

Transnet Freight Rail

an Operating Division **TRANSNET SOC LTD**

[Registration Number 1990/000900/30]

REQUEST FOR QUOTATION (RFQ)

FOR THE: **SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET.**

RFQ NUMBER	:	KBC/34177
ISSUE DATE	:	07 June 2021
CLOSING DATE	:	22 June 2021
CLOSING TIME	:	10h00 AM
CLOSING VENUE	:	THE SECRETARIAT, ACQUISITION COUNCIL TRANSNET FREIGHT RAIL TENDER BOX Supply Chain Services REM Building Austen Street Beaconsfield Kimberley
TENDER VALIDITY PERIOD	:	12 weeks from closing date (14 September 2021)

Technical Enquiries: **Nopinkie Nqeketo**

Tel: **073 798 0263**

Contents

Number	Heading
--------	---------

The Tender

Part T1: Tendering Procedures

- | | |
|------|--|
| T1.1 | Tender Notice and Invitation to Tender |
| T1.2 | Tender Data |

Part T2: Returnable Documents

- | | |
|------|-----------------------------|
| T2.1 | List of Returnable Document |
| T2.2 | Returnable Schedules |

The Contract

Part C1: Agreements and Contract Data

- | | |
|------|------------------------------|
| C1.1 | Form of Offer and Acceptance |
| C1.2 | Contract Data (Parts 1 & 2) |

Part C2: Pricing Data

- | | |
|------|----------------------|
| C2.1 | Pricing Instructions |
| C2.2 | Bill of Quantities |

Part C3: Scope of Work

- | | |
|------|-------------------|
| C3.1 | Works Information |
|------|-------------------|

Part C4: Site Information

- | | |
|------|------------------|
| C4.1 | Site Information |
|------|------------------|

T1.1 TENDER NOTICE AND INVITATION TO TENDER

SECTION 1: NOTICE TO TENDERERS

1. INVITATION TO TENDER

Responses to this Tender [hereinafter referred to as a **Tender**] are requested from persons, companies, close corporations or enterprises [hereinafter referred to as a Tenderer].

DESCRIPTION	SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET
TENDER FEE AND BANKING DETAILS	This RFQ may be downloaded directly from National Treasury's e-Tender Publication Portal at www.etenders.gov.za and Transnet Freight Rail Website https://www.transnetfreightrail-tfr.net/Supplier/Lists/TFR%20TENDER%20List/AllItems.aspx free of charge. Alternatively, this RFQ may be purchased at R100 (inclusive of VAT) per set for those bidders that require a hard copy from Transnet. Bidders are however encouraged to download the RFQ from the eTender Portal instead. Payment is to be made as follows: Account name: Transnet Freight Rail Bank: Standard Bank Account Number: 203158598 Branch Code: 004805 Reference: KBC/34177 NOTE: 1. This amount is not refundable. Proof of payment for such payment made must be presented when collecting the RFQ Document. 2. It is the responsibility of the tenderer to ensure downloading or receipt of a complete RFQ all specifications, drawings and annexures.
COLLECT RFQ/ANNEXURES FROM:	<u>Applicable collection address:</u> Supply Chain Services REM Building Room 1 Austen Street Beaconsfield Kimberley Contact Person: Leonie Visagie Email address: Leonie.visagie@transnet.net
ISSUE DATE AND COLLECTION DATE DEADLINE	Between 09:00 and 15:00 from 07 June 2021 until 21 June 2021. Note: If a tender fee is applicable, payment must be effected prior to the deadline for collection. Pursuant to this requirement, should a third party [such as a courier] be instructed to collect the RFQ on behalf of a Tenderer, please ensure that this person [the third party] has a "proof of payment" receipt for presentation to Transnet when collecting the RFQ.
COMPULSORY TENDER CLARIFICATION MEETING	No Compulsory Tender Clarification Meeting will take place
CLOSING DATE	10:00am on 22 June 2021 Tenderers must ensure that tenders are delivered timeously to the correct address. If a tender is late or delivered to the incorrect address, it will not be accepted for consideration.

2. TENDER SUBMISSION

Tender Offers must be sealed and addressed as follows:

The Secretariat, Acquisition Council

RFP No: **KBC/34177**

Description: Supply, delivery, installation and commissioning of pumping plant (including mechanical and electrical equipment for a lift pump station) in Postmasburg with a standby generator set.

Closing date and time: 22 June 2021 at 10:00 am

Closing address: *[Refer to options in paragraph 3 below]*

All submissions must reflect the return address of the Tenderer on the reverse side.

3. DELIVERY INSTRUCTIONS FOR TENDER

3.1 Delivery by hand

If delivered by hand, the sealed submission must be deposited in the tender box which is located at the address of the Transnet tender box and must be addressed as follows:

**THE SECRETARIAT, ACQUISITION COUNCIL
TRANSNET FREIGHT RAIL TENDER BOX
Supply Chain Services
REM Building
Room 1
Austen Street
Beaconsfield
Kimberley**

The measurements of the "tender slot" are 400mm wide x 100mm high, and Tenderers must please ensure that tender documents or files are no larger than the above dimensions. Tenders which are too bulky [i.e. more than 100mm thick] must be split into two or more files, and placed in separate envelopes, each such envelope to be addressed as required in paragraph 2 above.

3.2 Dispatch by courier

If dispatched by courier, the envelope must be addressed as follows and delivered to the Office of The Secretariat, Transnet Group Capital Acquisition Council and a signature obtained from that Office:

**THE SECRETARIAT, ACQUISITION COUNCIL
TRANSNET FREIGHT RAIL TENDER BOX
Supply Chain Services
REM Building
Austen Street
Beaconsfield
Kimberley**

- 3.3 The tender offers to this tender will be opened as soon as possible after the closing date and time. Transnet shall not, at the opening of tenders, disclose to any other company any confidential details pertaining to the Tender Offers / information received, i.e. pricing, delivery, etc. The names and locations of the Tenderers will be divulged to other Tenderers upon request.
- 3.4 Submissions must not contain documents relating to any Tender other than that shown on the submission.

4. **CONFIDENTIALITY**

All information related to this RFP is to be treated with strict confidentiality. In this regard Tenderers are required to certify that they have acquainted themselves with the Non-Disclosure Agreement. All information related to a subsequent contract, both during and after completion thereof, will be treated with strict confidence. Should the need however arise to divulge any information gleaned from provision of the Works, which is either directly or indirectly related to Transnet's business, written approval to divulge such information must be obtained from Transnet.

5. **DISCLAIMERS**

Tenderers are hereby advised that Transnet is not committed to any course of action as a result of its issuance of this Tender and/or its receipt of a tender offer. In particular, please note that Transnet reserves the right to:

- 5.1. Award the business to the highest scoring Tenderer/s unless objective criteria justify the award to another tenderer.
- 5.2. Not necessarily accept the lowest priced tender or an alternative Tender;
- 5.3. Go to the open market if the quoted rates (for award of work) are deemed unreasonable;
- 5.4. Should the Tenderers be awarded business on strength of information furnished by the Tenderer, which after conclusion of the contract is proved to have been incorrect, Transnet reserves the right to terminate the contract;
- 5.5. Request audited financial statements or other documentation for the purposes of a due diligence exercise;
- 5.6. Not accept any changes or purported changes by the Tenderer to the tender rates after the closing date;
- 5.7. Verify any information supplied by a Tenderer by submitting a tender, the Tenderer/s hereby irrevocably grant the necessary consent to the Transnet to do so;
- 5.8. Conduct the evaluation process in parallel. The evaluation of Tenderers at any given stage must therefore not be interpreted to mean that Tenderers have necessarily passed any previous stage(s);
- 5.9. Unless otherwise expressly stated, each tender lodged in response to the invitation to tender shall be deemed to be an offer by the Tenderer. The Employer has the right in its sole and unfettered discretion not to accept any offer.
- 5.10. Not be held liable if tenderers do not provide the correct contact details during the clarification session and do not receive the latest information regarding this RFP with the possible consequence of being disadvantaged or disqualified as a result thereof.
- 5.11. Transnet reserves the right to exclude any Tenderers from the tender process who has been convicted of a serious breach of law during the preceding 5 [five] years including but not limited to breaches of the Competition Act 89 of 1998, as amended. Tenderers are required to indicate in tender returnable [clause 12 on T2.2-03, **Breach of Law**] whether or not they have been found guilty of a serious breach of law during the past 5 [five] years.

6. Transnet will not reimburse any Tenderer for any preparatory costs or other work performed in connection with this Tender, whether or not the Tenderer is awarded a contract.

7. **NATIONAL TREASURY'S CENTRAL SUPPLIER DATABASE**

Tenderer are required to self-register on National Treasury's Central Supplier Database (CSD) which has been established to centrally administer supplier information for all organs of state and facilitate the verification of certain key supplier information. The CSD can be accessed at <https://secure.csd.gov.za/>. Tenderer are required to provide the following to Transnet in order to enable it to verify information on the CSD:

Supplier Number..... and Unique registration reference

number.....(Tender Data)

**Transnet urges its clients, suppliers and the general public
to report any fraud or corruption to
TIP-OFFS ANONYMOUS: 0800 003 056 OR Transnet@tip-offs.com**

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement, first published in Board Notice 62 of 2004 in Government Gazette No 26427 of 9 June 2004. It was subsequently amended in Board Notice 67 of 2005 in Government Gazette No 28127 of 14 October 2005, Board Notice 93 of 2006 in Government Gazette No 29138 of 18 August 2006, Board Notice No 9 of 2008 in Government Gazette No 31823 of 30 January 2009, Board Notice 86 of 2010 in Government Gazette No 33239 of 28 May 2010, Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015 and Board Notice 423 of 2019 in Government Gazette No 42622 of 8 August 2019.

This edition incorporates the amendments made in Board Notice 423 of 2019 in Government Gazette 42622 of 8 August 2019. (see www.cidb.org.za).

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

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

Clause	Data
C.1.1	The <i>Employer</i> is Transnet SOC Ltd (Reg No. 1990/000900/30)
C.1.2	The tender documents issued by the <i>Employer</i> comprise: Part T: The Tender Part T1: Tendering procedures Part T2 : Returnable documents Part C: The contract Part C1: Agreements and contract data Part C2: Pricing data Part C3: Scope of work Part C4: Site information
	T1.1 Tender notice and invitation to tender T1.2 Tender data T2.1 List of returnable documents T2.2 Returnable schedules C1.1 Form of offer and acceptance C1.2 Contract data (Part 1 & 2) C2.1 Pricing instructions C2.2 Price Schedule C3.1 Works Information C4.1 Site information
C.1.4	The Employer's agent is: Name:
	Procurement Officer Liesel Weir

Address:	SCS, Austen Street, Beaconsfield, Kimberley
Tel No.	053 838-3202
E – mail	Liezel.weir@transnet.net

C.2.1 Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:

1. Stage One - Local Production and Content in terms of the Preferential Procurement Regulations, 2017:

Tenderers must properly complete, duly sign and submit returnable schedule T2.2-01 entitled "Declaration Certificate for Local Production and Content (SBD 6.2 and Annexures C, D & E)", committing to meet the following stipulated minimum thresholds for local production and content for the following designated sectors as determined by the Department of Trade and Industry (DTI):

90% for Electrical cable products; and
100% for Steel products and components for construction.

The exchange rate to be used for the calculation of local production and content must be the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of the advertisement of the tender. The rates of exchange quoted by the tenderer in paragraph 4.1 of Returnable Schedule T2.2-01 (the Declaration Certificate for Local Production and Content for Designated Sectors) may be verified for accuracy. Only the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 must be used to calculate local content.

The SABS approved technical specification number SATS 1286:2011 and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)] are accessible to all potential tenderers on the DTI's official website;
[http://www.the.dti.gov.za/industrial development/ip.jsp](http://www.the.dti.gov.za/industrial%20development/ip.jsp)

Any tenderer that fails to meet the stipulated pre-qualifying criteria will be regarded as an unacceptable tender.

2. Stage Two - Eligibility in terms of the Construction Industry Development Board:

a) Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, designation of **3EB or higher** class of construction work, are eligible to have their tenders evaluated.

b) Joint Venture (JV)

Joint ventures are eligible to submit tenders subject to the following:

1. every member of the joint venture is registered with the CIDB;

2. the lead partner has a contractor grading designation of **3EB 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 a **3EB or higher** class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations
4. The tenderer shall provide a certified copy of its signed joint venture agreement.

Any tenderer that fails to meet the stipulated pre-qualifying criteria will be regarded as an unacceptable tender.

3. Stage Three - Functionality:

Only those tenderers who obtain the minimum qualifying score for functionality will be evaluated further in terms of price and the applicable preference point system. The minimum qualifying score for functionality is 70 points.

The evaluation criteria for measuring functionality and the points for each criteria and, if any, each sub-criterion are as stated in C.3.11.3 below.

Any tenderer that fails to meet the stipulated pre-qualifying criteria will be regarded as an unacceptable tender.

C.2.12 No alternative tender offers will be considered.

C.2.13.3 Parts of each tender offer communicated on paper shall be as an **original, one (1) copy** which shall be in the **English Language**.

C.2.13.5 The *Employer's* details and address for delivery of tender offers and identification details that
C2.15.1 are to be shown on each tender offer package are:

Location of tender box TRANSNET FREIGHT RAIL

Physical address: **REM Building
Austen Street
Beaconsfield
Kimberley**

Identification details: The tender documents must be submitted labelled with:

- Name of Tenderer: **(insert company name)**
- Contact person and details: **(insert details)**
- The Tender Number: **KBC/34177**

The Tender Description: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG

WITH A STANDBY GENERATOR SET.

Documents must be marked for the attention of: ***Employer's Agent: L. WEIR***

C.2.13.9 Telephonic, telegraphic, facsimile or e-mailed tender offers will not be accepted.

C.2.15 The closing time for submission of tender offers is:

Time: **10:00 am** on the **22 June 2021**

Location: **The Tender Box
Transnet Freight Rail
REM Building
Austen Street
Beaconsfield
Kimberley**

NO LATE TENDERS WILL BE ACCEPTED

C.2.16 The tender offer validity period is **12 weeks** after the closing date. Tenderers are to note that they may be requested to extend the validity period of their tender, on the same terms and conditions, if Transnet's internal evaluation and governance approval processes has not been finalised within the validity period.

C.2.23 The tenderer is required to submit with his tender:

1. A valid Tax Clearance Certificate issued by the South African Revenue Services.
Tenderers also to provide Transnet with a TCS PIN to verify Tenderers compliance status.
2. A **valid B-BBEE Certificate** from a Verification Agency accredited by the South African Accreditation System [**SANAS**], or a **sworn affidavit** confirming annual turnover and level of black ownership in case of all EMEs and QSEs with 51% black ownership or more together with the tender;
3. A valid CIDB certificate in the correct designated grading;
4. Proof of registration on the Central Supplier Database;
5. Letter of Good Standing with the Workmen's compensation fund by the tendering entity or separate Letters of Good Standing from all members of a newly constituted JV.

Note: Refer to Section T2.1 for List of Returnable Documents

C3.4 The time and location for opening of the offers are after the opening submissions at the venue as stated in C.2.15.

C3.11 The minimum number of evaluation points for functionality is: **70**

The procedure for the evaluation of responsive tenders is Functionality, Price and Preference:

Only those tenderers who attain the minimum number of evaluation points for Functionality will be eligible for further evaluation, failure to meet the minimum threshold will result in the tender being disqualified and removed from any further consideration.

Functionality Criteria

The functionality criteria and maximum score in respect of each of the criteria are as follows:

(Please see CIDB Compiler guidance note T1.2 – Tender Data).

Functionality criteria	Sub-criteria	Sub-criteria points	Maximum number of points
Previous experience (T2.2-11)	No experience in this field of work / No proof provided	0	50%
	1 years' experience in similar projects completed	40	
	2 years' experience in similar projects completed	70	
	3 Years' experience in similar projects complete	90	
	4 and more years' experience in similar projects completed	100	
Method Statement (T2.2-12)	No documentation submitted.	0	50%
	Incomplete method statement	40	
	Adequate method statement	70	
	Detailed Method Statement with indicating only the items addressed in T2.2-12	90	
	Detailed method statement indicating all items addressed and more in T2.2-12	100	
Maximum possible score for Functionality			100

Functionality shall be scored independently by not less than 3 (three) evaluators and averaged in accordance with the following schedules:

- T2.2-11 Previous Experience
- T2.2-12 Method Statement

Each evaluation criteria will be assessed in terms of scores of 0, 40, 70, 90 or 100

The scores of each of the evaluators will be averaged, weighted and then totaled to obtain the final score for functionality, unless scored collectively. (See CIDB Inform Practice Note #9).

Note: Any tender not complying with the above mentioned requirements, will be regarded as non-responsive and will therefore not be considered for further evaluation. This note must be read in conjunction with Clause C.2.1.

-
- C.3.11. Only tenders that achieve the minimum qualifying score for functionality will be evaluated further in accordance with the 80/20 preference points systems as described in Preferential Procurement Regulations **6 and 7.**

80 where the financial value of one or more responsive tenders received have a value equal to or below R50 million, inclusive of all applicable taxes,

Up to 100 minus W₁ tender evaluation points will be awarded to tenderers who complete the preferencing schedule and who are found to be eligible for the preference claimed. **Should the BBBEE rating not be provided, tenderers with no verification will score zero points for preferencing.**

Note: Transnet reserves the right to carry out an independent audit of the tenderers scorecard components at any stage from the date of close of the tenders until completion of the contract.

-
- C.3.13 Tender offers will only be accepted if:

1. The tenderer or any of its directors/shareholders 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;
2. the tenderer does not appear on Transnet's list for restricted tenderers and National Treasury's list of Tender Defaulters;
3. the tenderer has fully and properly completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the Employer or potentially compromise the tender process and persons in the employ of the state.
4. Transnet reserves the right to award the tender to the tenderer who scores the highest number of points overall, unless there are **objective criteria** which will justify the award of the tender to another tenderer. Objective criteria include but are not limited to the outcome of a due diligence exercise to be conducted. The due diligence exercise may take the following factors into account inter alia;

the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,

e) complies with the legal requirements, if any, stated in the tender data and

f) is able, in the option of the employer to perform the contract free of conflicts of interest.

C.3.17 The number of paper copies of the signed contract to be provided by the Employer is 1 (one).

T2.1 List of Returnable Documents

2.1.1 These schedules are required for pre-qualification and eligibility purposes:

- T2.2-01 **Stage Two as per PPPFA: Eligibility Criteria Schedule** - Declaration Certificate of Local Production and Content (SBD 6.2)
- T2.2-02 **Stage Three as per CIDB: Eligibility Criteria Schedule** - CIDB Registration

2.1.2 Stage Four as per CIDB: these schedules will be utilised for evaluation purposes:

- T2.2-11 **Evaluation Schedule:** Previous experience
- T2.2-12 **Evaluation Schedule:** Method Statement

2.1.3 Returnable Schedules:

General:

- T2.2-04 Authority to submit tender
- T2.2-10 Record of addenda to tender documents

Agreement and Commitment by Tenderer:

- T2.2-03 RFP – Breach of Law
- T2.2-05 Certificate of Acquaintance with Tender Document
- T2.2-06: CIDB SFU ANNEX G Compulsory Enterprise Questionnaire
- T2.2-07 Non-Disclosure Agreement
- T2.2-08 RFQ Declaration Form
- T2.2-09 Service Provider Integrity Pact
- T2.2-13 Supplier Code of Conduct

1.3.3 Transnet Vendor Registration Form:

- T2.2-14 Transnet Vendor Registration Form

2.2 C1.1 OFFER PORTION OF FORM OF OFFER & ACCEPTANCE

2.3 C1.2 CONTRACT DATA

2.4 C1.3 Forms of Securities

2.5 C2.1 Pricing Instructions

2.6 C2.2 PRICE SCHEDULE

SBD 6.2

T2.2-01: Pre-qualification Criteria Schedule: Declaration of Certificate for Local Production and Content for Designated Sectors

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
- 1.2. Regulation 8.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand
y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on <http://www.thedti.gov.za/industrial development/ip.jsp> at no cost.

- 1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. Definitions

- 2.1. **"bid"** includes written price quotations, advertised competitive bids or proposals;
- 2.2. **"bid price"** price offered by the bidder, excluding value added tax (VAT);
- 2.3. **"contract"** means the agreement that results from the acceptance of a bid by an organ of state;

- 2.4. **"designated sector"** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;
- 2.5. **"duly sign"** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).
- 2.6. **"imported content"** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour or intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. **"local content"** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. **"stipulated minimum threshold"** means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. **"sub-contract"** means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
3. **The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:**

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
• Electrical and Telecom Cables;	90%
• Steel Value-Added Products	100%

4. Does any portion of the services, works or goods offered have any imported content?

(**Tick applicable box**)

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

- 4.1. If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: TRANSNET FREIGHT RAIL ON BEHALF OF TRANSNET SOC LTD

NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names), do hereby declare, in my capacity as of (name of bidder entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Price of the Designated commodity Electrical and Telecom Cables	Ex VAT	R
Imported content (x), as calculated in terms of SATS 1286:2011		R
Stipulated minimum threshold for local content (paragraph 3 above)		
Local content %, as calculated in terms of SATS 1286:2011		

Price of the Designated commodity Steel Value-Added Products	Ex Vat	R
Imported content (x), as calculated in terms of SATS 1286:2011		R
Stipulated minimum threshold for local content (paragraph 3 above)		
Local content %, as calculated in terms of SATS 1286:2011		

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of

the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

NOTE TO TENDERERS: FAILURE TO FULLY COMPLETE, DECLARE, SIGN & DATE THIS SBD6.2 DECLARATION AS WELL AS THE ACCOMPANYING ANNEXURE C "LOCAL CONTENT DECLARATION - SUMMARY SCHEDULE" WILL RESULT IN THE TENDER SUBMISSION BEING NON-RESPONSIVE AND DISQUALIFIED FROM ANY FURTHER EVALUATION.

Annex C

Local Content Declaration – Summary Schedule

- (C1) Tender No. KBC/34177
- (C2) Tender Description: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET.
- (C3) Designated product(s) Electrical and Telecom Cables (90%) AND Steel Value-Added Products (100%)
- (C4) Tender Authority: TRANSNET FREIGHT RAIL A DIVISION OF TRANSNET SOC
- (C5) Tendering entity name:
- (C6) Tender Exchange Rate: Pula EU GBP
- (C7) Specified local content %

Note: VAT to be excluded from all calculations

Calculation of local content

Tender Item no's	List of items	Tender price –each (excl. VAT)	Exempted imported value	Tender value net of exempted imported content	Imported Value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
(C20) Total tender value											
(C21) Total Exempt imported content											
(C22) Total Total Tender value net of exempt imported content											
(C23) Total Imported content											
(C24) Total local content											
(C25) Average local content % of tender											

Signature of tenderer from Annex B

Date:

Annex D**Imported Content Declaration – Supporting Schedule to Annex C**

(D1) Tender No. KBC/34177

(D2) Tender Description: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET.

(D3) Designated Products: Electrical and Telecom Cables (90%) AND Steel Value-Added Products (100%)

(D4) Tender Authority: TRANSNET FREIGHT RAIL A DIVISION OF TRANSNET SOC

(D5) Tender Entity name:

(D6) Tender Exchange Rate: Pula EU GBP

Note: VAT to be excluded from all calculations

A. Exempted imported content

Calculation of imported content									
Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)

(D19) Total exempt imported value

Summary	
Tender Qty	Exempted imported value
(D17)	(D18)

This total must correspond with Annex C – C12

B. Imported directly by the Tenderer

Calculation of imported content									
Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)

(D32) Total imported value by tenderer

Summary	
Tender Qty	Exempted imported value
(D30)	(D31)

C. Imported by a 3rd party and supplied to the Tenderer

Calculation of imported content									
Description of imported content	Local Supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	
(D33)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	

(D45) Total imported value by 3rd party

Summary	
Tender Qty	Exempted imported value
(D43)	(D44)

D. Other foreign currency payments

Calculation of foreign currency payments				
Type of Payment	Local Supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange
(D46)	(D47)	(D48)	(D49)	(D50)

(D52) Total of foreign currency payments declared by tenderer and/or 3rd party

Summary of Payments	
Local value of payments	
(D51)	

Signature of tenderer from Annex B

(D53) Total of imported content & foreign currency payments – (D32), (D45) &

This total must correspond with Annex C – C23

Date:

SATS 1286.2011

Annex E**Local Content Declaration – Supporting Schedule to Annex C**

(E1)	Tender No.	KBC/34177
(E2)	Tender Description:	SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET.
(E3)	Designated Products:	Electrical and Telecom Cables (90%) AND Steel Value-Added Products (100%)
(E4)	Tender Authority:	TRANSNET FREIGHT RAIL A DIVISION OF TRANSNET SOC
(E5)	Tender Entity name:	

Note: VAT to be excluded from all calculations

Local Products (Goods, Services and Works)	Description of items purchased	Local Suppliers	Value
	(E6)	(E7)	(E8)
(E9) Total local products (Goods, Services and Works)			

(E10) **Manpower costs** (Tenderer's manpower cost)

(E11) **Factory overheads** Rental, depreciation & amortisation, utility costs, consumables etc.)

(E12) **Administration overheads and mark-up** (Marketing, insurance, financing, interest etc.)

(E13) Total Local Content

This total must correspond with Annex C – C24

Signature of tenderer from Annex B

Date: _____

T2.2-02: Eligibility Criteria Schedule - CIDB Grading

Designation

Note to tenderers:

Tenderers are to indicate their CIDB Grading by filling in the table below. **Attach a copy of the CIDB Grading Designation or evidence of being capable of being so registered.**

CRS Number	Status	Grading	Expiry Date

4. Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a **3EB or higher** class of construction work, are eligible to have their tenders evaluated.

5. Joint Venture (JV)

Joint ventures are eligible to submit tenders subject to the following:

5. every member of the joint venture is registered with the CIDB;
6. the lead partner has a contractor grading designation in the a **3EB or higher** class of construction work; and
7. 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 a **3EB or higher** class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations
8. the Contractor shall provide the employer with a certified copy of its signed joint venture agreement;
9. and in the event that the joint venture is an 'Incorporated Joint Venture' the Memorandum of Incorporation to be provided within 4 (four) weeks of the Contract Date.



T2.2-03: REQUEST FOR PROPOSAL – BREACH OF LAW

NAME OF COMPANY: _____

I / We _____ do hereby certify that ***I/we have/have not been*** found guilty during the preceding 5 (five) years of a serious breach of law, including but not limited to a breach of the Competition Act, 89 of 1998, by a court of law, tribunal or other administrative body. The type of breach that the Tenderer is required to disclose excludes relatively minor offences or misdemeanors, e.g. traffic offences.

Where found guilty of such a serious breach, please disclose:

NATURE OF BREACH:

DATE OF BREACH:

Furthermore, I/we acknowledge that Transnet SOC Ltd reserves the right to exclude any Tenderer from the tendering process, should that person or company have been found guilty of a serious breach of law, tribunal or regulatory obligation.

Signed on this _____ day of _____ 20____

SIGNATURE OF TENDER

T2.2-04: Authority to submit a Tender

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for his category of organisation or alternatively attach a certified copy of a company / organisation document which provides the same information for the relevant category as requested here.

A - COMPANY	B - PARTNERSHIP	C - JOINT VENTURE	D - SOLE PROPRIETOR

A. Certificate for Company

I, _____ chairperson of the board of directors _____, hereby confirm that by resolution of the board taken on _____ (date), Mr/Ms _____, acting in the capacity of _____, was authorised to sign all documents in connection with this tender offer and any contract resulting from it on behalf of the company.

Signed

Date

Name

Position

Chairman of the Board of Directors

B. Certificate for Partnership

We, the undersigned, being the **key partners** in the business trading as _____

_____ hereby authorise Mr/Ms _____

acting in the capacity of _____, to sign all documents in

connection with the tender offer for Contract _____ and any

contract resulting from it on our behalf.

Name	Address	Signature	Date

NOTE: This certificate is to be completed and signed by the full number of Partners necessary to commit the Partnership. Attach additional pages if more space is required.

C. Certificate for Joint Venture

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

Mr/Ms _____, an authorised signatory of the company

_____, acting in the capacity of lead

partner, to sign all documents in connection with the tender offer for Contract _____

_____ and any contract resulting from it on our behalf.

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

Furthermore we attach to this Schedule a copy of the joint venture agreement which incorporates a statement that all partners are liable jointly and severally for the execution of the contract and that the lead partner is authorised to incur liabilities, receive instructions and payments and be responsible for the entire execution of the contract for and on behalf of any and all the partners.

Name of firm	Address	Authorising signature, name (in caps) and capacity

D. Certificate for Sole Proprietor

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

Signed

Date

Name

Position

Sole Proprietor

T2.2-05 Certificate of Acquaintance with Tender Documents

NAME OF TENDERING ENTITY:

—

1. By signing this certificate I/we acknowledge that I/we have made myself/ourselves thoroughly familiar with, and agree with all the conditions governing this RFP. This includes those terms and conditions of the Contract, the Supplier Integrity Pact, Non-Disclosure Agreement etc. contained in any printed form stated to form part of the documents thereof, but not limited to those listed in this clause.
2. I/we furthermore agree that Transnet SOC Ltd shall recognise no claim from me/us for relief based on an allegation that I/we overlooked any tender/contract condition or failed to take it into account for the purpose of calculating my/our offered prices or otherwise.
3. I/we understand that the accompanying Tender will be disqualified if this Certificate is found not to be true and complete in every respect.
4. For the purposes of this Certificate and the accompanying Tender, I/we understand that the word "competitor" shall include any individual or organisation, other than the Tenderer, whether or not affiliated with the Tenderer, who:
 - a) has been requested to submit a Tender in response to this Tender invitation;
 - b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and
 - c) provides the same Services as the Tenderer and/or is in the same line of business as the Tenderer
5. The Tenderer has arrived at the accompanying Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive Tendering.
6. In particular, without limiting the generality of paragraph 5 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - a) prices;
 - b) geographical area where Services will be rendered [market allocation]
 - c) methods, factors or formulas used to calculate prices;

-
- d) the intention or decision to submit or not to submit, a Tender;
- e) the submission of a tender which does not meet the specifications and conditions of the tender; or
- f) Tendering with the intention not winning the tender.
7. 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 Services to which this tender relates.
8. The terms of the accompanying tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.
9. I/We am/are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and/or may be reported to the National Prosecuting Authority [NPA] for criminal investigation. In addition, Tenderers that submit suspicious tenders may be restricted from conducting business with the public sector for a period not exceeding 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signed on this _____ day of _____ 20____

SIGNATURE OF TENDERER

T2.2-06: ANNEX G Compulsory Enterprise Questionnaire

The following particulars hereunder must be furnished.

In the case of a Joint Venture, separate enterprise questionnaires in respect of each partner/member must be completed and submitted.

1. SECTION 1: NAME OF ENTERPRISE: _____

2. SECTION 2: VAT REGISTRATION NUMBER, IF ANY: _____

3. SECTION 3: CIDB REGISTRATION NUMBER, IF ANY: _____

4. SECTION 4: CSD NUMBER: _____

5. SECTION 5: 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

6. SECTION 6: PARTICULARS OF COMPANIES AND CLOSE CORPORATIONS

Company registration number _____

Close corporation number _____

Tax reference number: _____

Section 7: The attached SBD4 must be completed for each tender and be attached as a tender requirement.

Section 8: The attached SBD 6 must be completed for each tender and be attached as a requirement.

Section 9: The attached SBD8 must be completed for each tender and be attached as a requirement.

Section 10: The attached SBD9 must be completed for each tender and be attached as a requirement.

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

- i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) 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;
- iii) 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;
- iv) 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
- v) 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

SBD 4



DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/ adjudicating authority where-

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

¹ "State" means –

- a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999); any municipality or municipal entity;
- b) provincial legislature;
- c) national Assembly or the national Council of provinces; or
- d) Parliament.

**SBD 4**

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

2.1 Full Name of bidder or his or her representative: _____

2.2 Identity Number: _____

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

2.4 Company Registration Number: _____

2.5 Tax Reference Number: _____

2.6 VAT Registration Number: _____

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

2.7 Are you or any person connected with the bidder presently employed by the state?

YES / NO

2.7.1 If so, furnish the following particulars:

- Name of person / director / trustee / shareholder/ member:

- Name of state institution at which you or the person connected to the bidder is employed:

- Position occupied in the state institution:

Any other particulars:

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

SBD 4

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

YES / NO

2.7.3 If yes, did you attached proof of such authority to the bid document?

YES / NO

Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.3.1 If no, furnish reasons for non-submission of such proof:

2.8 Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months?

YES / NO

2.8.1 If so, furnish particulars:

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid?

YES / NO

2.8.2 If so, furnish particulars.

SBD 4

2.9 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?

YES/NO

2.9.1 If so, furnish particulars.

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

YES/NO

2.10.1 If so, furnish particulars:

SBD 4**3 Full details of directors / trustees / members / shareholders.**

Full Name	Identity Number	Personal Tax Reference Number	State Employee Number / Persal Number

SBD 4

4 DECLARATION

I, THE UNDERSIGNED (NAME) _____ CERTIFY
THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF
PARAGRAPH 23 OF THE GENERAL CONDITIONS OF CONTRACT SHOULD THIS
DECLARATION PROVE TO BE FALSE.

Signature

Date

Position

Name of bidder

SBD 6.1

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

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

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

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all bids:
- the 80/20 system for requirements with a Rand value of below R50 000 000 (all applicable taxes included)
- 1.2 The value of this bid is estimated **not to exceed** R50 000 000 (all applicable taxes included) and therefore the **80/20** preference point system shall be applicable.
- 1.3 Preference points for this bid shall be awarded for:
- (a) Price; and
 - (b) B-BBEE Status Level of Contribution.
- 1.4 The maximum points for this bid are allocated as follows:

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

- 1.5 Failure on the part of a bidder to submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System [**SANAS**], or a sworn affidavit confirming annual turnover and level of black ownership in case of all EMEs and QSEs with 51% black ownership or more together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

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

-
- (b) **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
 - (c) **"B-BBEE status level of contributor"** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
 - (d) **"bid"** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
 - (e) **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
 - (f) **"CIPC"** means the Companies and Intellectual Property Commission, formerly known as CIPRO, the Companies and Intellectual Property Registration Office.
 - (g) **"comparative price"** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
 - (h) **"consortium or joint venture"** 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;
 - (i) **"contract"** means the agreement that results from the acceptance of a bid by an organ of state;
 - (j) **"EME"** means an Exempted Micro Enterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
 - (k) **"firm price"** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
 - (l) **"functionality"** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
 - (m) **"non-firm prices"** means all prices other than "firm" prices;
 - (n) **"person"** includes a juristic person;
 - (o) **"QSE"** means a Qualifying Small EEnterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
 - (p) **"rand value"** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
 - (q) **"sub-contract"** means the primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part
-

of a project in terms of the contract;

- (r) **"total revenue"** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;
- (s) **"trust"** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- (t) **"trustee"** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 points is allocated for price on the following basis:
80/20

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

Where

P_s = Points scored for comparative price of bid under consideration

P_t = Comparative price of bid under consideration

$P_{\min}$ = Comparative price of lowest acceptable bid

5. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

- 5.1 In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

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

- 5.2 A bidder who qualifies as a EME in terms of the B-BBEE Act must submit a sworn affidavit confirming Annual Total Revenue and Level of Black Ownership. Furthermore EMEs may also obtain a sworn affidavit from CIPC (formerly CIPRO) Self Service Terminals when registering a business or filing annual returns. In these instances Transnet would require proof of turnover as well as proof of ownership. Sworn affidavits must substantially comply with the format that can be obtained on the DTI's website at www.dti.gov.za/economic_empowerment/bee_codes.jsp.
- 5.3 QSEs that are at least 51% Black owned or higher are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R50 million or less and the entity's Level of Black ownership.

- 5.4 A Bidder other than EME or a QSE that is at least 51% Black owned must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Verification Agency accredited by SANAS.
- 5.5 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.6 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.7 Tertiary Institutions and Public Entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.8 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- 5.9 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.
- 5.10 Bidders are to note that the rules pertaining to B-BBEE verification and other B-BBEE requirements may be changed from time to time by regulatory bodies such as National Treasury or the DTI. It is the Bidder's responsibility to ensure that his/her bid complies fully with all B-BBEE requirements at the time of the submission of the bid.

6. BID DECLARATION

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

7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 5.1

- 7.1 B-BBEE Status Level of Contribution: . =(maximum of 20 points)
(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or a sworn affidavit.

8. SUB-CONTRACTING

- 8.1 Will any portion of the contract be sub-contracted?
(*Tick applicable box*)

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

8.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME.

(Tick applicable box)

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

9. DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm: _____

9.2 VAT registration number: _____

9.3 Company registration number: _____

9.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited

[TICK APPLICABLE BOX]

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

9.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

9.7 Total number of years the company/firm has been in business: _____

9.8 I/we, the undersigned, who is / are duly authorized to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favorable arrangements due to such cancellation;
 - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

1.

2.

.....
SIGNATURE(S) OF TENDERER(S)

DATE:

ADDRESS

.....

.....

SBD 8

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This Standard Bidding Document must form part of all bids invited.
2. It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
3. The bid of any bidder may be disregarded if that bidder, or any of its directors have-
 - a. abused the institution's supply chain management system;
 - b. committed fraud or any other improper conduct in relation to such system; or
 - c. failed to perform on any previous contract.
- 4. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's database as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied).	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445.	Yes ☐	No ☐
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
4.4.1	If so, furnish particulars:		



SBD 8

CERTIFICATION

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

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

Signature

Date

Position

Name of Tenderer

**SBD 9****CERTIFICATE OF INDEPENDENT BID DETERMINATION**

1. This Standard Bidding Document (SBD) must form part of all bids/quotes³ 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).⁴ Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - (a) disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - (b) cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
4. This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when 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 (SBD 9) must be completed and submitted with the bid:

³ Includes price quotations, advertised competitive bids, limited bids and proposals.

⁴ 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.

SBD 9**CERTIFICATE OF INDEPENDENT QUOTATION/PROPOSAL DETERMINATION**

I, the undersigned, in submitting the accompanying quote:

(Quote Number and Description)

in response to the invitation for the quote made by:

(Name of Institution)

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

I certify, on behalf of: _____ 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

SBD 9

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 consortium⁵ will not be construed as collusive bidding.
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.

⁵ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

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

Signature

Date

Position

Name of bidder

T2.2-07 NON-DISCLOSURE AGREEMENT

[..... 2020]

Note to tenderers: This Non-Disclosure Agreement is to be completed and signed by an authorised signatory:

THIS AGREEMENT is made effective as of day of 20..... by and between:

TRANSNET SOC LTD

(Registration No. 1990/000900/30), a company incorporated and existing under the laws of South Africa, having its principal place of business at 2nd Floor, Waterfall Business Estate, 9 Country Estate Drive, Midrand, 1662, South Africa

and

.....
(Registration No.), a private company incorporated and existing under the laws of South Africa having its principal place of business at
.....
.....

WHEREAS

Transnet and the Company wish to exchange Information [as defined below] and it is envisaged that each party may from time to time receive Information relating to the other in respect thereof. In consideration of each party making available to the other such Information, the parties jointly agree that any dealings between them shall be subject to the terms and conditions of this Agreement which themselves will be subject to the parameters of the Tender Document.

IT IS HEREBY AGREED

1. INTERPRETATION

In this Agreement:

- 1.1 **Agents** mean directors, officers, employees, agents, professional advisers, contractors or sub-contractors, or any Group member;
- 1.2 **Bid or Bid Document** (hereinafter Tender) means Transnet's Request for Information [**RFI**] Request for Proposal [**RFP**] or Request for Quotation [**RFQ**], as the case may be;
- 1.3 **Confidential Information** means any information or other data relating to one party [the **Disclosing Party**] and/or the business carried on or proposed or intended to be carried on by that party and which is made available for the purposes of the Bid to the other party [the **Receiving Party**] or its Agents by the Disclosing Party or its Agents or recorded in agreed minutes following oral disclosure and any other information otherwise made available by the Disclosing Party or its Agents to the Receiving Party or its Agents, whether before, on or after the date of this Agreement, and whether in writing or otherwise, including any information, analysis or specifications derived from, containing or reflecting such information but excluding information which:

- 1.3.1 is publicly available at the time of its disclosure or becomes publicly available [other than as a result of disclosure by the Receiving Party or any of its Agents contrary to the terms of this Agreement]; or
- 1.3.2 was lawfully in the possession of the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] free of any restriction as to its use or disclosure prior to its being so disclosed; or
- 1.3.3 following such disclosure, becomes available to the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] from a source other than the Disclosing Party or its Agents, which source is not bound by any duty of confidentiality owed, directly or indirectly, to the Disclosing Party in relation to such information;
- 1.4 **Group** means any subsidiary, any holding company and any subsidiary of any holding company of either party; and
- 1.5 **Information** means all information in whatever form including, without limitation, any information relating to systems, operations, plans, intentions, market opportunities, know-how, trade secrets and business affairs whether in writing, conveyed orally or by machine-readable medium.

2. CONFIDENTIAL INFORMATION

- 2.1 All Confidential Information given by one party to this Agreement [the **Disclosing Party**] to the other party [the **Receiving Party**] will be treated by the Receiving Party as secret and confidential and will not, without the Disclosing Party's written consent, directly or indirectly communicate or disclose [whether in writing or orally or in any other manner] Confidential Information to any other person other than in accordance with the terms of this Agreement.
- 2.2 The Receiving Party will only use the Confidential Information for the sole purpose of technical and commercial discussions between the parties in relation to the Tender or for the subsequent performance of any contract between the parties in relation to the Tender.
- 2.3 Notwithstanding clause 2.1 above, the Receiving Party may disclose Confidential Information:
 - 2.3.1 to those of its Agents who strictly need to know the Confidential Information for the sole purpose set out in clause 2.2 above, provided that the Receiving Party shall ensure that such Agents are made aware prior to the disclosure of any part of the Confidential Information that the same is confidential and that they owe a duty of confidence to the Disclosing Party. The Receiving Party shall at all times remain liable for any actions of such Agents that would constitute a breach of this Agreement; or
 - 2.3.2 to the extent required by law or the rules of any applicable regulatory authority, subject to clause 2.4 below.
- 2.4 In the event that the Receiving Party is required to disclose any Confidential Information in accordance with clause 2.3.2 above, it shall promptly notify the Disclosing Party and cooperate with the Disclosing Party regarding the form, nature, content and purpose of such disclosure or any action which the Disclosing Party may reasonably take to challenge the validity of such requirement.

2.5 In the event that any Confidential Information shall be copied, disclosed or used otherwise than as permitted under this Agreement then, upon becoming aware of the same, without prejudice to any rights or remedies of the Disclosing Party, the Receiving Party shall as soon as practicable notify the Disclosing Party of such event and if requested take such steps [including the institution of legal proceedings] as shall be necessary to remedy [if capable of remedy] the default and/or to prevent further unauthorised copying, disclosure or use.

2.6 All Confidential Information shall remain the property of the Disclosing Party and its disclosure shall not confer on the Receiving Party any rights, including intellectual property rights over the Confidential Information whatsoever, beyond those contained in this Agreement.

3. RECORDS AND RETURN OF INFORMATION

3.1 The Receiving Party agrees to ensure proper and secure storage of all Information and any copies thereof.

3.2 The Receiving Party shall keep a written record, to be supplied to the Disclosing Party upon request, of the Confidential Information provided and any copies made thereof and, so far as is reasonably practicable, of the location of such Confidential Information and any copies thereof.

3.3 The Company shall, within 7 [seven] days of receipt of a written demand from Transnet:

3.3.1 return all written Confidential Information [including all copies]; and

3.3.2 expunge or destroy any Confidential Information from any computer, word processor or other device whatsoever into which it was copied, read or programmed by the Company or on its behalf.

3.4 The Company shall on request supply a certificate signed by a director as to its full compliance with the requirements of clause 3.3.2 above.

4. ANNOUNCEMENTS

4.1 Neither party will make or permit to be made any announcement or disclosure of its prospective interest in the Tender without the prior written consent of the other party.

4.2 Neither party shall make use of the other party's name or any information acquired through its dealings with the other party for publicity or marketing purposes without the prior written consent of the other party.

5. DURATION

The obligations of each party and its Agents under this Agreement shall survive the termination of any discussions or negotiations between the parties regarding the Tender and continue thereafter for a period of 5 [five] years.

6. PRINCIPAL

Each party confirms that it is acting as principal and not as nominee, agent or broker for any other person and that it will be responsible for any costs incurred by it or its advisers in considering or pursuing the Tender and in complying with the terms of this Agreement.

7. ADEQUACY OF DAMAGES

Nothing contained in this Agreement shall be construed as prohibiting the Disclosing Party from pursuing any other remedies available to it, either at law or in equity, for any such threatened or actual breach of this Agreement, including specific performance, recovery of damages or otherwise.

8. PRIVACY AND DATA PROTECTION

- 8.1 The Receiving Party undertakes to comply with South Africa's general privacy protection in terms Section 14 of the Bill of Rights in connection with this Tender and shall procure that its personnel shall observe the provisions of such Act [as applicable] or any amendments and re-enactments thereof and any regulations made pursuant thereto.
- 8.2 The Receiving Party warrants that it and its Agents have the appropriate technical and organisational measures in place against unauthorised or unlawful processing of data relating to the Tender and against accidental loss or destruction of, or damage to such data held or processed by them.

9. GENERAL

- 9.1 Neither party may assign the benefit of this Agreement, or any interest hereunder, except with the prior written consent of the other, save that Transnet may assign this Agreement at any time to any member of the Transnet Group.
- 9.2 No failure or delay in exercising any right, power or privilege under this Agreement will operate as a waiver of it, nor will any single or partial exercise of it preclude any further exercise or the exercise of any right, power or privilege under this Agreement or otherwise.
- 9.3 The provisions of this Agreement shall be severable in the event that any of its provisions are held by a court of competent jurisdiction or other applicable authority to be invalid, void or otherwise unenforceable, and the remaining provisions shall remain enforceable to the fullest extent permitted by law.
- 9.4 This Agreement may only be modified by a written agreement duly signed by persons authorised on behalf of each party.
- 9.5 Nothing in this Agreement shall constitute the creation of a partnership, joint venture or agency between the parties.
- 9.6 This Agreement will be governed by and construed in accordance with South African law and the parties irrevocably submit to the exclusive jurisdiction of the South African courts.

Signed

Date

Name

Position

Tenderer

T2.2-08: RFQ DECLARATION FORM

NAME OF COMPANY: _____
We _____ do hereby certify that:

1. Transnet has supplied and we have received appropriate tender offers to any/all questions (as applicable) which were submitted by ourselves for tender clarification purposes;
2. we have received all information we deemed necessary for the completion of this Tender;
3. at no stage have we received additional information relating to the subject matter of this tender from Transnet sources, other than information formally received from the designated Transnet contact(s) as nominated in the tender documents;
4. we are satisfied, insofar as our company is concerned, that the processes and procedures adopted by Transnet in issuing this tender and the requirements requested from tenderers in responding to this tender have been conducted in a fair and transparent manner; and
5. furthermore, we acknowledge that a direct relationship exists between a family member and/or an owner / member / director / partner / shareholder (unlisted companies) of our company and an employee or board member of the Transnet Group as indicated below: *[Respondent to indicate if this section is not applicable]*

FULL NAME OF OWNER/MEMBER/DIRECTOR/
PARTNER/SHAREHOLDER:

ADDRESS:

Indicate nature of relationship with Transnet:

[Failure to furnish complete and accurate information in this regard may lead to the disqualification of your response and may preclude a Respondent from doing future business with Transnet]

We declare, to the extent that we are aware or become aware of any relationship between ourselves and Transnet (other than any existing and appropriate business relationship with Transnet) which could unfairly advantage our company in the forthcoming adjudication process, we shall notify Transnet immediately in writing of such circumstances.

6. We accept that any dispute pertaining to this tender will be resolved through the Ombudsman process and will be subject to the Terms of Reference of the

Ombudsman. The Ombudsman process must first be exhausted before judicial review of a decision is sought. (Refer "Important Notice to respondents" below).

7. We further accept that Transnet reserves the right to reverse a tender award or decision based on the recommendations of the Ombudsman without having to follow a formal court process to have such award or decision set aside.
8. We have acquainted ourselves and agree with the content of T2.2-09 "Service Provider Integrity Pact".

For and on behalf of duly authorized thereto
Name:
Signature:
Date:

IMPORTANT NOTICE TO TENDERERS

- Transnet has appointed a Procurement Ombudsman to investigate any material complaint in respect of tenders exceeding R5,000,000.00 (five million S.A. Rand) in value. Should a Tenderer have any material concern regarding an tender process which meets this value threshold, a complaint may be lodged with Transnet's Procurement Ombudsman for further investigation.
- It is incumbent on the Tenderer to familiarise himself/herself with the Terms of Reference for the Transnet Procurement Ombudsman, details of which are available for review at Transnet's website www.transnet.net.
- An official complaint form may be downloaded from this website and submitted, together with any supporting documentation, within the prescribed period, to procurement.ombud@transnet.net
- For transactions below the R5,000,000.00 (five million S.A. Rand) threshold, a complaint may be lodged with the Chief Procurement Officer of the relevant Transnet Operating Division.
- All Tenderers should note that a complaint must be made in good faith. If a complaint is made in bad faith, Transnet reserves the right to place such a tenderer on its List of Excluded Bidders.

T2.2-09 Service Provider Integrity Pact

Important Note: All potential tenderers must read this document and certify in the RFQ Declaration Form that they have acquainted themselves with, and agree with the content.

The contract with the successful tenderer will automatically incorporate this Integrity Pact and shall be deemed as part of the final concluded contract.

INTEGRITY PACT

Between

TRANSNET SOC LTD

Registration Number: 1990/000900/30
("Transnet")

and

The Contractor (hereinafter referred to as the "Tenderer/Service Providers/Contractor")

PREAMBLE

Transnet values full compliance with all relevant laws and regulations, ethical standards and the principles of economical use of resources, fairness and transparency in its relations with its Tenderers / Service Providers/Contractors.

In order to achieve these goals, Transnet and the Tenderer / Service Provider hereby enter into this agreement hereinafter referred to as the "Integrity Pact" which will form part of the Tenderer's / Service Provider's / Contractor's application for registration with Transnet as a vendor.

The general purpose of this Integrity Pact is to agree on avoiding all forms of dishonesty, fraud and corruption by following a system that is fair, transparent and free from any undue influence prior to, during and subsequent to the currency of any procurement and / or reverse logistics event and any further contract to be entered into between the Parties, relating to such event.

All Tenderers / Service Providers / Contractor's will be required to sign and comply with undertakings contained in this Integrity Pact, should they want to be registered as a Transnet vendor.

1. OBJECTIVES

- 1.1 Transnet and the Tenderer / Service Provider / Contractor agree to enter into this Integrity Pact, to avoid all forms of dishonesty, fraud and corruption including practices that are anti-competitive in nature, negotiations made in bad faith and under-pricing by following a system that is fair, transparent and free from any influence / unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:
 - a) Enable Transnet to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works, goods and services; and
 - b) Enable Tenderers / Service Providers / Contractors to abstain from bribing or participating in any corrupt practice in order to secure the contract.

2. COMMITMENTS OF TRANSNET

Transnet commits to take all measures necessary to prevent dishonesty, fraud and corruption and to observe the following principles:

- 2.1 Transnet hereby undertakes that no employee of Transnet connected directly or indirectly with the sourcing event and ensuing contract, will demand, take a promise for or accept directly or through intermediaries any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Tenderer, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the tendering process, Tender evaluation, contracting or implementation process related to any contract.
- 2.2 Transnet will, during the registration and tendering process treat all Tenderers / Service Providers with equity, transparency and fairness. Transnet will in particular, before and during the registration process, provide to all Tenderers / Service Providers the same information and will not provide to any Tenderers / Service Providers / Contractors confidential / additional information through which the Tenderers / Service Providers / Contractors could obtain an advantage in relation to any tendering process.
- 2.3 Transnet further confirms that its employees will not favour any prospective Tenderer in any form that could afford an undue advantage to a particular Tenderer during the tendering stage, and will further treat all Tenderers / Service Providers / Contractors participating in the tendering process.

- 2.4 Transnet will exclude from the tender process such employees who have any personal interest in the Tenderers / Service Providers / Contractors participating in the tendering process.

3. OBLIGATIONS OF THE TENDERER / SERVICE PROVIDER

- 3.1 The Tenderer / Service Provider / Contractor commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its Tender or during any ensuing contract stage in order to secure the contract or in furtherance to secure it and in particular the Tenderer / Service Provider / Contractor commits to the following:

- a) The Tenderer / Service Provider / Contractor will not, directly or through any other person or firm, offer, promise or give to Transnet or to any of Transnet's employees involved in the tendering process or to any third person any material or other benefit or payment, in order to obtain in exchange an advantage during the tendering process; and
- b) The Tenderer / Service Provider / Contractor will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any employee of Transnet, connected directly or indirectly with the tendering process, or to any person, organisation or third party related to the contract in exchange for any advantage in the tendering, evaluation, contracting and implementation of the contract.

- 3.2 The acceptance and giving of gifts may be permitted provided that:

- a) the gift does not exceed R1 000 (one thousand Rand) in retail value;
- b) many low retail value gifts do not exceed R 1 000 within a 12 month period;
- c) hospitality packages do not exceed R5 000 in value or many low value hospitality packages do not cumulatively exceed R5 000;
- d) a Tenderer / Service Provider does not give a Transnet employee more than 2 (two) gifts within a 12 (twelve) month period, irrespective of value;
- e) a Tenderer / Service Provider does not accept more than 1 (one) gift in excess of R750 (seven hundred and fifty Rand) from a Transnet employee within a 12 (twelve) month period, irrespective of value;
- f) a Tenderer / Service Provider may under no circumstances, accept from or give to, a Transnet employee any gift, business courtesy, including an invitation to a business meal and /or drinks, or hospitality package, irrespective of value, during any Tender evaluation process, including a period of 12 (twelve) months after such tender has been awarded, as it may be perceived as undue and improper influence on the evaluation process or reward for the contract that has been awarded; and
- g) a Tenderer / Service Provider may not offer gifts, goods or services to a Transnet employee at artificially low prices, which are not available to the public at those prices.

- 3.3 The Tenderer / Service Provider / Contractor will not collude with other parties interested in the contract to preclude a competitive Tender price, impair the transparency, fairness and progress of the tendering process, Tender evaluation, contracting and implementation

of the contract. The Tenderer / Service Provider further commits itself to delivering against all agreed upon conditions as stipulated within the contract.

- 3.4 The Tenderer / Service Provider / Contractor will not enter into any illegal or dishonest agreement or understanding, whether formal or informal with other Tenderers / Service Providers / Contractors. This applies in particular to certifications, submissions or non-submission of documents or actions that are restrictive or to introduce cartels into the tendering process.
- 3.5 The Tenderer / Service Provider / Contractor will not commit any criminal offence under the relevant anti-corruption laws of South Africa or any other country. Furthermore, the Tenderer /Service Provider will not use for illegitimate purposes or for restrictive purposes or personal gain, or pass on to others, any information provided by Transnet as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 3.6 A Tenderer / Service Provider / Contractor of foreign origin shall disclose the name and address of its agents or representatives in South Africa, if any, involved directly or indirectly in the registration or tendering process. Similarly, the Tenderer / Service Provider / Contractor of South African nationality shall furnish the name and address of the foreign principals, if any, involved directly or indirectly in the registration or tendering process.
- 3.7 The Tenderer / Service Provider / Contractor will not misrepresent facts or furnish false or forged documents or information in order to influence the tendering process to the advantage of the Tenderer / Service Provider or detriment of Transnet or other competitors.
- 3.8 The Tenderer / Service Provider / Contractor shall furnish Transnet with a copy of its code of conduct, which code of conduct shall reject the use of bribes and other dishonest and unethical conduct, as well as compliance programme for the implementation of the code of conduct.
- 3.9 The Tenderer / Service Provider / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4. INDEPENDENT TENDERING

- 4.1 For the purposes of that Certificate in relation to any submitted Tender, the Tenderer declares to fully understand that the word "competitor" shall include any individual or organisation, other than the Tenderer, whether or not affiliated with the Tenderer, who:
 - a) has been requested to submit a Tender in response to this Tender invitation;
 - b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and
 - c) provides the same Goods and Services as the Tenderer and/or is in the same line of business as the Tenderer.
- 4.2 The Tenderer has arrived at his submitted Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive tendering.

-
- 4.3 In particular, without limiting the generality of paragraph 5 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- a) prices;
 - b) geographical area where Goods or Services will be rendered [market allocation];
 - c) methods, factors or formulas used to calculate prices;
 - d) the intention or decision to submit or not to submit, a Tender;
 - e) the submission of a Tender which does not meet the specifications and conditions of the RFP; or
 - f) tendering with the intention of not winning the Tender.
- 4.4 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 Goods or Services to which his/her tender relates.
- 4.5 The terms of the Tender as submitted have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official Tender opening or of the awarding of the contract.
- 4.6 Tenderers are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to Tenders and contracts, Tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and/or may be reported to the National Prosecuting Authority [NPA] for criminal investigation and/or may be restricted from conducting business with the public sector for a period not exceeding 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.
- 4.7 Should the **Tenderer find any terms or conditions stipulated in any of the relevant documents quoted in the Tender unacceptable**, it should indicate which conditions are unacceptable and offer alternatives by written submission on its company letterhead, attached to its submitted Tender. Any such submission shall be subject to review by Transnet's Legal Counsel who shall determine whether the proposed alternative(s) are acceptable or otherwise, as the case may be.

5. DISQUALIFICATION FROM TENDERING PROCESS

- 5.1 If the Tenderer / Service Provider / Contractor has committed a transgression through a violation of section 3 of this Integrity Pact or in any other form such as to put its reliability or credibility as a Tenderer / Service Provider into question, Transnet may reject the Tenderer's / Service Provider's / Contractor's application from the registration or tendering process and remove the Tenderer / Service Provider from its database, if already registered.
- 5.2 If the Tenderer / Service Provider / Contractor has committed a transgression through a violation of section 3, or any material violation, such as to put its reliability or credibility into question. Transnet may after following due procedures and at its own discretion also exclude the Tenderer / Service Provider / Contractor from future tendering processes. The imposition and duration of the exclusion will be determined by the severity of the

transgression. The severity will be determined by the circumstances of the case, which will include amongst others the number of transgressions, the position of the transgressors within the company hierarchy of the Tenderer / Service Provider /Contractor and the amount of the damage. The exclusion will be imposed for up to a maximum of 10 (ten) years. However, Transnet reserves the right to impose a longer period of exclusion, depending on the gravity of the misconduct.

- 5.3 If the Tenderer / Service Provider / Contractor can prove that it has restored the damage caused by it and has installed a suitable corruption prevention system, or taken other remedial measures as the circumstances of the case may require, Transnet may at its own discretion revoke the exclusion or suspend the imposed penalty.

6. TRANSNET'S LIST OF EXCLUDED TENDERERS (BLACKLIST)

- 6.1 All the stipulations around Transnet's blacklisting process as laid down in Transnet's Supply Chain Policy and Procurement Procedures Manual are included herein by way of reference. Below follows a condensed summary of this blacklisting procedure.
- 6.2 Blacklisting is a mechanism used to exclude a company/person from future business with Transnet for a specified period. The decision to blacklist is based on one of the grounds for blacklisting. The standard of proof to commence the blacklisting process is whether a "*prima facie*" (i.e. on the face of it) case has been established.
- 6.3 Depending on the seriousness of the misconduct and the strategic importance of the Goods/Services, in addition to blacklisting a company/person from future business, Transnet may decide to terminate some or all existing contracts with the company/person as well.
- 6.4 A Service Provider or Contractor to Transnet may not subcontract any portion of the contract to a blacklisted company.
- 6.5 Grounds for blacklisting include: If any person/Enterprise which has submitted a Tender, concluded a contract, or, in the capacity of agent or subcontractor, has been associated with such Tender or contract:
- a) Has, in bad faith, withdrawn such Tender after the advertised closing date and time for the receipt of Tenders;
 - b) has, after being notified of the acceptance of his Tender, failed or refused to sign a contract when called upon to do so in terms of any condition forming part of the Tender documents;
 - c) has carried out any contract resulting from such Tender in an unsatisfactory manner or has breached any condition of the contract;
 - d) has offered, promised or given a bribe in relation to the obtaining or execution of the contract;
 - e) has acted in a fraudulent or improper manner or in bad faith towards Transnet or any Government Department or towards any public body, Enterprise or person;

-
- f) has made any incorrect statement in a certificate or other communication with regard to the Local Content of his Goods or his B-BBEE status and is unable to prove to the satisfaction of Transnet that:
- (i) he made the statement in good faith honestly believing it to be correct; and
 - (ii) before making such statement he took all reasonable steps to satisfy himself of its correctness;
- g) caused Transnet damage, or to incur costs in order to meet the contractor's requirements and which could not be recovered from the contractor;
- h) has litigated against Transnet in bad faith.
- 6.6 Grounds for blacklisting include a company/person recorded as being a company or person prohibited from doing business with the public sector on National Treasury's database of Restricted Service Providers or Register of Tender Defaulters.
- 6.7 Companies associated with the person/s guilty of misconduct (i.e. entities owned, controlled or managed by such persons), any companies subsequently formed by the person(s) guilty of the misconduct and/or an existing company where such person(s) acquires a controlling stake may be considered for blacklisting. The decision to extend the blacklist to associated companies will be at the sole discretion of Transnet.

7. PREVIOUS TRANSGRESSIONS

- 7.1 The Tenderer / Service Provider /Contractor hereby declares that no previous transgressions resulting in a serious breach of any law, including but not limited to, corruption, fraud, theft, extortion and contraventions of the Competition Act 89 of 1998, which occurred in the last 5 (five) years with any other public sector undertaking, government department or private sector company that could justify its exclusion from its registration on the Tenderer's / Service Provider's / Contractor's database or any tendering process.
- 7.2 If it is found to be that the Tenderer / Service Provider /Contractor made an incorrect statement on this subject, the Tenderer / Service Provider / Contractor can be rejected from the registration process or removed from the Tenderer / Service Provider / Contractor database, if already registered, for such reason (refer to the Breach of Law Form contained in the applicable RFX document.)

8. SANCTIONS FOR VIOLATIONS

- 8.1 Transnet shall also take all or any one of the following actions, wherever required to:
- a) Immediately exclude the Tenderer / Service Provider / Contractor from the tendering process or call off the pre-contract negotiations without giving any compensation the Tenderer / Service Provider / Contractor. However, the proceedings with the other Tenderer / Service Provider / Contractor may continue;
 - b) Immediately cancel the contract, if already awarded or signed, without giving any compensation to the Tenderer / Service Provider / Contractor;
 - c) Recover all sums already paid by Transnet;

- d) Encash the advance bank guarantee and performance bond or warranty bond, if furnished by the Tenderer / Service Provider / Contractor, in order to recover the payments, already made by Transnet, along with interest;
- e) Cancel all or any other contracts with the Tenderer / Service Provider; and
- f) Exclude the Tenderer / Service Provider / Contractor from entering into any Tender with Transnet in future.

9. CONFLICTS OF INTEREST

9.1 A conflict of interest includes, inter alia, a situation in which:

- a) A Transnet employee has a personal financial interest in a tendering / supplying entity; and
- b) A Transnet employee has private interests or personal considerations or has an affiliation or a relationship which affects, or may affect, or may be perceived to affect his / her judgment in action in the best interest of Transnet, or could affect the employee's motivations for acting in a particular manner, or which could result in, or be perceived as favouritism or nepotism.

9.2 A Transnet employee uses his / her position, or privileges or information obtained while acting in the capacity as an employee for:

- a) Private gain or advancement; or
- b) The expectation of private gain, or advancement, or any other advantage accruing to the employee must be declared in a prescribed form.

Thus, conflicts of interest of any Tender committee member or any person involved in the sourcing process must be declared in a prescribed form.

9.3 If a Tenderer / Service Provider / Contractor has or becomes aware of a conflict of interest i.e. a family, business and / or social relationship between its owner(s) / member(s) / director(s) / partner(s) / shareholder(s) and a Transnet employee / member of Transnet's Board of Directors in respect of a Tender which will be considered for the Tender process, the Tenderer / Service Provider / Contractor:

- a) must disclose the interest and its general nature, in the Request for Proposal ("RFX") declaration form; or
- b) must notify Transnet immediately in writing once the circumstances has arisen.

9.4 The Tenderer / Service Provider / Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any committee member or any person involved in the sourcing process, where this is done, Transnet shall be entitled forthwith to rescind the contract and all other contracts with the Tenderer / Service Provider / Contractor.

10. MONITORING

10.1 Transnet will be responsible for appointing an independent Monitor to:

- a) Conduct random monitoring of compliance to the provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor for less than R100,000.000 (one hundred million Rand) in value;
- b) Monitor compliance to the provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor for greater than R100,000.000 (one hundred million Rand) in value; and

- c) Investigate any allegation of violation of any provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor, irrespective of value.

10.2 The Monitor will be subjected to Transnet's Terms of Conditions of Contract for the Provision of Services to Transnet, as well as to Transnet's Service Provider Code of Conduct.

11. EXAMINATION OF FINANCIAL RECORDS, DOCUMENTATION AND/OR ELECTRONIC DATA

11.1 For the purpose of Monitoring, as stipulated above, the Monitor shall be entitled to:

- a) Examine the financial records, documentation and or electronic data of Tenderer / Service Provider / Contractor / Transnet. The Tenderer / Service Provider / Transnet shall provide all requested information / documentation / data to the Monitor and shall extend all help possible for the purpose of such examination.

12. DISPUTE RESOLUTION

12.1 Transnet recognises that trust and good faith are pivotal to its relationship with its Tenderer / Service Provider / Contractor. When a dispute arises between Transnet and its Tenderer / Service Provider / Contractor, the parties should use their best endeavours to resolve the dispute in an amicable manner, whenever possible. Litigation in bad faith negates the principles of trust and good faith on which commercial relationships are based. Accordingly, following a blacklisting process as mentioned in paragraph 0 above, Transnet will not do business with a company that litigates against it in bad faith or is involved in any action that reflects bad faith on its part. Litigation in bad faith includes, but is not limited to the following instances:

- a) **Vexatious proceedings:** these are frivolous proceedings which have been instituted without proper grounds;
- b) **Perjury:** where a Tenderer / Service Provider / Contractor make a false statement either in giving evidence or on an affidavit;
- c) **Scurrilous allegations:** where a Tenderer / Service Provider / Contractor makes allegations regarding a senior Transnet employee which are without proper foundation, scandalous, abusive or defamatory; and
- d) **Abuse of court process:** when a Tenderer / Service Provider / Contractor abuses the court process in order to gain a competitive advantage during a Tender process.

13. GENERAL

13.1 This Integrity Pact is governed by and interpreted in accordance with the laws of the Republic of South Africa.

13.2 The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the law relating to any civil or criminal proceedings.

13.3 The validity of this Integrity Pact shall cover all the tendering processes and will be valid for an indefinite period unless cancelled by either Party.

13.4 Should one or several provisions of this Integrity Pact turn out to be invalid the remainder of this Integrity Pact remains valid.

13.5 Should a Tenderer / Service Provider / Contractor be confronted with dishonest, fraudulent or corruptive behaviour of one or more Transnet employees, Transnet expects its Tenderer / Service Provider / Contractor to report this behaviour directly to a senior Transnet official / employee or alternatively by using Transnet's "Tip-Off Anonymous" hotline number 0800 003 056, whereby your confidentiality is guaranteed.

The Parties hereby declare that each of them has read and understood the clauses of this Integrity Pact and shall a Tenderer by it. To the best of the Parties' knowledge and belief, the information provided in this Integrity Pact is true and correct.

T2.2-10: Record of Addenda to Tender Documents

This schedule as submitted confirms that the following communications received from the *Employer* before the submission of this tender offer, amending the tender documents, have been taken into account in this specific tender offer:

	Date	Title or Details
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

T2.2-11: Previous Experience: Pre-Qualifying Quality (Functionality) Criteria

Note to tenderers:

Tenderers are required to List their previous experience for similar work with written references, completion certificates or in execution (company name, contact person and value of work completed or in execution)

Index of documentation attached to this schedule:

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

The table below is for information purposes only to indicate the method of scoring that will be followed to Evaluate the programme submitted by the Tenderer:

Scoring will be as follows:

Previous Experience (50%)	
0	No proof of similar projects completed
40	One (1) similar project completed
70	Two (2) similar projects completed
90	Three (3) similar projects completed.
100	Four (4) or more similar projects completed

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the Tenderer, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed

.....

Date

.....

Name

.....

Position

.....

Tenderer

.....

T2.2-12: Method Statement

Note to tenderers:

Method statement

The bidder should provide a method statement (methodology) on supply, deliver, installation and commissioning of pumping plant (including mechanical and electrical equipment for a lift pump station) in Postmasburg with a standby generator set. (As per Specifications attached)

The document must include but not be limited to the items below:

1. The contractor to provide a detailed method statement, stating the method that will be used for the supply, deliver, installation and commissioning of the pumping plant with a standby generator set.
2. The Tenderer must submit, together with his offer, the design of the control system complying with the requirements for automatic starting, stopping, interlocking and isolation specified.
3. It will be the Contractor's responsibility to ensure that the noise level at 5 meters from any position outside the plantroom, stainless steel housing or shipping container is not greater than 85 dBA. Tenderers must state at the time of tendering how they intend to comply with this clause
4. Full details of the housing, the fuel tank, the rust, weather and vandal proofing etc. are to be supplied and must be submitted with the tender.
5. Detailed layout proposals must accompany this tender as per Project Specification: Section 1, Clause 1.7.
6. Pump and power curves and points of duty must be submitted with the tender as per Project Specification: Section 2, clause 2.2.1.
7. The preferred engines must be sourced from Upington / Kimberley or Bloemfontein. Tenderers must state in their offer who the service agent will be.
8. Detail must be given of soundproofing. As per C3.1 section 4.12.
9. The method statement shall include the following;
 - a) A delivery period. (A delivery period of 3 months and less will be required – State delivery period offered);
 - b) Output and voltage;
 - c) General Operation;
 - d) Mounting;
 - e) Construction;
 - f) Installation;
 - g) Design (A suitable and approved design is required, to provide a robust, vandal-proof, positively

 vermin-proof, storm-weather proof, outdoor housing.);

h) Maintenance

Scoring will be as follows:

	Method Statement – 50%
0	No documentation submitted.
40	Incomplete method statement with a delivery period of 4 months and more
70	Adequate method statement with a delivery period of 3 months
90	Detailed Method Statement with indicating a delivery period of 3 months
100	Detailed method statement indicating all items addressed and with a delivery period of 2 months and less

Signed

Date

Name

Position

Tenderer

T2.2-13: Supplier Code of Conduct

Transnet SOC Limited aims to achieve the best value for money when buying or selling goods and obtaining services. This however must be done in an open and fair manner that supports and drives a competitive economy. Underpinning our process are several acts and policies that any supplier dealing with Transnet must understand and support. These are:

- The Transnet Procurement Policy – A guide for Tenderers.
- Section 217 of the Constitution - the five pillars of Public PSCM (Procurement and Supply Chain Management): fair, equitable, transparent, competitive and cost effective;
- The Public Finance Management Act (PFMA);
- The Broad Based Black Economic Empowerment Act (BBBEE)
- The Prevention and Combating of Corrupt Activities Act (PRECCA); and
- The Construction Industry Development Board Act (CIDB Act).

This code of conduct has been included in this contract to formally appraise Transnet Suppliers of Transnet's expectations regarding behaviour and conduct of its Suppliers.

Prohibition of Bribes, Kickbacks, Unlawful Payments, and Other Corrupt Practices

Transnet is in the process of transforming itself into a self-sustaining State Owned Enterprise, actively competing in the logistics industry. Our aim is to become a world class, profitable, logistics organisation. As such, our transformation is focused on adopting a performance culture and to adopt behaviours that will enable this transformation.

1. Transnet SOC Limited will not participate in corrupt practices. Therefore, it expects its suppliers to act in a similar manner.

- Transnet and its employees will follow the laws of this country and keep accurate business records that reflect actual transactions with, and payments to, our suppliers.
- Employees must not accept or request money or anything of value, directly or indirectly, from suppliers.
- Employees may not receive anything that is calculated to:
 - Illegally influence their judgement or conduct or to ensure the desired outcome of a sourcing activity;
 - Win or retain business or to influence any act or decision of any person involved in sourcing decisions; or
 - Gain an improper advantage.

- There may be times when a supplier is confronted with fraudulent or corrupt behaviour of Transnet employees. We expect our Suppliers to use our "Tip-offs Anonymous" Hot line to report these acts. (0800 003 056).

2. *Transnet SOC Limited is firmly committed to the ideas of free and competitive enterprise.*

- Suppliers are expected to comply with all applicable laws and regulations regarding fair competition and antitrust practices.
- Transnet does not engage with non-value adding agents or representatives solely for the purpose of increasing BBBEE spend (fronting).

3. *Transnet's relationship with suppliers requires us to clearly define requirements, to exchange information and share mutual benefits.*

- Generally, suppliers have their own business standards and regulations. Although Transnet cannot control the actions of our suppliers, we will not tolerate any illegal activities. These include, but are not limited to:
 - Misrepresentation of their product (origin of manufacture, specifications, intellectual property rights, etc.);
 - Collusion;
 - Failure to disclose accurate information required during the sourcing activity (ownership, financial situation, BBBEE status, etc.);
 - Corrupt activities listed above; and
 - Harassment, intimidation or other aggressive actions towards Transnet employees.
- Suppliers must be evaluated and approved before any materials, components, products or services are purchased from them. Rigorous due diligence is conducted and the supplier is expected to participate in an honest and straight forward manner.
- Suppliers must record and report facts accurately, honestly and objectively. Financial records must be accurate in all material respects.

Conflicts of Interest

A conflict of interest arises when personal interests or activities influence (or appear to influence) the ability to act in the best interests of Transnet SOC Limited.

- Doing business with family members.
- Having a financial interest in another company in our industry

Where possible, contracts will be negotiated to include the above in the terms of such contracts. To the extent such terms are not included in contractual obligations and any of the above code is breached, then Transnet reserves its right to review doing business with these suppliers.

I, _____ of _____
(insert name of Director or as per Authority (insert name of Company)
Resolution from Board of Directors)

hereby acknowledge having read, understood and agree to the terms and conditions set out in the "Transnet Supplier Code of Conduct."

Signed this on day _____ at _____

Signature

T2.2-14: SUPPLIER DECLARATION FORM

Transnet Vendor Management has received a request to load / change your company details onto the Transnet vendor master database. Please return the completed Supplier Declaration Form (SDF) together with the required supporting documents as per Appendix A to the Transnet Official who is intending to procure your company's services / products, to enable us to process this request. Please only submit the documentation relevant to your request.

Please Note: all organisations, institutions and individuals who wish to provide goods and/or services to organs of the State must be registered on the National Treasury's Central Supplier Database (CSD). This needs to be done via their portal at <https://secure.csd.gov.za/> **before applying to Transnet.**

General Terms and Conditions:

Please Note: Failure to submit the relevant documentation will delay the vendor creation / change process.

Where applicable, the respective Transnet Operating Division processing your application may request further or additional information from your company.

The Service Provider warrants that the details of its bank account ("the nominated account") provided herein, are correct and acknowledges that payments due to the Supplier will be made into the nominated account. If details of the nominated account should change, the Service Provider must notify Transnet in writing of such change, failing which any payments made by Transnet into the nominated account will constitute a full discharge of the indebtedness of Transnet to the Supplier in respect of the payment so made. Transnet will incur no liability for any payments made to the incorrect account or any costs associated therewith. In such an event, the Service Provider indemnifies and holds Transnet harmless in respect of any payments made to an incorrect bank account and will, on demand, pay Transnet any costs associated herewith.

Transnet expects its suppliers to timeously renew their Tax Clearance and B-BBEE certificates (Large Enterprises and QSEs less than 51% black owned) as well as sworn affidavits in the case of EMEs and QSEs with more than 51% black ownership as per Appendices C and D.

In addition, please take note of the following very important information:

1. **If your annual turnover is R10 million or less**, then in terms of the DTI Generic Codes of Good Practice, you are classified as an Exempted Micro Enterprise (EME). If your company is classified as an EME, please include in your submission a sworn affidavit confirming your company's most recent annual turnover is less than R10 million and percentage of black ownership and black female ownership in the company (Appendix C) OR B-BBEE certificate issued by a verification agency accredited by SANAS in terms of the EME scorecard should you feel you will be able to attain a better B-BBEE score. It is only in this context that an EME may submit a B-BBEE verification certificate. These EME sworn affidavits must be accepted by the . Government introduced this mechanism specifically to reduce the cost of doing business and regulatory burden for these entities and the template for the sworn affidavit is available at no cost on the website www.thedti.gov.za or EME certificates at CIPC from www.cipic.co.za.

The B-BBEE Commission said "that only time an EME can be verified by a SANAS accredited verification professional is when it wishes to maximise its B-BBEE points and move to a higher B-BBEE recognition level, and that must be done use the QSE Scorecard".

2. **If your annual turnover is between R10 million and R50 million**, then in terms of the DTI codes, you are classified as a Qualifying Small Enterprise (QSE). A QSE which is at least 51% black owned, is required to submit a sworn affidavit confirming their annual total revenue of between R10 million and R50 million and level of black ownership (Appendix D). QSE 'that does not qualify for 51% of black ownership, are required to submit a B-BBEE verification certificate issued by a verification agency accredited by SANAS their QSEs are required to submit a B-BBEE verification certificate issued by a verification agency accredited by SANAS.

Please Note: B-BBEE certificate and detailed scorecard should be obtained from an accredited rating agency (e.g. SANAS Member).

3. **If your annual turnover exceeds R50 million**, then in terms of the DTI codes, you are classified as a Large Enterprise. Large Enterprises are required to submit a B-BBEE level verification certificate issued by a verification agency accredited by SANAS.

Please Note: B-BBEE certificate and detailed scorecard should be obtained from an accredited rating agency (e.g. SANAS Member).

4. **The supplier to furnish proof to the procurement department as required in the Fourth Schedule of the Income Tax Act. 58 of 1962** whether a supplier of service is to be classified as an "employee", "personal service provider" or "labour broker". Failure to do so will result in the supplier being subject to employee's tax.

5. **No payments can be made to a vendor until the** vendor has been registered / updated, and no vendor can be registered / updated until the vendor application form, together with its supporting documentation, has been received and processed. No payments can be made to a vendor until the vendor has met / comply with the procurement requirements.

6. It is in line with PPPFA Regulations, only valid B-BBEE status level certificate issued by an unauthorised body or person OR a sworn affidavit as prescribed by the B-BBEE Codes of Good Practice, OR any other requirement prescribed in terms of the Broad- Based Black Economic Empowerment Act.

7. The B-BBEE Commission advises entities and organs of state to reject B-BBEE certificates that have been issued by verification agencies or professionals who are not accredited by South African National Accreditation Systems ("SANAS") as such B-BBEE certificates are invalid for lack of authority and mandate to issue them. A list of SANAS Accredited agencies is available on the SANAS website at www.sanas.co.za.

8. Presenting banking details. Please note: Banks have decided to enable the customers and provide the ability for customers to generate Account Confirmation/Bank Account letters via their online platform; this is a digital approach to the authentication of banking details.

SUPPLIER DECLARATION FORM

Supplier Declaration Form

Important Notice: all organisations, institutions and individuals who wish to provide goods and/or services to organs of the State must be registered on the National Treasury Central Supplier Database (CSD). This needs to be done via their portal at <https://secure.csd.gov.za/> **before applying to Transnet.**

CSD Number (MAAA xxxxxxx):						
Company Trading Name						
Company Registered Name						
Company Registration No Or ID No If a Sole Proprietor						
Company Income Tax Number						
Form of Entity	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor
	Non-profit (NPO's or NPC)	Personal Liability Co	State Owned Co	National Govt	Provincial Govt	Local Govt
	Educational Institution	Specialised Profession	Financial Institution	Joint Venture	Foreign International	Foreign Branch Office

Did your company previously operate under another name?						Yes	No
If YES state the previous details below:							
Trading Name							
Registered Name							
Company Registration No Or ID No If a Sole Proprietor							
Form of Entity	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor	
	Non-profit (NPO's or NPC)	Personal Liability Co	State Owned Co	National Govt	Provincial Govt	Local Govt	
	Educational Institution	Specialised Profession	Financial Institution	Joint Venture	Foreign International	Foreign Branch Office	

Your Current Company's VAT Registration Status	
VAT Registration Number	
If Exempted from VAT registration , state reason and submit proof from SARS in confirming the exemption status	
If your business entity is not VAT Registered, please submit a current original sworn affidavit (see example in Appendix I). Your Non VAT Registration must be confirmed annually.	

Company Banking Details	Bank Name
Universal Branch Code	Bank Account Number

Company Physical Address	Code
Company Postal Address	Code
Company Telephone number	
Company Fax Number	
Company E-Mail Address	
Company Website Address	
Company Contact Person Name	
Designation	



Telephone	
Email	

Is your company a Labour Broker?	Yes	No
Main Product / Service Supplied e.g. Stationery / Consulting / Labour etc.		
How many personnel does the business employ?	Full Time	Part Time
Please Note: Should your business employ more than 2 full time employees who are not connected persons as defined in the Income Tax Act, please submit a sworn affidavit, as per Appendix II.		

Most recent Financial Year's Annual Turnover	<R10Million EME	>R10Million <R50Million QSE	>R50Million Large Enterprise
--	---------------------------	--	--

Does your company have a valid proof of B-BBEE status?						Yes	No							
Please indicate your Broad Based BEE status (Level 1 to 9)						1	2	3	4	5	6	7	8	9
Majority Race of Ownership														
% Black Ownership		% Black Women Ownership		% Black Disabled person(s) Ownership		% Black Youth Ownership								
% Black Unemployed		% Black People Living in Rural Areas		% Black Military Veterans										

Please Note: Please provide proof of B-BBEE status as per Appendix C and D:

- Large Enterprise and QSEs with less than 51% black ownership need to obtain a B-BBEE certificate and detailed scorecard from an accredited rating agency;
- EMEs and QSEs with at least 51% black ownership may provide an affidavit using the templates provided in Appendix C and D respectively;
- Black Disabled person(s) ownership will only be accepted if accompanied with a certified letter signed by a physician on the physician's letterhead confirming the disability;
- A certified South African identification document will be required for all Black Youth Ownership.

Supplier Development Information Required

EMPOWERING SUPPLIER

An Empowering Supplier is a B-BBEE compliant Entity which complies with at least three criteria if it is a large Entity, or one criterion if it is a Qualifying Small Enterprise ("QSE"), as detailed in Statement 400 of the New Codes.

In terms of the requirements of an Empowering Supplier, numerous companies found it challenging to meet the target of 25% transformation of raw materials or beneficiation including local manufacturing, particularly so, if these companies imported goods or products from offshore. The matter was further compounded by the requirement for 25% of Cost of Sales, excluding labour cost and depreciation, to be procured from local producers or suppliers.

YES ☐ NO ☐

FIRST TIME SUPPLIER

A supplier that we have not yet Traded within Transnet and will be registered via our database for the 1st time.

YES ☐ NO ☐



SUPPLIER DEVELOPMENT PLAN Supplier Development Plan is a plan that when we as Transnet award a supplier a long-term contract depending on the complexity of the Transaction. We will negotiate supplier development obligations that they must meet throughout the contract duration. e.g. we might request that they (create jobs or do skills development or encourage procurement from designated groups. (BWO, BYO & BDO etc.).	YES ☐ NO ☐
DEVELOPMENT PLAN DOCUMENT Agreed plan that will be crafted with the supplier in regards to their development (It could be for ED OR SD in terms of their developmental needs they may require with the company.	YES ☐ NO ☐ *If Yes- Attach supporting documents
ENTERPRISE DEVELOPMENT BENEFICIARY A supplier that is not yet in our value chain that we are assisting in their developmental area.	YES ☐ NO ☐
SUPPLIER DEVELOPMENT BENEFICIARY A supplier that we are already doing business with or transacting with and we are also assisting them assisting them in their developmental area e.g. (They might require training or financial assistance etc.)	YES ☐ NO ☐
GRADUATION FROM ED TO SD BENEFICIARY When a supplier that we assisted with as an ED beneficiary then is awarded, a business and we start Transacting with.	YES ☐ NO ☐
ENTERPRISE DEVELOPMENT RECIPIENT A supplier that isn't in our value chain as yet but we have assisted them with an ED intervention	YES ☐ NO ☐

By signing below, I hereby verify that I am duly authorised to sign for and on behalf of firm / organisation and that all information contained herein and attached herewith are true and correct			
Name and Surname		Designation	
Signature		Date	

C1.1 Form of Offer & Acceptance

Offer

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

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET.

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

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The offered total of the Prices inclusive of VAT is	R
(in words)	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organization)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Service Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil 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 of award.

Unless the tenderer (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(s)

Name(s)

Capacity

for the

Employer

(Insert name and address of organization)

Name &
signature of
witness

Date

Schedule of Deviations

Note:

1. To be completed by the Employer prior to award of contract. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. 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.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1		
2		
3		
4		
5		

By the duly authorized representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

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

For the tenderer:

For the Employer

Signature

Name

Capacity

On behalf
of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &
signature
of witness

Date

C1.2 Contract Data

PART ONE - DATA PROVIDED BY THE *EMPLOYER*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	A: Priced contract with price list
	dispute resolution Option and secondary Options	W1: Dispute resolution procedure
	of the NEC3 Term Service Contract (June 2005) (and amended June 2006 and April 2013)	Z: <i>Additional conditions of contract</i>
10.1	The <i>Employer</i> is: Address	Transnet SOC Ltd Registered address: Transnet Corporate Centre Waterfall Business Estate 9 Country Estate Drive Midrand 1662
	Having elected its Contractual Address for the purposes of this contract as:	Transnet Freight Rail Supply Chain Services Austen Street Kimberley 8301
	Tel No.	053 838-3202
10.1	The <i>Service Manager</i> is (name): Address	Nopinkie Nqeketo Test Lab Building Caledon West Street Bellville

	Tel	073 798 0263
	e-mail	Nopinkie.ngeketo@transnet.net
11.2(13)	The <i>service</i> is	SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQ
11.2(15)	The Service Information is in	The Scope of Services
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa subject to the jurisdiction of the Courts of South Africa.
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	2/4 weeks
2	The <i>Contractor's</i> main responsibilities	(If the optional statement for this section is not used, no data will be required for this section)
21.1	The <i>Contractor</i> submits a first plan for acceptance within	2 weeks of the Contract Date
3	Time	
30.1	The <i>starting date</i> is.	
30.1	The <i>service period</i> is	
4	Testing and defects	No additional data is required for this section of the <i>conditions of contract</i>.
5	Payment	
50.1	The <i>assessment interval</i> is	25th (twenty fifth) day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	Payment will be effected on or before the last day of the month following the month during which a valid Tax Invoice and Statement were received.
51.4	The <i>interest rate</i> is	The prime lending rate of the Standard Bank South Africa.
7	Use of Equipment Plant and Materials	No additional data is required for this section of the <i>conditions of contract</i>.
8	Risks and insurance	



80.1	These are additional <i>Employers</i> risks	1. 2. 3.
84.1	The minimum limit of indemnity for insurance in respect of loss and damage to property (except goods, plant and materials and equipment) and liability for bodily injury or death of a person (not an employee of the <i>Service Provide</i>) caused by activity in connection with this contract for any one event is:	Whatever <i>Contractor</i> deems necessary as the <i>Employer</i> is not carrying this indemnity.
84.1	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act.
84.1	The <i>Contractor</i> liability to the <i>Employer</i> for indirect or consequential loss including loss of profit, revenue and goodwill, is limited to:	The total of the prices.
84.1	For any one event, the <i>Contractor</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employers</i> property is limited to:	The total of the prices.
84.1	The <i>Contractor</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than the excluded matters, is limited to:	The total of the prices.
9	Termination	There is no Contract Data required for this section of the <i>conditions of contract</i>.
10	Data for main Option clause	
A	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	 weeks.

11 Data for Option W1

W1.1	The <i>Adjudicator</i> is (Name)	Both parties will agree as and when a dispute arises. If the parties cannot reach an agreement on the <i>Adjudicator</i>, the chairman of the Association of Arbitrators will appoint an <i>Adjudicator</i>.
W1.2(3)	The <i>Adjudicator nominating body</i> is: If no <i>Adjudicator nominating body</i> is entered, it is	The Association of Arbitrators (Southern Africa)
W1.4(2)	The <i>tribunal</i> is:	Arbitration
W1.4(5)	The <i>arbitration procedure</i> is The place where arbitration is to be held is The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	The Rules for the Conduct of Arbitrations of the Association of Arbitrators (Southern Africa) Bloemfontein, South Africa The Chairman of the Association of Arbitrators (Southern Africa)

Z Additional conditions of contract

Z1 Obligations in respect of Termination

Z1.1	The following will be included under core clause 91.1: In the second main bullet, after the word 'partnership' add 'joint venture whether incorporated or otherwise (including any constituent of the joint venture)'; and Under the second main bullet, insert the following additional bullets after the last sub-bullet: - commenced business rescue proceedings (R22) - repudiated this Contract (R23)
Z1.2	Termination Table The following will be included under core clause 90.2 Termination Table as follows: Amend "A reason other than R1 – R21" to "A reason other than R1 – R23"
Z1.3	Amend "R1 – R15 or R18" to "R1 – R15, R18, R22 or R23."

Z2 Right Reserved by Transnet to Conduct Vetting through SSA

Z2.1	Transnet reserves the right to conduct vetting through State Security Agency (SSA) for security clearances of any Contractor who has access to National Key Points for the following without limitations: 1. Confidential – this clearance is based on any information which may be used by malicious, opposing or hostile elements to harm the objectives and functions of an organ of state. 2. Secret – clearance is based on any information which may be used by malicious, opposing or hostile elements to disrupt the objectives and functions of an organ of state. 3. Top Secret – this clearance is based on information which may be used by malicious, opposing or hostile elements to neutralize the objectives and functions of an organ of state.
Z3	Additional clause relating to Collusion in the Construction Industry
Z3.1	The contract award is made without prejudice to any rights Transnet may have to take appropriate action later with regard to any declared bid rigging including blacklisting.
Z4	Protection of Personal Information Act
Z4.1	The <i>Employer</i> and the <i>Contractor</i> are required to process information obtained for the duration of the Agreement in a manner that is aligned to the Protection of Personal Information Act

C1.2 Contract Data

PART TWO - DATA PROVIDED BY THE *CONTRACTOR*

The tendering contractor is advised to read both the NEC3 Term Service Contract (June 2005) and the relevant parts of its Guidance Notes (TSC3-GN) in order to understand the implications of this Data which the tenderer is required to complete.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

[illegible]

Experience:

CV's (and further key person's data including CVs) are in

A Priced contract with price list		
11.2(12)	The <i>price list</i> is in	C3
11.2(19)	The tendered total of the Prices is	R

C2.1 Pricing instructions: Option A

1.1 The conditions of contract

1.2 How the contract prices work and assesses it for progress payments

Clause 11 in NEC3 Term Services Contract (TSC), June 2005 (with amendments June 2006 and April 2013) Option A states:

Identified 11

and defined 11.2 (17) The Price for Services Provided to Date is the total of terms

- the Price for each lump sum item in the Price List which the *Contractor* has completed and
- where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.

(19) The Prices are the amounts stated in the Price column of the Price List, where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

1.3 Measurement and Payment

1.3.1 The Price List provides the basis of all valuations of the Price for Services Provided to Date, payments in multiple currencies and general progress monitoring.

1.3.2 The amount due at each assessment date is based on activities and/or milestones completed as indicated on the Price List.

1.3.3 **The Price List work breakdown structure is compiled to the satisfaction of the Employer with any additions and/or amendments deemed necessary.**

1.3.4 **The Contractor's detailed Price List** is sufficient detail to monitor completion of activities related to the operations on the Accepted Plan in order that payment of completed activities may be assessed.

1.3.5 The Prices are obtained from the Price List. The Prices includes for all direct and indirect costs, overheads, profits, risks, liabilities, obligations, etc. relative to the contract.

C2.2 Price Schedule

Schedule 1: Preliminary and General

Item no	Description	Unit	Quantity	Rate	Price (Excl. VAT)
1.1	All contractual requirements	Sum	1		
1.2	All overhead costs	Sum	1		
1.3	Operating and Maintenance Manuals	Sum	1		
1.4	Liaison and co-operation with other contractors	Sum	1		
1.5	Occupational Health and Safety requirements	Sum	1		
1.6	Preliminary visit to site to discuss installation with Engineer	Sum	1		
1.7	Testing and hand over of installation(s) with all relevant parties	Sum	1		
1.8	Training	Sum	1		
1.9	All other obligations (Specify)	Sum	1		
1.9.1					
1.9.2					
1.9.3					
1.9.4					
1.9.5					
1.9.6					
Sub Total for Schedule 1 (Preliminary and General) Excl. VAT:					

Schedule 2: Mechanical Installation

Item no	Description	Unit	Quantity	Rate	Price (Excl. VAT)
2.1	SUPPLY OF PUMP SETS				
2.1.1	Supply of end-suction, centrifugal pump sets, complete with pump, motor, coupling and guard, mounted on a base plate	each	2		
2.2	SUPPLY OF PIPEWORK				
2.2.1	Supply of Complete pipework, including couplings, pipe supports and anchors	Sum	1		
2.3	SUPPLY OF VALVES				
2.3.1	Supply of Shut-off Valves (10 bar rated): Ø 80mm	each	5		
2.3.2	Supply of Non-return Valves (10 bar rated): Ø 80mm	each	2		
2.3.3	Supply of Air-release valve, including shut-off valve (10 bar rated): Ø 50mm	each	1		
2.4	SUPPLY OF ANCILLARY EQUIPMENT				
2.4.1	Supply of suction and delivery Ø 100 mm stainless steel, glycerine filled, pressure guages with three way cocks complete on steel guage stand, including hoses.	each	2		
2.4.2	Ø 80mm Mechanical water meter	each	1		
2.4.3	Supply of all mechanical accessories, including bolts, nuts, washers and packings	Sum	1		
2.4.4	Electronic drawings for approval and manufacturing	Sum	1		
2.5	INSTALLATION OF EQUIPMENT				
2.5.1	Installation of all plant and material supplied under items 2.1 to 2.4 including all off-loading, storing until erection, handling, assembly of pump sets, adjusting, painting, operation, factory testing, site testing and handing over in complete working order and upholding for a period of twelve (12) months, including all electrical gear	Sum	1		
2.6	All items not included above but which are nevertheless necessary to meet the Scope of Work and/or are required for the proper, safe and effective operation of the plant (Specify)				

Description of the Works: **SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET**

2.6.1		Sum	1		
2.6.2		Sum	1		
2.6.3		Sum	1		
2.6.4		Sum	1		
2.6.5		Sum	1		
2.6.6		Sum	1		
Sub Total for Schedule 2 (Mechanical Installation) Excl. VAT:					

Schedule 3: Electrical Installation

Item no	Description	Unit	Quantity	Rate	Price (Excl. VAT)
3.1	ELECTRICAL SUPPLY				
3.1.1	40A, 6kA Motor circuit breaker installed in kiosk 2/7/4 (complete)	each	1		
3.2	ELECTRICAL MCCs				
3.2.1	Supply and installation of new MCC for:				
	MCC (DOL)	each	1		
	SMS Alarm System (Incorporated inside MCC)	each	1		
3.3	CONTROL EQUIPMENT (Supply and install)				
3.3.1	Ultrasonic level sensor	each	2		
3.3.2	Float level switches	each	3		
3.3.3	Generator Demand Float level switch	each	1		
3.4	CABLES (Supply and install)				
	MCC Supply:				
3.4.1	Kiosk (2/7/4) supply to Generator: 4mm ² x 4C + 16mm ²	m	20		
3.4.2	Miniture Substation to MCC : 4mm ² x 4C Cu + 16mm ² BCEW	m	20		
	Motor cables:				
3.4.3	2.5mm ² x 4C Cu	Sum	1		
	Control and instrumentation:				
3.4.4	Float level switches	Sum	1		
3.4.5	Ultrasonic level sensor	Sum	1		
3.4.6	Overheat and Seal fail	Sum	1		
3.4.7	Generator Control Cable	Sum	1		
3.5	CABLE TERMINATIONS:				
	Supply, install and connect (both ends included)				
	MCC Supply:				
3.5.1	Miniture Substation to MCC : 4mm ² x 4C Cu + 16mm ² BCEW	each	2		

Description of the Works: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET

	Motor connections:				
3.5.2	Pump motors	each	4		
	Control and instrumentation:				
3.5.3	Float level switches	each	8		
3.5.4	Ultrasonic level sensor	each	4		
3.5.5	Overheat and Seal fail	each	8		
3.5.6	Generator Control Cable	each	2		
3.6	EXCAVATION				
	Excavate, backfill, compact and restore surface to original state:				
3.6.1	Intermediate	m	40		
3.6.2	Import sand or stone-free soil, including all handling	m ³	2		
3.6.3	Removal and dumping of excess material, including all handling	m ³	2		
3.7	GENERAL ELECTRICAL INSTALLATION				
	Supply and Install				
3.7.1	Cable Trays for Routing of cabling around site	Sum	1		
3.7.2	Sundry equipment such as cable connection boxes, conduit, etc.	Sum	1		
3.7.3	Safety signage	Sum	1		
3.7.4	PVC warning tape	m	40		
3.8	EARTHING AND BONDING				
	Supply, install and connect:				
3.8.1	Bonding of equipment such as pipework, cable ladder, etc.	Sum	1		
3.8.2	Generator Earth Spike	each	1		
3.8.3	Earth spike(if required)	each	1		
3.8.4	Earthing readings at pump station	each	1		
3.9	BUILDING LIGHTING AND POWER				
	Supply, install and connect:				
3.9.1	Pump Station Building local lighting and power as per drawing				

Description of the Works: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET

3.10	TESTING AND COMMISSIONING OF EQUIPMENT	Sum	1		
3.11	PRELIMINARY AND GENERAL				
3.11.1	To include general costs, travelling, lodging project coordination, etc.	Sum	1		
3.12	DRAWINGS AND MANUALS	Sum	1		
3.13	TRAINING	Sum	1		
3.14	OTHER EQUIPMENT				
	All items not included above but which are nevertheless necessary to meet the Scope of Work and/or are required for the proper, safe and effective operation of the plant (Specify)				
3.14.1		Sum	1		
3.14.2		Sum	1		
3.14.3		Sum	1		
3.14.4		Sum	1		
3.14.5		Sum	1		
3.14.6		Sum	1		
Sub Total for Schedule 3 (Electrical Installation) Excl. VAT:					

Schedule 4: Generator Installation

Item no	Description	Unit	Quantity	Rate	Price (Excl. VAT)
4.1	GENERATING SET				
	Supply and install:				
4.1.1	Complete containerised genset complete with sound attenuating, fuel tank, controller ,changeover, etc. and ancillaries not provided under item (2)	Sum	1		
4.2	ANCILLARY EQUIPMENT				
	Supply and install:				
4.2.1	Fuel tank	Sum	1		
4.2.2	Sound attenuation	Sum	1		
4.2.3	Fuel and oil drainage pumps	Sum	1		
4.3	CABLES				
	Supply, install, terminate and connect:				
4.3.1	Alternator to Changeover: 25x4 Cu	Sum	1		
4.3.2	Local control and instrumentation cables	Sum	1		
4.4	GENERAL INSTALLATION				
	Supply and install:				
4.4.1	Sundries	Sum	1		
4.4.2	Earthing	Sum	1		
4.4.3	Transport and rigging	Sum	1		
4.4.4	Fuel (Full Tank)	Sum	1		
4.4.5	Generator Plint	Sum	1		
4.5	TESTING AND COMMISIONING OF EQUIPMENT				
4.5.1	To include general costs, travelling, lodging, project coordination, etc.	Sum	1		
4.6	DRAWINGS, OPERATING AND MAINTENANCE MANUALS	Sum	1		
4.7	TRAINING	Sum	1		
4.8	ONE YEAR MAINTENANCE	Sum	1		
4.9	OTHER EQUIPMENT				

Description of the Works: **SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET**

	All items not included above but which are nevertheless necessary to meet the Scope of Work and/or are required for the proper, safe and effective operation of the plant (Specify)				
4.9.1		Sum	1		
4.9.2		Sum	1		
4.9.3		Sum	1		
4.9.4		Sum	1		
4.9.5		Sum	1		
4.9.6		Sum	1		
Sub Total for Schedule 4 (Generator Installation) Excl. VAT:					

SUMMARY OF SCHEDULES

SCHEDULE	DESCRIPTION	SUB TOTAL (EXCL. VAT)
1	Preliminary and General	
2	Mechanical Installation	
3	Electrical Installation	
4	Generator Installation	
SUB TOTAL:		
10% CONTINGENCIES		
SUB TOTAL:		
15% VAT:		
GRAND TOTAL:		

C3: SPECIFICATIONS STANDARD SPECIFICATION STANDBY GENERATING PLANT GS (R1)

INDEX

SECTION	DESCRIPTION	PAGE
GS.4.1	GENERAL	1
GS.4.2	PLANTROOM	1
GS.4.3	OUTPUT AND VOLTAGE	1
GS.4.4	GENERAL OPERATION	2
GS.4.5	MOUNTING	2
GS.4.6	ENGINE	2
GS.4.6.1	General	2
GS.4.6.2	Rating	2
GS.4.6.3	De-rating	2
GS.4.6.4	Starting And Stopping	3
GS.4.6.5	Starter Battery	3
GS.4.6.6	Cooling	3
GS.4.6.7	Lubrication	3
GS.4.6.8	Fuel Pump	3
GS.4.6.9	Fuel Tank	3
GS.4.6.10	Governor	4
GS.4.6.11	Flywheel	4
GS.4.6.12	Exhaust Silencer	4
GS.4.6.13	Protection	4
GS.4.6.14	Accessories	5
GS.4.7	ALTERNATOR	5
GS.4.7.1	Regulation	5
GS.4.7.2	Performance	5

SECTION	DESCRIPTION	PAGE
GS.4.7.3	Coupling	5
GS.4.7.4	Protection	5
GS.4.8	SWITCHBOARDS	5
GS.4.8.1	Construction	6
GS.4.8.2	Switchboard Instruments	6
GS.4.8.3	Battery Charging Equipment	7
GS.4.8.4	Markings	7
GS.4.8.5	Bypass Switch and Mains Disconnecter	7
GS.4.8.6	Automatic Change-Over System	8
GS.4.8.7	Protection and Alarm Devices	8
GS.4.9	CONTROL	8
GS.4.9.1	Function Mode Selector Switch	8
GS.4.9.2	Alarm, Fault and Status Display	10
GS.4.10	EARTHING	11
GS.4.11	INSTALLATION	11
GS.4.12	WARNING NOTICES	11
GS.4.13	NOISE SUPPRESSION	11
GS.4.13.1	Noise Level	11
GS.4.13.2	Acoustic Material, Protection and Fixing	12
GS.4.14	STAINLESS STEEL HOUSING FOR TRANSPORTABLE (COMPACT CONTAINER) SETS	12
GS.4.14.1	Design	12
GS.4.14.2	Major Features	12
GS.4.14.3	Notices and Labels	12
GS.4.14.4	Special Information	13
GS.4.14.5	Terminal Box	13
GS.4.14.6	Container Earth	13
GS.4.14.7	Container Earth Spike	13

SECTION	DESCRIPTION	PAGE
GS.4.14.8	Battery	13
GS.4.14.9	Fuel Tank	13
GS.4.14.10	Switchboard	14
GS.4.15	MAINTENANCE	14
GS.4.15.1	Initial Maintenance	14
GS.4.15.2	Maintenance Agreement	15
GS.4.16	TESTS	15

STANDARD SPECIFICATION STANDBY GENERATING PLANT GS (R1):

GS.4.1 GENERAL

This section includes the standard specification for the supply, delivery and complete installation on site of diesel-electric standby generator sets in a 100% working order.

Any deviation from this standard specification or additional information will be given in the relevant project specification in part C3.1 of this document. In case of contradiction between this Standard Specification and the Project Specification, the latter shall be applicable.

Full particulars, performance curves and illustrations of the equipment offered, must be handed in together with the tender. Tenderers may submit quotes for standard equipment, which comply as closely as possible with the specification. Any deviations from the specification must be fully defined.

The schedules of information, shall be fully completed by all tenderers.

Note: Wherever it is referred to as singular, it shall also be applicable for more than one generator set.

GS.4.2 PLANTROOM

A Plantroom will be provided by the employer unless stated as a containerized unit in the project specification. The provisional floor plan, with dimensions is shown on the tender drawings.

Tenderers must confirm whether the space is sufficient for the installation and state the requirements of their equipment offered and shall indicate the proposed layout of their equipment in red marker, or separate drawings of plantroom and equipment.

GS.4.3 OUTPUT AND VOLTAGE

The generating set shall have an output on site and at a voltage as specified in the relevant project specification C3.1, taking into account any starting requirements and de-rating factors for site conditions such as altitude, temperature and humidity.

If no specific output or site conditions are stated, the Tenderer shall be responsible to determine the site conditions and calculate the rating of set(s) to be supplied and installed under this contract, based upon the parameters stated in the project specification. Any information i.r.o. site conditions given in the project specification is a guideline only and must be verified by the tenderer.

The standby generating set shall be able to accept and handle the specified load on site in one step in accordance with the starting requirement of the load within 15 seconds after being started.

The set must only be connected to the load once the set has reached full speed.

GS.4.4 GENERAL OPERATION

The set is required to supply in the load requirements in the case of a mains power failure, in conjunction with any other condition set in the project specification.

The set shall be fully automatic, i.e. it shall start when any one phase of the main supply fails or gets switched and shall shut down when the normal supply is re-established. In addition it shall be possible to manually start and stop the set.

To prevent the alternator being electronically connected to the mains supply when the mains supply is on and vice versa, a safe and fail-proof system of suitably interlocked contactors shall be supplied and fitted to the changeover switchboard.

GS.4.5 MOUNTING

The generating set frame must be of the "DUPLEX" type manufactured from heavy duty U-channel or I-section steel.

The engine and alternator must be built together on a common frame, which must be mounted on anti-vibration mountings on a skid base framework. A drip tray must be fitted under the engine. The tray must be large enough to catch a drip from any part of the engine and must be removable, by sliding on the floor out of the framework.

There must be at least 200mm clear space between the sump drain plug and the drip tray, with clear access for a drainage container to be inserted and removed without spillage. Alternatively, the engine sump must be fitted with an extended drain point outside the frame for draining of oil into a container outside the frame. A shut-off ball valve and a threaded removable plug must be provided at the drain end of the extended drain pipe.

GS.4.6 ENGINE

GS.4.6.1 General

The engine must comply with the requirements laid down in BS 5514 and must be of the automated injection, compression ignition type, running at a speed not exceeding 1 500 r.p.m. The engine must be amply rated for the required electrical output of the set, when running under the site conditions. The starting period for either manual or automatic switching on until the taking over by the generator set, in one step, of the specified load, shall not exceed 15 seconds. This must be guaranteed by the Tenderer.

Turbo charged engines will only be accepted if the Tenderer submits a written guarantee that the engine can deliver full load within the specified starting period.

Curves furnished by the engine makers, showing the output of the engine offered against the speed, for both intermittent and continuous operation as well as fuel consumption curves when the engine is used for electric generation, must be submitted with the tender.

GS.4.6.2 Rating

The set shall be capable of delivering the specified output continuously under the site conditions, without overheating. The engine shall be capable of delivering an output of 110% of the specified output for one hour in any period of 12 hours consecutive running in accordance with BS 5514.2.

GS.4.6.3 De-rating

The de-rating of the engine for site conditions shall be strictly in accordance with BS 5514 of 1997 as amended to date. Any other methods of de-rating must have the approval of the Employer and must be motivated in detail. Such de-rating must be guaranteed in writing and proved by the successful Tenderer at the site test.

GS.4.6.4 Starting and Stopping

The engine shall be fitted with an electric starter motor and be easily started from cold, without the use of any special ignition devices, under summer as well as winter conditions.

Tenderers must state what arrangements are provided to ensure easy starting in cold weather. Full details of this equipment must be submitted. In the case of water-cooled engines, any electrical heaters shall be thermostatically controlled. The electrical circuit for such heaters shall be taken from the control panel and must be protected by a suitable circuit breaker.

GS.4.6.5 Starter Battery

The set must be supplied with a fully charged lead-acid type battery, complete with the necessary electrolyte. The battery must have sufficient capacity to provide the starting torque stipulated by the engine makers. The battery capacity shall not be less than 120 Ah and shall be capable of providing three consecutive start attempts from cold and thereafter a fourth attempt under manual control of not less than 20 seconds duration each. The battery must be of the heavy-duty "low-maintenance" type, housed in a suitable battery box.

GS.4.6.6 Cooling

The engine shall be air-cooled with water-cooled types offered only as an alternative. In the case of water-cooling, a built-on heavy duty, tropical type pressurized radiator must be fitted. Only standby sets that are water-cooled shall have electric heaters.

For either method of cooling, protection must be provided against running at excessive temperatures. The operation of this protective device must give a visual and audible indication on the switchboard. Water-cooled engines shall in addition be fitted with a low water cut-out switch, installed in the radiator, to switch the set off in the event of a loss of coolant. The protection shall operate in the same way as the other cut-out switches (e.g. low oil pressure). All air ducts for the cooling of the engine are to be allowed for. The air shall not re-circulate in the plantroom and an air duct shall be supplied from the cooling fan cowling/radiator face to the air outlet louvres in the plantroom wall.

GS.4.6.7 Lubrication

Lubrication of the main bearings and other important moving parts shall be by forced feed system. An automatic low oil pressure cut-out must be fitted, operating the stop solenoid on the engine and giving a visible and audible indication on the switchboard.

GS.4.6.8 Fuel Pump

The fuel injection equipment must be suitable for operation with the commercial brands of diesel fuel normally available in South Africa.

GS.4.6.9 Fuel Tank

A separately mounted fuel tank shall be installed for each set in the plantroom or container, on a steel support structure. The tank shall have sufficient capacity for standby sets to run the engine on full load for a period of 12 hours. In the case of compact containerized sets the tank can be built into the base. A water trap must be fitted in the fuel pipeline from the tank to the engine.

The tank must have a sloped bottom to a single low point, fitted with drainage point, comprising a ball valve with extended drain pipe, fitted with a threaded plug at the drain end.

Note: That in the case of compact containerized sets with the fuel tank in the base, the drain point must be at least 200mm above f.f.l., to accommodate a container of sufficient capacity. An access opening must be provided on top of the tank that the bulk of the fuel can be drained by means of a drainage pump.

The tank shall be fitted with a suitable filter, a full height gauge glass, "low fuel level" alarm, giving an audible and visible signal on the switchboard as well as a low-low fuel level cut-out and drip tray.

An electrically operated pump with sufficient length of oil resistant hose to reach 2m beyond the door, shall be supplied, for each set for filling the fuel tanks from 200ℓ drums.

The interconnection fuel piping shall consist of copper tubes and the connection to vibrating components shall be in flexible tubing with armored covering.

GS.4.6.10 Governor

The speed of the engine shall be controlled by a governor in accordance with Class A2 of BS 5514 of 1977 if not otherwise specified.

The permanent speed variation between no-load and full load shall not exceed 4, 5% of the nominal engine speed and the temporary speed variation shall not exceed 10%. External facilities must be provided on the engine, to adjust the nominal speed setting by $\pm 5\%$ at all loads between zero and rated load.

GS.4.6.44 Flywheel

A suitable flywheel must be fitted, so that lights fed from the set will be free from any visible flicker.

A cyclic irregularity of the set must be within the limit laid down in BS 5514 of 1977.

GS.4.6.12 Exhaust Silencer

It is essential to keep the noise level as low as possible. An effective exhaust silencing system of the residential type must be provided, that the noise level does not exceed 75 dB (A) as measured 3,0 m from the exit.

The exhaust pipe shall be installed in such a way that the expelled exhaust fumes will not cause discomfort to the public. The exhaust pipe must be flexibly connected to the engine to take up vibrations transmitted from the engine, which may cause breakage. The exhaust piping and silencer shall be lagged to reduce the heat and noise transmission into the plantroom / container and shall be protected against the ingress of driving rain at 45° to the horizontal. The exhaust pipe must extend 0.5m above the roof gutters. It must be suspended with hangers secured to a steel brace secured to the wall on both sides. The opening through the wall must be sleeved with flanges both sides of the wall at the point of exit. These flanges must be clamped to the wall with threaded rod through the wall.

GS.4.6.13 Protection

The engine must be protected against damage from the conditions listed below. Suitable protection devices must be provided, to activate a relay on the switchboards, which will stop the engine, with manual reset:

- a) Low oil pressure
- b) Low oil level (sump)
- c) Over-temperature (cylinder head)
- d) Engine cooling fan/water pump belt break
- e) Low water level (radiator)
- f) Over-speed

GS.4.6.14 Accessories

The engine must be supplied complete with all accessories, air and oil filters, three instruction manuals, spare parts lists, the first fill of lubricating oils, etc.

GS.4.7 ALTERNATOR

The alternator shall be of the self-excited brush-less type, with enclosed ventilated drip-proof housing and must be capable of supplying the specified output continuously with a temperature rise not exceeding the limits laid down in BS 5000 for rotor and stator windings.

The alternator shall be capable of delivering an output of 110% of the specified output, for one hour in any period of 12 hours consecutive running.

Both windings must be fully impregnated for tropical climate and must have oil resisting finishing varnish.

One bearing alternators shall not be acceptable.

GS.4.7.1 Regulation

The alternator must preferably be self-regulated without the utilization of solid state elements. The inherent voltage regulation must not exceed plus or minus 5% of the nominal voltage specified, at all loads with the power factor between unity and 0,8 lagging and within the driving speed variations of 4,5% between no-load and full load.

GS.4.7.2 Performance

The excitation system shall be designed to promote rapid voltage recovery following the sudden application of the full load. The voltage shall recover to within 5% of the steady state within 300 milliseconds following the application of full load and the transient voltage dip shall not exceed 18%.

GS.4.7.3 Coupling

The engine and alternator must be directly coupled by means of a high quality flexible coupling, of equal quality and performance to the "HOLSET" type.

GS.4.7.4 Protection

The alternator must be protected against damage from the conditions listed below. Suitable protection devices must be provided to activate a relay in the switchboard, which will stop the generating set with manual reset:

- a) Overload (adjustable overload relay)
- b) Over-temperature (thermistors)
- c) Under speed.

GS.4.8 SWITCHBOARDS

A switchboard must be supplied and installed to incorporate the equipment for the control and protection of the generating set and battery charging.

The switchboard must conform SANS 10142-1 (with particular emphases on the change-over section) and to the specification as set out in the following paragraphs.

GS.4.8.1 Construction

The switchboard shall be a totally enclosed, floor or wall mounted unit, fabricated from steel panels, carried on a substantial angle iron framework. Self-tapping screws shall not be used in the construction of the board. In the case of containerized sets, the switchboard must be in a compartment own door, separated from the engine compartment with a full length double (sandwich) fire wall, the space between filled with insulation material, sufficient to prevent heat transfer from the engine compartment to the switchboard compartment.

The board shall be flush fronted and all equipment to be mounted behind the front plate, on suitable supports.

All equipment, connections and terminals shall be easily accessible from the front. The front panels must be hinged, with square key locks.

All pushbuttons, pilot lights, control switches, instrument and control fuses, shall be mounted on hinged panels with control wires in flexible looms.

The steelwork of the boards must be thoroughly de-rusted, primed with zinc chromate and finished with two coats of signal red quality enamel, or a baked powder epoxy coating.

Suitably rated terminals must be provided for all main circuits and the control and protection circuits. Where cable lugs are used, these shall be crimped onto the cable stands. Screw terminals shall be of the type to prevent spreading of cable strands. All terminals shall be clearly marked.

For the control wiring, each wire shall be fitted with a cable or wire marker of approved type and numbering of these markers must be shown on the wiring diagram of the switchboards. Control wiring shall be run in PVC trunking as far as possible. The trunking shall be properly fixed to the switchboard steelwork. Adhesive shall not be acceptable for the fixing of trunking or wire looms to the steelwork.

The automatic control and protection equipment may be custom built discrete type or of the solid state proprietary type, but the latter must still fully conform to the functional specification.

All equipment on the switchboard, such as contractors, isolators, bus-bars, etc., shall have ample current carrying capacity to handle at least 110% of the full load alternator current specified.

The main switchgear is as follows, detailed in the relevant sections hereafter and in the single line diagram:

- Incoming normal power circuit breaker
- Incoming standby power circuit breaker
- Bypass switch
- Automatic changeover equipment
- Load circuit breaker (s)

GS.4.8.2 Switchboard Instruments

The generating set switchboard shall be equipped as follows:

- a) Voltmeter to suit the generating set output voltage with ON/OFF selector switch. In the case of three phase sets it must be a six position switch for phase and line voltages and central OFF position.
- b) A flush 96mm² dial combination maximum demand and instantaneous ampere meter for each phase, with re-settable pointer suitably scaled 20% higher than the alternator rating. A red arc stripe above the scale markings from 0-20 A and a red radial line through the scale at full-load current shall be provided. This instrument shall be supplied complete with the necessary current transformer(s).
- c) One flush 96mm square vibrating frequency meter for the alternator frequency.

-
- d) A six digit running hour meter to record the plant running hours to one tenth of an hour.
 - e) Fuses or m.c.b.'s for the potential circuits.

If the set is fitted with a propriety type controller, the above instrumentation may be provided integral to the controller with LCD display window, but a facility must be provided whereby all the above information can be viewed on a single display.

The following instruments must be provided, installed on the switchboard, or separate engine mounted panel:

- a) Oil pressure
- b) Engine temperature
- c) Battery voltage
- d) Battery charging current

GS.4.8.3 Battery Charging Equipment

Each switchboard shall be equipped with battery charging equipment.

The charger shall operate automatically in accordance with the state of the battery and shall generally consist of an air-cooled transformer, a full wave solid-state rectifier and the necessary automatic control equipment of the constant voltage system.

The charger must be fed from the mains. An engine driven alternator must also be provided for charging the battery while the set is operational. Failure of this alternator must also activate the battery charger failure circuit.

GS.4.8.4 Markings

All labels, markings or instructions on the switchgear shall be in English only.

GS.4.8.5 Bypass Switch and Mains Disconnect

The switchboard shall be equipped with a circuit breaker disconnect to isolate the mains and a manually operated on-load-by-pass switch labelled MAINS NORMAL/C/O/ BYPASS, which shall either connect the incoming mains to the automatic change-over control gear, or directly to the outgoing feeder. In the latter position the automatic control gear, including the main contactors, shall be isolated for maintenance purposes. It shall be not possible to start the engine except with the selector switch in the "TEST" position.

It is required that this bypass and mains disconnect be mounted away from the automatic control gear, in a separate compartment, either on the side or in the lower portion of the switchboard cubicle, and that the switches are operated from the front of the compartment.

GS4.8.6 Automatic Change-Over System

A fully automatic change-over system must be provided to isolate the mains supply and connect the standby set to the outgoing feeder in case of a mains failure and reverse this procedure on return of the mains.

The switchgear for this system must be electrically **and** mechanically interlocked in a safe and fail-proof way to prevent the alternator from being switched onto the mains or *vice versa*.

The change-over system must be supplied with normal (mains) power from the bypass switch normal position and standby power from the alternator supply circuit breaker.

The change-over outgoing side must be connected to load circuit breaker(s) via the bypass switch as shown on the single line diagram.

Contactors must be rated AC-3 duty.

Important Notice:

The Tenderer must submit, together with his offer, the design of the control system complying with the requirements for automatic starting, stopping, interlocking and isolation specified.

GS.4.8.7 Protection and Alarm Devices

The switchboard shall be equipped with protection and alarm devices as described under relevant sections.

All protection/alarm relays must operate an alarm hooter. A push button must be installed in the hooter circuit to stop the audible signal, but the fault indication light on the control panel must remain lit until the fault has been rectified.

An ON/OFF switch is not acceptable. After the hooter has been stopped, it must be reset automatically, ready for a further alarm.

The hooter must be of the continuous duty and low consumption type. Both hooter and protection circuits must operate from the battery.

Potential free contacts from the alarm relay must be brought down to terminals for remote indication of alarm conditions.

A test pushbutton must be provided to test all indicator lamps.

GS.4.9 CONTROL

The generating set switchboard must be fitted with a control panel to provide the functions as specified below. The control panel may be custom built, or may be a microprocessor based propriety digital controller, but with the same functionality as described below.

GS1.4.9.1 Function Mode Selector Switch

A four position TEST/MANUAL/OFF/AUTO mode selector switch with visual switched position status must be provided (including for sets with microprocessor controllers), with operation as follows:

a) OFF

In this position the set shall be completely disconnected from the control that it cannot be started, safe for cleaning and maintenance.

b) TEST

In this position it shall be possible to manually start and stop the set, but the running set shall not be switched to the load, i.e. the change-over system will be switched to the normal (mains) supply, even in case of a power failure.

c) MANUAL

In this position it shall be possible to start and stop the engine by means of a three position OFF-ON-START selector switch with spring return from START to ON.

To start the engine, the switch must be turned from OFF to ON and to START.

Once the engine has started the switch must return to the ON position. To STOP the engine the switch must be switched to the OFF position.

In the ON position, a corresponding blue indication light must switch ON.

In the case of processor type controllers, keypad type START and STOP facilities shall be acceptable.

Once the engine has started and run up to speed, the change-over must switch to the standby power position and take load, irrespective of normal power is available.

When the engine is stopped, the change-over must switch back to the normal supply position only after an adjustable period of (10 – 300 s) after the standby supply has been disconnected.

d) AUTO

In the AUTO position the engine must start automatically when any one of the normal supply phases has failed or switched off and shut down when the normal supply is re-established.

Mains sensing must be done on the main incoming breaker load side.

A secondary START/STOP condition may be specified in the project specification.

Start Delay

A 0 – 15 s adjustable start delay timer must be provided to prevent start up on power dips or very short interruptions.

Stop delay

A stop delay is required for the set, to keep the set on load for an adjustable period of one to sixty seconds after the return of the mains supply or secondary STOP command, before changing back to the supply. The change-over must switch back to the normal supply position, only after an adjustable period of 10 to 300 s, to ensure all rotary load equipment has come to a complete standstill, before switched to NORMAL power again, unless specified in the project specification as a synchronized change-over.

An additional timer shall keep the set running for a further adjustable cooling period of 5 to 10 minutes at no-load before stopping.

Three start attempt

The automatic control shall make provision for three consecutive starting attempts. Failing to start after the third attempt, the control shall shut the engine off, with visual and audible alarm indication.

GS.4.9.2 Alarm, Fault and Status Display

All alarm, fault and status conditions must be visually displayed by means of cluster LED indicators, as scheduled below. At the same time an audible alarm must be activated.

An alarm accept pushbutton must be provided to silence the alarm, but the indication light must stay on until the alarm/fault condition has been rectified/manually reset.

a) Alternator

- Overload
- Over-temperature

b) Engine

- Low oil pressure
- Low oil level
- Temperature high
- Low water level
- Over-speed
- Belt break
- Start fail

c) Fuel tank

- Low fuel
- Low fuel cut-out

d) Power supply status

- Mains supply on
- Alternator supply on
- Mains contactor
- Standby contactor on

e) Battery charger

- Battery charger fail
- Engine alternator fail

In the case of a microprocessor controller, the FAULT/ALARM conditions must be displayed on a LCD screen, with corresponding alarm accept facilities.

GS.4.10 EARTHING

An earth bar must be fitted in the switchboard, to which all non-current carrying metal parts shall be bonded.

The neutral point of the alternator must be solidly connected to this bar by means of a removable link labelled "EARTH". Suitable terminals must be provided on the earth bar for connection of up to three earth conductors, which will be supplied and installed by other.

GS.4.11 INSTALLATION

Except for the supply of the incoming mains supply cable and outgoing feeder cables, the Tenderer must include for the complete installation and wiring of the plant in running order, including the connection of the incoming cable and outgoing feeder cables.

PVC insulated steel wire armored PVC sheathed cables shall be used for the alternator circuit and for the control circuits either multi-core PVC cable or PVC insulated wires in conduit.

Note: That in the case of compact container sets no cabling to or from the set may be accessible without opening a pad lockable panel door.

GS.4.12 WARNING NOTICES

Notices, in English must be installed in the plant rooms.

The contents of these notices are summarized below.

- a) Unauthorized entry prohibited.
- b) Unauthorized handling of equipment prohibited.
- c) Procedure in case of electric shock.

d) Procedure in case of fire.

The successful Tenderer must consult the Act and get approval of the wording from the Employer's representative, prior to ordering the notices.

Lettering must be black on a yellow background.

Notice (a) must be installed outside next to the entrance of the plantroom and (b to d) inside the plantroom.

In the plantroom, a clearly legible and indelible warning notice must be mounted in a conspicuous position.

The notice shall be made of non-corrodible and non-deteriorating material, preferably plastic and must read as follows:

DANGER: This engine will start without notice. Select "OFF" on control panel before working on the plant.

GS.4.13 NOISE SUPPRESSION

GS.4.13.1 Noise Level

It will be the Contractor's responsibility to ensure that the noise level at 5 meters from any position outside the plantroom, stainless steel housing or shipping container is not greater than 85 dBA.

Tenderers must state at the time of tendering how they intend to comply with this clause. A sound meter to verify the noise levels must be provided at the taking over inspection.

GS.4.13.2 Acoustic Material, Protection and Fixing

Acoustic absorbent material, where provided, shall be permanently fixed to the room or container walls, in an acceptable and approved workmanlike manner.

This acoustic material shall be contained by Expanded or Perforated Metal.

The Expanded or Perforated Metal shall be thoroughly cleaned, de-rusted primed and painted before final combustible.

GS.4.14 STAINLESS STEEL HOUSING FOR TRANSPORTABLE (COMPACT CONTAINER) SETS:

GS.4.14.1 Design

A suitable and approved design is required, to provide a robust, vandal-proof, positively vermin-proof, storm-weather proof, outdoor housing. This shall be manufactured from grade 304 stainless steel, of minimum thickness 1.8mm, to adequately protect the standby plant from the elements for an expected period of 20 years.

The outdoor housing design is to be such that once the installation is completed, the set can be remotely started without personnel first having to open shutters/doors etc.

The design of the housing shall be such that it is possible to do any adjustments to the equipment when needed.

GS.4.14.2 Major Features

A sloping roof, either pitched or rounded, complete with suitable lifting lugs.

Removable front and rear panels. Top half to be adequately louvered for ventilation.

Removable adjacent side panels on each side which shall be interchangeable. Top half to be adequately louvered for ventilation.

If there are more than two removable panels per side, the center support post must be bolted on with stainless steel nuts and bolts. This will depend on the size of the plant.

The bottom of the panels is to be fitted with two (2) 12mm diameter pins, which will locate in suitable holes in the bottom of the housing.

The top ends of the panels are to be secured to the housing by two easily accessible, robust, lockable panel type handles. Two sets of keys to be provided.

A suitable channel is to be provided on the housing to prevent rainwater from running into the panel recesses, and then into the housing.

Each panel shall have two (2) grab handles to facilitate easy removal.

The panels shall be suitably louvered to allow for the maximum air flow.

The starting battery, fuel tank, battery charger, control panel and exhaust silencer etc. are also to be housed within this housing.

GS.4.14.3 Notices and Labels

Permanent suitably sized notices are to be positioned and fixed to the sides of the housing.

Notices shall be fixed to the housing by means of pop rivets or stainless steel bolts and nuts.

The working shall be as specified in the project specification.

These notices shall be made of plastic, fiber glass board, or other acceptable non-deteriorating and non-corrodible material.

The 50mm lettering shall be engraved or be of an approved permanent indelible non-deteriorating nature.

GS.4.14.4 Special Information

Full details of the housing, the fuel tank, the rust, weather and vandal proofing etc. are to be supplied and must be submitted with the tender.

This information will form a major part of the evaluation, and Tenderers failing to provide this information will NOT be considered.

GS.4.14.5 Terminal Box

An exterior weather proof terminal box completed with pad lockable hinged cover and square key (catches/latches), gland plate for incoming/outgoing cables, shall be provided flush in the housing. It must be totally rust proof and sealed against the elements and be positively vermin and vandal proof.

This terminal box shall be fitted with terminals suitable for making off the:

- Alternator outgoing supply;
- Mains incoming supply;
- EARTH BAR and earth terminals.

All the above shall be labelled. The terminal box will have a "DANGER ELECTRICITY ALIVE" label on the door. The terminal box shall be fitted with a substantial gland plate.

Note: That the cables may not be externally accessible without opening the cover door.

GS.4.14.6 Container Earth

The container shall be provided with a suitable and approved earthing stud suitably located, so that the entire container metal frame is adequately bonded to the earthing system. This shall be effectively bonded to the earth bar in the terminal box and to the earth spike mentioned hereunder.

GS.4.14.7 Container Earth Spike

The container earthing stud shall be bonded to an earthing spike, which will be driven into the ground at a suitable point in close proximity to the terminal box.

GS.4.14.8 Battery

The battery shall be mounted in such a position that acid split or leaking from the cells cannot, under any circumstances, reach any equipment or the fuel tank.

GS.4.14.9 Fuel Tank

The fuel tank shall be so positioned that fuel cannot spill onto the equipment or the battery. Note the requirement of par. 4.6.9.

GS.4.14.10 Switchboard

The switchboard and control panel shall be mounted on suitable anti-vibration mountings, in a separate compartment from the engine/alternator compartment, with suitable insulation that there is no heat transfer from the engine/alternator to the switchboard.

GS.4.15 MAINTENANCE

GS.4.15.1 Initial Maintenance

The successful Tenderer will be required to maintain the plant in good running order for a period of twelve months after the plant has been taken over by the Client. The full cost of this maintenance must be included in the tender price, inclusive of overheads, travelling fees, including the consumables as detailed below. The Client shall not acknowledge any cost claims additional to this maintenance cost as tendered.

However, should the Contractor fail to hand over the plant in good working order on expiry of the specified twelve months, the Contractor will be responsible for further monthly maintenance until final delivery is taken.

Under this agreement the Contractor will undertake to arrange once every two months for a visit to the plant by a qualified member of his staff, who shall:

- a) Report to the person responsible for keeping the maintenance records and enter into a logbook the date of the visit, the test carried out, and the adjustments made and any further details that may be required.
- b) Grease and oil moving parts, where necessary.
- c) Check the air filter and, when necessary, clean the filter and replace filter oil.
- d) Check the lubricating oil and top-up when necessary.
- e) After the plant has run on one oil change for the number of hours stipulated by the manufacturers, drain the sump, refill with fresh lubricating oil and change the oil filter. The reading of the hour meter on the switchboard will be taken to establish the number of hours run by the plant.
- f) Clean and lubricate the air filter and/or replace the filter element at intervals recommended by the engine manufacturer.
- g) Check and when necessary adjust the valve settings and the fuel injection equipment.
- h) Check the battery and top-up the electrolyte when necessary.
- i) Test-run the plant for 0.5 hour and check the automatic starting with simulated faults on the mains, the proper working of all parts, including the electrical gear, the protective devices with

fault indicators, the change-over equipment and the battery charger. Make the necessary adjustments.

- j) Report to the Client and to the Engineer on any parts that become unserviceable through fair wear and tear, or damaged by causes beyond the control of the Contractor.
- k) The Contractor on receiving the report shall immediately submit a detailed quotation for the repair or replacement of such parts to the Client.
- l) Advise the Client when it has become necessary to de-carbonize the engine and submit quotation of this service.
- m) Top-up the water of the radiator, if applicable.
- n) Clean the plant and its components.

GS.4.15.2 Maintenance Agreement

- a) After the lapse of the above-mentioned twelve (12) month period, the Contractor may be required to enter into a maintenance agreement, initially for one year with a possible yearly renewal.
- b) Acceptance of the tender shall not bind the Client to accept this maintenance service.

GS.4.16 TESTS

The following tests are to be carried out:

- a) At the supplier's premises, before the generating set will be delivered to site, Representatives of the Employer and Engineer may be present during the test to satisfy them that the generating set complies with the specification and delivers the specified output. The test must be carried out in accordance with BS 5514, Part 2 and 3. The Employer and Engineer must be timeously advised of the date of this test.
- b) On site tests to be carried out

The load resistance and all instruments, which may be required for the tests, have to be provided by the successful Tenderer.

Test reports of both tests as specified under (a) and (b) are to be submitted to the Employer.

DATA SHEET

SECTION 1: MECHNICAL EQUIPMENT DATA SHEETS

A: DATA SHEET FOR PUMPS

PERFORMANCE CURVES & PUMP DRAWINGS

The Tenderer is required to submit signed performance curves with the tender indicating head, efficiency, kW and NPSH. The Tenderer is required to submit a line drawing of the complete pump/motor unit showing all salient dimensions.

1 Lift Pump

1.1	Manufacturer				
1.2	Place of manufacture				
1.3	Delivery time				
1.4	Model number and type				
1.5	Number of stages				
1.6	Impeller diameter (mm) and material				
1.7	Characteristics;				
		Shut-off head	Best efficiency	Max. power condition	Duty point
	Total manometric head[m]				
	Flow rate [l/s]				
	NPSH required [m]				
	Pump input power [kW] / motor current [A] required at 400 V	/	/	/	/
	Pump efficiency				
1.8	Suction diameter (if applicable)				
1.9	Discharge diameter				
1.10	Overall diameter				
1.11	Weight of pump with motor				
1.12	Type of gland sealing				
1.13	Pump size [mm]				

GUARANTEED CHARACTERISTICS

We guarantee that each pump set will deliver a minimum of l/s against a total manometric head of water of m and will not exceed a pump input power/motor input current of kW / A at 400 V r.p.m. in compliance with the project specification. The motor rated power exceed the calculated duty point of the driven equipment by %.

Note: This data sheet must be completed fully at tender stage.

.....
SIGNATURE OF TENDERER

.....
DATE

B: DATA SHEETS FOR PIPING AND VALVES

Manufacturer data sheets / brochures must be provided for all equipment offered.

1 DATA SHEET FOR PIPING

- 1.1 Name of manufacturing firm
- 1.2 Name of galvanizing firm
- 1.3 Name of Epoxy Coating applicator firm
- 1.4 Material of piping
- 1.5 Epoxy coating make and product name / number
- 1.6 Maximum working pressure [bar]
- 1.7 Test pressure [bar]
- 1.8 Internal diameter [mm]
- 1.9 Couplings
- 1.10 Flange ratings / drillings

2 DATA SHEET FOR AIR-RELEASE VALVE

- 2.1 Name of Manufacturer
- 2.2 Make and model number
- 2.3 Material
- Body
- Float
- 2.4 Accessories
- 2.5 Size [mm]
- 2.6 Maximum working pressure [bar]
- 2.7 Shut-off valve make and model number

3 DATA SHEET FOR SHUT-OFF VALVES

- 3.1 Name of Manufacturer
- 2.2 Make and model number
- 3.3 Material
- Body
- Blade
- 3.4 Coating

- 3.5 Accessories
- 3.6 Size [mm]
- 3.7 Maximum working pressure [bar]
- 3.8 Shut-off valve make and model number

4 DATA SHEET FOR NON-RETURN VALVES

- 4.1 Name of Manufacturer
- 4.2 Make and model number
- 4.3 Material
- Body
- Disc
- 4.4 Coating
- 4.5 Accessories
- 4.6 Size [mm]
- 4.7 Maximum working pressure [bar]
- 4.8 Shut-off valve make and model number

5 DATA SHEET FOR MECHANICAL WATER METER

- 5.1 Name of Manufacturer
- 5.2 Make and model number
- 5.3 Size [mm]
- 5.4 Maximum working pressure [bar]

.....
SIGNATURE OF TENDERER

.....
DATE

SECTION 2: ELECTRICAL EQUIPMENT DATA SHEETS

A: DATA SHEET FOR ELECTRICAL MOTORS

1 Postmasburg Booster Pump Station

1.1	Manufacturer	.....
1.2	Place of manufacture	.....
1.3	Class of insulation	.....
1.4	Type of motor	.....
1.5	Rated output (kW)	.....
1.6	Rated full load current	.....
1.7	Voltage	.....
1.8	Power factor at full load	.....
1.9	Power factor at $\frac{3}{4}$ load	.....
1.10	High efficiency motor	YES / NO
	a) Efficiency at full load	.....
	b) Efficiency at $\frac{3}{4}$ load	.....
1.11	Protection class	.....
1.12	Full load speed	.....
1.13	Maximum outer diameter	.....
1.14	Additional information	.....
1.15	Seal Failure Protection	YES / NO Type
1.16	Overheat Protection	YES / NO Type

Note: This datasheet must be completed fully at tender stage

.....
SIGNATURE OF TENDERER

.....
DATE

B: DATA SHEET FOR CONTROL EQUIPMENT

1 FLOAT LEVEL SWITCHES

1.1	Manufacturer	_____
1.2	Place of manufacture	_____
1.3	Model number / Type description	_____
1.4	Is brochure included	YES / NO

2 ULTRASONIC LEVEL SENSORS

2.1	Manufacturer	_____
2.2	Place of manufacture	_____
2.3	Model number / Type description	_____
2.4	Is brochure included	YES / NO
2.5	Additional Information	_____

3 SMS SYSTEM

3.1	Manufacturer	_____
3.2	Place of manufacture	_____
3.3	Model number / Type description	_____
3.4	Is brochure included	YES / NO
3.5	Additional Information	_____

.....
SIGNATURE OF TENDERER

.....
DATE

C: DATA SHEET FOR LV MCC's AND SWITCHGEAR

1. SOURCE

EQUIPMENT	NAME OF MANUFACTURER	PLACE OF MANUFACTURE
MCC		
Circuit breakers		
Non electronic starters		
Electronic starters		

2. STARTER

STARTER	TYPE	RATING	DUTY	OVERLOAD
Postmasburg Booster Pumps				

3. MCC DIMENSION (L X W X H)

3.1 Postmasburg Booster Pumps:

4. OHS ACT: SANS 10142-1 COMPLIANCE

Refer to C3.2 Standard Specification PMA Clause PMA 4.2.1

(Note the relevant question box must be marked with an "X")

4.1 Assemblies ≤ 10 kA (SANS 1973-3)

a) Will switchboards be in compliance

Yes		No	
-----	--	----	--

4.2 Assemblies ≤ 10 kA (SANS 1973-1)

a) Will switchboards be in compliance

NOT APPLICABLE			
Yes		No	

b) State basis of MCC offered

TTA		MTA		OTHER*	
-----	--	-----	--	--------	--

4.3 Name of steelwork and bus bar assembly manufacturer

4.4 Name of switchboard assembly popular

- 4.5 If (3) and (4) are different entities, state whether the entity under (3) will certify the completed populated switchboard under (4) as compliant with SANS 1973-1.

Yes		No	
-----	--	----	--

- 4.6 Has the requirements of the abovementioned Clause PMA 4.2.1 in terms of the OHS Act been noted and is compliance confirmed.

Yes		No	
-----	--	----	--

(Note: this is a statement of legal compliance)

.....
NAME OF TENDERER

.....
SIGNATURE OF TENDERER

.....
DATE

(Who by his signature verifies the correctness of the above and accepts responsibility to future compliance)

D: DATA SHEET FOR ELECTRICAL CABLES

1. Postmasburg booster pump station

1.1 Power Cables

a. MCC supply

.....

b. Pump motor

.....

1.2 Control Cables

a. Overheat

.....

b. Ultrasonic level sensor

.....

c. Float level switches

.....

d. Moisture Ingress

.....

1.3 Instrumentation Cables

.....

.....
SIGNATURE OF TENDERER

.....
DATE

[illegible]

DATE _____

**PROJECT SPECIFICATION
SECTION 1: GENERAL:**

1.1 GENERAL

This contract covers the related design, supply, delivery, installation, commissioning and maintenance during the defects liability period of pumping plant and equipment of mechanical and electrical equipment for a lift pump station in Postmasburg.

1.2 DESCRIPTION OF THE SITE AND ACCESS

The site is situated at the new housing development outside the town of Postmasburg, Northern Cape.

1.3 DETAILS OF THE CONTRACT

This contract will be executed as a sub-contract. The mechanical contractor under this contract shall liaise closely with the main civil contractor.

The mechanical contractor shall supply all fittings and fixtures, to be built-in in accordance with the programme, timeously, so as not to affect the execution of that contract in any way. All builders' work required specifically by the successful Tenderer, must be detailed by the mechanical contractor and executed by the civil contractor. Any allowance required for attendance upon and co-operation with the other contractors must be made in the rates and no separate payment will be made for this eventuality.

The major items of work to be carried out under this contract are:

- a) Supply and install two (2) new lift pump set (end-suction centrifugal) including piping, valve, control equipment, etc.
- b) Supply and install emergency standby generating set, including control equipment, etc.

Note: The Employer reserves the right to accept this tender in part only.

1.4 CONSTRUCTION PROGRAMME

The mechanical contractor shall in liaison with the civil contractor submit a programme for approval by the Engineer.

1.5 SITE FACILITIES AVAILABLE

The Contractor shall make his own arrangement for any sanitary facilities he may require.

1.6 STATUS

The particular specification sections forming part of this contract, have been written to cover all phases of work usually encountered in contracts of this nature and may therefore cover items of work not encountered in this particular contract. In case of any discrepancy or conflict with any part or parts of the particular specification section, these project specification amendments shall apply.

1.7 PLANT LAYOUTS

The general layout of the pump installation, piping and valves are shown on the attached drawings, providing the relative positioning of the various items

The space available for the pump installation has been indicated and tenderers are required to offer the most compact layout that will fit these constraints and also ensure efficient operation. Detailed layout proposals must accompany this tender.

1.8 COMPLIANCE WITH ACT

The complete installation shall be in accordance with the Occupational Health and Safety Act (Act 85, 1993)

1.9 STANDBY

Provision shall be made for a competent workman to take charge of the complete pumping installation, at the completion of the work, for a minimum period of one (1) week at the expense of the Contractor. The standby is for the purposes of running in the equipment, dealing with the defects that may appear and for properly instructing the Employer's staff in the care, operation and maintenance of the complete plant. This temporary charge-hand would be under direct control of the consultant for the whole of this period and shall carry out all reasonable instructions given to him by the latter.

1.10 TESTING

The Engineer shall test the electrical panels in the factory and all equipment necessary to test the performance and operation of the panels must be provided.

After completion of the installation and putting into proper operation of the pumping plant, the contractor will be required to make suitable arrangements for the testing of the plant and equipment supplied under this contract, in the presence of the Engineer or his representative, so as to determine whether they are in compliance with the guaranteed figures submitted by the contractor. The installation must be in operation for at least a week before this handing over inspection will take place.

Before the Engineer is called to witness any testing, in the factory or on site, the contractor must test/commission the equipment/installation on his own. In the case of commissioning the results of the commissioning must be handed to the Engineer. A commissioning report form will be obtainable from the Engineer for this purpose and the Engineer must accept the results before arrangements for hand-over inspection will be made.

The contractor must make provision in his pricing for these tests, commissioning tests, as well as the hand-over tests.

1.11 GUARANTEE

The Tenderer shall submit performance details of the plant, where called for in the information sheets and these details shall be taken as the guaranteed figures of the performance of the plant. Should the overall performance of the plant fail to comply with these figures by more than 5% on the flow rate and 8% on the power absorbed by the plant. The Engineer shall have the right to reject the plant, to recover all monies paid to the Contractor under the Contract for such plant and to confiscate the surety by way of liquidated damages, whereupon the Contractor at this own expense shall remove all rejected plant when ordered to do so by the Engineer.

1.12 MAINTENANCE SERVICING

The Contractor shall provide for the maintenance and servicing of the installation as follows:

- a) The Contractor shall be responsible for all maintenance and servicing of the installation for the full twelve (12) month maintenance and guarantee period. During this period the Contractor shall make good any defects to inferior materials and workmanship and maintain all plant and equipment in perfect operating condition.
- b) The Contractor shall fill out the plant log book on site in which he shall record sign and date all work carried out at each inspection as well as log all run hour ampere and pressure readings.
- c) The Contractor shall allow for all expendable materials necessary for servicing the plant.

1.13 OPERATING AND MAINTENANCE MANUALS

The Contractor shall supply Operating and Maintenance Manuals as specified under PMA 1.7.

Three hard copies of the Manuals shall be provided for as well as two soft copies on CD's or DVD's. These soft copies shall be complete and identical to the hard copies.

1.14 TRAINING

The Contractor shall allow for a complete training session of the Operating and Maintenance team. This shall include all for all material and information needed for the proper operation of the installation and the required checks to be done.

PROJECT SPECIFICATION

SECTION 2: MECHANICAL SPECIFICATION

2.1 SCOPE

This section of the contract covers the related design, supply, delivery, erection, installation, commissioning, testing and upholding during the period of maintenance of electrically pump equipment, piping, valves, control and auxiliary gear, etc.

2.2 PUMPS

2.2.1 Lift Pumps

Two pumps shall be supplied. (1 Duty / 1 Standby)

The pumps shall be of the end-suction, centrifugal type of KSB manufacture, or similar and equal approved.

The pump casing and guides shall be made of high grade cast iron, the impeller and diffusers shall be made of bronze and the shaft shall be of Stainless Steel. The pump shall be equipped with mechanical seals. Bearings shall be waterproof and with suitable provision for grease lubrication and the pump shall be equipped with a bearing pedestal, bearing brackets shall not be accepted. The rotating assembly shall be properly balanced so as not to give rise to end thrust or alternatively suitable thrust bearings shall be provided. The pump must be of a back-pull-out design to allow the removal of the power head, with the pump housing remaining fixed to the pipework. All parts shall be of ample dimensions and strength, properly machined and assembled to ensure perfectly free running.

The pump impeller shall be trimmed to suit the duty point as discussed in paragraph 2.3. The pump's shut-off pressure head shall be at least 15% higher than the operational duty point pressure head. The pump operational speed shall not exceed 1500 rpm. The minimum acceptable efficiency of the pump at the design duty point shall be according to paragraph 2.3.

Each pump shall be driven by a 4-pole, Premium efficiency electrical motor. The motor and frame shall be sized to cope with the maximum power requirements of the associated pump and impeller combination and shall be selected at 20% (-2% tolerance) above the maximum power required for the impeller size.

The pump and motor sets must be directly coupled with a rubber coupling similar or equal to Fennerflex, properly set up within the tolerances specified. After installation the pump and motor shall be laser aligned by a firm specializing in machine alignment. A certificate confirming such laser alignment per pump set must be submitted to the Engineer, and must be included in the O&M Manuals. The shaft keys must be machined down where it extends beyond the coupling.

The complete pump and motor unit shall be installed on a specifically designed common base which shall be bolted down with three anchor bolts on each side to the concrete plinth. Four jacking bolts shall be used positioning of the motor for alignment with the pump. A coupling guard shall be provided to cover the rubber coupling and all rotating parts. Drawings of the frames must be approved before manufacture.

Pump and power curves and points of duty must be submitted with the tender.

2.3 PUMP DUTIES

The pumps shall be designed to operate under the following conditions of duty:

The pumps shall be capable of doing the following duty (with only one pump operational at a time):

DESCRIPTION	MAXIMUM	MINIMUM
Minimum pump rate @ maximum head	6.7 l/s	
Levels:		
Suction levels	1.2 m	5.1 m
Discharge level at elevated tower	14.0 m	14.0 m
Design details:		
Static head	12.8 m	8.9 m
Estimated friction losses	2.1 m	2.1 m
End pressure required	2.0 m	2.0 m
Total head losses	16.9 m	13.0 m
PIPE DETAILS	DESCRIPTION	
Section 1 (suction)	10 m Ø 80 mm Mild Steel pipe*	
Section 2 (delivery)	30 m Ø 80 mm Mild Steel pipe*	

* Information for tender purposes only, final lengths to be confirmed on site.

2.4 PIPING AND PIPE FITTINGS

2.4.1 Piping

The tenderer shall include for the related design, supply and delivery to site and for the installation and testing of the purpose made piping as indicated on drawing no. 300371-ME-DRD-P01.

All Pipe-work for suction and delivery shall be heavy duty hot-dipped galvanized and coated with a two pack epoxy coating to a dry final thickness (DFT) of 300 µm and 400 µm for the coating and lining respectively. All hot-dipped galvanizing shall be in accordance with SANS 121:2000 as well as the guidelines of HDGASA. The piping must be sweep blasted after being galvanized and cleaned according to the manufacturer's requirements prior to application of the epoxy coating.

All mild steel piping shall be flanged and drilled to SABS 1123 Table 1000/3 and rated at 10 bar.

The layout of pipe-work shall be such as to facilitate dismantling, inspection and maintenance.

The pipes must be properly supported and so arranged that all stresses created in the pipe line by static and dynamic forces, including recoil shock, will be taken up by suitable anchors. All pipework shall be properly supported by hot dipped galvanized pipe support, bolted to the floor, and capable of handling the operating /shut-off pressures.

The Tenderer shall submit drawings showing the dimensions and layout of all pip-work, as well as any openings, sleeves and other builder's work required, once the tender has been awarded.

2.4.2 Isolating Valves

Isolating valves for the pump station shall be flanged, resilient seat gate valves, with non-rising spindles and equipped with a hand wheel. The valves shall be right hand closing and rated at 10 Bar for suction and discharge. Valves shall conform to SANS 664:2011.

2.4.3 Non-Return Valves

Non-return valves shall be of the flanged, single door, swing type non-return valves, equipped with a counter weight and lever. The valves shall be rated at 10 Bar.

2.4.4 Air Release Valves

The air release valves shall be of the double acting type, rated at 10 Bar it must be supplied with an isolating gate valve, rated at 10 Bar.

2.5 PRESSURE GAUGES

Each pump set shall be fitted with one pressure gauge on the suction and discharge of the potable water lift pump sets. The raw water pump set will be equipped with a pressure gauge on the delivery side only. These must be mounted on steel gauge stands and connected with neatly secured high pressure nylon pipe fitted in galvanized conduit. Fitting of pressure gauges directly onto pipe-work shall not be allowed.

The pressure gauge shall be 100 mm diameter, glycerin filled with stainless steel bodies, equipped with a three-way isolating cock, with a pressure range, as listed below:

Lift Pumps

Suction : -50 to 100kPa

Discharge : 0 to 500kPa

2.6 NUTS, BOLTS, READY-BAR AND PACKING

Nuts, bolts, washers (2 per bolt set), and ready-bar (threaded rod) shall be hot dipped galvanized. Bolts and ready-bar lengths shall allow for at least two screw threads to be visible when tightened.

When bolts or ready-bars are cut the ends must be treated with a corrosion protective coating similar or equally to Zinkfix.

Packings (gaskets) shall be of the full-face type with pre-punched holes for bolts and/or ready-bar. The packings shall not be less than 3 mm thick (uncompressed).

2.7 MECHANICAL WATER METER

Mechanical turbine type flow meters equivalent to the COSMOS WPD range must be supplied, installed and connected at each borehole. The meter accuracy must be better or equal to $\pm 2\%$ at continuous flow rating and $\pm 5\%$ at minimum flow-rate.

The meter must comply with the following requirements:

Pipe line diameter	Ø 80
Meter diameter	DN 80
Flanges: SABS table	PN 10; 1 000/3
Flow speed measuring range	0,1 – 10 m/s
Flow rate measuring range	0,2 – 10 ℓ/s
Flow rate nominal	6,7 ℓ/s

2.8 SPARES

The tenderer shall submit a complete list of all spare parts, which are not regularly kept in stock by the supplier and which the Tenderer considers to be necessary for the replacement of wearing parts.

2.9 ALTERNATIVE PROPOSALS

Any other proposal that will result in a more efficient working of the proposed systems, will be considered, even if additional expense is involved. Alternative proposals that will produce savings will also be considered and evaluated. **Alternative offers will only be considered if offered apart from the main proposal and in attached covering letter.**

2.10 INSTALLATION

The sum tendered for shall include for all arrangements for handling, transport to site, erection, adjustment, etc. as specified under PMA.1.10.

2.11 PLANT DRAWINGS

Drawings of all plant, equipment (in position) supplied and installed under this contract shall be submitted by the Contractor in hard copy format (3x copies) as well as in electronic format, as specified in PMA 1.2.

PROJECT SPECIFICATION

SECTION 3: ELECTRICAL INSTALLATION

3.1 SCOPE

This section of the contract covers the related design, supply, delivery, installation, putting into satisfactory operation, testing and maintenance during the defects liability period of the electrical installation for the works consisting of MCC, control gear, cables, SMS Systems installations and upgrades and all electrical equipment necessary to complete the installation in full working order. Electric motors must be provided as part of the relevant driven equipment in Section 2.

All equipment and work carried out must be in accordance with the particular specification PMA Section 4 of C3.2 of this document, unless stated otherwise in this project specification. Particular attention must be paid to clause PMA 4.2, relating to electrical motors and other clauses stipulated in the following paragraphs.

A standby generator set must be provided under this contract for emergency power supply to the pump station. The generating set must be able to start on demand as specified under Section 5.

The Scope of work comprises in short:

- a) The supply, delivery and installation of one new wall mounted MCC for control of two (2) drywell pumps.
- b) The associated electrical installation and control equipment.
- c) A new generator as specified in Section 5.

3.2 ELECTRICAL SUPPLY AND EARTH CONNECTION

The electrical supply authority is the Tsantsabane Local Municipality at Postmasburg. The electrical supply to the pump stations will be at 400 V/232 V nominal at 50 Hz.

The point-of-supply for the pump station will be a kiosk next to the pump station. The kiosk, Kiosk 2/7/4, will be provided with metering and main breaker under a different contract.

The provisional cable sizes and lengths are given in the price schedule for purposes of tendering. The size for ordering must be confirmed with the Engineer and the length must be determined on site.

It will be the responsibility of the Contractor to make the necessary arrangements for the electrical connections timeously with the supply authority. No connection fees are payable. Once connected, the contractor must ensure that the supply i.ro. voltage and earthing is in order before switching power onto his equipment. Claims for damage arising from non-compliance will not be accepted.

The feeder cable must be installed from the kiosk to the Generating Set, housing the changeover. The cable must then be installed from the generator to the pump station MCC.

3.3 MCC CONSTRUCTION

MCC's must be constructed strictly in accordance with PMA 4.2, unless stated to the contrary in this section.

The MCC construction must be as follows:

-
- a) Supply and install a new indoor type, wall mounted MCC.
 - b) The MCC's fault rating must be 6kA (minimum), to be confirmed with the Engineer before construction. All hinges, handles, nuts and bolts must be stainless steel (SS304).

The MCC must comprise the following:

3.3.1 Incoming Section Equipped with:

- a) Main incoming motor starting circuit breaker rated for the full load demand of all equipment fed from this MCC.
- b) Lightning surge arrestors of the SURGETEK type, manufactured in conformance with the guidelines of SANS 10142 1, class 2 minimum, installed within a vented PVC box inside the MCC. The surge arrestors must have a healthy status indication.
- c) Voltmeter with selector switch.
- d) Three combination maximum demand and instantaneous type CT operated ampere meters.
- e) Phase fail protection.
- f) Bypass Switch.

3.3.2 Control Section for Booster Pumps Equipped With:

- a) All control devices and equipment necessary to ensure operation as specified in 3.4.1 and indication lights as per 3.4.14.
- b) Two (2) LED Displays mounted on the panel for display of the LEVEL inside the two reservoirs. The parameters must be obtained from the two Ultrasonic Transmitters for the Suction and Delivery tank respectively.

3.3.3 Outgoing Section for drywell Pumps (2 No.) Equipped for each, with:

- a) All control devices and equipment necessary to ensure operation as specified in 3.4.1.
 - MANUAL/OFF/AUTO selector switch
 - Indication lights as per 3.4.1.4
- b) Motor Starters:
 - DOL (3kW) in accordance with PMA 4.3.

3.3.4 Outgoing Section for Distribution and Local Power Equipped with:

- a) 30 mA earth leakage relay and 15 A 1P circuit breaker for and including a panel mounted, 16 A switched socket outlet.
- b) 10 A SP circuit breaker for ultrasonic level sensors.
- c) 10 A SP circuit breaker for the SMS system.
- d) 3 x Spare positions.

3.3.5 Outgoing Section for Remote Monitoring and Control

An outgoing section for remote monitoring and control fitted with terminals and wired to the relevant equipment to be monitored and controlled by the remote monitoring and control system in accordance with PMA 4.2.9 and as described under the relevant control equipment section, in the future. This compartment will also house the SMS system for sending messages at preprogrammed numbers to alert them of alarm events.

3.4 CONTROL

The pump station is equipped with two drywell pumps pumping from a suction tank into an elevated storage tank, for water supply to the area.

The MCC must start the pump sets based on the level in the storage tank, to ensure continued water availability in the elevated tank.

3.4.1 Mode selection

The pumps must be operated both automatically and manually, by means of a three position selector switch on the MCC for each pump, labelled AUTO/OFF/MANUAL. In the OFF position it shall not be possible to start a pump and a running pump shall STOP when switched to OFF.

a) Manual mode

The pumps must be started and stopped by means of START and STOP pushbuttons for each pump on the MCC. A pumping down facility must be provided to pump the catchment tank. Refer also to 3.4.1.3 on protection.

b) Automatic mode

Primary Control (Demand)

The current duty pump must START when the level in the Storage tank falls below a predetermined low level, and STOP when the tank reaches a predetermined high level. The DELIVERY DEMAND indication light must be cancelled by the STOP position as described above.

Secondary Control (Suction)

The suction tank must be fitted with a Ultrasonic Level Sensor for Level Monitoring, as well as measurement of the SUCTION LOW and SUCTION ENABLED levels.

In the event that a running pump pumps the tank level down to the SUCTION LOW level, a SUCTION LOW indication light must switch on and the running pump must stop.

Should the suction tank level reach the SUCTION ENABLED level, primary control must not resume, but the pumps must be ENABLED to start on the next demand cycle.

The SUCTION ENABLED level resets the SUCTION LOW level for primary control to be available again. Note that the indication light must stay lit until the Alarm Reset Pushbutton is pushed.

The suction tank ultrasonic level sensor must be set up two output relays, one for SUCTION LOW LEVEL and one for SUCTION ENABLED, simulating float level switches, complete with latching relay and wired to the incoming terminals, that the ultrasonic sensor can at any time be replaced with start and stop float level switches.

The delivery tank ultrasonic level sensor must be set up two output relays, one for DELIVERY DEMAND and one for DELIVERY STOP, simulating float level switches, complete with latching relay and wired to the incoming terminals, that the ultrasonic sensor can at any time be replaced with start and stop float level switches.

Duty select

A three position selector switch labelled PUMP DUTY SELECT must be provided with the switch positions marked ALTERNATE/P1/P2.

In the ALTERNATE position, the duty pumps must automatically change over after every pumping cycle (i.e. if P1 were running, then P2 would run next, then P1 again, and so forth).

Should a duty pump be switched off, fail to start or fail when running, the standby pump must take over. Should the failed pump be reset, the pump must not restart, (i.e. the running pump must complete the pumping cycle), but be available as standby.

In position P1 or P2, the operation must be exactly as for ALTERNATE, except, the selected duty pump must always START first (i.e. no cycle changeover).

3.4.2 Emergency control

A LOW LEVEL ALARM Float must be installed in the Elevated tank for redundancy in the control system.

Should the delivery tank reach the LOW LEVEL ALARM float, a corresponding indication light must turn on and the next available pump must START.

Note: The Delivery Low Level alarm must be canceled by the Delivery High Level alarm (provided the floats are in the appropriate position, and vice versa, but the indication must stay on until it is manually reset by the ALARM RESET pushbutton on the control panel.

3.4.3 Level alarm

a) Suction Low Level Alarm

A SUCTION EXTRA LOW LEVEL float switch must be fitted in the suction tank, lower than the stop level. At this level a SUCTION EXTRA LOW LEVEL indication light must switch on and any running pump must STOP, SUCTION EXTRA LOW LEVEL condition must remain until the LEVEL REACHES THE SUCTION ENABLED position as described in 3.4.1.b).

b) Delivery High Level

A HIGH LEVEL ALARM float switch must be fitted in the delivery tank, higher than the stop level. At this level a DELIVERY HIGH LEVEL indication light must switch on and any running pump must STOP.

Note: The reset pushbutton must cancel the HIGH LEVEL condition as soon as the float switch is in the normal position.

Provision must be made for remote reset via the radio telemetry SCADA system.

3.4.4 Protection

Each pump set must be protected in all control modes against damage due to the conditions described below. The motor must STOP and a corresponding fault indication light must switch ON.

All protection devices must have manual resets, unless specified to the contrary elsewhere. The motor may only restart once the protection device has been reset.

a) Pump protection

- An extra low level float switch, in the suction tank, to prevent the pumps from running dry.

In manual mode this float switch must be overridden when the start pushbutton is manually held in for the pumping down facility.

Note: The RESET pushbutton must cancel the LOW LEVEL condition as soon as the float level switch is in the normal position. The float switch contact must be OPEN when hanging.

b) Motor Protection

- Overload
- Overheat
- Phase fail
- No Flow Protection

3.4.5 Alarm and Status Indication Facilities

Alarm and status indication as per PMA 4.2.8 must be provided as indicated below, for each item monitored.

a) Pump panel (2 No)

- RUN
- STARTER TRIP
- OVERHEAT
- NO FLOW

b) Control Panel

- DELIVERY HIGH LEVEL ALARM
- DELIVERY LOW LEVEL ALARM
- DELIVERY DEMAND
- SCUTION ENABLED

- SUCTION LOW LEVEL
- SUCTION EXTRA LOW LEVEL ALARM

3.4.6 Remote Monitoring and Control

Signals must be provided for monitoring and control, wired to terminals in the telemetry Section 4, in accordance with PMA 4.2.9. Control signals include the telemetry alarm reset. The telemetry section must be wired for future remote monitoring via telemetry.

3.5 MONITORING EQUIPMENT

This section covers in short the SMS system that must be installed in the Remote Monitoring and Control Compartment.

The SMS system will be used to notify operational personal of a problem at the pump station for further investigation. The SMS system must be capable of notifying at least two people when an event is triggered on the MCC. The SMS system must include all sim cards and subscriptions and two numbers programmed into the system. The system must be preloaded with 200 sms's.

The SMS system must have battery backup I the event of a power failure to relay this condition.

3.5.1 Alarm Status

The following signals must trigger a SMS message:

#	Alarm	Caused By	Comment
1	Extra Low Level Alarm (Suction)	LS-001 (Low level alarm float)	The Suction tank has reach a critically low level
2	MSS Fault	Pump protection or trips, MCC breaker trip or fault	One or more problem at the MCC is causing a fault condition, and as such, the pump station is not functioning and needs attention.
3	Power Failure	Power Failure at the Pump Station	Power Failure at the Pump Station
4	Low Level Alarm (Delivery)	LS-002A (Low level alarm float)	The Delivery tank has reached a critically low level
5	Generator Fuel Alarm	General Low Fuel	The Fuel in the Generator is Low and may stop soon and needs attention.
6	Generator general fault	Fault detection by generator controller (can include any number of things)	General offline and will not be available should it be required

3.5.2 Mounting

The SMS system must be mounted inside the Telemetry compartment. Any Power Supply required must also be included.

The antenna must be mounted inside the compartment unless communication proves difficult.

3.6 CONTROL EQUIPMENT

3.6.1 Ultrasonic Level Sensor (PMA 4.12.1.1)

An Endress & Hauser, Mobrey, Siemens, VEGA or similar and equal ultrasonic level sensor and controller must be supplied and installed in the respective tanks

- a) 1 X Ultrasonic level sensor in the Suction Tank for:
 - Level Measurement
 - SUCTION LOW LEVEL and SUCTION ENABLED Control Signals
- b) 1 X Ultrasonic level sensor in the Elevated Tank for:
 - Level Measurement
 - Delivery START/STOP Demand Control

3.6.2 Float Level Switches (PMA 4.12.1.2)

Float level switches of the magnetic reed switch type must be supplied and installed in the sump for level alarms, protection and emergency control of the pumps. The operating voltage must be 24 V DC.

- a) 3 X Float level switches for control and protection in the Delivery tank.
- b) 1 X Float level switches for control and protection in the Suction tank.

3.7 GENERAL ELECTRICAL INSTALLATION

The general electrical installation covers the supply installation and connection of electrical equipment, as applicable, provided under this contract.

The work must be done in accordance with section 4 of the Standard Specifications PMA in C3.2 of this document.

3.7.1 Site Cables and Sleeves

Tenderers must allow for the supply and installation of all necessary cables of appropriate size to all the electrical equipment specified in accordance with the particular specification PMA 4.9 and schedule of prices.

Tenderers must ensure that all motor, control and instrumentation cables ordered are of adequate length for continuous cable runs, according to the mechanical tender drawings and pointed out on site. No additional claims will be entertained during the contract stage.

Note that the tenderer must allow for continuous cable runs from the new MCC to the pumps.

3.7.2 Excavations

3.7.2.1 General Information

The excavations will include the digging, closing and reinstatement of LV supply cable trenches for supply to the pump station. Excavation will include work on roads and sidewalks. The relevant municipal authority must be contacted before any excavation may take place.

All driveways and sidewalks shall be restored to their original condition as before the excavation, if required.

The excavation conditions will be set out in the price schedule.

3.7.3 Site Cable Works

The site cable works as described below must be performed in accordance with PMA 4.9.

3.7.3.1 MCC Supply

A new cable must be installed from the Kiosk 2/7/4 to the Generator change over switch.

3.7.3.2 Pump Motor and Control Cables

Cables must be installed as set out in the power and control cable schedules.

3.7.3.3 Generator Cables

Generator cables must be installed as set out in the control, power and single line diagrams.

3.8 EARTHING

The new MCC must be connected to earth via a BCEW from the supply kiosk.

The earthing of the pump station must then be tested by the Contractor, under this contract, to determine whether it complies with SANS 10142-1. These values must be presented to the Engineer, after which, in conjunction with the Client, a decision will be made whether additional earth spikes as stated below, is required.

Earth spikes of the 1, 8 m, steel rod, copper clad type must be used.

Earthing of equipment shall be done strictly in accordance with the particular specification PMA 4.11. Pumps bases and pipe work must all be bonded to earth.

3.9 TESTING

3.9.1 Test Reports

The Contractor must submit his own test reports, on the forms bound in Section 3.3.3 of this document, to the Engineer before calling on the Engineer to test equipment.

3.9.2 Factory Test

The MCC's must be inspected and tested by the Contractor before installation. Tenderers must make provision for all equipment necessary to test the operation of the boards for compliance with the specification, inclusive of all protection devices.

Once the Contractor is satisfied that the MCC's is to specification, the Engineer must be notified in writing and he will then inspect and test the MCC's. Should the MCC's fail due to non-compliance with the specification, the cost of the inspection and any re-inspection will be for the account of the Contractor, in accordance with ECSA rates.

3.9.3 Acceptance Test

On completion of the installation and putting into proper operating of the works, the Contractor will be required to make suitable arrangements for the testing of the plant and equipment supplied under this contract, in the presence of the Engineer or his representative, to demonstrate whether they are in compliance with the guaranteed figures submitted by the Contractor, and the test results submitted after commissioning. Refer to PMA Section 5.3 on testing. A competent person must be present to carry out the electrical testing.

The Contractor shall be responsible for all the costs incurred in testing, including the supply and the use of all calibrated instruments.

3.10 TRAINING

Provision shall be made for a competent workman to take charge of the complete pumping installation, at the completion of the work, for a minimum period of one (1) day at the expense of the Contractor. The training is for the purposes of running in the equipment, dealing with the defects that may appear and for properly instructing the Employer's staff in the care, operation and maintenance of the complete plant. An attendance register must be compiled by the Contractor, signed by all the operators present, with a complete copy e-mailed to the engineer for record-keeping.

PROJECT SPECIFICATION

SECTION 4: STANDBY GENERATING SETS

4.1 SCOPE

This section of the contract covers the related design, supply, delivery, installation, putting into satisfactory operation, testing and maintenance during the defects liability period of standby generating sets and associated electrical installation and equipment necessary to complete the installation in full working order.

All equipment and work carried out must be in accordance with the standard specification GS (R1), in Part C3.2 of this document, unless stated otherwise in this project specification.

The scope of works comprises in short:

- a) One containerized, made from stainless steel, generating set with automatic mains fail change-over, of the Socomec manufacture or equivalently approved by the engineer, switchboard to supply standby power to the Postmasburg Booster Pump Station, installed on an outdoor plinth provided under this contract for this project. The silencer must also be made from stainless steel.
- b) The electrical supply to the pump station switchboard.
- c) A control cable for control and switching signals to the MCC.

4.2 ELECTRICAL SUPPLY AND EARTH CONNECTION

The supply authority is Tsantsabane Local Municipality at Poastmasburg.

The normal supply to the installation will be 3-phase 400 V / 230 V nominal at 50 Hz and must be provided as follows:

A point of connection will be provided under this contract in close proximity of the generator plant room. Refer to Section 3, clause 3.2.

The normal power supply cable is provided between the point of supply and the generator and the standby power cables from the generating set AMF panel to the pump station MCC, is provided for under C3.2 Section 3 of this contract.

An earth electrode must be installed for the generating set.

It will be the responsibility of the generating set contractor to make the necessary arrangements for the electrical connections timeously with the Mechanical Contractor. Once connected, the generating set contractor must ensure that the supply i.ro. voltage and earthing is in order before switching power onto his equipment. Claims for damage arising from non-compliance will not be accepted.

4.3 SITE CONDITIONS

The site condition are:

- a) Altitude above sea level : 1350 m

-
- | | | | |
|----|------------------------------|---|------|
| b) | Maximum temperature | : | 40°C |
| c) | Humidity at this temperature | : | 70 % |

The Tenderer must verify the above-mentioned site conditions and include his calculation for derating of the generating set in the tender information sheets.

Note that a tender without these calculations may be rejected.

4.4 OUTPUT AND VOLTAGE

The generating set must have a voltage output of 400/231 V at 50 Hz. The output must be sufficient to start, accelerate and run the pump sets as per Section 2 and 3 of this Part C3.2, in accordance with the **pumping equipment offered**. It must be noted that both pumps use DOL Starters.

The **estimated** nominal running requirements based on the motor rating (full load) as per tender document is as follows:

- | | | | |
|----|----------------------|---|-------------------------------------|
| a) | Sewage pumps (1D/1S) | : | 1 x 3 kV, 8A Running, 50 A Starting |
| b) | General power | : | 1 kVA; 1 Ø |

The Tenderer/Contractor will be responsible to determine the generating set site output, taking into account all derating factors and the pump sets starting requirements.

Note 1:

The motor ratings given above are nominal and the generating set rating must be based on the pumping equipment offered.

Note 2:

The load at start-up is nominally inductive and the alternator must be rated to provide for the starting current. At no stage may the alternator output voltage (transient) dip below 370V.

4.5 ENGINE

The preferred engines must be sourced from Upington / Kimberley or Bloemfontein. Tenderers must state in their offer who the service agent will be.

4.6 ANCILLARY EQUIPMENT

Ancillary equipment such as fuel filling pumps, oil drainage pumps, drip trays, hot air ducting, exhaust etc. must be provided as per the relevant section of Standard Specification GS.

The fuel tank must be built into the containerized set, including a bund tray to trap the complete potential volume (plus 15%) of fuel to be split.

Note that the tender offer must include all fuel for testing purposes, as well as a full tank at handover, in presence of the municipal representative.

Note that the fuel cap must be in front of the user (on the fuel tank) after he/she has opened the canopy doors, for easy refilling.

4.7 SWITCHBOARD

A switchboard as specified in paragraph 4.8 of the standard specification must be provided. It must conform to the standard specification PMA and the general requirements of Part C3.1, at 40 A; 6kA. The switchboard must be installed within the generator enclosure.

Note: That a mains isolator must be provided, but the bypass switch is provided as part of the pump station MCC.

The main switchgear is shown on a single line diagram included in the document.

4.8 STARTING AND STOPPING

The generating set must START automatically when there is power failure and there is a start demand from the Generators dedicated level float switch, and STOP when the normal power has been restored or there is a pump stop demand from the pump station MCC. (The pump start, on power up, has an adjustable delay).

The start demand must be derived from a dedicated float level switch for starting the generator. The level float's control circuit must be powered from the generator battery power supply. The Level Float must be **closed when hanging** to ensure that the generator battery is not continuously drained when the tank has water.

Once the pump station has filled the elevated tank, the generator must receive a STOP signal from the MCC after a short adjustable delay, and the generator must stop.

4.9 REMOTE MONITORING

The following signals must be provided at voltage free-contacts suitable for the control voltage determined in liaison with the MCC manufacture at terminals in the generating set switchboard for integration with the SMS alarm system:

- a) Generating set RUN status.
- b) All generating set alarm and fault indication signals, activating a common GENERATING SET FAULT contact.
- c) Low Fuel alarm.
- d) Battery voltage with low alarm.

4.10 CABLES

PVC SWA PVC cables with bare copper earth conductor must be supplied, installed and connected between the generating set and the generating set switchboard, as per the price schedule.

The cables between the AMF changeover panel and pump set MCC will be supplied and installed under C3.2 Section 3, but must be connected to the AMF panel under this section.

4.11 ALARMS

The successful tenderer must pay particular attention to the requirements of the alarms as described in the Standard Specification GS (R1).

4.12 SOUND ATTENUATION

The pump station and generating set is situated in a residential area and the Tenderer must pay particular attention to the sound emission requirements. Soundproofing of the containerized generating set to the required standard, will form part of the generating set installation and must be included in the price. Detail must be provided with the tender. All openings such as air intake and exit must be fitted with sound attenuators. At taking over inspection, sound level readings will be taken and the Contractor must provide the necessary instrumentation, with calibration certificate.

4.13 DRAWINGS

The contractor shall submit within twenty one (21) days after appointment the following drawings and detail of the equipment to be supplied:

- a) General layout of generator equipment, including plan, elevation and sections as required and footprint of all equipment.
- b) Generating set mounting frame.
- c) Detail of silencer and exhaust system with expansion pieces and brackets.
- d) Detail of the fuel tank, spill tray, piping arrangement and drainage system.
- e) Detail of radiator (where applicable), fan cooling arrangement and cooling air outlet ducting.
- f) Detail of air intake and outlet louvers and sound attenuation.

4.14 GENERATOR FUEL TANK

Note that the Generator Fuel tank must be sloped to allow the complete drainage of the content.

4.15 TESTING

Testing must be allowed for as per C3.1 Section 1, clause 1.10 and C3.2 GS (R1) Par 4.16.

Clause PMA 5.4 in respect of unsuccessful testing will be applied under this section. Travelling cost for re-inspection will be recovered from Cape Town.

4.16 MAINTENANCE

One year maintenance as per C3.2 GS (R1) paragraph 4.15.2 must be allowed for.

Should the result of the acceptance test be such that a re-inspection is required of the Engineer or his representative, the full cost of the inspection and fruitless time spent on the first inspection, will be for the account of the Contractor. The cost will be in accordance with ECSA rates.

Description of the Works: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET

SCALE FOR REDUCED PLAN

NOT POSTNABEJRG M02

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

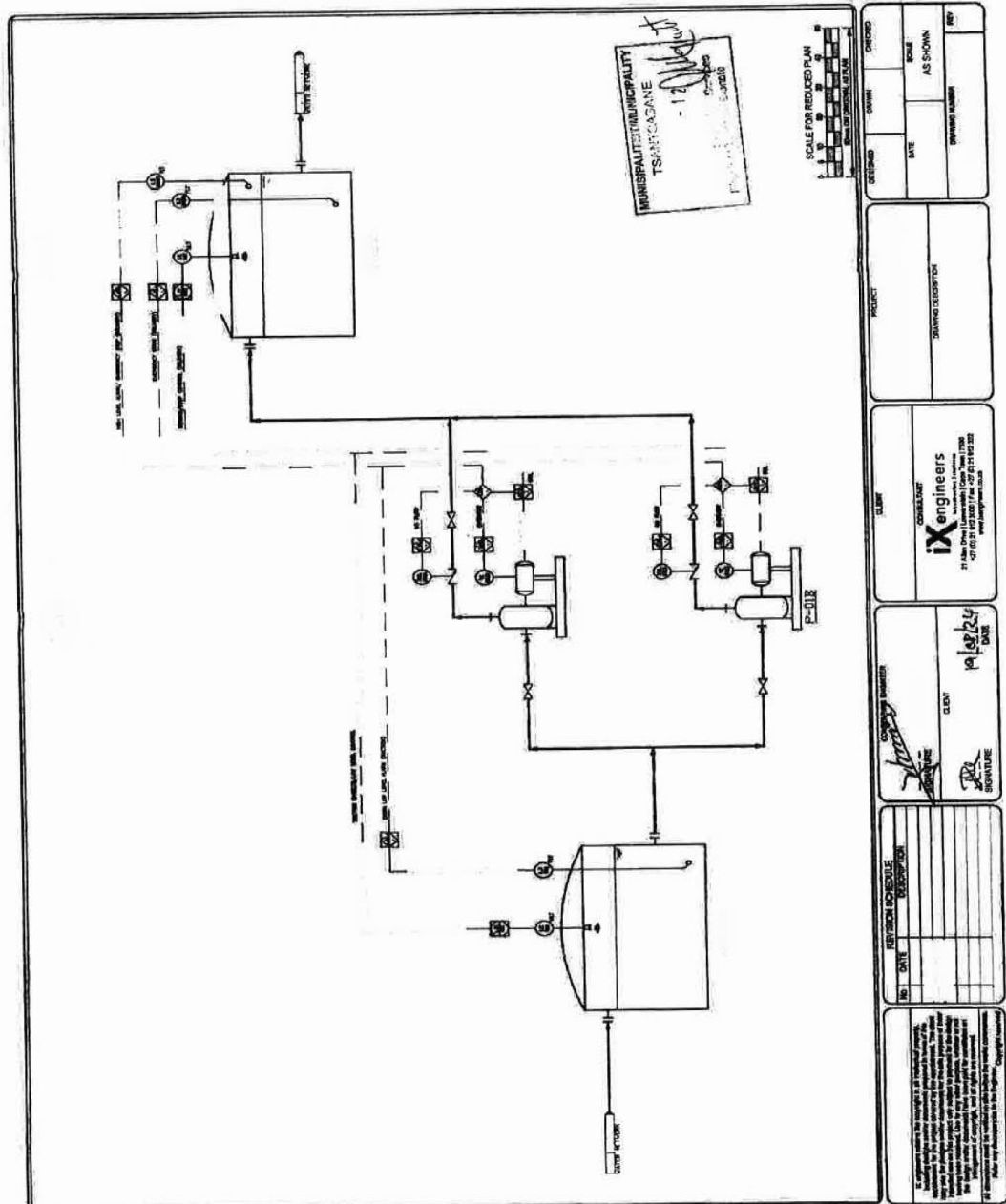
☒	DESCRIPTION
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

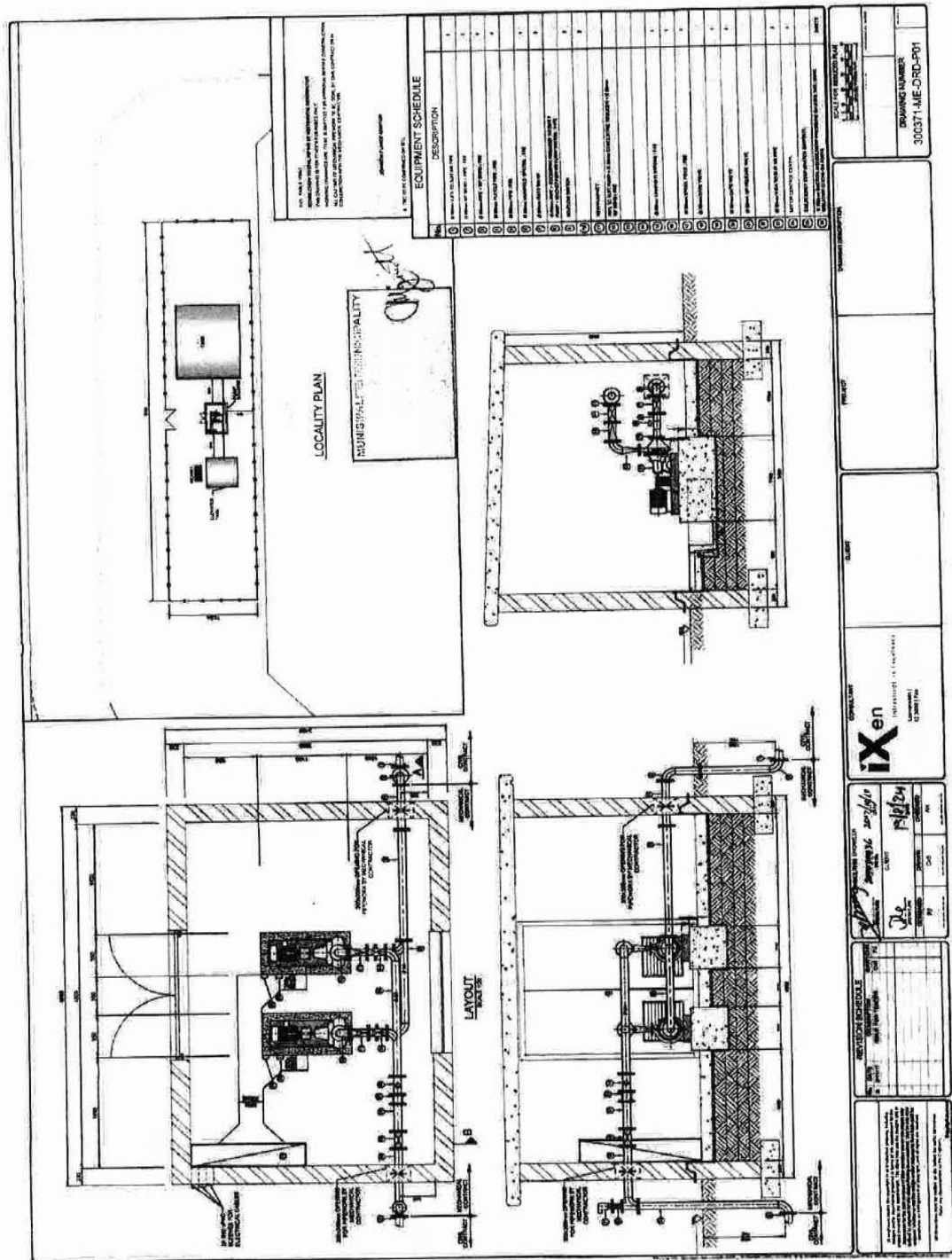
REVISION SCHEDULE

DATE	DESCRIPTION
19/10/24	1. Make 3rd P/Ls and 3rd P/Ls of existing work. The cable is not added for the replacement.

SYMBOL

☒	DESCRIPTION
☐	
☐	

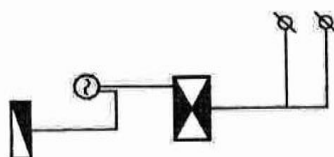




Description of the Works: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET

[illegible][illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		-25mm ²							-0mm ²					



8

TSANTSABANE
MUNICIPALITY
2010



SCALE 1:1000 1:500 1:250 1:125 1:62.5 1:31.25 1:15.625 1:7.8125 1:3.90625 1:1.953125 1:0.9765625 1:0.48828125 1:0.244140625 1:0.1220703125 1:0.06103515625 1:0.030517578125 1:0.0152587890625 1:0.00762939453125 1:0.003814697265625 1:0.0019073486328125 1:0.00095367431640625 1:0.000476837158203125 1:0.0002384185791015625 1:0.00011920928955078125 1:0.000059604644775390625 1:0.0000298023223876953125 1:0.00001490116119384765625 1:0.000007450580596923828125 1:0.0000037252902984619140625 1:0.00000186264514923095703125 1:0.000000931322574615478515625 1:0.0000004656612873077392578125 1:0.00000023283064365386962890625 1:0.000000116415321826934814453125 1:0.0000000582076609134674072265625 1:0.00000002910383045673370361328125 1:0.000000014551915228366851806640625 1:0.0000000072759576141834259033203125 1:0.00000000363797880709171295166015625 1:0.000000001818989403545856475830078125 1:0.0000000009094947017729282379150390625 1:0.00000000045474735088646191895751953125 1:0.000000000227373675443230959478759765625 1:0.0000000001136868377216154797393798828125 1:0.00000000005684341886080773986968994140625 1:0.000000000028421709430403869934844970703125 1:0.0000000000142108547152019349674224853515625 1:0.00000000000710542735760096748371124267578125 1:0.000000000003552713678800483741855621337890625 1:0.0000000000017763568394002418709278106689453125 1:0.00000000000088817841970012093546390533447265625 1:0.000000000000444089209850060467731952667236328125 1:0.0000000000002220446049250302338659763336181640625 1:0.00000000000011102230246251511693298816680908203125 1:0.000000000000055511151231257558466494083404541015625 1:0.0000000000000277555756156287792332470417202705078125 1:0.0000000000000138777878078143896166235208601353515625 1:0.00000000000000693889390390719480831176043006767578125 1:0.000000000000003469446951953597404155880215033837890625 1:0.0000000000000017347234759767987020779401075169189453125 1:0.00000000000000086736173798839935103897005375845947265625 1:0.000000000000000433680868994199675519485026879229736328125 1:0.0000000000000002168404344970998377597425134396148681640625 1:0.00000000000000010842021724854991887987125671980743408203125 1:0.000000000000000054210108624274959439935628359903717041015625 1:0.0000000000000000271050543121374797199678141799518585205078125 1:0.00000000000000001355252715606873985998390708997592926025390625 1:0.000000000000000006776263578034369929991953544987964630126953125 1:0.00000000000000000338813178901718496499597677249398231506328125 1:0.00000000000000000169406589450859248249798838624699115781640625 1:0.000000000000000000847032947254296241248994193123495578908203125 1:0.0000000000000000004235164736271481206249470965617477894541015625 1:0.00000000000000000021175823681357406031247354828087389472705078125 1:0.000000000000000000105879118406787030156236774140436947363525390625 1:0.0000000000000000000529395592033935150781183870702184736817626953125 1:0.000000000000000000026469779601696757539059193535109236840881328125 1:0.000000000000000000013234889800848378769529596767554618420440640625 1:0.0000000000000000000066174449004241893847647983837773092102203203125 1:0.00000000000000000000330872245021209469238239919188865460511016015625 1:0.000000000000000000001654361225106047346191199595944327302555080078125 1:0.0000000000000000000008271806125530236730955997979721636512775400390625 1:0.00000000000000000000041359030627651183654779989898608182563877001953125 1:0.000000000000000000000206795153138255918273899949493040912819385009765625 1:0.0000000000000000000001033975765691279591369499747465204564096925048828125 1:0.00000000000000000000005169878828456397956847498737326022820484625244140625 1:0.000000000000000000000025849394142281989784237493686630114102423126220703125 1:0.0000000000000000000000129246970711409948921187468433150570512115631103515625 1:0.00000000000000000000000646234853557049744605937342165752852560578155517578125 1:0.000000000000000000000003231174267785248723029686710828764262802890777588203125 1:0.0000000000000000000000016155871338926243615148433554143821314014453887941015625 1:0.00000000000000000000000080779356694631218075742167770719106570072269439705078125 1:0.000000000000000000000000403896783473156100378710838853595532850361347198525390625 1:0.0000000000000000000000002019483917365780501893554194267977664251808599742626953125 1:0.00000000000000000000000010097419586828902509467770971339888321259297989765625 1:0.000000000000000000000000050487097934144512547338854856699441606298989947828125 1:0.0000000000000000000000000252435489670722562736694274283497208031494949739140625 1:0.00000000000000000000000001262177448353612813683471371417486040157474748695703125 1:0.000000000000000000000000006310887241768064068417356857087430078737373743478515625 1:0.0000000000000000000000000031554436208840320342086784285437150393686868717392578125 1:0.00000000000000000000000000157772181044201601710433921427185751968434343586962890625 1:0.0000000000000000000000000007888609052210080085521696071359287598421717179348140625 1:0.00000000000000000000000000039443045261050400427608480356796437992108585896740703125 1:0.000000000000000000000000000197215226305252002138042401783982189960542929483703515625 1:0.0000000000000000000000000000986076131526260010690212008916991099802714647418517578125 1:0.00000000000000000000000000004930380657631300053451060044584955499401373237092588203125 1:0.000000000000000000000000000024651903288156500267255300222924777497006866185462941015625 1:0.0000000000000000000000000000123259516440782501336276501114623887450034330927314705078125 1:0.00000000000000000000000000000616297582203912506681382505557311937250171654636573525390625 1:0.000000000000000000000000000003081487911019562533406912527786559686250858273182867626953125 1:0.00000000000000000000000000000154074395550978126670345626389327984312542913659143381328125 1:0.000000000000000000000000000000770371977754890633351728131946639921562714568295716906640625 1:0.000000000000000000000000000000385185988877445316675864065973319960781357284147854533203125 1:0.0000000000000000000000000000001925929944387226583379320329866599803906786420739272666015625 1:0.00000000000000000000000000000009629649721936132916896601649332999019533932103696363330078125 1:0.000000000000000000000000000000048148248609680664584483008246659995097669660518481816650390625 1:0.0000000000000000000000000000000240741243048403322922415001233299975488348302592409083251953125 1:0.00000000000000000000000000000001203706215242016614612075006166499877441741512962045416259765625 1:0.000000000000000000000000000000006018531076210083073060375030832499387208707564810227081298828125 1:0.0000000000000000000000000000000030092655381050415365301875154162496936043537824051135406494140625 1:0.00000000000000000000000000000000150463276905252076826509375770812484680217689120255677032470703125 1:0.000000000000000000000000000000000752316384526260384132546878854062423401088445601278385162353515625 1:0.00000000000000000000000000000000037615819226313019206627343942703121170054422280063919258117678125 1:0.000000000000000000000000000000000188079096131565096033136719713515605350272111400319596290588390625 1:0.0000000000000000000000000000000000940395480657825480165683598567578026751360557001597981452941953125 1:0.00000000000000000000000000000000004701977403289127400828417992837890133756802785007989907264709765625 1:0.000000000000000000000000000000000023509887016445637004142089964189450668784013925039949536323548828125 1:0.0000000000000000000000000000000000117549435082228185020710449820947253393920069625199747681617744140625 1:0.00000000000000000000000000000000000587747175411140925103552249104736266969600348125998738408088720703125 1:0.000000000000000000000000000000000002938735877055704625517761245523681334848001740629993692040443603515625 1:0.0000000000000000000000000000000000014693679385278523127588806227618406674240008703149968460202218017578125 1:0.00000000000000000000000000000000000073468396926392615637944031138092033371200043515749842301011090088203125 1:0.000000000000000000000000000000000000367341984631963078189720155690460166856000217578749211505055450441015625 1:0.0000000000000000000000000000000000001836709923159815390948600778452300834280001087893746057525277252205078125 1:0.00000000000000000000000000000000000009183549615799076954743003892261504171400005439468730287626386261025390625 1:0.000000000000000000000000000000000000045917748078995384773715019461307520857000027197343651438131931259765625 1:0.0000000000000000000000000000000000000229588740394976923868575097306537604285000135986718257190659656298828125 1:0.00000000000000000000000000000000000001147943701974884619342875486532688021425000679933591285952982781494140625 1:0.000000000000000000000000000000000000005739718509874423096714377432663440107125003399667956429764913907470703125 1:0.0000000000000000000000000000000000000028698592549372115483571887163317200535625016998339782148824569537353515625 1:0.000000000000000000000000000000000000001434929627468605774178594358165860026781250849966989107441228476867678125 1:0.0000000000000000000000000000000000000007174648137343028870892971790829300133906250424949945537206142384338390625 1:0.0000000000000000000000000000000000000003587324068671514435446485895414650066953125021247497768603071192169140625 1:0.00000000000000000000000000000000000000017936620343357572177232429477073250334765625010623874843015355960845703125 1:0.0089683101716787860886162147385366251672382812505311937421526779804228515625 1:0.00448415508583939304430810736926831258611914062502655967107633899021142890625 1:0.002242077542919696522154053684634156254055955781250132798355381699510714453125 1:0.0011210387714598482610770268423172781252279778906250066396776908497553572265625 1:0.00056051938572992413053851342115863906251139889453125003319838842487767861328125 1:0.000280259692864962065269256710579319531255699447265625001659919412438839306640625 1:0.0001401298464324810326346283552896597656252849722382812500082995970194196696533203125 1:0.0070064923216240516317314177644829882812514248611119140625000414979850970983481640625 1:0.00350324616081202581586570888224149412507123055781250020748992504854917408203125 1:0.001751623080406012907932854441120747062535611527890625001037449472724587041015625 1:0.0008758115402030064539664272205603735312517805761394531250005187247362293535025390625 1:0.00043790577010150322698321361028018676562508902880697656250002593623681114676751953125 1:0.000218952885050751613491606805140093382812504451440348781250001296811840557338759765625 1:0.0001094764425253758067458034025700466912502225722414062500006484059202786693693798828125 1:0.005473822126268790337290170128502334562501112861103125000032420296013933468468994140625 1:0.00273691106313439516864508506425116728125055643055156250000162101480069667342349970703125 1:0.001368455531567197584	
--	--



Description of the Works: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF PUMPING PLANT (INCLUDING MECHANICAL AND ELECTRICAL EQUIPMENT FOR A LIFT PUMP STATION) IN POSTMASBURG WITH A STANDBY GENERATOR SET

