONSULTANT
 24A RISSIK STREET POLDKVANE 0700
TEL: 015 297 5906 FAX: 086 246 0744 EMAIL: admin@hwaeng.co.za

PROJECT NAME	DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J
DRAWING TITLE	CONSTRUCTION NAME BOARD

DRAWING No.	21008-P2B-01
SCALE AS SHOWN	A
REVISION No.	A
SHEET No.	1 OF 1
CONTRACT No	SK8/3/1-07/2022/23



AVAILABLE WATER SOURCES				PIPE LENGTHS	
GA-MALEKANA WTW	2.4ML/d			DIAMETER (mm)	LENGTH (m)
BOREHOLES	1.2ML/d			300	578
STEELPOORT/KUTULLO WTW	1.0ML/d			250	6676
TOTAL	4.6ML/d			200	2982
				150	13761

VILLAGE NAME	PROJECTED POPULATION FOR 2018	PROJECTED HOUSEHOLDS FOR 2018	PROJECTED POPULATION FOR 2028	PROJECTED HOUSEHOLDS FOR 2028	PROJECTED POPULATION FOR 2038	PROJECTED HOUSEHOLDS FOR 2038
MAEPA	1489	373	1857	465	2312	578
RATAU	957	240	1197	300	1494	374
MAPHOPHA	5499	1375	6841	1711	8510	2128
RANTHO	4236	1059	5272	1318	6560	1640
MASHA	7776	1944	9671	2418	12028	3007
MALEKANA	3761	941	4681	1171	5823	1456
MASEVEN	3022	756	3761	941	4681	1171
STEELPOORT	5957	1490	7410	1853	9217	2305
GA-MPANA	2155	539	2684	671	3342	836
TOTAL	34852	8717	38640	10848	53967	13495
AADD (kl/d)	2421		3017		3749	
GAADD (kl/d)	2929		3648		4533	
AVAILABLE WATER(kl/d)			4600			
WATER BALANCE (kl/d)	1671		952		67	

LEGEND	
ROAD	—
NEWLY CONSTRUCTED BULK SUPPLY	---
EXISTING BULK SUPPLY	---
PROPOSED BULK SUPPLY	---
PROPOSED GROND TANK	■
PROPOSED PWTP	▲
EXISTING SERVICE RESERVOIR	●
EXISTING PWTP	▲
EXISTING GROND TANK	■
EXISTING BOREHOLE	◆

0	08/2019	FOR CONSTRUCTION		J.M	
No	DATE	REVISION		CONSULT	DIR

NOTES

STAMP

DESIGNED BY	F.M
CHECKED BY	A.C
DRAWN BY	T.S
CHECKED BY	A.C
APPROVED BY	ALEX CHIUSWA
SIGNATURE	



SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
GRUBBERSDAL
0490

TEL: 013-262 7300
FAX: 013-262 3688

CLIENT



24A RISSIK STREET
POLDKWANE
0700

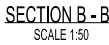
CONSULTANT

TEL: 015 297 5906
FAX: 086 246 0744
EMAIL: hweng.ash@gmail.com

PROJECT NAME	DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) CONTRACT B
DRAWING TITLE	OVERALL LAYOUT

DRAWING No. 18012-P2-03	SCALE 1:20
CONTRACT No. SKB/3/1-07/2022/23	REVISION No. 0
	SHEET No. SHEET 1 OF 1

1. EXCAVATION MUST TAKE PLACE AFTER THE ENGINEER HAS ASSESSED AND CONFIRMED THAT WORKS MAY PROCEED.
2. THE OWNER OF THE ROAD (ROAD AGENCIES) MUST GIVE PERMISSION TO EXCAVATE.
THE REPRESENTATIVE TO VISIT SITE BEFORE EXCAVATIONS CAN TAKE PLACE.
ALL BACKFILLING AND COMPACTION MUST BE DONE TO ROAD OWNER STANDARDS.



A	02/2022	FOR TENDER	J/M	
No	DATE	REVISION	CONSULT	DIR

NOTES

STAMP

DESIGNED BY	J.M
CHECKED BY	A.C
DRAWN BY	O.S
CHECKED BY	F.M
SIGNATURE	

CONSULTANT



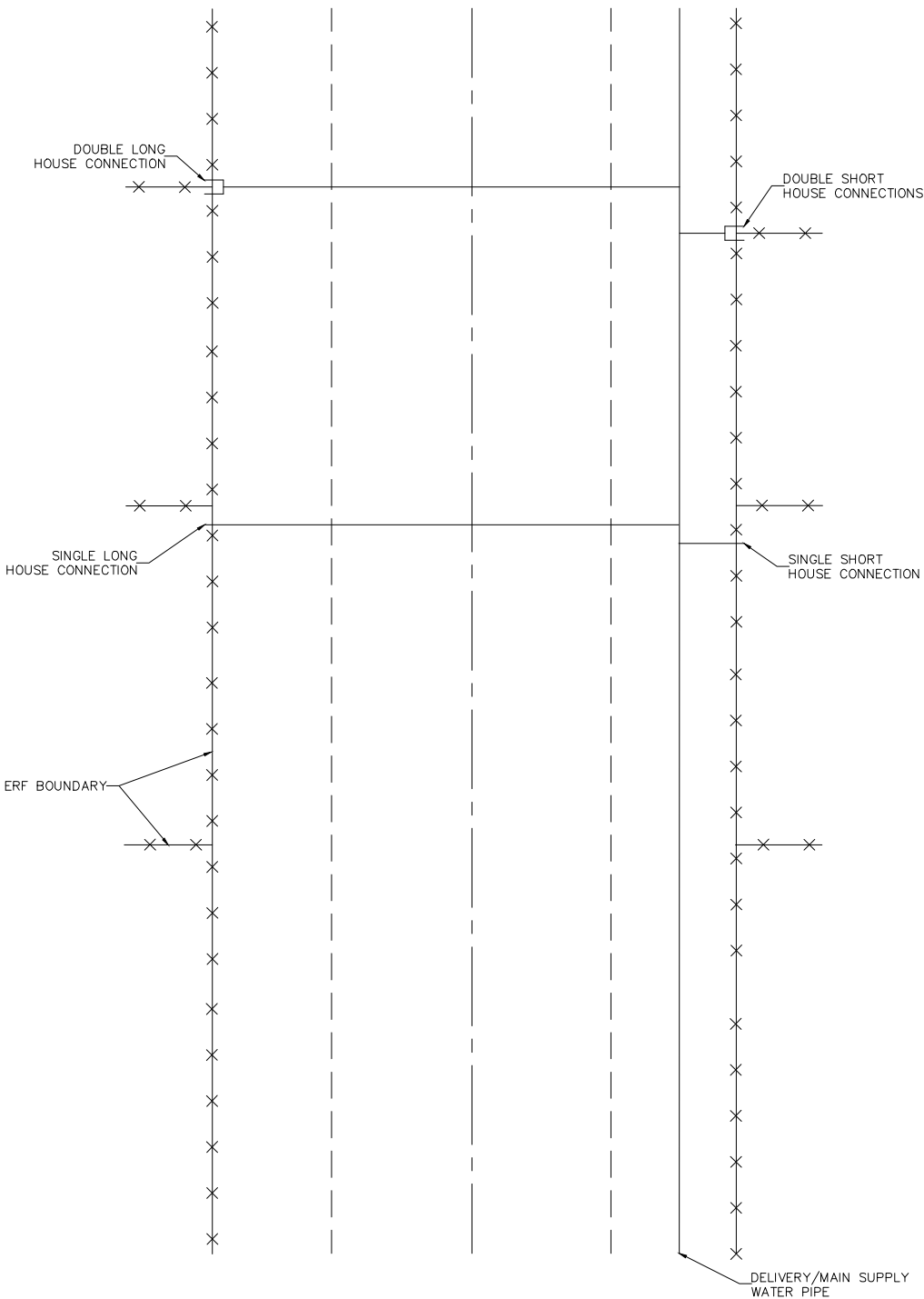
24A RISSIK STREET
POLOKWANE
0700

TEL: 015 297 5906
FAX: 086 246 0744
EMAIL: admin@hiwaeng.co.za

PROJECT NAME
DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J
DRAWING TITLE
ROAD CROSSING

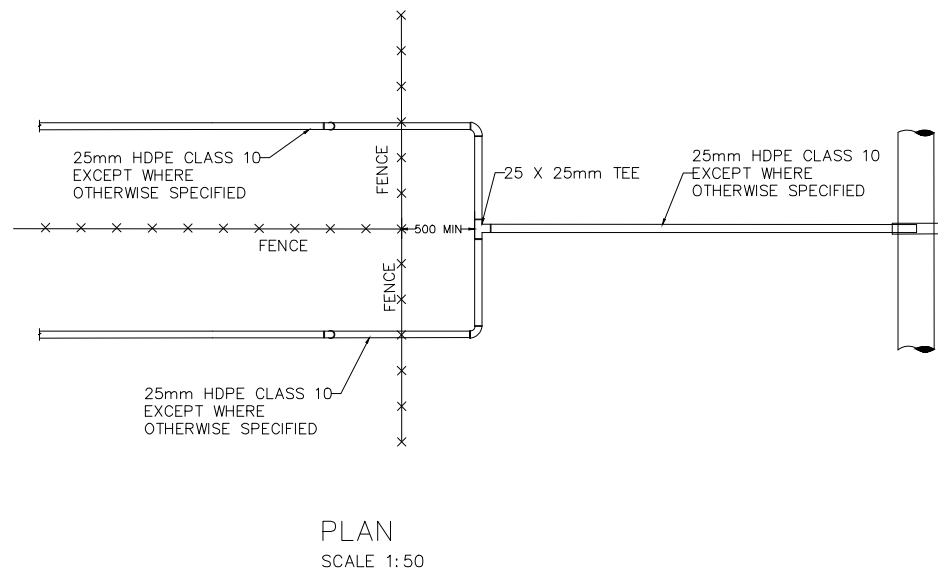
DRAWING No. 21008-P2B-04	SCALE AS SHOWN
	REVISION No. A
CONTRACT No. SKB/3/1-07/2022/23	SHEET No. SHEET 1 OF 1

1. 25mm ND 90° HDPE ELBOW (4 NO)
2. 25mm ND HDPE PIPE 250mm LONG
3. 25mm ND HDPE ADAPTOR (1 No.)
4. 25mm ND HDPE PIPE 900mm LONG



TYPICAL POSITIONS OF DOUBLE AND SINGLE HOUSE CONNECTIONS

SCALE 1:30



A	02/2022	FOR TENDER		J.M	
No	DATE	REVISION		CONSULT	DIR

NOTES

STAMP	
-------	--

DESIGNED BY	J.M
CHECKED BY	A.C
DRAWN BY	B.M
CHECKED BY	F.M
SIGNATURE	*****

CLIENT	
SEKHUKHUNE DISTRICT MUNICIPALITY	TEL: 013 262 7300
3 WEST STEET	FAX: 013 262 3688
GROBLERSDAL	
0490	

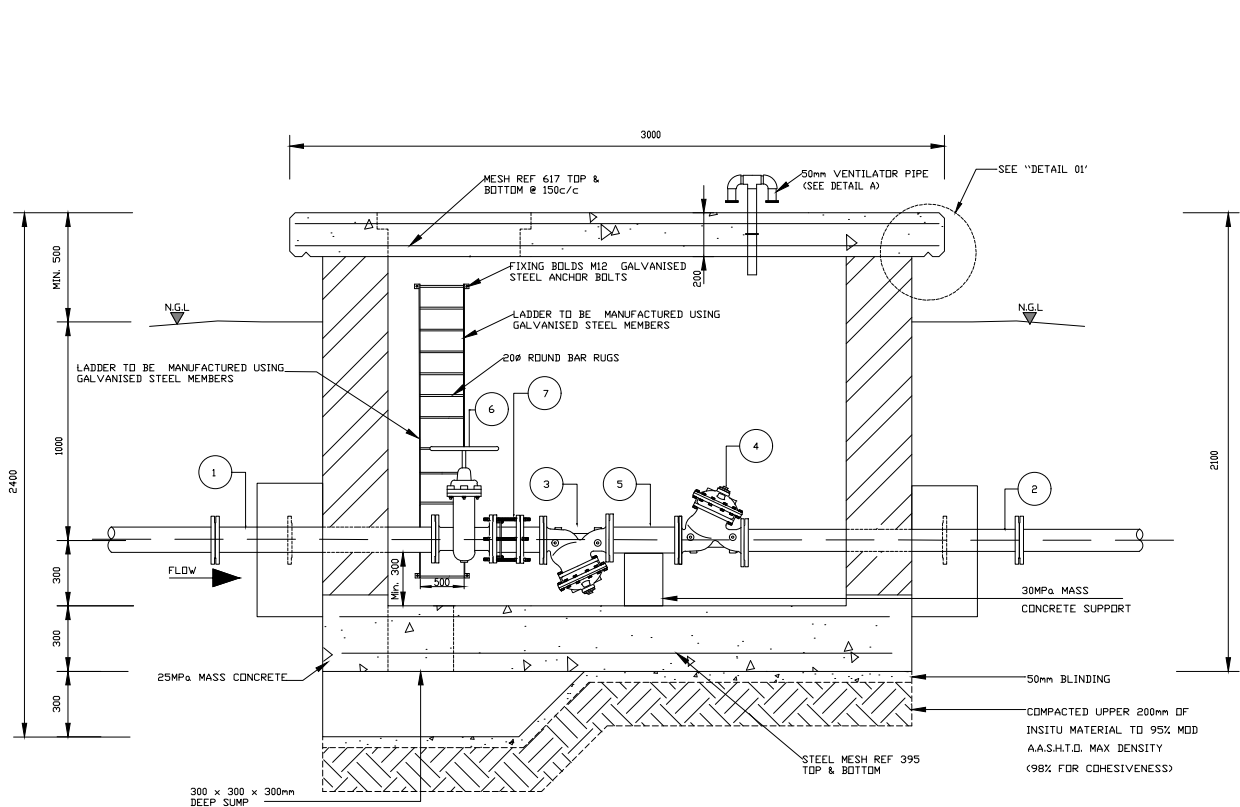
CONSULTANT


HWA
Engineering & Construction

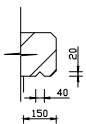
24A RISSIK STREET TEL: 015 297 5906
POLDKWANE FAX: 086 246 0744
0700 EMAIL: admin@hweng.co.za

PROJECT NAME	DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) – CONTRACT J
DRAWING TITLE	DETAILS OF YARD CONNECTION

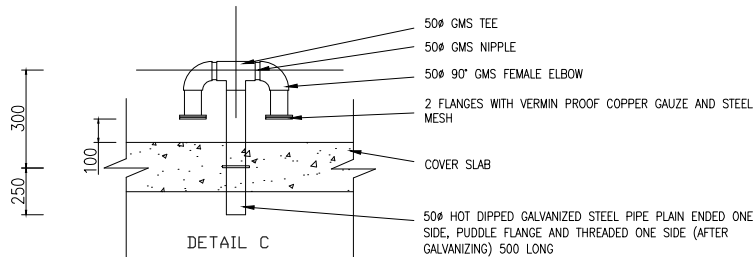
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	REVISION No. A
CONTRACT No SKB/3/1-07-2022/23	SHEET No. SHEET 1 OF 1



SECTION A-A
SCALE 1:25



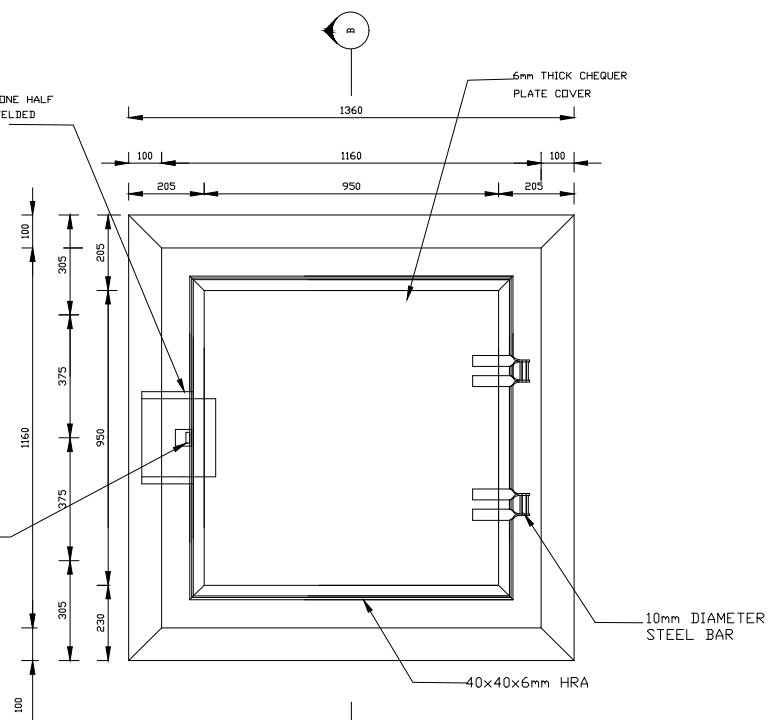
DETAIL 01
SCALE 1:10



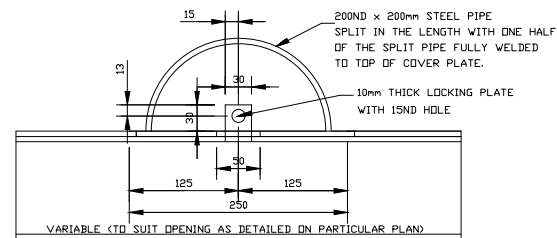
DETAIL C
VENTILATOR
SCALE 1:15

200ND x 200mm STEEL PIPE
SPLIT IN THE LENGTH WITH ONE HALF
OF THE SPLIT PIPE FULLY WELDED
TO TOP OF COVER PLATE.

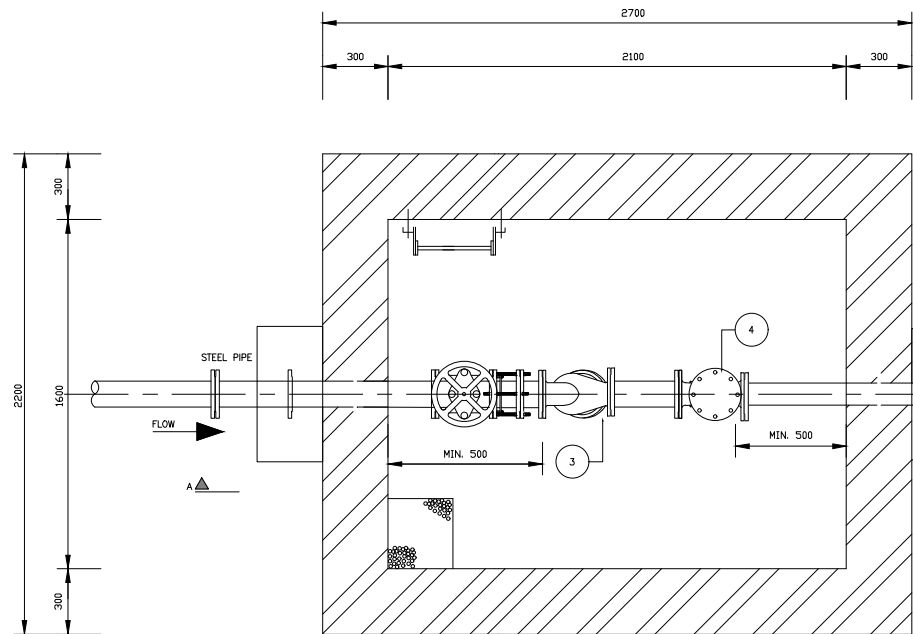
10mm THICK LOCKING PLATE
WITH 15ND HOLE



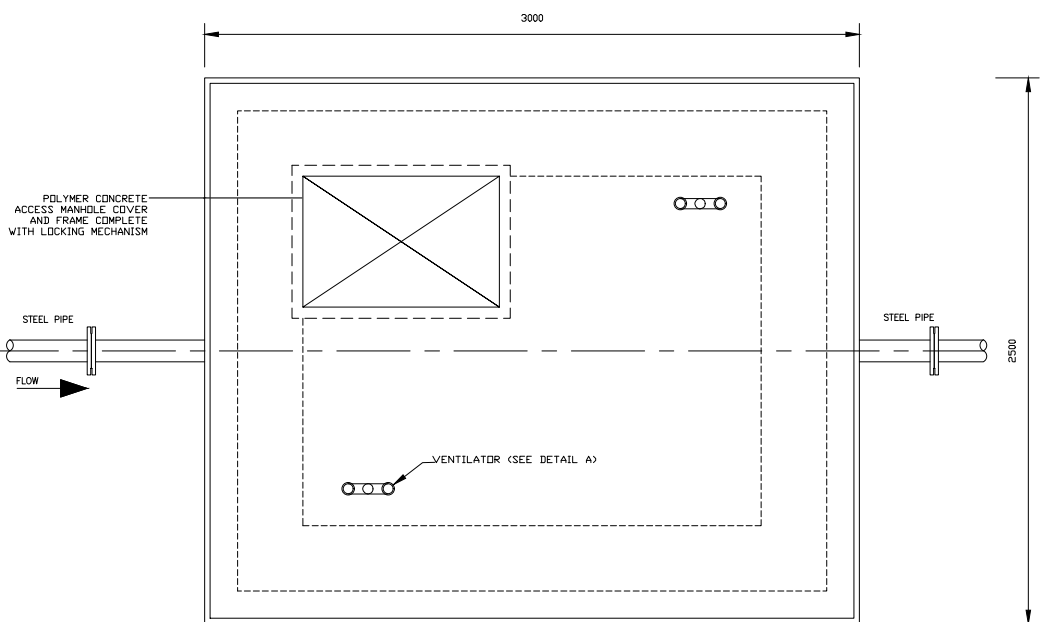
PLAN
SCALE 1:25
DETAIL OF MANHOLE COVER



VIEW B
SCALE 1:5



SECTIONAL PLAN
SCALE 1:25



STRAINER VALVE CHAMBER PLAN
SCALE 1:25

GENERAL NOTES:

1. ALL FLANGES TO BE DRILLED TO SABS 1123 TABLE 1600.
2. CONCRETE SLABS CLASS 25/19
3. ALL EXPOSED CORNERS TO BE CHAMFERED 25mm
4. COVER TO ALL REINFORCEMENT- 40mm MIN.
5. ALL STEELWORK TO BE HOT-DIPPED GALVANIZED TO SABS- ISO 1461 1999.
6. AIR VENTILATION HOLES MUST BE COVERED ON THE INSIDE WITH EXPANDED SHEETING 'MENTAX' HAVING A MAXIMUM 8x10mm OPENINGS 2mm WIDE x 1mm THICK STRANDS. THE SHEETING SHOULD BE INSTALLED WITH 6mm DIAMETER SCREWS AND PLUGS.
7. ALL STEEL PIPES AND PIPE SECTIONS TO BE MILD STEEL TO SABS 62 MEDIUM DUTY - WITH FLANGES TO SABS 1123. THE PIPE SECTIONS TO BE PROTECTED BY EITHER HOT-DIP GALVANIZING (TO SABS- ISO 1461: 1999) OR BY INTERNAL AND EXTERNAL COATING WITH KSIR 88 EPOXY COATING (THREE LAYERS OF 125micron EACH).
8. ALL UNDER GROUND STEEL FITTINGS AND GALVANIZED PIPES TO BE PROTECTED AGAINST CORROSION BY WRAPPING IT IN DENSOTAPE WITH 55 OVERLAPPING.

MATERIAL SCHEDULE - DN150 FLOW VALVE CHAMBER					
ITEM No.	SIZE (mm)	QTY.	MATERIAL	DESCRIPTION	STEEL GRADE
1	ND 150	01	STEEL PIPE	1010mm LONG STEEL PIPE WITH PUDDLE FLAGE. BOTH END FLANGED SABS 1123-2500/3	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
2	ND 150	01	STEEL PIPE	1260mm LONG STEEL PIPE WITH PUDDLE FLAGE. BOTH END FLANGED SABS 1123-2500/3	
3	ND 150	01	STANDARD ITEM	DN100 STRAINER VALVE (SV)	
4	ND 150	01	STANDARD ITEM	DN100 FLOW CONTROL VALVE	
5	ND 150	01	STEEL PIPE	300mm LONG STEEL PIPE WITH BOTH ENDS FLANGED BOTH ENDS	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
6	ND 150	01	GATE VALVE	STANDARD ITEM	
7	ND 150	01	V/J COUPLING	STANDARD ITEM	

TABLE 16

MATERIAL SCHEDULE - DN100 FLOW VALVE CHAMBER					
ITEM No.	SIZE (mm)	QTY.	MATERIAL	DESCRIPTION	STEEL GRADE
1	ND 100	01	STEEL PIPE	1010mm LONG STEEL PIPE WITH PUDDLE FLAGE. BOTH END FLANGED SABS 1123-2500/3	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
2	ND 100	01	STEEL PIPE	1260mm LONG STEEL PIPE WITH PUDDLE FLAGE. BOTH END FLANGED SABS 1123-2500/3	
3	ND 100	01	STANDARD ITEM	DN100 STRAINER VALVE (SV)	
4	ND 100	01	STANDARD ITEM	DN100 FLOW CONTROL VALVE	
5	ND 100	01	STEEL PIPE	300mm LONG STEEL PIPE WITH BOTH ENDS FLANGED BOTH ENDS	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
6	ND 100	01	GATE VALVE	STANDARD ITEM	
7	ND 100	01	V/J COUPLING	STANDARD ITEM	

TABLE 16

MATERIAL SCHEDULE - DN80 STRAINER VALVE CHAMBER					
ITEM No.	SIZE (mm)	QTY.	MATERIAL	DESCRIPTION	STEEL GRADE
1	ND 80	01	STEEL PIPE	1010mm LONG STEEL PIPE WITH PUDDLE FLAGE. BOTH END FLANGED SABS 1123-2500/3	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
2	ND 80	01	STEEL PIPE	1260mm LONG STEEL PIPE WITH PUDDLE FLAGE. BOTH END FLANGED SABS 1123-2500/3	
3	ND 80	01	STANDARD ITEM	DN80 STRAINER VALVE (SV)	
4	ND 80	01	STANDARD ITEM	DN80 FLOW CONTROL VALVE	
5	ND 80	01	STEEL PIPE	300mm LONG STEEL PIPE WITH BOTH ENDS FLANGED BOTH ENDS	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
6	ND 80	01	GATE VALVE	STANDARD ITEM	
7	ND 80	01	V/J COUPLING	STANDARD ITEM	

TABLE 16

No	DATE	REVISION	CONSULT	DIR
A	02/2022	FOR TENDER	F.M	

NOTES

DESIGNED BY	F.M
CHECKED BY	A.C
DRAWN BY	T.T
CHECKED BY	F.M

CLIENT



TEL: 013 262 7300
FAX: 013 262 3688

CONSULTANT



TEL: 015 297 5906
FAX: 086 246 0744
EMAIL: sdh@hwaeng.co.za

PROJECT NAME

DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMD-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J

DRAWING TITLE

FLOW CONTROL VALVE DETAILS

DRAWING No.

21008-P2B-08

REVISION No.

A

SHEET No.

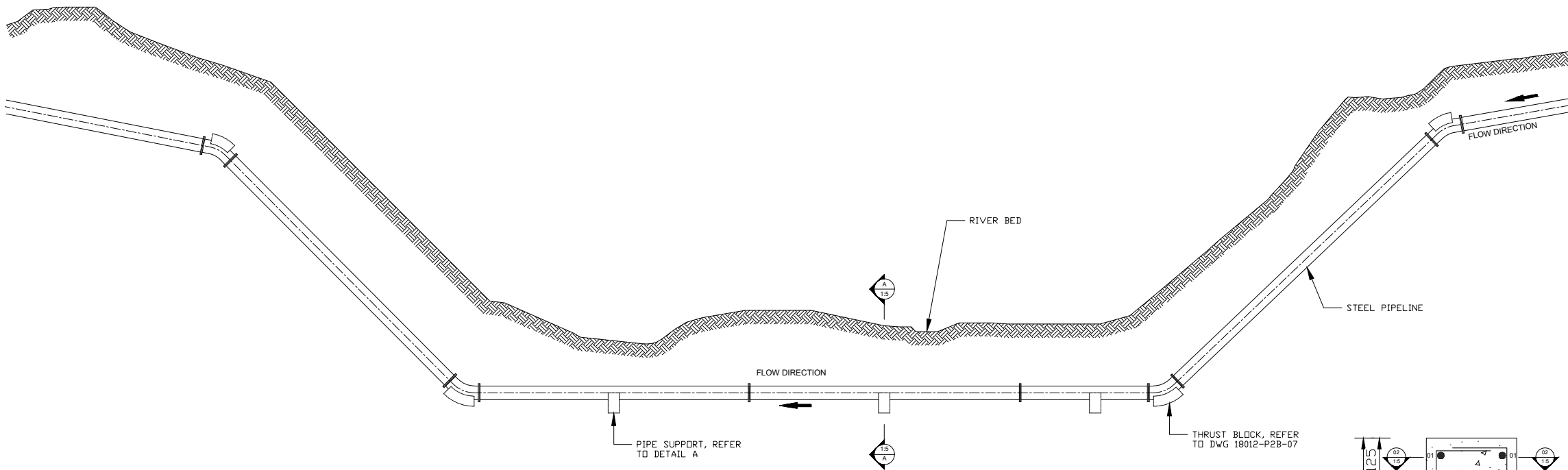
SHEET 1 OF 1

SCALE

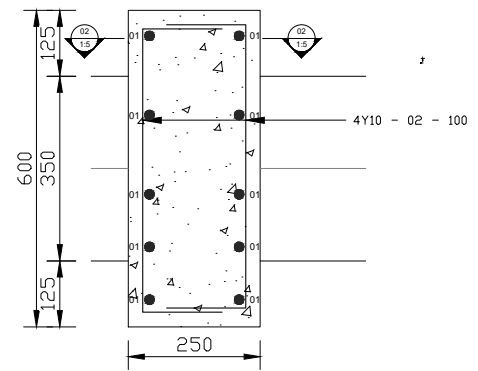
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CONTRACT No.

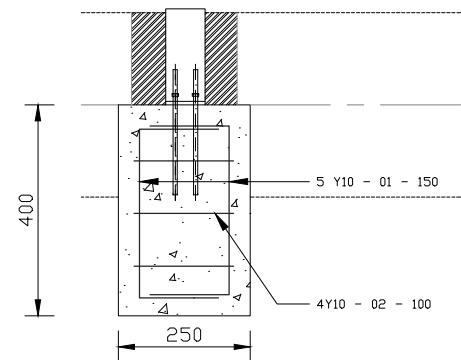
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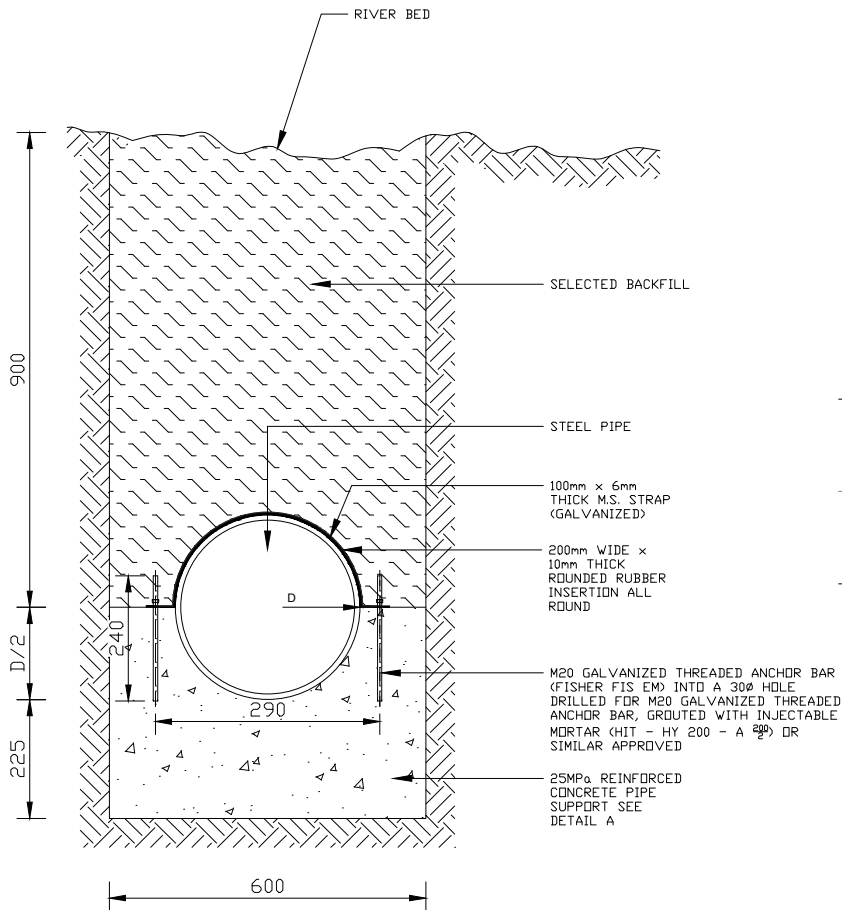
TYPICAL RIVER CROSSING DETAIL (BELOW RIVER BED)
SCALE 1:40



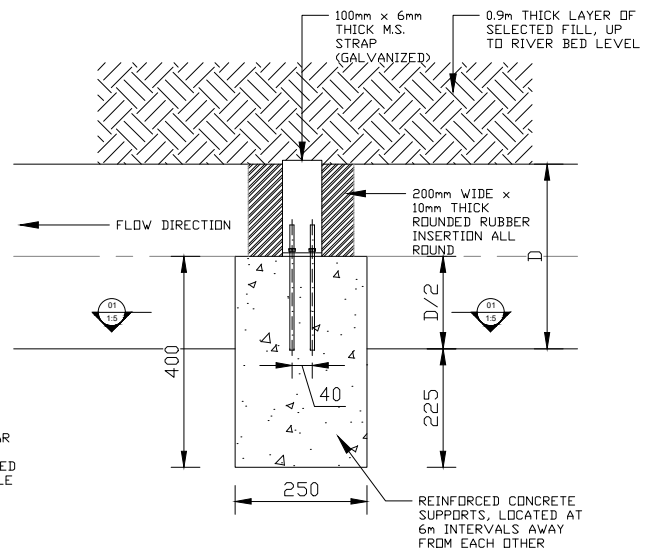
SECTION 01 - 01
SCALE 1:5



SECTION 02 - 02
SCALE 1:5



SECTION A - A
SCALE 1:5



DETAIL A
SCALE 1:5

BENDING SCHEDULE

REFERENCE	BAR MARK	TYPE & SIZE	No EACH	TOTAL No	TOTAL LENGTH	SHAPE CODE	DIMENSIONS				
							A	B	C	D	E
RIVER CROSSING SUPPORTS	01	Y10	10	400	660	38	170	320	<SPACING 150mm C/C>		
	02	Y10	08	320	860	38	170	520	<SPACING 100mm C/C>		

- NOTE:
1. THE TYPE OF CROSSING TO BE USED WHERE THE PROPOSED BULK WATER SUPPLY PIPELINE CROSSES A WATERCOURSE SHALL BE TO THE APPROVAL OF THE ENGINEER.
 2. NECESSITY FOR THE ROCK ANCHORS SHALL BE DECIDED BY THE ENGINEER.
 3. ALL CONCRETE IS TO BE REINFORCED AS SHOWN ON THE STEEL BENDING SCHEDULES IN THIS DRAWING.
 4. ALL CONCRETE SHALL CONSIST OF DOLOMITIC AGGREGATE WITH SULPHATE RESISTING CEMENT.
 5. MINIMUM COVER TO REINFORCEMENT = 40mm
 6. MILD STEEL PIPES SHALL COMPLY WITH SANS 719, GRADE B, FLANGED BOTH ENDS, COATED AND LINED AS SPECIFIED, STRICTLY IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. MINIMUM WALL THICKNESS TO BE 4.5mm UNLESS SPECIFIED OTHERWISE.
 7. STEEL PIPES TOGETHER WITH COUPLINGS, WHICH ARE IN CONTACT WITH SOIL, SHALL BE WRAPPED WITH DENSOPOL 80 HT OR AN APPROVED EQUIVALENT.
 8. ALL PIPE MATERIAL, TYPE AND SIZE TO BE CONFIRMED WITH THE ENGINEER PRIOR TO THE ORDERING OF ANY MATERIAL.
 9. CORROSION PROTECTION SYSTEM OF STEEL FITTINGS IN SOIL-VOID FILLING PUTTY WITH CORROSION PROTECTION TAPE AND PVC OUTER WRAP DEMO (PROFILING MASTIC ,PETROLATUM TAPE AND CLINGWRAP ,STOPAQ (4100 PUTTY,WRAPPING = BOND CZH AND OUTERWRAP PVC) OR SIMILAR APPROVED

NOTES				STAMP				DESIGNED BY: F.M. CHECKED BY: A.C. DRAWN BY: T.N. CHECKED BY: J.M. APPROVED BY: ALEX CHIUSWA SIGNATURE: _____				CLIENT: SEKHUKHUNE DISTRICT MUNICIPALITY 3 WEST STREET GROBLERSDAL 0490 TEL: 013-262 7300 FAX: 013-262 3688				CONSULTANT: HWA 24A RISSIK STREET POLKWANE 0700 TEL: 015 297 5906 FAX: 086 246 0744 EMAIL: achi@hwaeng.co.za				PROJECT NAME: DE-HOOP/MALEKANA WATER SCHEME(FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J DRAWING TITLE: RIVER CROSSING DETAILS				DRAWING No. 21008-P2B-09 CONTRACT No. SK8/3/1-07/2022/23		SCALE AS SHOWN REVISION No. A SHEET No. SHEET 1 OF 2	
A 02/2022 FDR TENDER F.M.																											
No DATE REVISION CONSULT DIR																											



BENDING SCHEDULE

PROJECT NAME

PROJECT NAME	DE-HOOP/MALEKANA WATER SCHEME(FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) CONTRACT A
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DRAWING TITLE	MALEKANA RIVER CROSSING DETAILS
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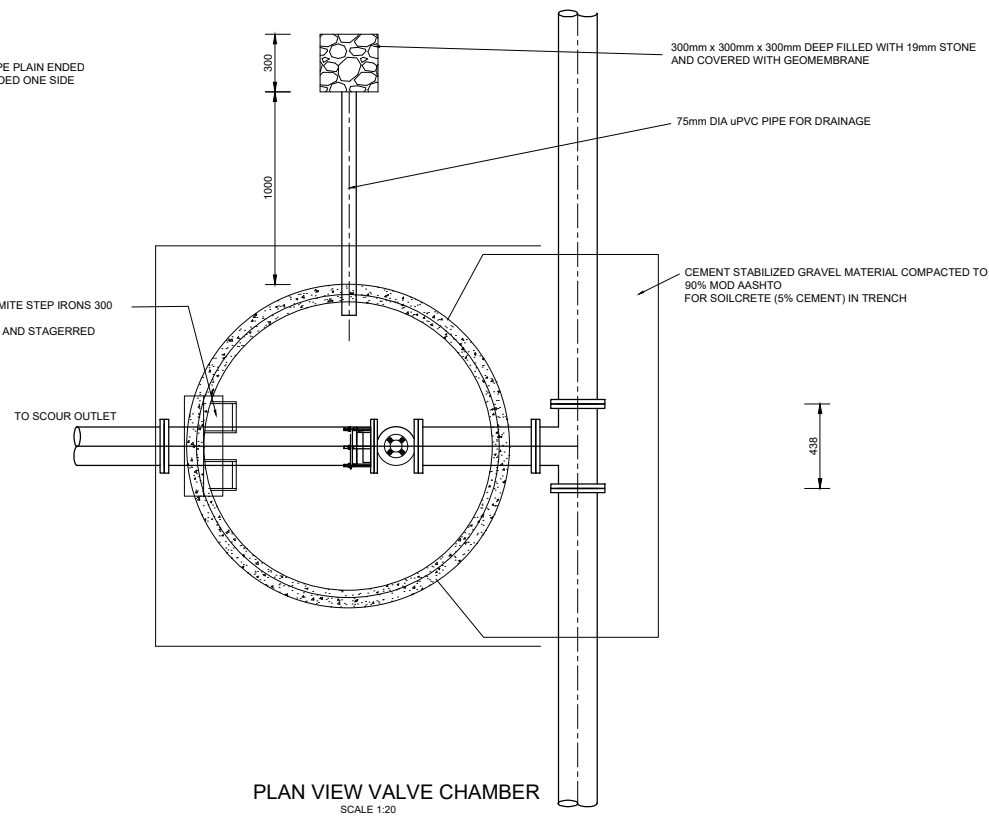
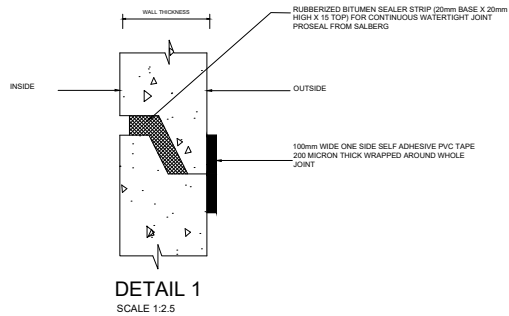
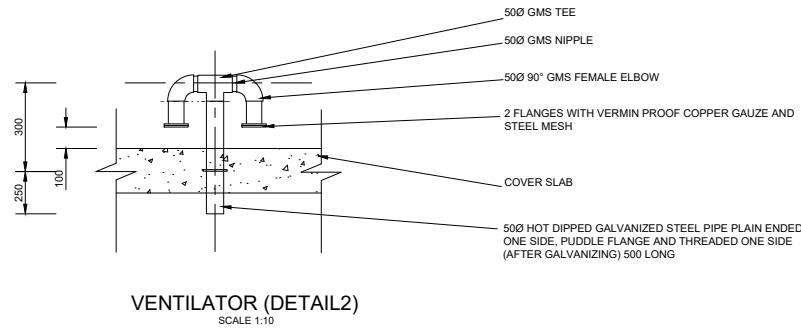
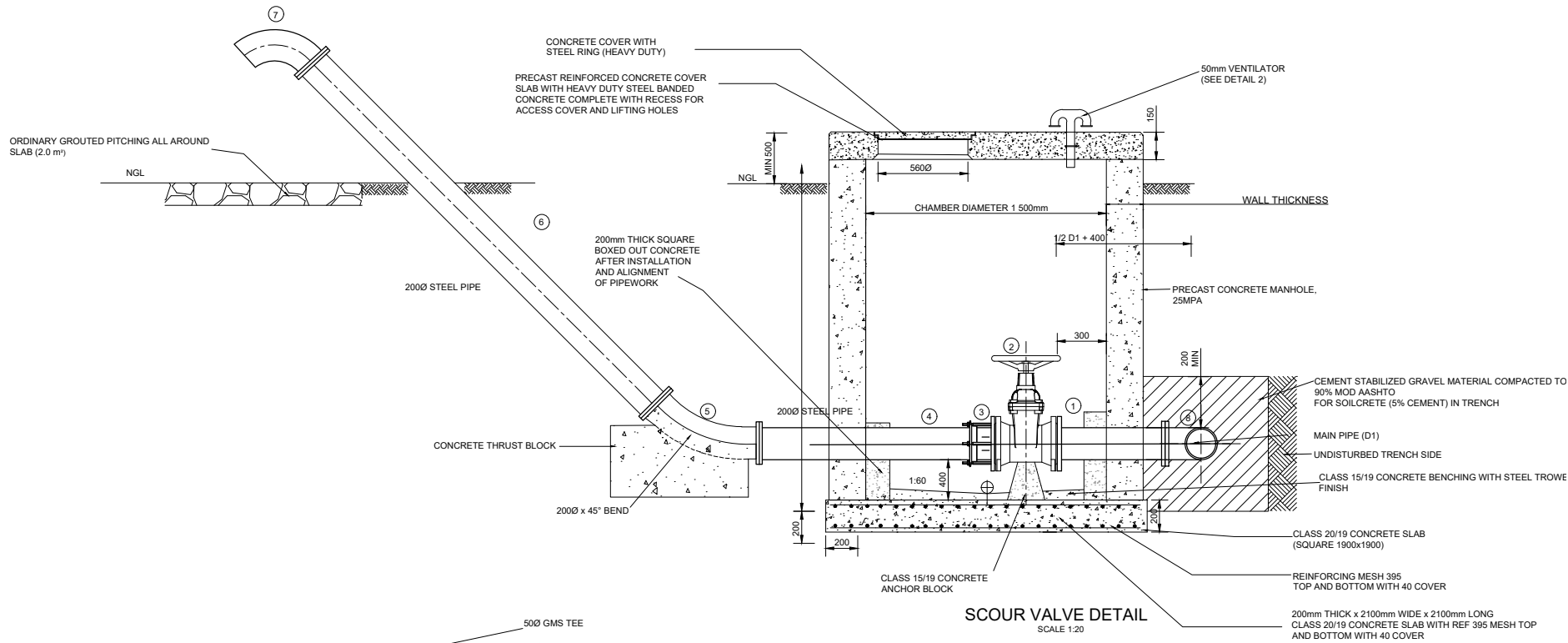
DRAWING No. 21008-P2B-09	SCALE AS SHOWN
	REVISION No. 0
CONTRACT No. SK8/31-07/2022/23	SHEET No. SHEET 2 OF 2

NOTE:

1. THE TYPE OF CROSSING TO BE USED WHERE THE PROPOSED BULK WATER SUPPLY PIPELINE CROSSES A WATERCOURSE SHALL BE TO THE APPROVAL OF THE ENGINEER.
2. NECESSITY FOR THE ROCK ANCHORS SHALL BE DECIDED BY THE ENGINEER.
3. ALL CONCRETE IS TO BE REINFORCED AS SHOWN ON THE STEEL BENDING SCHEDULES IN THIS DRAWING.
4. ALL CONCRETE SHALL CONSIST OF DOLOMITIC AGGREGATE WITH SULPHATE RESISTING CEMENT.
5. MINIMUM COVER TO REINFORCEMENT = 40mm
6. MILD STEEL PIPES SHALL COMPLY WITH SANS 719, GRADE B, FLANGED BOTH ENDS, COATED AND LINED AS SPECIFIED, STRICTLY IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. MINIMUM WALL THICKNESS TO BE 4.5mm UNLESS SPECIFIED OTHERWISE.
7. STEEL PIPES TOGETHER WITH COUPLINGS, WHICH ARE IN CONTACT WITH SOIL, SHALL BE WRAPPED WITH BENSOPOL 80 HT OR AN APPROVED EQUIVALENT.
8. ALL PIPE MATERIAL, TYPE AND SIZE TO BE CONFIRMED WITH THE ENGINEER PRIOR TO THE ORDERING OF ANY MATERIAL.
9. CORROSION PROTECTION SYSTEM OF STEEL FITTINGS IN SOIL/VOID FILLING PUTTY WITH CORROSION PROTECTION TAPE AND PVC OUTER

PIPE FITTING SCHEDULE (Ø100) MAIN PIPE (D1)						
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	MATERIAL	STEEL GRADE	FLANGE DRILLING
1	2	Ø100mm STEEL PIPE, x 623mm LONG, FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	TABLE 16
2	1	Ø100mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM		
3	1	Ø100mm VJ COUPLING		STANDARD ITEM		
4	1	Ø100mm STEEL PIPE, x 1245mm LONG FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
5	1	Ø100mm 45° BEND FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
6	1	Ø100mm STEEL PIPE MIN 1500mm LONG FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
7	1	Ø100mm X 90° STEEL PIPE BEND FLANGE ONE END		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
8	1	D1 x Ø100mm TEE, 286mm x 143mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	

PIPE FITTING SCHEDULE (Ø150) MAIN PIPE (D1)						
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	MATERIAL	STEEL GRADE	FLANGE DRILLING
1	2	Ø150mm STEEL PIPE, x 623mm LONG, FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	TABLE 16
2	1	Ø150mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM		
3	1	Ø150mm VJ COUPLING		STANDARD ITEM		
4	1	Ø150mm STEEL PIPE, x 1245mm LONG FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
5	1	Ø150mm 45° BEND FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
6	1	Ø150mm STEEL PIPE MIN 1500mm LONG FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
7	1	Ø150mm X 90° STEEL PIPE BEND FLANGE ONE END		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
8	1	D1 x Ø150mm TEE, 286mm x 143mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	



No	DATE	REVISION	CONSULT	DIR
A	02/2022	FOR TENDER	J.M	

NOTES

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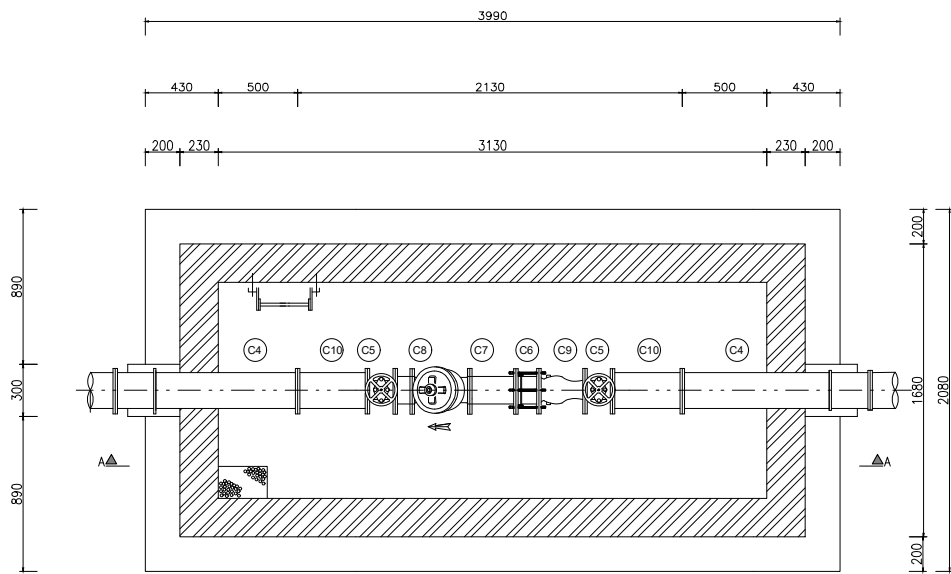
DESIGNED BY	F.M
CHECKED BY	A.C
DRAWN BY	S.L
CHECKED BY	A.C
SIGNATURE	

CLIENT	SEKHUKHUNE DISTRICT MUNICIPALITY 3 WEST STREET GRIDLERSDAL 6490	TEL: 013-262 7300 FAX: 013-262 3688
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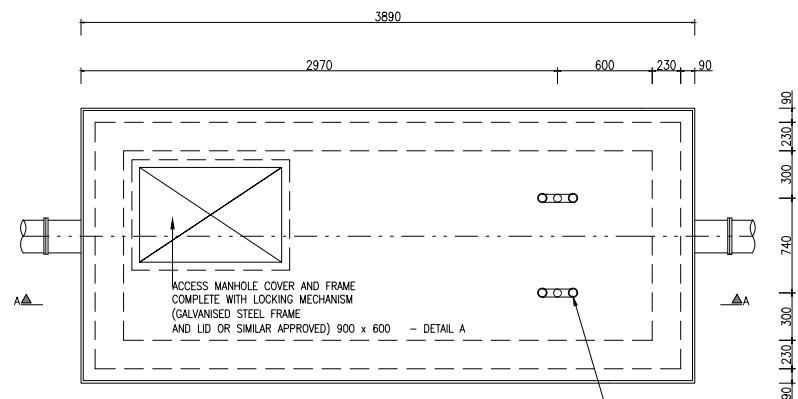
CONSULTANT	HWA 24A RISSIK STREET POLDKWANE 6708	TEL: 015 297 5906 FAX: 086 246 0744 EMAIL: sdn@hwaeng.co.za
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PROJECT NAME	DE HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J
DRAWING TITLE	SCOUR VALVE DETAILS

DRAWING No.	21008-P2B-10	SCALE	AS SHOWN
CONTRACT No	SKB/3/1-07/2022/23	REVISION No.	A
		SHEET No.	1 OF 1



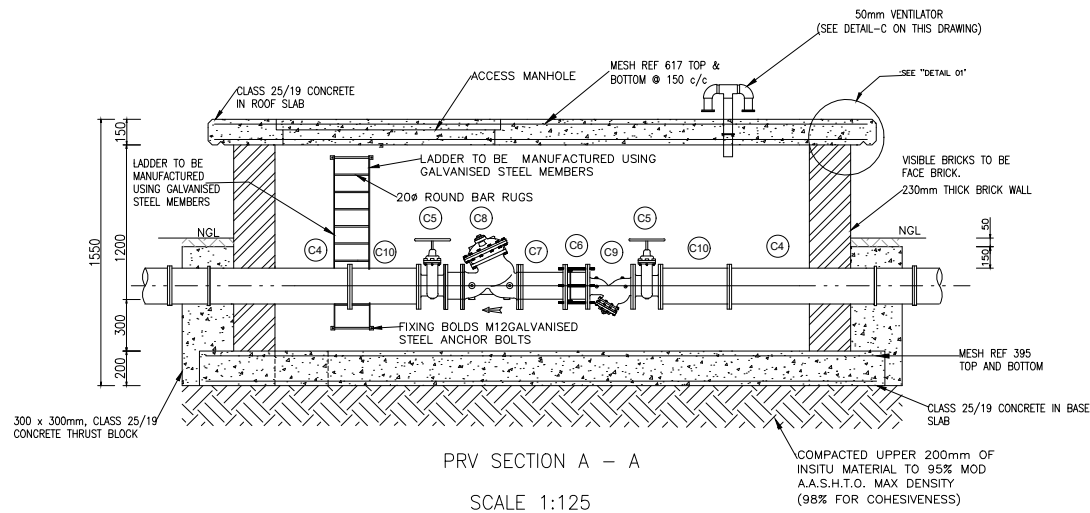
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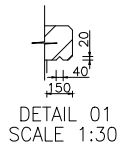
WATER METER ROOF PLAN
SCALE 1:125

NOTES:

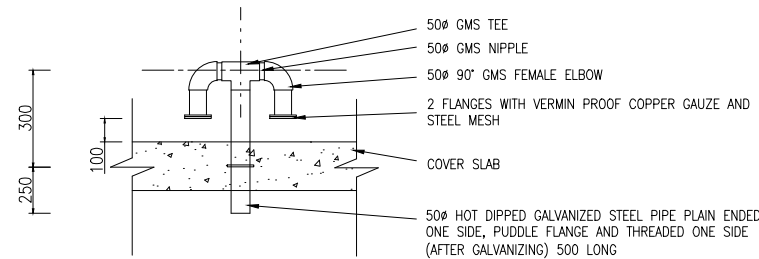
1. ALL STEEL PIPEWORK UP TO 150mm NB SHALL BE MEDIUM DUTY COMPLYING WITH SABS 62 (HOT DIP GALVANISED TO SABS ISO 1461).
2. 20mm THICK FLEXIJUNT OR APPROVED EQUIVALENT SHALL BE PROVIDED BETWEEN PIPELINE AND BRICKWORK.
3. ALL BRICKWORK SHALL BE 230mm THICK AND LAID IN STRETCHER BOND. VISIBLE BRICKS ON OUTSIDE OF CHAMBER SHALL BE FACE BRICK. REMAINING BRICK SHALL BE NON-FACING, HARD BURNT ENGINEERING GRADE BRICKS TO SABS 227.
5. BRICK FORCE TO BE PROVIDED ON EVERY THIRD LAYER.
6. TWO LAYERS OF DAMPROOF SHEETING SHALL BE PROVIDED BETWEEN THE ROOF SLAB AND BRICKWORK FOR ALL THE VALVE CHAMBERS.
7. ALL FLANGES SHALL COMPLY WITH SABS 1123 (1600/3)
8. BOLTS AND NUTS SHALL COMPLY WITH SABS 135.
9. ENGINEER TO CONFIRM DETAILS APPLICABLE FOR APPLICATION.



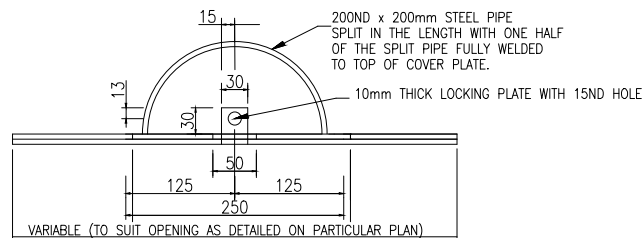
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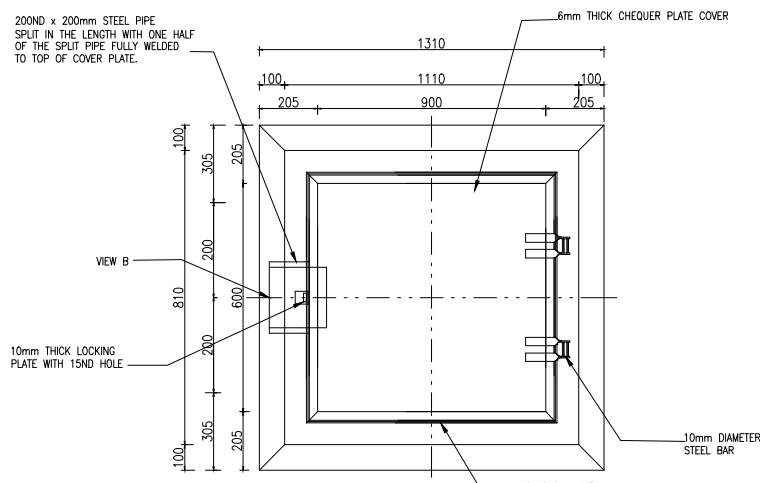
DETAIL 01
SCALE 1:30



DETAIL C
VENTILATOR
SCALE 1:80



VIEW B
DETAIL OF MANHOLE COVER
SCALE 1:30

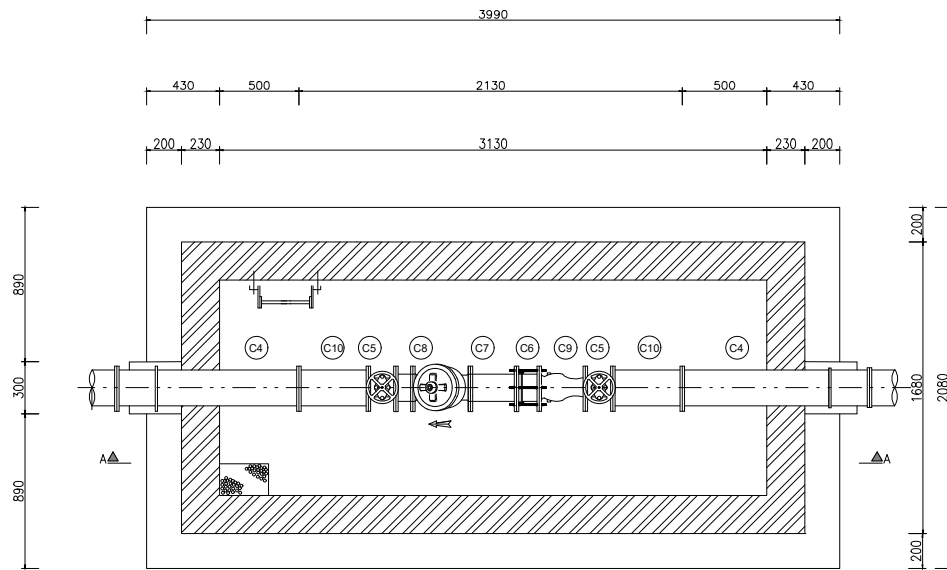


DETAIL A
DETAIL OF MANHOLE COVER
SCALE 1:80

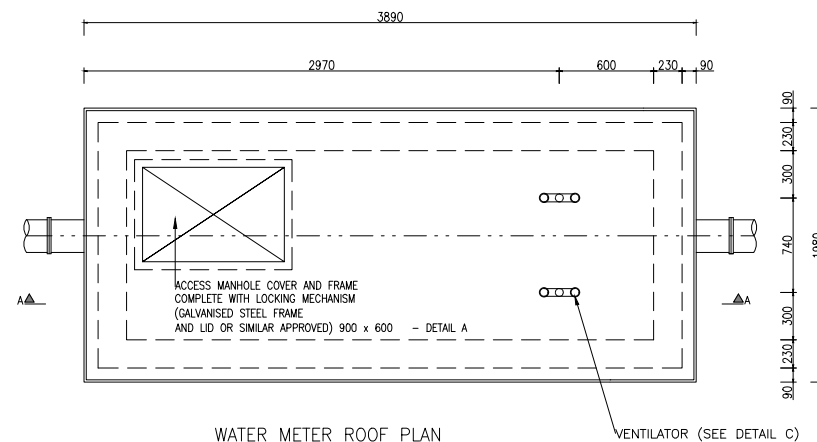
PIPE FITTING SCHEDULE					
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	MATERIAL	STEEL GRADE
C4	2	#50mm STEEL PIPE, x 1080mm LONG WITH PUDDLE FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
C5	2	#50mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM	
C6	1	VJ COUPLING		STANDARD ITEM	
C7	1	#50mm STEEL PIPE, x 410mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
C8	1	#50 BERMAND FLAT DISC PRESSURE REDUCING VALVE COMPLETE (OR SIMILAR APPROVED) PN25 WITH FLANGED ENDS.		STANDARD ITEM	
C9	1	#50mm STRAINER FLANGED BOTH ENDS		STANDARD ITEM	
C10	2	#50mm STEEL PIPE, 400mm LONG, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123

TABLE 16

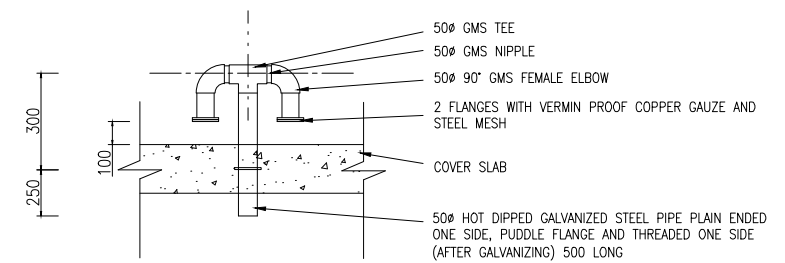
					NOTES	DESIGNED BY F.M		CLIENT  SEKHUKHUNE DISTRICT MUNICIPALITY 3 WEST STREET GRUBBERSDAL 0490 TEL: 013-262 7300 FAX: 013-262 3688	CONSULTANT  24A RISSIK STREET POLDKWANE 0700 TEL: 015 297 5906 FAX: 086 246 0744 EMAIL: admin@hwaeng.co.za		PROJECT NAME DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO TUBATSE LOCAL MUNICIPALITY) - CONTRACT J		DRAWING No. 21008-P2B-11		SCALE AS SHOWN	
						CHECKED BY A.C							REVISION No. A			
						DRAWN BY T.N										
						CHECKED BY A.C										
						APPROVED BY ALEX CHIUSWA										
						SIGNATURE										



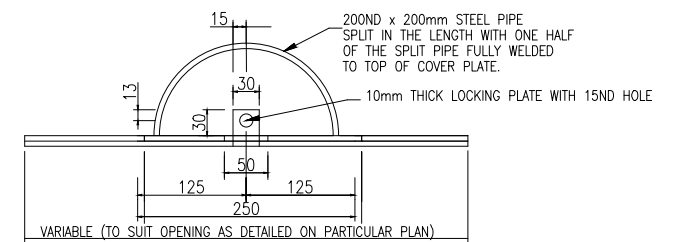
PRV PLAN SECTION
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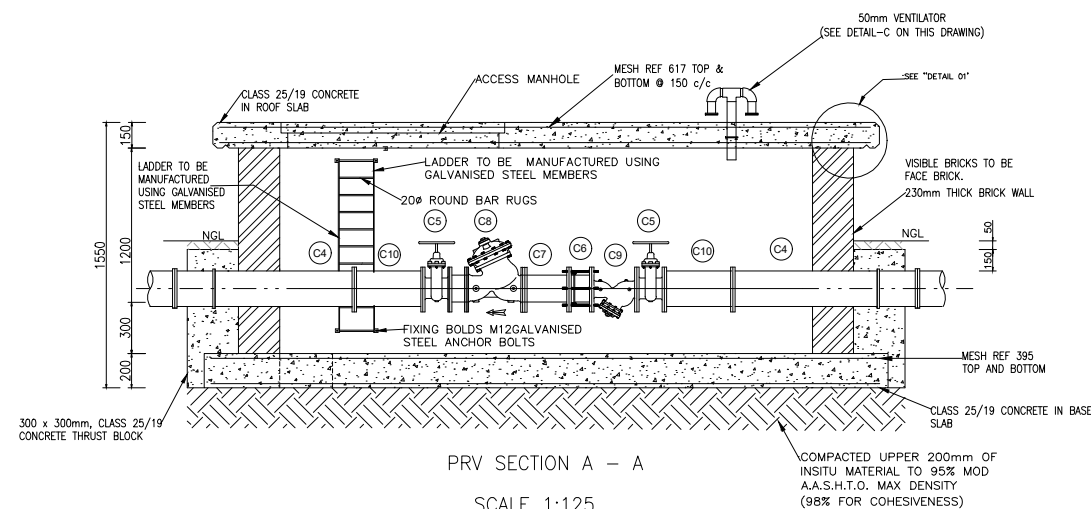
WATER METER ROOF PLAN
SCALE 1:125



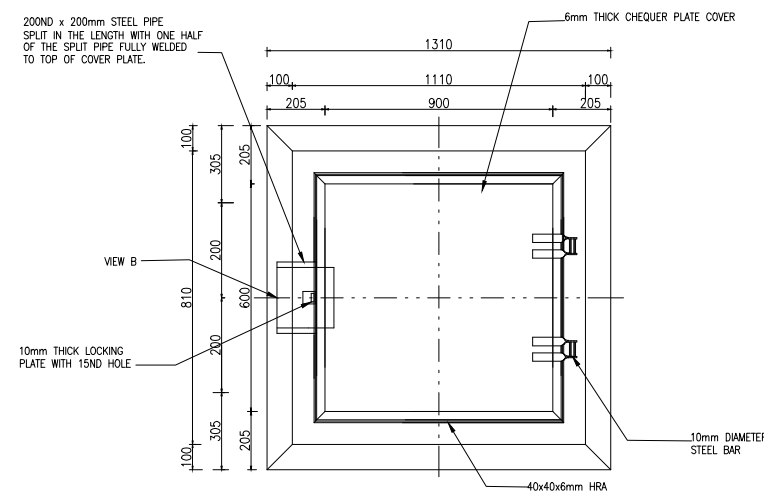
DETAIL C
VENTILATOR
SCALE 1:80



VIEW B
DETAIL OF MANHOLE COVER
SCALE 1:30



PRV SECTION A - A
SCALE 1:125



DETAIL A
DETAIL OF MANHOLE COVER
SCALE 1:80

PIPE FITTING SCHEDULE						
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	MATERIAL	STEEL GRADE	FLANGE DRILLING
C4	2	Ø65mm STEEL PIPE, x 1080mm LONG WITH PUDDLE FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	TABLE 18
C5	2	Ø65mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM		
C6	1	VJ COUPLING		STANDARD ITEM		
C7	1	Ø65mm STEEL PIPE, x 410mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
C8	1	Ø65 BERMANO FLAT DISC PRESSURE REDUCING VALVE COMPLETE (OR SIMILAR APPROVED) PRZS WITH FLANGED ENDS		STANDARD ITEM		
C9	1	Ø65mm STRAINER FLANGED BOTH ENDS		STANDARD ITEM		
C10	2	Ø65mm STEEL PIPE, 400mm LONG, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	

No	DATE	REVISION	CONSULT	DIR
A	02/2022	FOR TENDER	F.M	

NOTES

DESIGNED BY	F.M
CHECKED BY	A.C
DRAWN BY	T.N
CHECKED BY	A.C
APPROVED BY	ALEX CHIUSWA
SIGNATURE	

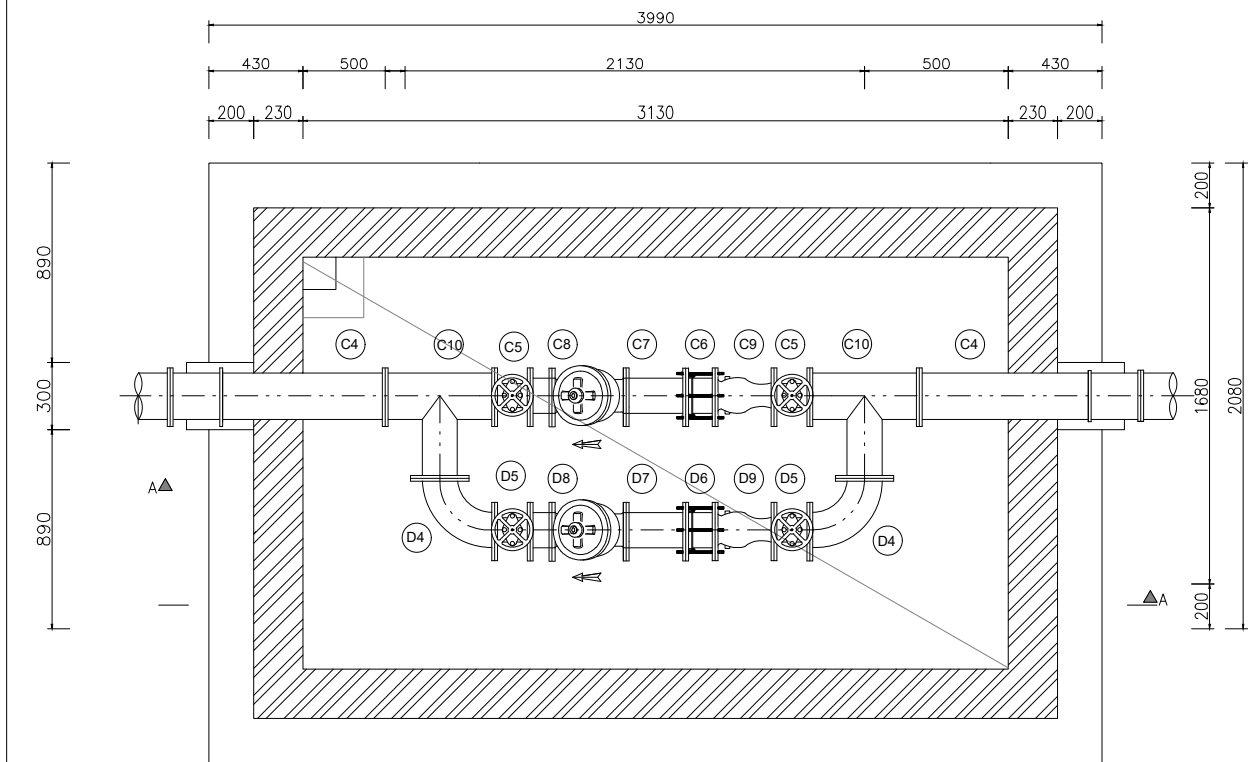
CLIENT
SEKHUKHUNE DISTRICT MUNICIPALITY 3 WEST STREET GROBLERSDAL 0490
TEL: 013-262 7300 FAX: 013-262 3688

CONSULTANT
24A REISSIK STREET POLDKOVANE 0700
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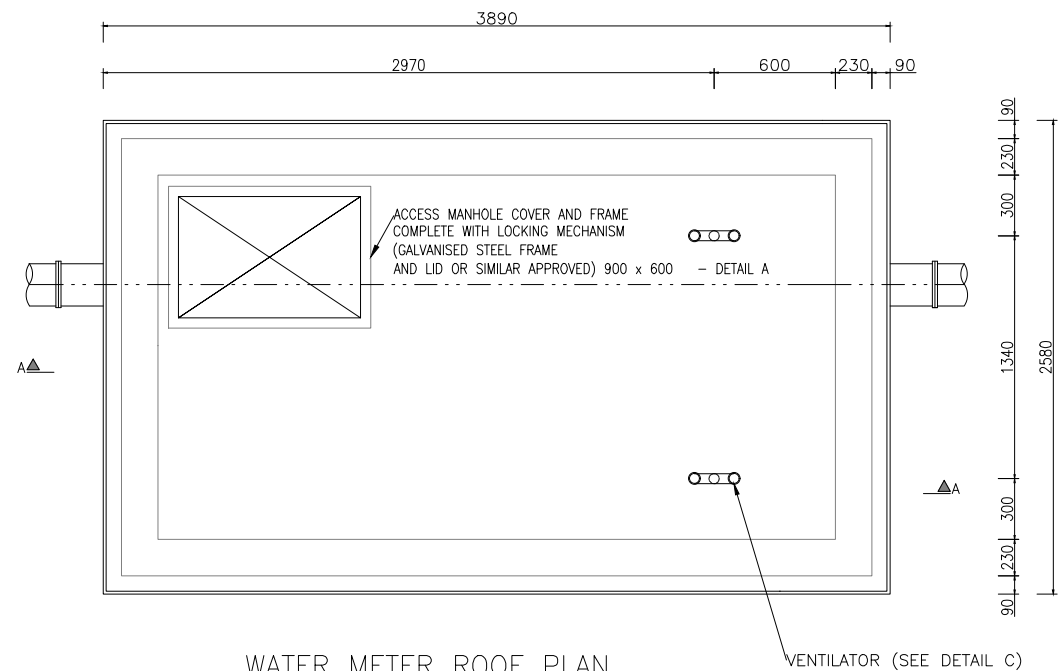
PROJECT NAME
DE-HDOP/MALEKANA WATER SCHEME (FETAKGOMO TUBATSE LOCAL MUNICIPALITY) - CONTRACT J
DRAWING TITLE
PRESSURE REDUCING VALVE CHAMBER LAYOUT

DRAWING No.	21008-P2B-11
CONTRACT No	SK8/3/1-07/2022/23

SCALE	AS SHOWN
REVISION No.	A
SHEET No.	SHEET 2 OF 4



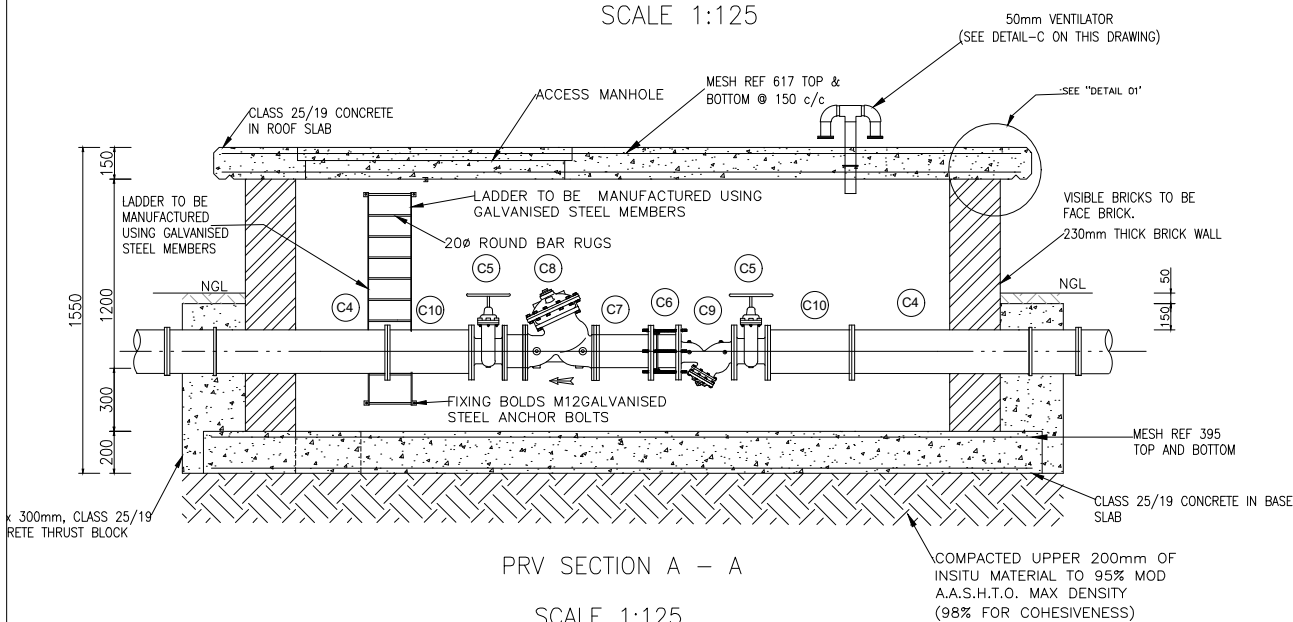
PRV PLAN SECTION
SCALE 1:125



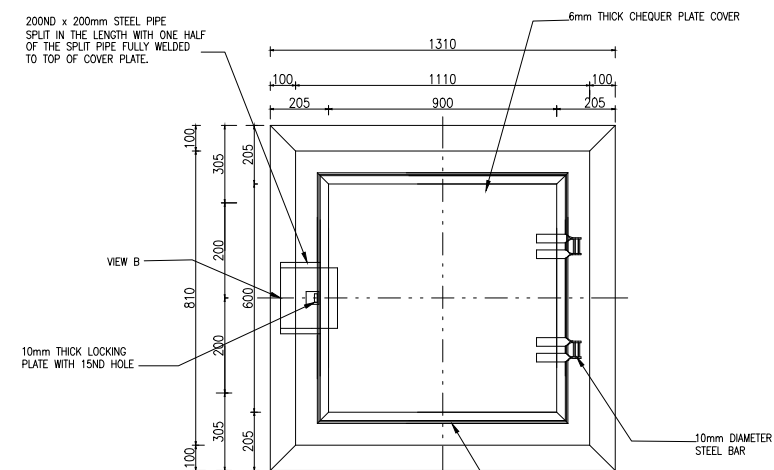
WATER METER ROOF PLAN
SCALE 1:125

NOTES:

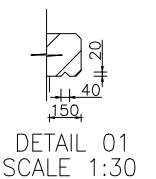
- ALL STEEL PIPEWORK UP TO 150mm NB SHALL BE MEDIUM DUTY COMPLYING WITH SABS 62 (HOT DIP GALVANISED TO SABS ISO 1461).
- 20mm THICK FLEXIJUNT OR APPROVED EQUIVALENT SHALL BE PROVIDED BETWEEN PIPELINE AND BRICKWORK.
- ALL BRICKWORK SHALL BE 230mm THICK AND LAID IN STRETCHER BOND. VISIBLE BRICKS ON OUTSIDE OF CHAMBER SHALL BE FACE BRICK. REMAINING BRICK SHALL BE NON-FACING, HARD BURNT ENGINEERING GRADE BRICKS TO SABS 227.
- BRICK FORCE TO BE PROVIDED ON EVERY THIRD LAYER. TWO LAYERS OF DAMPROOF SHEETING SHALL BE PROVIDED BETWEEN THE ROOF SLAB AND BRICKWORK FOR ALL THE VALVE CHAMBERS.
- ALL FLANGES SHALL COMPLY WITH SABS 1123 (1600/3)
- BOLTS AND NUTS SHALL COMPLY WITH SABS 135.
- ENGINEER TO CONFIRM DETAILS APPLICABLE FOR APPLICATION.



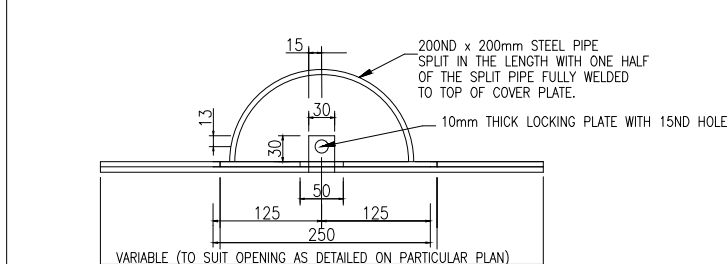
PRV SECTION A - A
SCALE 1:125



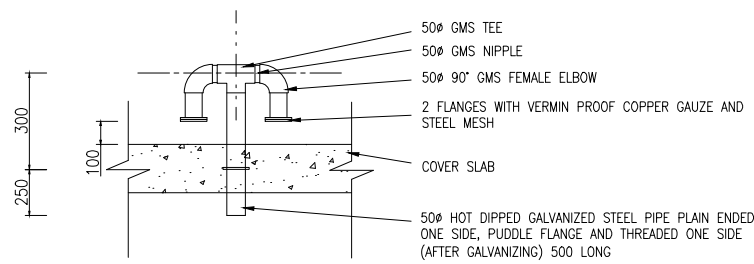
DETAIL A
DETAIL OF MANHOLE COVER
SCALE 1:80



DETAIL 01
SCALE 1:30



VIEW B
DETAIL OF MANHOLE COVER
SCALE 1:30



DETAIL C
VENTILATOR
SCALE 1:80

PIPE FITTING SCHEDULE					
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	MATERIAL	STEEL GRADE
C4	2	#150mm STEEL PIPE, x 1080mm LONG WITH PUDDLE FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
C5	2	#150mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM	
C6	1	VJ COUPLING		STANDARD ITEM	
C7	1	#150mm STEEL PIPE, x 410mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
C8	1	#150 BERMAND FLAT DISC PRESSURE REDUCING VALVE COMPLETE (OR SIMILAR APPROVED) PN25 WITH FLANGED ENDS.		STANDARD ITEM	
C9	1	#150mm STRAINER FLANGED BOTH ENDS		STANDARD ITEM	
C10	2	#150 x #100mm STEEL T-JUNCTION, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
D5	2	#100mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM	
D6	1	VJ COUPLING		STANDARD ITEM	
D7	1	#100mm STEEL PIPE, x 410mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123
D8	1	#100 BERMAND FLAT DISC PRESSURE REDUCING VALVE COMPLETE (OR SIMILAR APPROVED) PN25 WITH FLANGED ENDS.		STANDARD ITEM	
D9	1	#100mm STRAINER FLANGED BOTH ENDS		STANDARD ITEM	
D10	2	#100mm 90 DEGREE BEND STEEL FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123

TABLE 16

A	08/2021	FOR TENDER	F.M
No	DATE	REVISION	CONSULT

NOTES

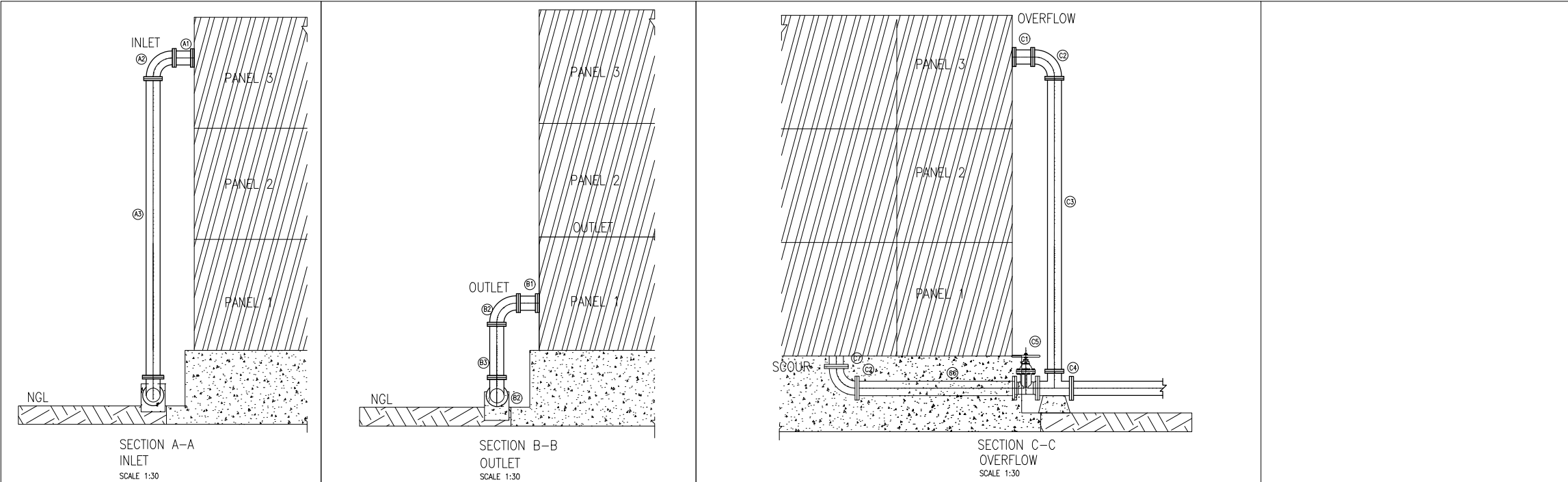
DESIGNED BY	F.M
CHECKED BY	A.C
DRAWN BY	T.N
CHECKED BY	A.C
APPROVED BY	ALEX CHIUSWA
SIGNATURE	

CLIENT	SEKHUKHUNE DISTRICT MUNICIPALITY 3 WEST STREET GRIFFITHS 0496
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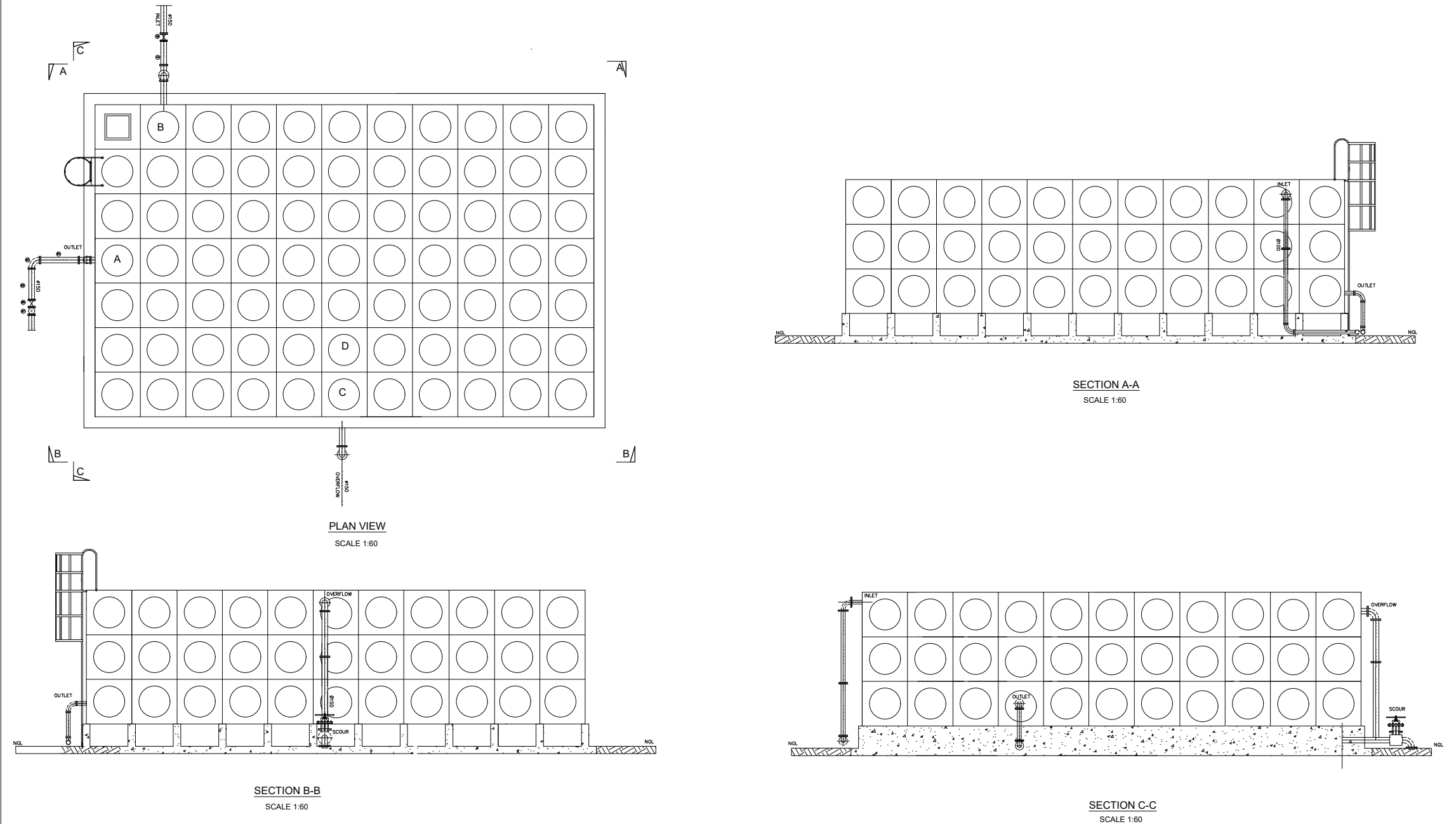
PROJECT NAME	DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO TUBATSE LOCAL MUNICIPALITY)
DRAWING TITLE	PRESSURE REDUCING VALVE CHAMBER LAYOUT

DRAWING No.	18012-6.5-11
SCALE	AS SHOWN
REVISION No.	A
CONTRACT No.	SKB/31/1-20/2021/22
SHEET No.	SHEET 4 OF 4



PIPE FITTING SCHEDULE				
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	WALL 'T' mm
A1	1	Ø150 mm PIPE, x 200 mm LONG FLANGED BOTH ENDS		FLANGE DRILLING
A2	2	Ø150 x 90 DEG SHORT RADIUS BEND FLANGED BOTH ENDS		
A3	1	Ø150 mm PIPE, 4450 mm LONG FLANGED BOTH ENDS		TABLE 16
A4	1	Ø150 mm PIPE, 800 mm LONG FLANGED BOTH ENDS		
A5	1	Ø150 mm SOCKETED GATE VALVE FLANGED BOTH ENDS		GALVANISED STEEL

B1	1	Ø100 mm PIPE, x 200 mm LONG FLANGED BOTH ENDS		FLANGE DRILLING
B2	3	Ø100 x 90 DEG SHORT RADIUS BEND FLANGED BOTH ENDS		
B3	1	Ø100 mm PIPE, x 500 mm LONG FLANGED BOTH ENDS		TABLE 16
B4	1	Ø100 mm PIPE, 1000 mm LONG FLANGED BOTH ENDS		
B5	1	Ø100 mm PIPE, 800 mm LONG FLANGED BOTH ENDS		GALVANISED STEEL
B6	1	Ø100 mm SOCKETED GATE VALVE FLANGED BOTH ENDS		
B7	1	ND100 mm WATER METER FLANGED BOTH ENDS		



C1	1	Ø200 x 90 DEG SHORT RADIUS BEND FLANGED BOTH ENDS		FLANGE DRILLING
C2	1	Ø200 x 90 DEG SHORT RADIUS BEND FLANGED BOTH ENDS		
C3	1	Ø200 mm PIPE, 4320 mm LONG FLANGED BOTH ENDS		TABLE 16
C4	1	Ø200 mm x Ø200 mm TEE FLANGED BOTH ENDS		
C5	1	Ø200 mm SOCKETED GATE VALVE FLANGED BOTH ENDS		GALVANISED STEEL
C6	1	Ø200 mm PIPE, 1700 mm LONG FLANGED BOTH ENDS		
C7	1	Ø200 mm PIPE, 100 mm LONG FLANGED BOTH ENDS		FLANGE DRILLING. TABLE 16. GALVANISED STEEL.

GENERAL NOTES

1. STRUCTURAL DRAWING MUST BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
(NOTE: THIS DRAWING IS TO BE CONFIRMED ON SITE)

2. CONCRETE

ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF SABS 1200 G.

CONCRETE STRENGTH AT 28 DAYS:

SLABS, BEAMS :CLASS 25/20, 25Mpa.

BASES :CLASS 25/20, 25Mpa.

THRUST BLOCK :CLASS 15/20, 15Mpa.

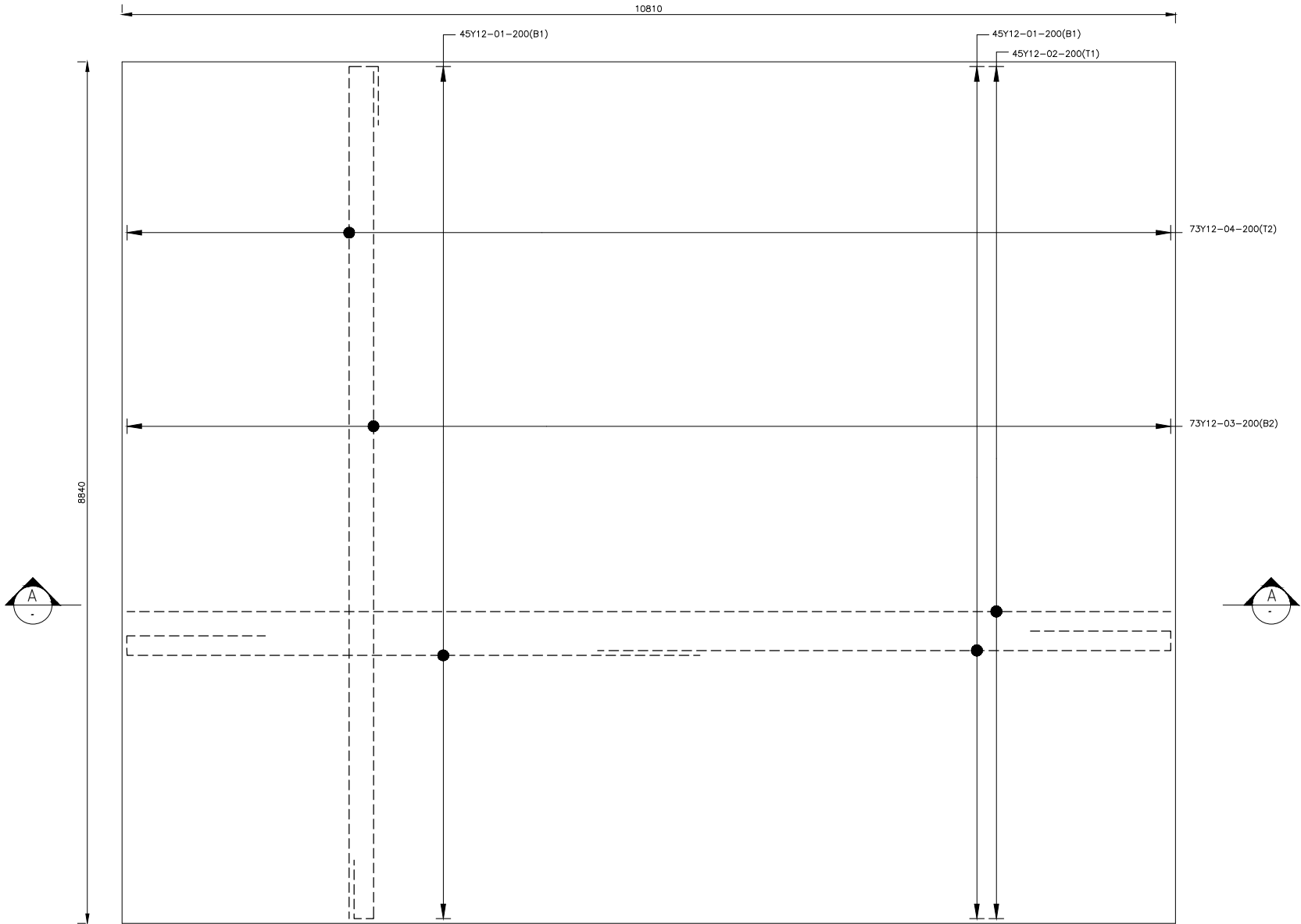
3. ALL STEEL PIPE COMPONENTS TO BE EPOXY COATED.

4. SUPPLY AND INSTALL LEVEL INDICATOR AS PER MANUFACTURERS DETAILS.

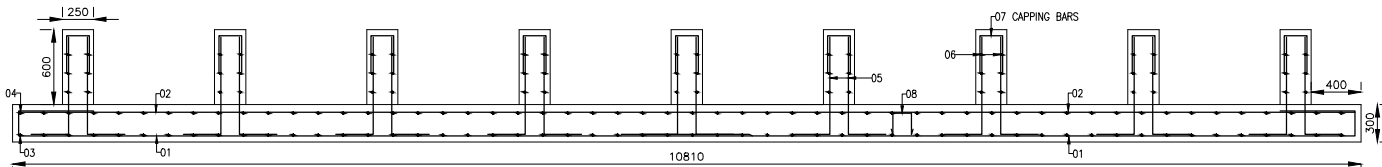
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									CHECKED BY A.C						DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J				REVISION No. A	
									DRAWN BY T.S		244 RISSIK STREET		244 RISSIK STREET							
									CHECKED BY A.C		SEKHUKHUNE DISTRICT MUNICIPALITY		POLDKWANE							
									APPROVED BY ALEX CHIUSWA		3 WEST STREET		0790							
									SIGNATURE		TEL: 013-262 7300		TEL: 015 297 5906							
											FAX: 013-262 3688		FAX: 086 246 0744							
											EMAIL: admin@hwa.co.za									

NOTES

- THIS STRUCTURE IS DESIGNED ON THE ASSUMPTION OF A UNIFORM, STABLE FOUNDATION OF MINIMUM BEARING CAPACITY OF 150kPa WHICH IS TO BE CONFIRMED BY A COMPETENT PERSON ON SITE PRIOR TO THE CASTING OF ANY BLINDING/NO FINES CONCRETE
- 28-DAY CONCRETE COMPRESSIVE STRENGTH:
a) BLINDING - CLASS 15 / 19 (15MPa)
b) MASS CONCRETE - CLASS 15 / 19 (15MPa)
c) FOOTING - CLASS 35 / 19 (35MPa)
d) FLOOR - CLASS 35 / 19 (35MPa)
e) WALLS - CLASS 35 / 19 (35MPa)
WATERTIGHT CONCRETE
- 100mm NO FINES (nfc) CONCRETE CLASS 19 NF LAYER WITH TOP 20mm TO BE 1:4 CEMENT : SAND SCREED/MOTAR WITH STEEL FLOATED FINISH. SCREEDING TO BE CARRIED OUT AS SOON AS NFC LAYER IS STRONG ENOUGH TO WITHSTAND THE SCREEDING OPERATION WITHOUT DAMAGE
- 1900x1900x100 THICK MASS CONCRETE IN LIEU OF NO-FINES CONCRETE BELOW COLUMN BASES. TOP SURFACE TO BE STEEL FLOATED.
- 20x20mm CHAMFERS TO EXPOSED CONCRETE EDGES AS SPECIFIED ON DRAWINGS AND ALL EXPOSED CONCRETE EDGES OF COLUMNS, FOOTINGS, ACCESS OPENINGS AND UPSTAND BEAMS.
- ALL PIPEWORK SHOWN ON THIS DRAWING ARE INDICATIVE. REFER TO PIPEWORK DRAWINGS FOR APPLICABLE PIPEWORK DETAILS.
- ALL STEELWORK DIMENSIONS TO BE CONFIRMED ON SITE BEFORE MANUFACTURING.
- PRE-APPROVED MORTAR COVER BLOCKS TO BE USED FOR RESERVOIR WALLS.
- CONFIRM ON SITE THAT RING FOOTING REBAR IS SUITABLE TO FIT THE SHAPE OF THE FOOTING BEFORE THE BLINDING BENEATH THE RING FOOTING IS CAST. ANY DISCREPANCIES IS TO BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
- ALL STEEL WORK AND ANCHOR BOLTS USED INSIDE THE RESERVOIR MUST BE GRADE 316 STAINLESS STEEL UNLESS SHOWN OTHERWISE.
- ALL POST-INSTALLED BOLTS SHALL BE DRILLED WITH PERCUSSION MASONRY DRILLS NOT CAPABLE OF CUTTING REINFORCEMENT STEEL. BRACKETS ARE TO ALLOW FOR SLOTTED HOLES TO ACCOMMODATE REINFORCING.



FOUNDATION PLAN
SCALE 1:30



SECTION A-A
SCALE 1:30

BENDING SCHEDULE

REFERENCE	BAR MARK	TYPE & SIZE	No EACH	TOTAL No	TOTAL LENGTH	SHAPE CODE	DIMENSIONS					
							A	B	C	D	E	E/R
SLAB	01	Y12	45	45	6680	38	5880	200				(SPACING 200mm C/C)
	01	Y12	45	45	6680	38	5880	200				(SPACING 200mm C/C)
	02	Y12	45	45	10710	20	10710					(SPACING 200mm C/C)
	03	Y12	55	73	9540	38	8740	200				(SPACING 200mm C/C)
	04	Y12	55	73	9540	38	8740	200				(SPACING 200mm C/C)
	08	Y10	80	80	1350	83	350	200	300			(SPACING 1000mm C/C)
BEAM	05	Y12	90	810	1100	37	300	800				(SPACING 200mm C/C)
	06	Y12	08	72	9490	38	8740	150				(SPACING 150mm C/C)
	07	Y12	45	405	750	38	300	150				(SPACING 200mm C/C)

A	02/2022	FOR TENDER		F.M	
No	DATE	REVISION		CONSULT	DIR

NOTES

STAMP

DESIGNED BY	F.M
CHECKED BY	A.C
DRAWN BY	P.M
CHECKED BY	A.C
APPROVED BY	ALEX CHIUSWA
SIGNATURE	

CLIENT



SEKHUKHUNE DISTRICT MUNICIPALITY
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PROJECT NAME

DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE
LOCAL MUNICIPALITY) - CONTRACT J

DRAWING TITLE

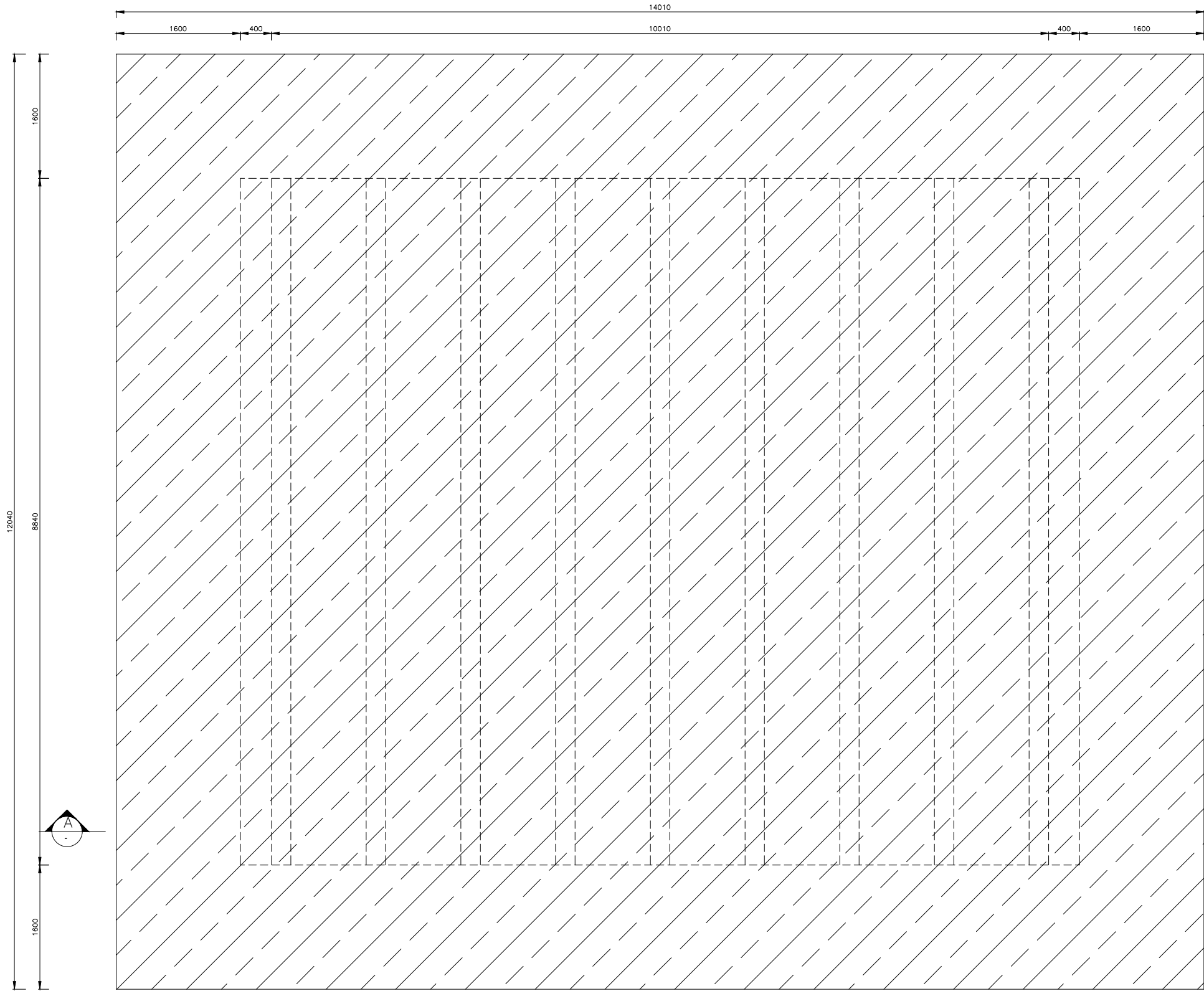
410KL GROUND STEEL TANK PIPE, FOUNDATION AND
REINFORCEMENT DETAILS

DRAWING
No.
21008-P2B-13

SCALE
AS
SHOWN
REVISION No.
A

CONTRACT No.
SK8/3/1-07/2022/23

SHEET No.
SHEET 2 OF 3

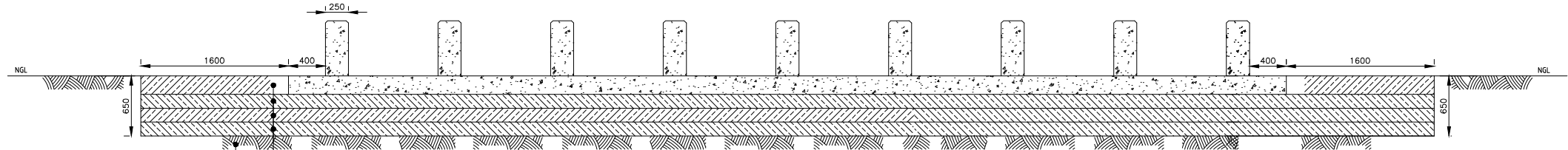


NOTES

1. EXCAVATE THE TOPSOIL TO A DEPTH OF 150mm TO SPOIL.
2. EXCAVATE THE EXPOSED SURFACE TO A DEPTH OF 0.65m AND CART AWAY.
3. RIP, SCARIFY, WET AND COMPACT THE EXPOSED GROUND SURFACE TO A DEPTH OF 150mm WITH A 10 TONNE VIBRATORY ROLLER (15 PASSES MINIMUM).
4. IN 150mm THICK LAYERS, FILL WITH IMPORTED APPROVED G6 MATERIAL COMPACTED TO 95% MOD. AASHTO DRY DENSITY AT OPTIMUM MOISTURE CONTENT.

BULK EARTHWORKS FOUNDATION PLAN

SCALE 1:30



SECTION A-A

SCALE 1:30

IMPORTED APPROVED G6 MATERIAL
COMPACTED IN 150mm THICK LAYERS
TO 95% MOD. AASHTO DRY DENSITY
AT OPTIMUM MOISTURE CONTENT

RIP, SCARIFY, WET AND COMPACT THE EXPOSED
GROUND SURFACE TO A DEPTH OF 150mm WITH
A 10 TONNE VIBRATORY ROLLER (15 PASSES MINIMUM)

A	02/2022	FOR TENDER		F.M	
No	DATE	REVISION		CONSULT	DIR

NOTES

STAMP

DESIGNED BY

F.M

CHECKED BY

A.C

DRAWN BY

P.M

CHECKED BY

A.C

APPROVED BY

ALEX CHIUSWA

SIGNATURE

.....

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PROJECT NAME

DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE
LOCAL MUNICIPALITY) – CONTRACT J

DRAWING TITLE

410KL GROUND STEEL TANK PIPE, FOUNDATION AND
REINFORCEMENT DETAILS

DRAWING No.

21008-P2B-13

SCALE

AS SHOWN

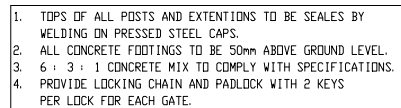
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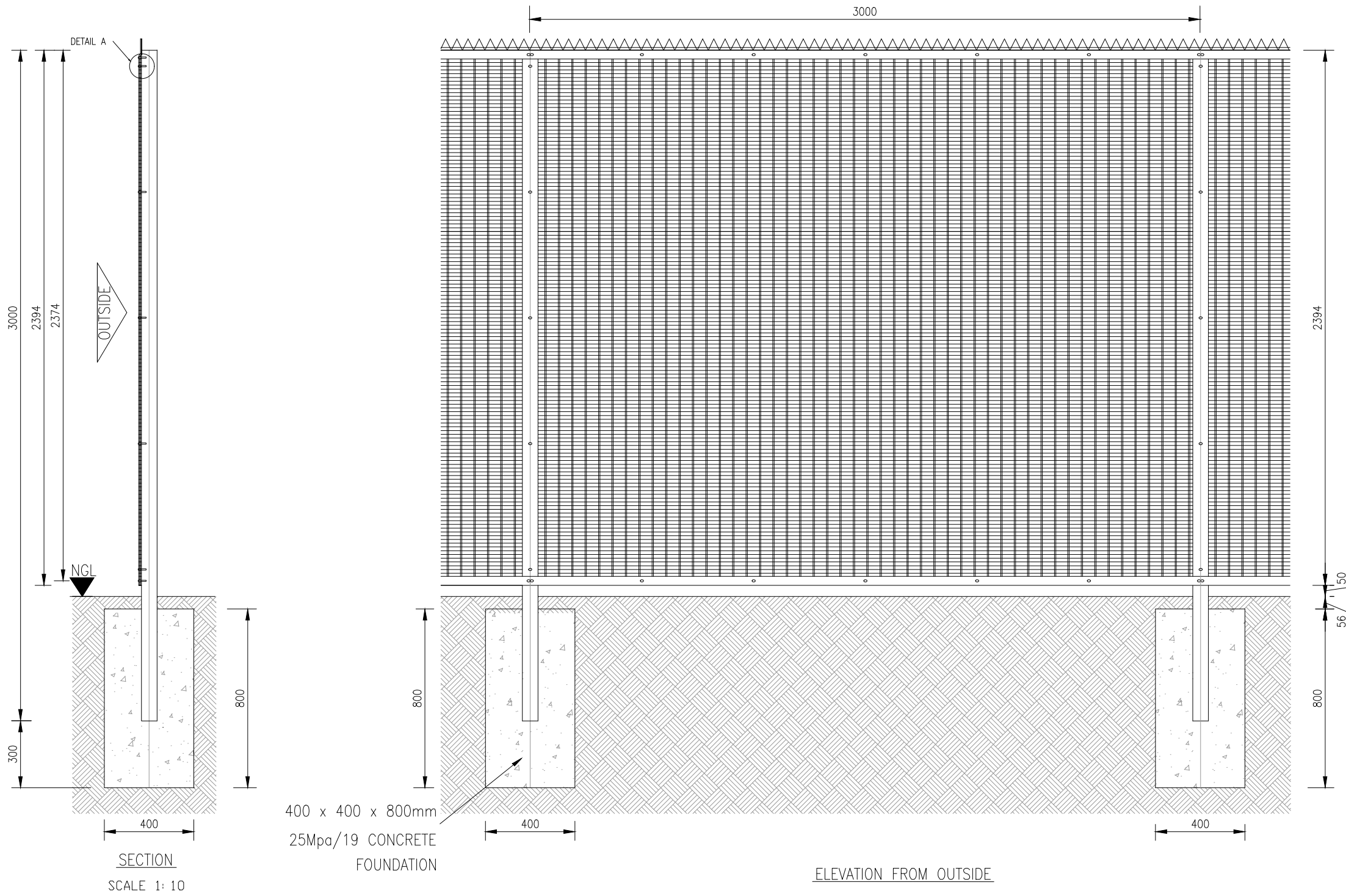
SHEET No.

3 OF 3

CONTRACT No.
SK8/3/1-07/2022/23



DRAWING No. 21008-P2B-14	SCALE AS SHOWN
	REVISION No. A
CONTRACT No. SK8/3/1-07/2022/23	SHEET No. SHEET 1 OF 1



SPECIFICATIONS

POSTS:

- ANGLE 70°70°6°3000mm LONG.
- SET POSTS VERTICALLY INTO GROUND AT 3000mm CENTRES.
- LONGER POSTS WILL BE REQUIRED WHERE FENCE STEPS > 200mm.

FOUNDATIONS:

- CAST 400°400°800 DEEP 25MPa/19 STONE AT EACH POST.
- GROUND CONDITIONS MAY REQUIRE ADDITIONAL CONCRETE.

LATERAL SUPPORT:

- LATERAL SUPPORT SHALL COMPRISE OF TWO HORIZONTAL RAILS.
- AT THE TOP, A PURPOSE BENT Z-PROFILE COMBO SAWTOOTH SERRATED EDGE SPIKE/RAIL 40°20°40°2.5mm THICK FABRICATED FROM 100mm WIDE SHEET METAL STRIP SHALL CAP OVER THE MESH PANEL AND BE FIXED TO THE FENCE POSTS PROVIDING LATERAL SUPPORT AND TO DETER CLIMBING.
- AT THE BOTTOM, AN ANGLE 40°40°3mm.

HIGH DENSITY MESH PANELS:

- MESH PANELS SHALL BE REF.35.8 SINGLESKIN(SS) FLAT PANEL(FP).
- FABRICATED FROM HIGH TENSILE STEEL WITH A WELD STRENGTH OF 60% AND A TENSILE STRENGTH OF 500N/mm².
- HORIZONTAL AND VERTICAL WIRES SHALL HAVE A CORE DIAMETER OF 3.96mm WITH A TOLERANCE OF +0.07mm.
- APERTURES SHALL BE 76.2mm W * 12.7mm H c/c OF WIRES.
- PANEL FINISH SIZE TOLERANCE:WIDTH +2.0mm AND HEIGHT +6mm.
- MESH PANELS ARE MANUFACTURED WITH ZINCALU WIRE(GALFIAN).

TAMPER PROOF FIXING:

- TO POSTS:CLAMP FIXED WITH FLAT 70°6 COVER STRIPS,USING M8 ANTI-VANDAL CUP SQUARE BOLTS,SHEAR-OFF NUTS AND FLAT WASHERS
- TO RAILS:BOLTED USING M8 ANTI-VANDAL CUPSQUARE BOLTS,SHEAR OFF NUTS AND FENDER WASHER.
- ALL FASTENERS AND FIXING SCREWS SHALL BE GRADE 304 STAINLESS STEEL.

ANTI CLIMB OVER PROTECTION:

- PURPOSES BENT Z-PROFILE COMBO SERRATED SPIKE/RAIL,(REF LATERAL RAIL).

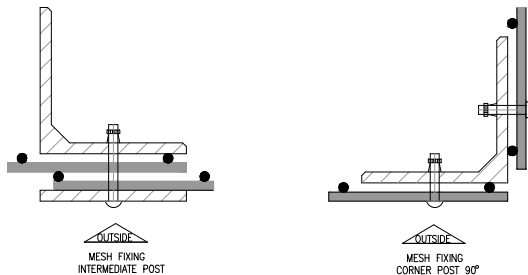
CORROSION PROTECTION:

INITIAL COATING:

- MESH,PANELS:ZINCALU.
- POSTS,STRUCTURE,COVER PLATES,RAILS AND SPIKES:HD GALVANISED.

ADDITIONAL COATING:

- FENCE MESH PANELS,POSTS,STRUCTURE,COVER PLATES,RAILS AND SPIKES SHALL BE UNIFORMLY PVC COATED,WHICH IS FREE OF LEAD, CADMIUM AND DOP,TO A MINIMUM THICKNESS OF 200um(microns) IN ACCORDANCE TO EN 10245-2 STEEL WIRE AND WIRE PRODUCTS-ORGANIC COATINGS ON STEEL WIRE - PART 2:PVC FINISHED WIRE.
- FINISH COLOURS SHALL BE EITHER RAL 7021 ANTHRACITE OR RAL 6005 GREEN.



DETAIL A
SCALE 1:2

A	08/2021	FOR TENDER		F.M	
No	DATE	REVISION		CONSULT	DIR

NOTES	

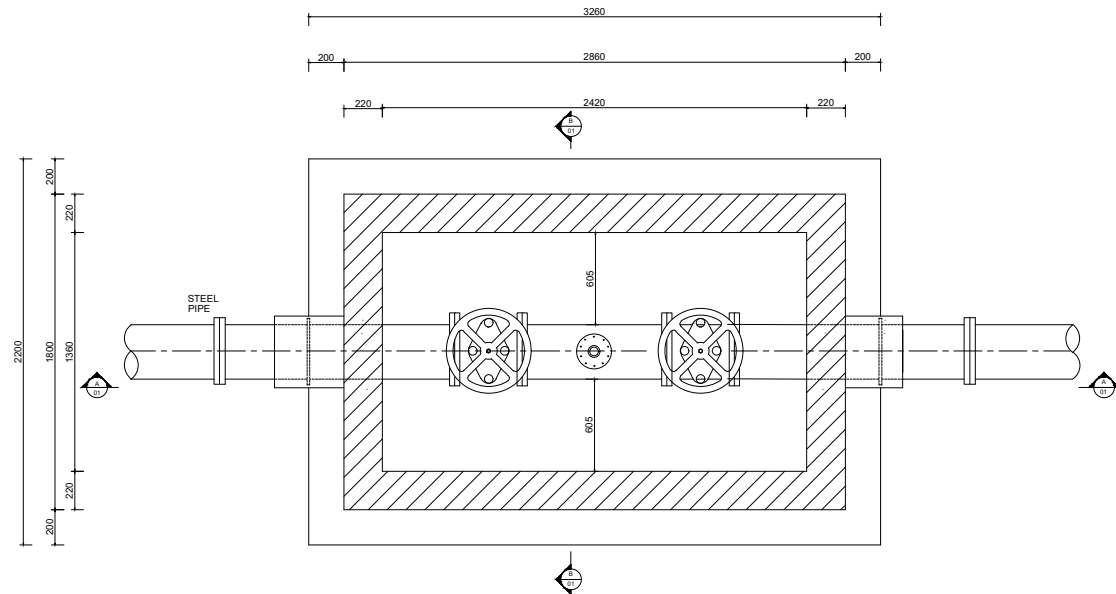
DESIGNED BY	J.M
CHECKED BY	A.C
DRAWN BY	P.M
CHECKED BY	F.M
APPROVED BY	ALEX CHUSWA
SIGNATURE	

CLIENT	
	
SEKHUKHUNE DISTRICT MUNICIPALITY 3 WEST STREET GROBLERSDAL	
TEL: 013 262 7300 FAX: 013 262 3688	

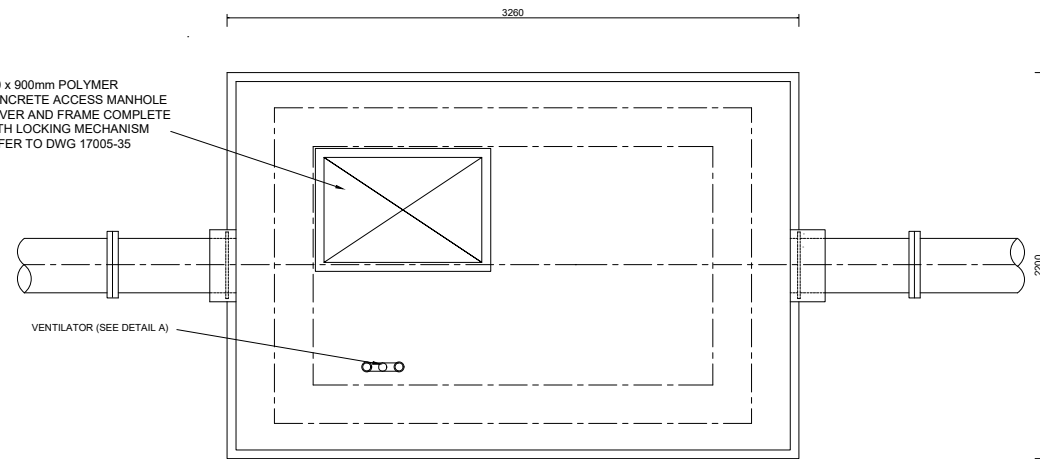
CONSULTANT	
	
24A RISSIK STREET P.O. BOX 100 P.O. BOX 100 P.O. BOX 100	
TEL: 015 297 5906 FAX: 015 297 5906 hwaeng.com@gmail.com	

PROJECT NAME	
DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J	
DRAWING TITLE	
PWTP BOUNDARY FENCE DETAILS (TAMPER PROOF)	

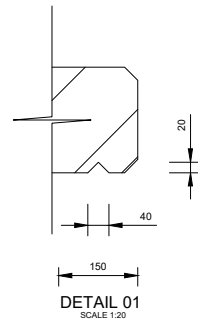
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	REVISION No. A
CONTRACT No. SK8/3/1-07/2022/23	SHEET No. SHEET 1 OF 1



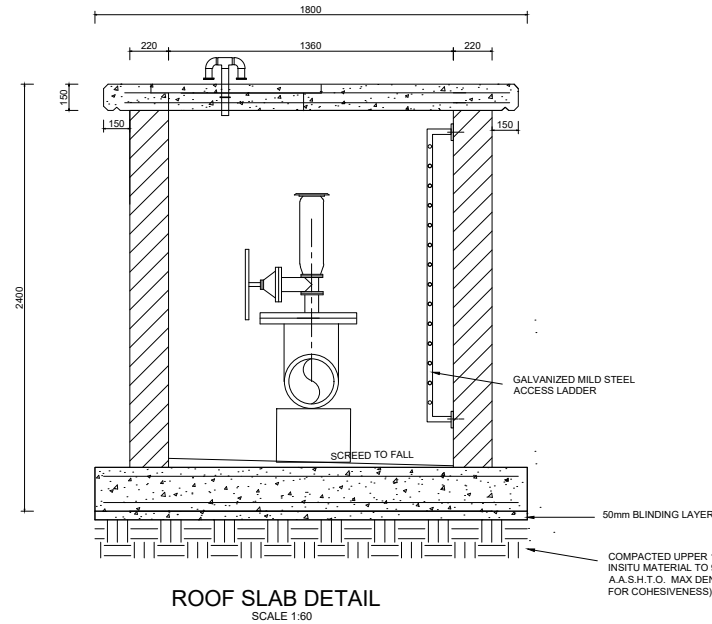
SECTION A-A
SCALE 1:60



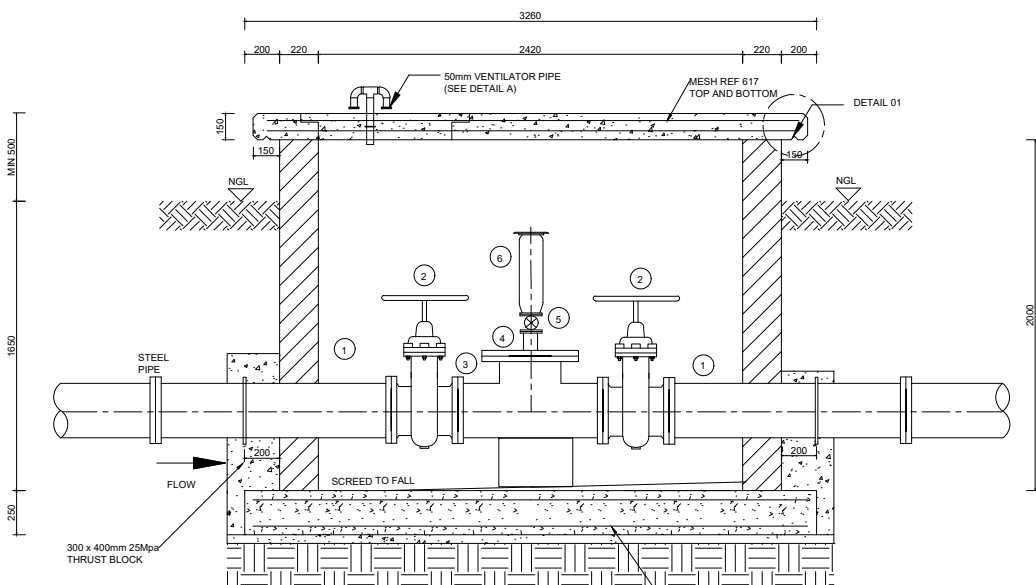
SECTION B-B
SCALE 1:60



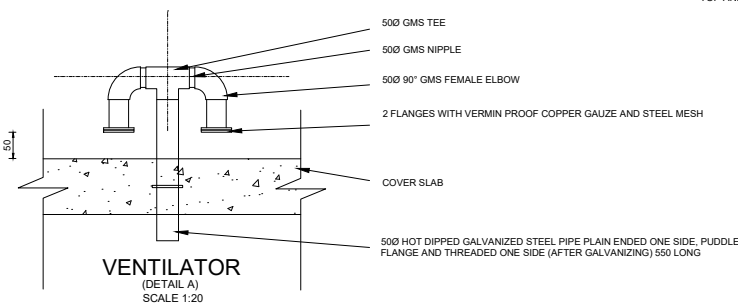
DETAIL 01
SCALE 1:20



ROOF SLAB DETAIL
SCALE 1:60



SECTIONAL PLAN
SCALE 1:60



VENTILATOR
(DETAIL A)
SCALE 1:20

ALL REINFORCED CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH SABS 1200G AND AND PSG IN THE CONTRACT DOCUMENT AND AS MAY BE AMENDED OR ADDED THEREAFTER.

- DATUM AS PER GENERAL LAYOUT PLAN.
- UNLESS OTHERWISE STATED ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS IN METERS.
- NO SCALING OF DIMENSIONS IS PERMITTED. ALL DIMENSIONS ARE TO BE CHECKED AND ANY DISCREPANCIES REPORTED TO THE ENGINEER IMMEDIATELY.
- FOUNDATION
 - DEPTHS OF ALL BASES SHALL BE SHOWN ON THE DRAWINGS AND BE FINALLY APPROVED ON SITE BY THE ENGINEER PRIOR TO PLACING OF REINFORCEMENT OR CONCRETE.
 - ALL BASES SHALL BE CAST ON A MINIMUM LAYER OF 50mm BLINDING.
 - BLINDING LAYERS SHALL NOT EXCEED 250mm IN THICKNESS.
- CONCRETE
 - CONCRETE TO BE MINIMUM STRENGTH MIX DESIGN OF:
 - CLASS 15/19 IN BLINDING LAYERS.
 - CLASS 30/19 IN WALL FOUNDATIONS, FLOOR AND ROOF SLABS, AND;
 - CLASS 30/19 IN RESERVOIR WALL, UNLESS OTHERWISE STATED.
 - MINIMUM COVER TO REINFORCEMENT INCLUDING LINKS SHALL BE:
 - 50mm FOR FOUNDATION SLABS AND FOOTINGS;
 - 50mm FOR WALLS AND COLUMNS, AND;
 - 30mm FOR ROOF SLABS ON CHAMBERS, UNLESS OTHERWISE INDICATED.

- REINFORCING
 - ALL REINFORCING STEEL SHALL BE WIRE BRUSHED AND KEPT CLEAN AND FREE OF ANY MILL SCALE, RUST, OIL OR ANY OTHER DELETERIOUS COMPOUNDS.
 - WELDING ON REINFORCEMENT STEEL WILL NOT BE PERMITTED.
 - ALL REINFORCING STEEL FIXED IN POSITION ON SITE SHALL BE CHECKED BY THE ENGINEER PRIOR TO CONCRETING.
- FORM WORK
 - FORM WORK SHALL BE ERECTED AND FIXED IN AN APPROVED MANNER AND SHALL BE INSPECTED BY THE ENGINEER PRIOR TO CONCRETING.
 - STRIPPING TIMES OF THE FORM WORK SHALL BE AS SPECIFIED IN SABS 1200 G TABLE 2 OR AS PER THE ENGINEERS SITE INSTRUCTIONS.
- GENERAL
 - WATERTIGHTNESS TEST IS TO BE CONDUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
 - NO STRUCTURAL ALTERATIONS MAY BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.
 - THE POSITION OF THE CONSTRUCTION JOINTS IS TO BE DISCUSSED AND AGREED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF ANY POUR.
 - PREPARATION OF CONSTRUCTION JOINTS, BEFORE COMMENCEMENT OF THE ADJACENT POUR, THE SURFACE OF THE PREVIOUS SECTION MUST BE CLEANED, AND SURFACE LAITANCE REMOVED, EITHER BY MEANS OF WIRE BRUSHING OR HACKING WITH A SCALING HAMMER, THE SURFACE MUST THEN BE THOROUGHLY WETTED AND SLUSHED WITH A 1:1.5 SAND OR CEMENT SLURRY, WITH PLACING OF NEW CONCRETE TO FOLLOW IMMEDIATELY.
 - ALL CONCRETE EDGES TO BE FINISHED WITH 20mm CHAMFERS.
 - NO CONCRETE IS TO BE CAST UNTIL STEEL FIXING HAS BEEN APPROVED BY THE ENGINEER.

PIPE FITTING SCHEDULE						
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	MATERIAL	STEEL GRADE	FLANGE DRILLING
1	2	Ø100mm STEEL PIPE, x 1270mm LONG WITH PUDDLE FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	TABLE 20
2	2	Ø100mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM		
3	1	Ø100mm x Ø 400mm TEE, 710mm x 355mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
4	1	Ø50mm FLANGED REDUCER, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
5	1	Ø50mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM		
6	1	Ø50mm AIR VALVE		STANDARD ITEM		

PIPE FITTING SCHEDULE						
ITEM NO.	NO. OFF	DESCRIPTION	SKETCH	MATERIAL	STEEL GRADE	FLANGE DRILLING
1	2	Ø150mm STEEL PIPE, x 1270mm LONG WITH PUDDLE FLANGE, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	TABLE 20
2	2	Ø150mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM		
3	1	Ø150mm x Ø 400mm TEE, 710mm x 355mm LONG FLANGED ONE ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
4	1	Ø80mm FLANGED REDUCER, FLANGED BOTH ENDS		EPOXY COATED STEEL	GRADE B STEEL PIPE (4.5mm THICKNESS) EPOXY COATING FOR CORROSION PROTECTION TO SANS 1123	
5	1	Ø80mm GATE VALVE FLANGED BOTH ENDS		STANDARD ITEM		
6	1	Ø80mm AIR VALVE		STANDARD ITEM		

No	DATE	REVISION	CONSULT	DIR
A	02/2023	FOR TENDER	J.M	

NOTES

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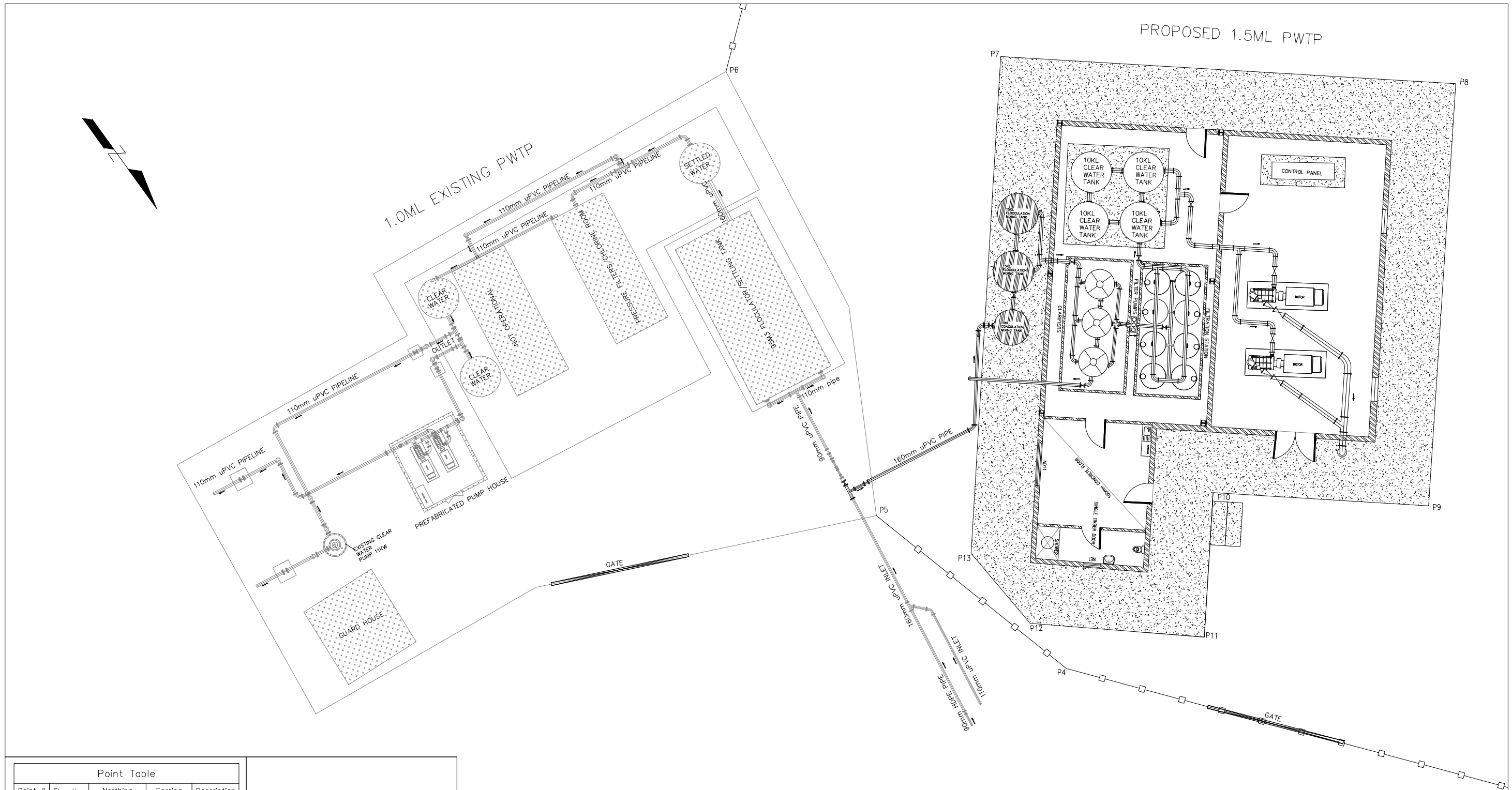
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PROJECT NAME	DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TUBATSE LOCAL MUNICIPALITY) - CONTRACT J
DRAWING TITLE	AIR VALVE (Ø150mm and Ø100mm) DETAIL

DRAWING No.	21008-P2B-16
CONTRACT No.	SKB/3/1-07/2022/23
SCALE AS SHOWN	REVISION No. A
SHEET No.	SHEET 1 OF 1



Point Table				
Point #	Elevation	Northing	Easting	Description
1	840.00	-2756207.34	100204.53	P1
2	839.80	-2756153.83	100163.33	P2
3	839.70	-2756118.46	100205.40	P3
4	839.90	-2756154.07	100234.32	P4
5	840.00	-2756164.93	100237.30	P5
6	840.00	-2756185.58	100230.94	P6
7	840.10	-2756178.73	100220.26	P7
8	840.10	-2756165.43	100204.00	P8
9	840.15	-2756150.38	100216.40	P9
10	840.16	-2756156.73	100224.06	P10
11	840.17	-2756151.53	100228.33	P11
12	840.12	-2756156.75	100234.46	P12
13	840.13	-2756160.97	100234.78	P13

LEGEND

PROPOSED FENCE

EXISTING FENCE

PROPOSED INFRASTRUCTURE

PROPOSED CONCRETE WORKS

EXISTING INFRASTRUCTURE

No	DATE	REVISION	CONSULT	DIR
A	02/2022	FOR TENDER	F.M	

NOTES

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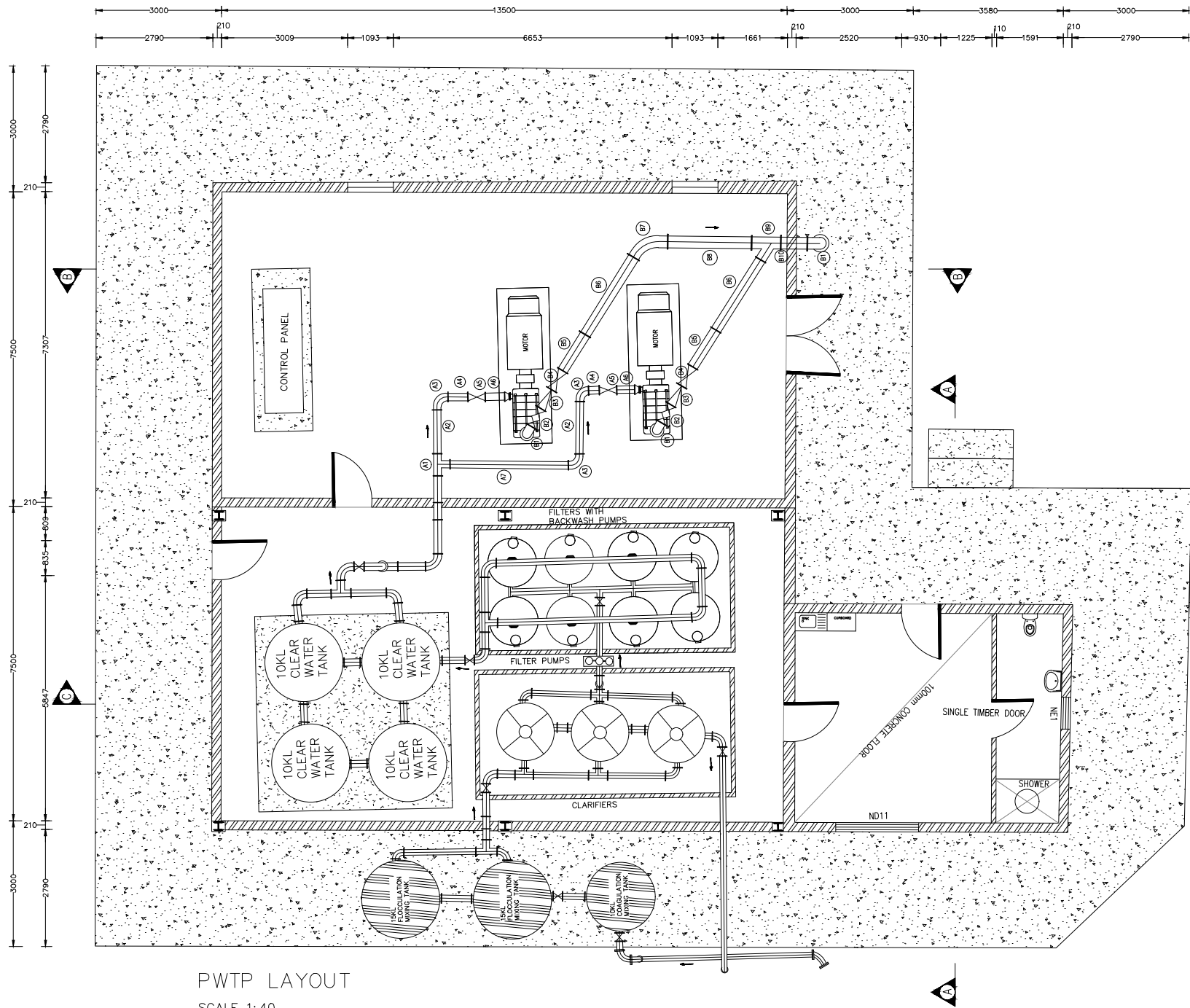
PROJECT NAME

DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TOBATSE LOCAL MUNICIPALITY) - CONTRACT J

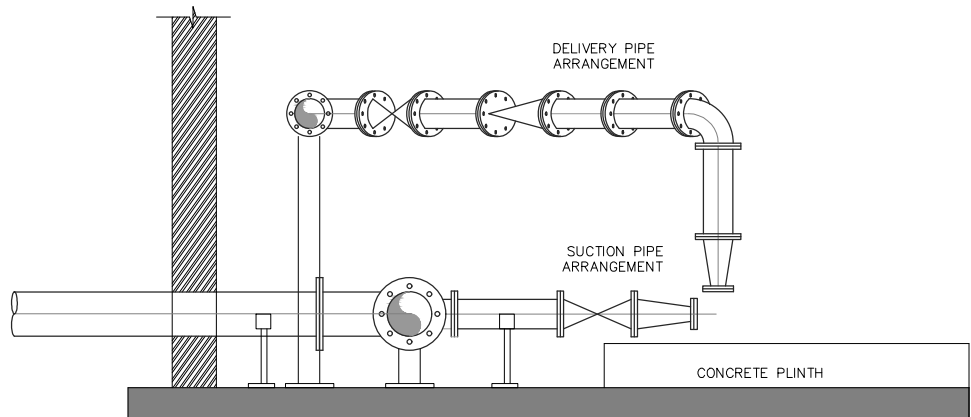
DRAWING TITLE

PACKAGE WATER TREATMENT PLANT LAYOUT

DRAWING No.	21008-P2B-17	SCALE	AS SHOWN
CONTRACT No.	SKB/3/1-07/2022/23	REVISION No.	A
		SHEET No.	SHEET 1 OF 1



POTP LAYOUT
SCALE 1:40



PUMP SUCTION & DELIVERY ARRANGEMENT
SCALE 1:20

PUMP STATION DELIVERY PIPE SCHEDULE						
REF	QUANTITY	SIZE	DESCRIPTION	PIPE MATERIAL	PIPE CLASS	PROTECTION
						WALL THICKNESS LINING COAT
B1	3	150	FLANGED 90 DEG ELBOW	STEEL	PN25	4.5 FBE FBE
B2	2	150	FLANGED PUMP CONTROL VALVE	STEEL	PN25	STANDARD ITEMS
B3	2	150	FLANGED NON-RETURN VALVE	STEEL	PN25	STANDARD ITEMS
B4	2	150	FLANGED WATERWORKS GATE VALVE	STEEL	PN25	STANDARD ITEMS
B5	2	150	FLANGED STEEL PIPE 1040mm LONG	STEEL	PN25	4.5 FBE FBE
B6	2	150	FLANGED STEEL PIPE 2200mm LONG	STEEL	PN25	4.5 FBE FBE
B7	1	150	FLANGED 45 DEG ELBOW, LONG RADIUS	STEEL	PN25	4.5 FBE FBE
B8	1	150	FLANGED STEEL PIPE 2030mm LONG	STEEL	PN25	4.5 FBE FBE
B9	1	150	FLANGED "Y" JUNCTION	STEEL	PN25	4.5 FBE FBE
B10	1	150	FLANGED STEEL PIPE 660mm LONG WITH PUDDLE FLANGE	STEEL	PN25	4.5 FBE FBE

PUMP STATION SUCTION PIPE SCHEDULE						
REF	QUANTITY	SIZE	DESCRIPTION	PIPE MATERIAL	PIPE CLASS	PROTECTION
						WALL THICKNESS LINING COAT
A1	1	150	FLANGED UNEQUAL TEE JUNCTION	STEEL	PN16	4.5 FBE FBE
A2	2	150	FLANGED STEEL PIPE 1130mm LONG	STEEL	PN16	4.5 FBE FBE
A3	3	150	FLANGED 90 DEGREE ELBOE	STEEL	PN16	4.5 FBE FBE
A4	2	150	FLANGED STEEL PIPE 475mm LONG	STEEL	PN16	4.5 FBE FBE
A5	2	150	FLANGED WATERWORKS GATE VALVE	STEEL	PN16	STANDARD ITEMS
A6	2	150	FLANGED STEEL PIPE 430mm LONG	STEEL	PN16	4.5 FBE FBE
A7	1	150	FLANGED STEEL PIPE 2830mm LONG	STEEL	PN16	4.5 FBE FBE

CONSTRUCTION NOTES

Foundations:

1. STRIP FOUNDATIONS – 600x200mm 15Mpa CONCRETE STRIP FOUNDATION. TOP OF FOUNDATION TO BE MIN 340mm BELOW N.G.L.
2. FILLING – APPROVED HARDCORE FILLING COMPACTED IN LAYERS OF MAX. 150mm. FILLING TO BE TREATED WITH SABS APPROVED INSECTICIDE AND WEED KILLER TO COMPLY WITH SABS 1164 & 1165.

Surfacebeds & floors:

1. SURFACEBED – 100mm THICK 15Mpa CONCRETE SURFACEBED ON USB GREEN 250 MICRON DAMP PROOF MEMBRANE. SURFACE BED CAST IN SECTIONS OF MAX. 20sqm
2. SCREED & FLOOR FINISH – "Marley Super Metro" 2,5mm THICK FULLY FLEXIBLE VINYL FLOOR SHEETING ON 1:4 SMOOTH CEMENT SAND SCREED TO A TOTAL THICKNESS OF 30mm. ALL LAID AND FINISHED STRICTLY TO MANUFACTURERS SPEC.
3. SCREED & FLOOR FINISH – 30mm 1:4 CEMENT SAND SCREED TO RECEIVE "Marley" 2mm THICK FULLY FLEXABLE VINYL ASBESTOS FLOOR TILES, LAID STRICTLY TO MANUFACTURERS SPEC.

Skirtings:

1. SKIRTING – 70mm HIGH "MARLEY" RIDGED PVC SKIRTING SCREWED AND PLUGE TO WALL AT 450mm C/C.

Walls & Structure:

1. EXTERNAL WALLS – APPROVED FACEBRICK WALLS IN STRETCHERBOND TO RECEIVE 10mm WIDE x 6mm DEEP SQUARE RECESSED JOINTS IN BOTH DIRECTIONS.
2. BRICKFORCE: BRC BRICKFORCE TO 230 AND 115 WALLS FOUNDATION WALLS – EVERY 2ND COURSE, SUPERSTRUCTURE – EVERY 4TH COURSE. OVER OPENINGS FORMED IN BRICKWORK, EVERY COURSE FOR 4 COURSES EXTENDING 500mm BEYOND OPENING IN BOTH DIRECTIONS.
3. 228x76mm SAP BEAM TO BE BUILT IN & TIED DOWN TO FACEBRICK COLUMNS WITH 2,5mm GALVANISED WIRE TIES. BEAM TO BE CREOSOTE TREATED PRIOR TO BEING BUILT IN.
4. LINTEL – APPROVED FACEBRICK ON EDGE LINTOL OVER ALL WINDOW & DOOR OPENINGS. BRICKWORK TO RECEIVE 10x6mm SQUARE RECESSED JOINTS.
5. D.P.C – PROVIDE 375 MICRON DPC IN WALLS AT FLOOR LEVEL & UNDER ALL EXTERNAL WINDOW CILLS.
6. INTERNAL WALLS – APPROVED STOCKBRICK WALLS IN STRETCHERBOND TO RECEIVE 1 x COAT SMOOTH 1:5 CEMENT SAND PLASTER TO RECEIVE 1xMERIT UNIVERSAL UNDERCOAT AND TWO COATS PLASCON POLVIN SUPER ACRYLIC PVA.
7. WALL TILES – PROVIDE STANDARD 150x150mm WHITE GLAZED WALL TILES FROM FLOOR TO TOP OF WINDOW HIGHT(2295mm). TILES TO BE LAID WITH MANUFACTURERS APPROVED TILING ADHESIVE, AND WHITE TILING GROUT.

Window Sills:

1. INTERNAL WINDOW CILL – 15mm THICK FIBRE CEMENT WINDOW SILL BEDDED IN 1:4 CEMENT SAND MORTAR. SAND & APPLY ALKALI RESISTANT SEALER AND TWO COATS MAT ENAMEL PAINT.
2. EXTERNAL WINDOW CILL – APPROVED FACEBRICK ON EDGE, TO MATCH WALLS. JOINTS TO BE SQUARE & RECESSED.

Ceiling & Cornice:

1. CORNICE – 75mm GYPSUM COVED CORNICE NAILED TO WALL AND CEILING AT 450mm CENTERS MAX. AND TO RECIEVE PAINT FINISH TO MATCH CEILING
2. CEILING – 6mm CLADIT FIBRE CEMENT CEILING NAILED TO 38x38mm SAP BATTENS AT MAX. 400mm C/C WITH GALVANISED CLOUT NAILS. PROVIDE GALVANISED H-PROFILE JOINTING STRIPS TO BE PRE PAINTED. PREPARE AND APPLY 1xUNIVERSAL UNDERCOAT & TWO COATS PLASCON POLVIN SUPER ACRYLIC PVA PAINT.

Roof & Facia:

1. ROOF SHEETING – 0,6mm "KLIPOK" ROOF SHEETING IN CHROMADECK FINISH ON 76x50mm SAP PURLINS AT MAX. 1200mm C/C ON PATTENT & APPROVED PRE-FABRICATED ROOF TRUSS SYSTEM.
2. RIDGE CAPING – STANDARD FACTORY MANYFACTURED RIDGES AND FLASHINGS IN FINISH TO MATCH ROOF COVERING.
3. FACIA & GUTTERS – 250x10mm THICK FC77 PRESSED FIBRE CEMENT FACIA, SCREW FIXED TO TRUSS ENDS & COUNTER BATTEN WITH COUNTERSUNK BRASS SCREWS. PREPARE & APPLY ONE UNIVERSAL UNDERCOAT & TWO COATS PLASCON POLVIN SUPER ACRYLIC P.V.A PAINT 100 x 100 x 0,6mm GUTTERS WITH 100mm DIA RAINWATER DOWNPIPES WITH CHROMADEK FINISH.
4. TRUSS SYSTEM: TIMBER PATENT & APPROVED PRE-FABRICATED SYSTEM AT 1200mm C/C MAX. PURLINS 50 x 76mm SA PINE AT 1400mm C/C MAX. WALL PLATE 114 x 38mm SA PINE TO BE CREOSOTE TREATED BEFORE FIXING. CERTIFICATE & GUARANTEE FOR DESIGN & ERECTION TO BE SUPPLIED BY TRUSS MANUFACTURER. ALL EXPOSED TIMBER SECTIONS AS WELL AS SECTIONS IN CONTACT WITH WET TRADES TO BE CREOSOTE TREATED BEFORE FIXING INTO POSITION. TRUSS TO BE SECURED TO WALLS AT WALLPLATE WITH 2,5mm GALV. STEEL WIRE TIES, BUILT INTO WALLS MIN 6 BRICK COURSES.

NOTE :

- * ALL DIMENSIONS AND LEVELS ARE TO BE VERIFIED ON SITE PRIOR TO COMMENCING SETTING OUT , WORKSHOP DRAWINGS OR CONSTRUCTION .
- * FIGURED DIMENSIONS ONLY TO BE USED .
- * DISCREPANCIES , ERRORS AND OMISSIONS ARE TO BE REPORTED TO ARCHITECTS IMMEDIATELY THEY BECOME EVIDENT .
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PROJECT NAME

DE-HOOP/MALEKANA WATER SCHEME (FETAKGOMO-TOBATSE LOCAL MUNICIPALITY) – CONTRACT J

DRAWING TITLE

PACKAGE WATER TREATMENT PLANT
DETAILS

DRAWING No.

21008-P2B-18

CONTRACT No.

SK8/3/1-07/2022/23

SCALE

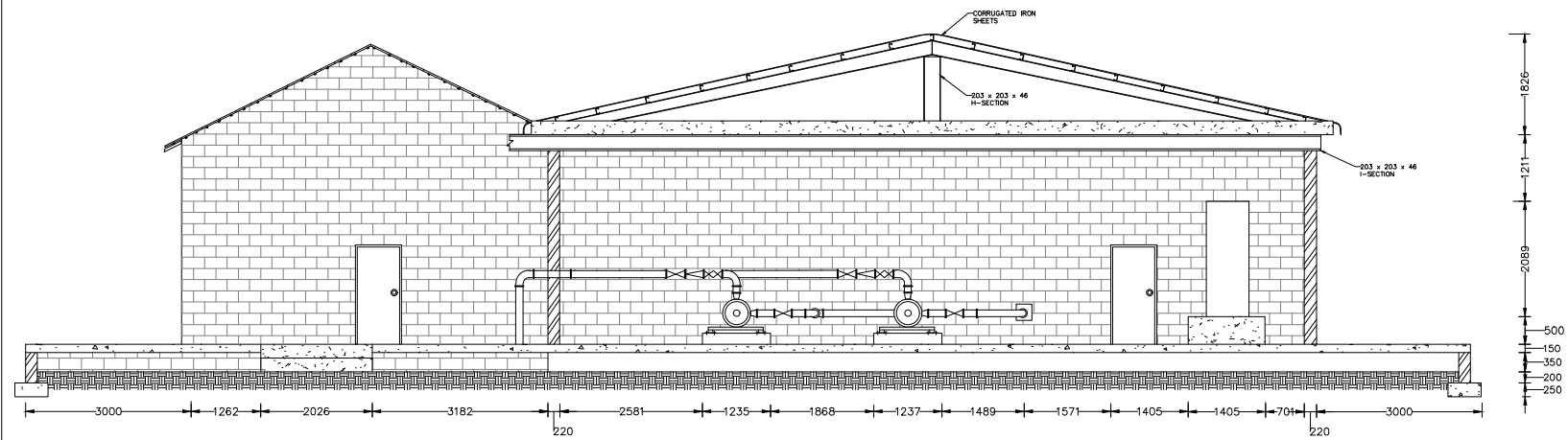
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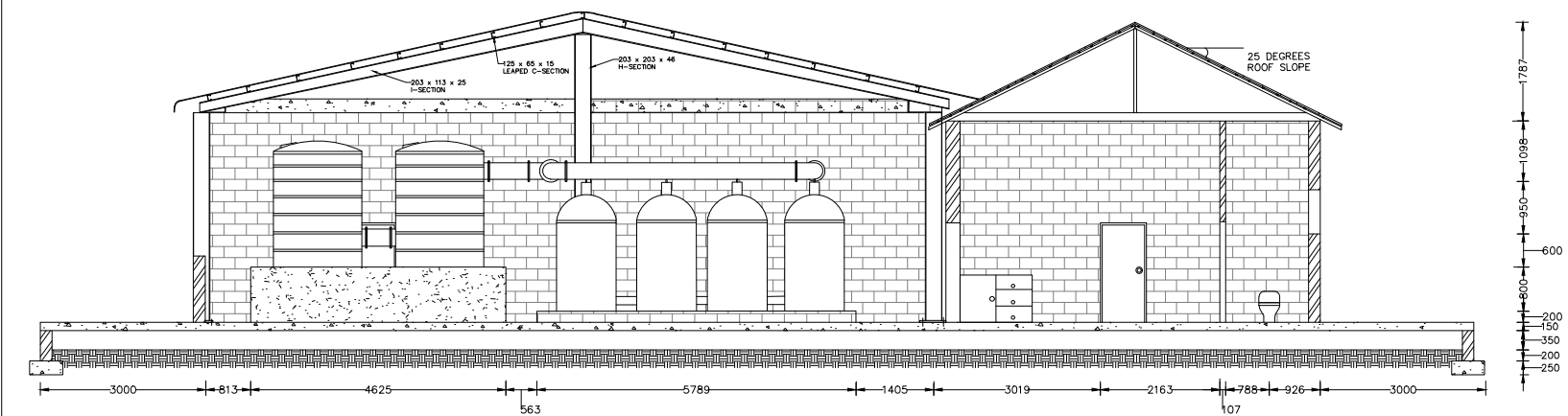
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SHEET 1 OF 2



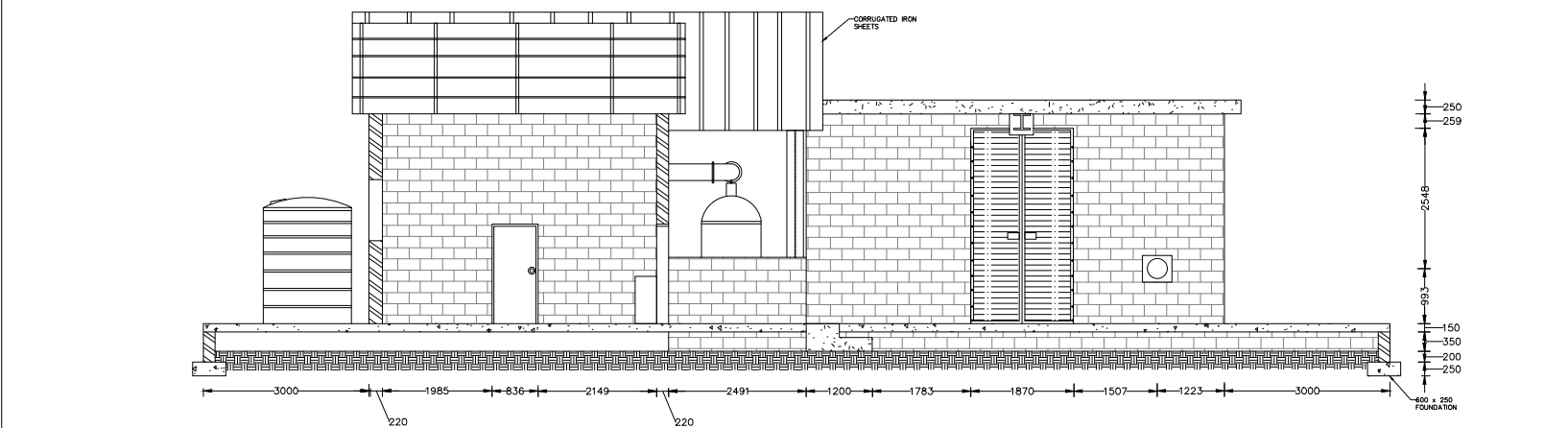
SECTION B – B

SCALE 1: 40



SECTION C – C

SCALE 1: 40



SECTION A – A

SCALE 1: 40

WATER TREATMENT PLANT COMPONENTS

- * Coagulant dosing system
- * pH adjustment dosing system
- * 3 x 10KL mixing tanks
- * 3 x circular clarifiers with control valves
- * 3 x 10KL buffer tanks
- * Duty and standby filter pumps
- * 4 x Glass Media Filters with automated backwash (120 x 800 mm)
- * 4 x GAC filters with automated backwash (120 x 1500 mm)
- * Filter bank pipework, valves and fittings
- * Glass and GAC filter media
- * Chlorine dosing system
- * 4 x 10KL clear water tanks
- * 2 x WKLn 40/4(01) CLEAR WATER PUMPS
- * MCC Control panel
- * Suction and delivery pipework for clear water pumps

CANOPY STRUCTURE ROOF MEMBER SIZES

- * Steel Column: 203 x 203 x 46 H-Section
- * Rafter: 203 x 113 x 25 I-Section
- * Sag Bars: 125 x 65 x 15 Leaped Channel Section
- * Sag Bars: 50 x 50 x 3 Sag Angles with 4mm end plates & 2 x M10 Gr.8 Bolts per connection
- * Bracing: Compression: 100 x 100 x 3 SHS
Tension: 60 x 60 x 4 L cross and bolted mid-span
- * Purling: 125 x 65 x 25 CFLC
- * Side Rails: 125 x 65 x 25 CFLC

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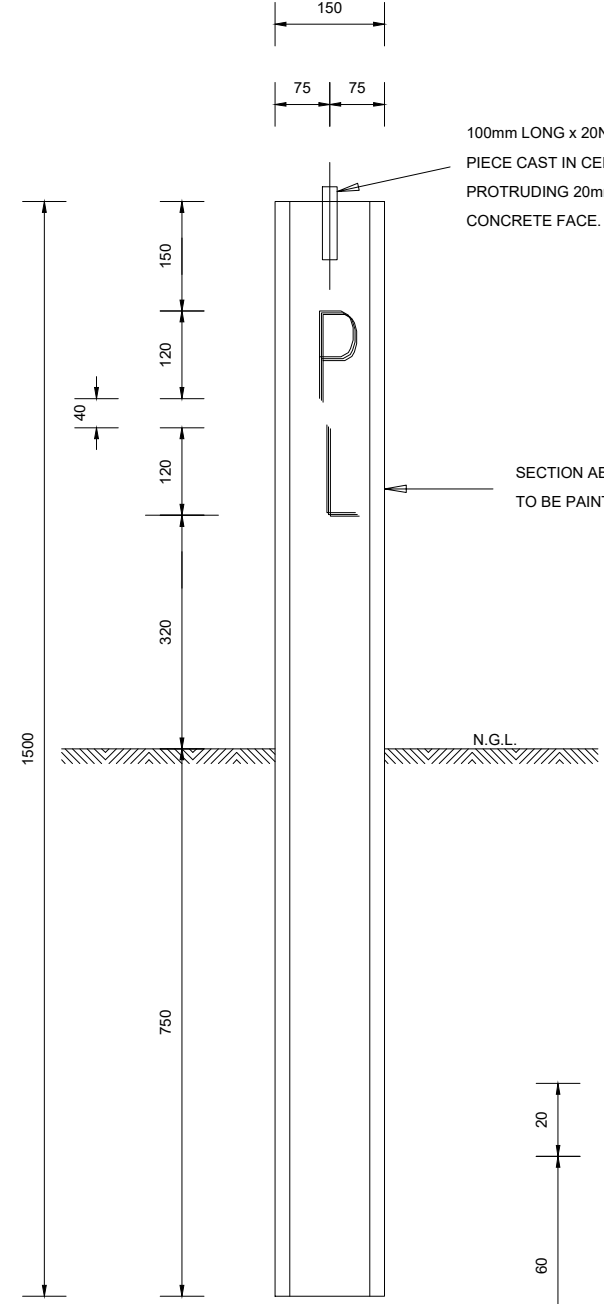
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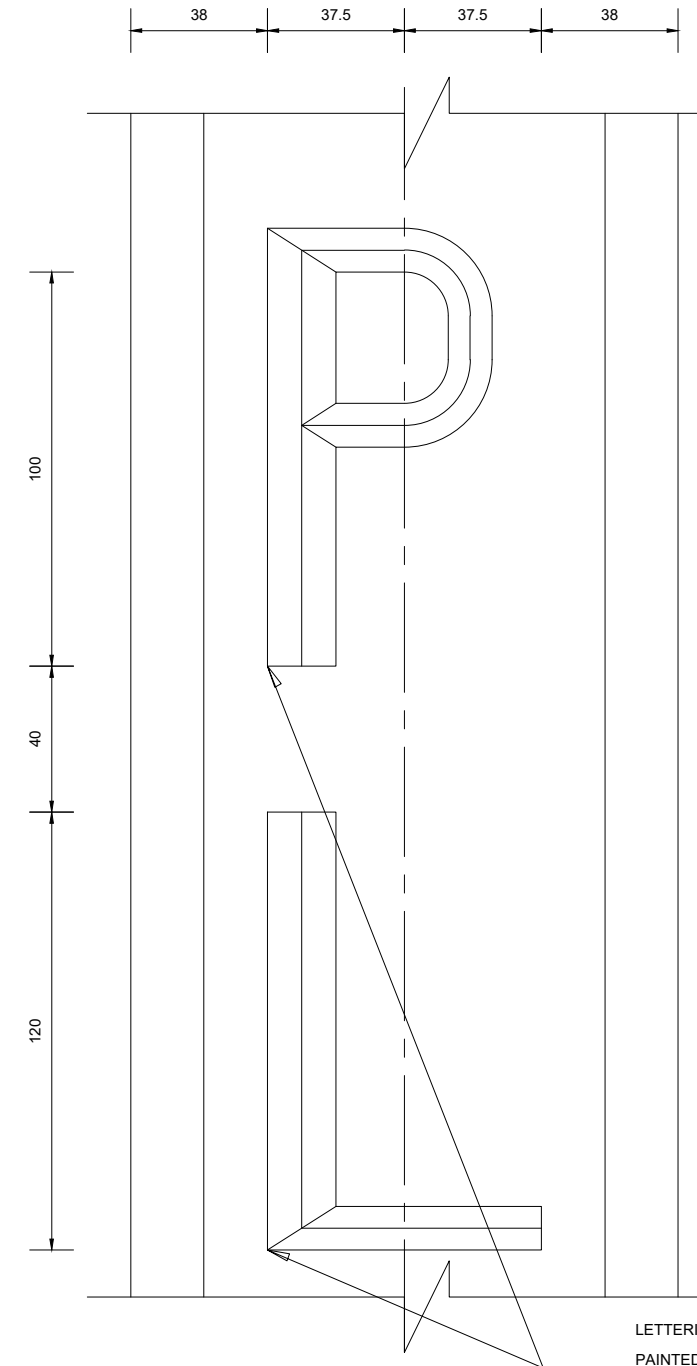
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DRAWING TITLE	PACKAGE WATER TREATMENT PLANT DETAILS

DRAWING No.	21008-P2B-18	SCALE	AS SHOWN
CONTRACT No.	SK8/3/1-07/2022/23	REVISION No.	A
		SHEET No.	2 OF 2

1. MARKER POSTS TO BE PLACED EVERY 200M ALONG THE PIPELINE ROUTE.
2. MARKER POSTS TO BE PLACED ON EVERY BEND ALONG THE PIPE PARALLEL TO A TARRED ROAD



REINFORCEMENT DETAIL
SCALE 1:5



LETTERING FORMED FEMALE IN CONCRETE AND
PAINTED WITH BLACK ENAMEL PAINT.
LETTERING TO BE 10mm WIDE x 10mm DEEP.

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