TRANSNET



TRANSNET SOC LIMITED (REGISTRATION NO.1990/000900/30) TRADING AS TRANSNET FREIGHT RAIL

NEC3 Engineering & Construction Short Contract (ECSC)

RFQ No. ERAC NS0294 9026CIDB

Routine testing of various substations under the control of the Depot Engineer, Nelspruit

Open date: Wednesday, 15th August 2012

Closing date: Tuesday, 11th September 2012

Option Date: 12 weeks

Contract Contract Cover

TRANSNET



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Part T1: Tendering Procedures

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PART T1: TENDERING PROCEDURES

T1.1 TENDER NOTICE AND INVITATION TO TENDER

RFQ No. ERAC NS0294 9026CIDB

Transnet SOC Limited trading as Transnet Freight Rail invites tenders for the routine testing of substations under the control of the Depot Engineer, Nelspruit.

Tenderers should have a CIDB contractor grading designation of 2EP or higher.

The physical address for collection of tender documents is: Transnet Freight Rail, Tender Advice Centre, Ground Floor, Inyanda House 1, 21 Wellington Road, Parktown.

Tender documents may be collected during working hours after **08h00** on Wednesday, **15**th **August 2012** and will only be available until **15h00** on Tuesday, **21**st **August 2012**.

On payment of an amount of **R200.00** (per set), which is not refundable to be made to Transnet Freight Rail at the Standard Bank, account number **203158598**, branch code **004805**, reference no. RFP No. **ERAC NS0294 9026CIDB**. The official Bank receipt(s) franked with the official Bank stamp to be provided with the collection of a tender document. No tenders will be sold after **15h00** on Tuesday, **21**st **August 2012** deadline.

Queries relating to the administrative issues of these documents may be addressed to:

Mr. Nico Swart

Tel. No. 012 315 2132 Fax. No. 012 315 2138

E-mail: Nico.swart3@transnet.net

A compulsory clarification meeting with representatives of the Employer will take place on Wednesday, 22nd August 2012, at 09h00 at the Infrastructure Depot Electrical, Nelspruit. (contact person: Moreki Matuludi on tel. No. 013 752 9448 (cell 071 889 6525). The briefing session will be followed by the site inspection of various substations. Tenderers without a valid tender document in their possession will not be allowed to attend this compulsory clarification meeting/site inspections. Tenderers shall be responsible for their own travel arrangements and cost regarding the site meeting and site inspections.

Transpet reserves the right to accept the whole or any part of a tender. Transpet also reserves the right to negotiate terms and conditions with all, or a short-listed group of contenders, or the preferred tenderer, should it be deemed necessary.

This tender closes punctually at 10h00 on Tuesday, 11th September 2012.

Tenders may only be submitted on the tender documentation that is issued. Telegraphic, telephonic, facsimile and late tenders will not be accepted. Tenderers are warned that a tender will be liable to disqualification should any attempt be made by a Tenderer either directly or indirectly to canvass any officer(s) or employees of Transnet SOC Limited in respect of a tender between the date the tender is submitted and the date of the award. A Tenderer may, however, at any time

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T1.1

Tender Notice and Invitation to Tender



communicate with the Chairperson of the Transnet Freight Rail Acquisition Council, at telephone no. 011 5449486 on any matter relating to his tender.

Envelopes must not contain documents relating to any tender other than that shown on the envelope. No slips are to be attached to the tender documents. Any additional conditions must be embodied in an accompanying letter. Alterations, additions or deletions must not be made by the Tenderer to the actual tender documents. Tenders submitted by Tenderers must be neatly bound and the inclusion of loose documents must be avoided.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

Compliance of tender(s) with Transnet's requirements is the sole responsibility of the Tenderer and any costs incurred in subsequent modifications to or replacement of equipment accepted by Transnet Limited in good faith on the grounds of certified compliance with specified standards by the contractor and in fact found to be inadequate in such respects, will be to the relevant Tenderer's account.

BROAD-BASED BLACK ECONOMIC EMPOWERMENT ("BBBEE")

TRANSNET fully endorses and supports the South African Government's Broad-Based Black Economic Empowerment Programme and it is strongly of the opinion that all business enterprises have an equal obligation to redress the imbalances of the past.

TRANSNET would therefore prefer to do business with business enterprises who share these same values and who are prepared to contribute to meaningful BBBEE initiatives (including and not limited to enterprise development, subcontracting and Joint Ventures) as part of their tender response.

Transnet would accordingly allow a "preference" in accordance with the 10% preference system, as per the Preferential Procurement Policy Framework Act 5 of 2000 (as amended) to companies who provide a BBBEE accreditation Certificate. All procurement and disposal transactions in excess of R30000 (Thirty thousand ZAR) will be evaluated accordingly. All transactions below R30000 will, as far as possible, be earmarked for Exempted Micro Enterprises (EME's).

TRANSNET consequently urges Respondents (Large enterprises and QSE's – see below) to have themselves duly accredited by any one of the Accreditation Agencies <u>approved</u> by SANAS (South African National Accreditation System, under the auspices of the DTI).

In terms of Government Gazette No. 32467, Notice No. 810 dated 31 July 2009, as from 1 February 2010 only BBBEE certificates issued by Accredited Verification Agencies of Verification Agencies that are in possession of a valid pre-assessment letter from South African National Accreditation System will be valid.

However accreditation certificates issued by non-accredited verification agencies before 01 February 2010 and which are still within their one (1) year validity period will still be acceptable, until their expiry date provided that the accreditation was done in accordance with the latest codes (i.e. those promulgated on 9 February 2007).

BBBEE Accreditation Certificates issued after the published date i.e. 01 February 2010, by a Verification Agency not approved by SANAS, will NOT be acceptable as from 01 February 2010.

Enterprises will be rated by such Accreditation Agencies based on the following:

- (a) <u>Large Enterprises (i.e. annual turnover >R35 million):</u>
 - > Rating level based on all 7 (seven) elements of the BBBEE scorecard

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Tender Notice and Invitation to Tender



- > Enterprises to provide BBBEE certificate and detailed scorecard (to be renewed annually)
- (b) Qualifying Small Enterprises QSE (i.e. annual turnover >R5 million but <R35 million):
 - > Rating based on any 4 (four) of the elements of the BBBEE scorecard
 - Enterprises to provide BBBEE certificate and detailed scorecard (to be renewed annually)
- (c) <u>Exempted Micro Enterprises EME (i.e. annual turnover <R5m are exempted from being rated or verified):</u>
 - > Automatic BBBEE Level 4 rating, irrespective of race ownership, i.e. 100% BBBEE recognition
 - ➢ Black ownership >50% or Black Women ownership >30% automatically qualify as Level 3 BBBEE rating, i.e. 110% BBBEE recognition
 - ➤ EME's should provide documentary proof of annual turnover (i.e. audited financials) plus proof of Black ownership if Black ownership >50% or Black Women ownership >30% (to be renewed annually) from their Auditors / Accounting Officers

In addition to the above, Respondents who wish to enter into a Joint Venture (JV) or subcontract portions of the contract to BBBEE companies must state in their Tenders / Proposals the percentage of the total contract value which would be allocated to such BBBEE companies, should they be successful in being awarded any business. A rating certificate in respect of such BBBEE JV-partners and/or sub-contractors, as well as a breakdown of the distribution of the aforementioned percentage allocation must also be furnished with the tender response to enable Transnet to evaluate / adjudicate on all tenders received on a fair basis.

Each Respondent is required to furnish proof of its BBBEE status (Certificate and Detailed Scorecard) and ensure that the documentation is valid at the date of Tender Submission as stipulated above to TRANSNET.

Failure to submit your BBBEE Certificate and Detailed Scorecard will result in a score of zero being allocated for BBBEE evaluation.

Turnover:	Indi	cate your company's most recent annual turnover:
	/,	C D
<u> </u>		N.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

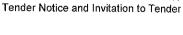
- If annual turnover <R5m, please attach auditors / accounting officers letter confirming annual turnover and percentage black ownership as well as Black Women ownership
- If annual turnover >R5m please attach BBBEE certificate and detailed scorecard from an accredited rating agency.

The DTI has created an online B-BBEE Registry (http://www.dti.gov.za) in order to provide a central and standardized source of the B-BBEE status of all entities, and to facilitate the flow of this information amongst entities by providing a Unique Profile Number (UPN) per each listing. Existing and prospective suppliers are therefore urged to list their B-BBEE status on the DTI Registry. Hence, entities verified by DTI, will receive the following benefits:

- Their BBBEE status will be verified and confirmed by the DTI, before listing on the Registry
- Listing on the Registry will provide suppliers the option to market themselves on the DTI B-BBEE Opportunities Network. This is a search engine that is designed to help businesses find B-BBEE compliant entities who match specific requirements in terms of the nature of services/goods provided, region, B-BBEE status or other search criteria.

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Transnet supports this DTI initiative and will use the DTI Registry to verify prospective and existing suppliers' BBBEE credentials.

Kindly provide Transnet with your DTI B-BBEE UNIQUE PROFILE NUMBER with all tender submissions.

DTI BBBEE UNIQUE PROFILE NUMBER:

Failure to submit your BBBEE information in terms of the above-mentioned clauses will result in a score of zero being allocated for BBBEE evaluation.

Suppliers and Tenderers are requested to duly complete the Supplier Declaration Form (SDF) and provide all the relevant supporting attachments as requested. Failure to provide the following may disqualify your tender submission:-

- 1. **Duly completed SDF**
- 2. BBBEE Certificate and detailed scorecard
- 3 Current tax clearance certificate

The Supplier and Tenderer shall furnish proof of the above to Transnet.

Transnet at its sole discretion may decide to allow certain price preferences in order to uplift the historically disadvantaged in terms of the PPPFA (Act 5 of 2000).

Transnet insists on honesty and integrity beyond reproach at all times and will not tolerate any form of improper influencing, bribery, corruption, fraud, or any other unethical conduct on the part of bidders/ Transnet employees. If, in the opinion of Transnet's Chief Operating Officer, a tenderer/contractor/ supplier has or has caused to be promised, offered or given to any Transnet employee, any bribe, commission, gift, loan, advantage or other consideration. Transnet shall be entitled to revoke the tender / contract by following its internal policies that govern the Exclusion process. In such an event Transnet will be entitled to place any Tenderer/Contractor/Supplier who has contravened the provisions of Transnet's business ethics on its List of Excluded Tenderers. This List will also be distributed to all other State Owned Enterprises and Government Departments.

Transnet invites its valued suppliers to report any allegations of fraud, corruption or other unethical activities to Transnet Tip-offs Anonymous, at any of the following addresses/contract numbers :-

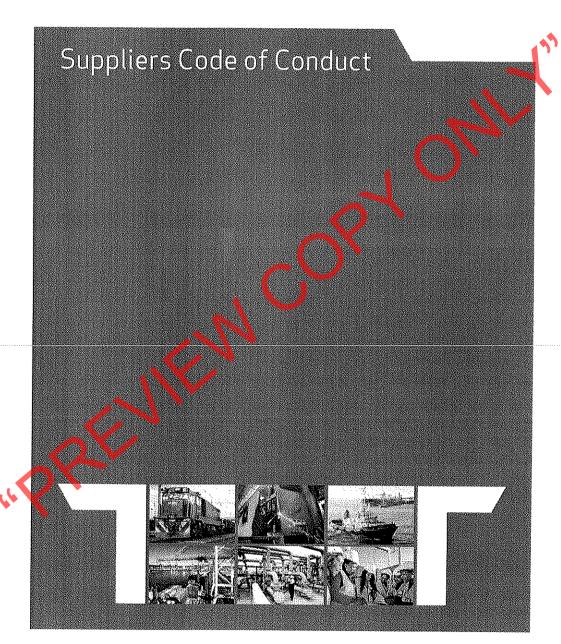
- Toll free anonymous hotline 0800 003 056
- Email Transnet@tip-offs.com
- Fax number 0800 007 788
- Freepost DN 298, Umhlanga Rocks, 4320

CONFIDENTIALITY IS GUARANTEED.

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Suppliers Code of Conduct

Transnet 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:

- >> 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); and
- >> The Anti-Corruption Act.

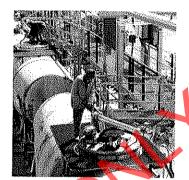
This code of conduct has been compiled to formally apprise Transnet Suppliers of Transnet's expectations regarding behaviour and conduct of its Suppliers.

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.

Transnet 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 recieve anything that is calculated to:

- Illegally influence their judgement or conduct or to influence the outcome of a sourcing activity;
- Win or retain business or to influence any act or decision of any person involved in sourcing decisions; 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" Hotline to report these acts - 0800 003 056.

Transnet is firmly committed to free and competitive enterprise.

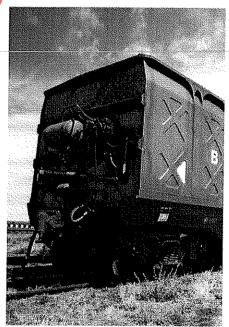
- » Suppliers are expected to comply with all applicable laws and regulations regarding fair competition and antitrust practices
- >> Transnet does not engage non-value adding agents or representatives solely for the purpose of increasing BBBEE spend (fronting).

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

Senerally, suppliers have their own business standards and regulations. Although Transnet cannot control the actions of our suppliers, we will not tolerate any illegal activities.

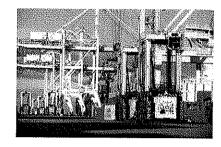






These include, but are not limited to:

- 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 must be 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.









Conflict 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. Examples are:

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

Show that you support good business practice by logging onto www.transnet-suppliers.net and completing the form.

This will allow us to confirm that you have received, and agree to, the terms and conditions set out in our Suppliers Code of Conduct.

TIP-OFFS ANONYMOUS HOTLINE 0800 003 056

Part T1.2: Tender Data

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T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) The Standard Conditions of Tender make several references to the Tender Data for details 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 to the clause in the Standard Conditions of Tender to which it mainly applies.

- F.1.1 The employer is Transnet Limited trading as Transnet Freight Rail.
- F.1.2 The tender documents issued by the employer comprise:

Part T1: Tendering procedure

- T1.1 Tender notice and invitation to tender
 - · Suppliers Code of Conduct
- T1.2 Tender data

Part T2: Returnable documents

- T2.1 List of returnable documents
- T2.2 Returnable Schedules

Part C1: Agreements and contract data

- C1.1 Contract Data: General
- C1.2 Contract data: The contractor's Offer and Acceptance
- C1.3 Contract Data: Works Information

Part C2: Pricing data

- C2.1 Pricing instructions
- C2.2 Price list

Part C3: Scope of work

- C3.1 Works Information
- C3.2 Secondary specifications
- C3.3 General specifications

Part C4: Site information

- C4 Site information
 - Principal Controlled insurance
- F.1.4 The employer's agent is:

Name:

Mr. Moreki Matuludi

Address:

Rail Network, (Infrastructure Maintenance (Electrical)), Nelspruit

Tel:

013 752 9448

Cell.

071 889 6525

E-mail:

moreki.matuludi@transnet.net

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T1.2 Tender Data



- F.2.1.1 The following 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 for a **2EP** class of construction work, are eligible to submit tenders.
 - a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **2EP** class of construction work; and

Joint ventures are eligible to submit tenders provided that:

- 1. every member of the joint venture is registered with the CIDB;
- 2. the lead partner has a contractor grading designation in the **2EP** class of construction work; and
- 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 2EP class of construction work.
- F.2.7 The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender. Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be received only from those tendering entities appearing on the attendance list.
- F.2.12 If a Tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.

Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.

Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the Tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.

The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructedNo alternative tender offers will be considered.

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

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- F.2.13.3 Parts of the tender offer communicated on paper shall be submitted as an original, plus one copy.
- The employer's address for delivery of tender offers and identification details to be shown on F.2.13.5 each tender offer package are:

If posted, the envelope must be addressed to:

The Chairperson Transnet Freight Rail Acquisition Council P.O. Box 4244 **JOHANNESBURG** 2000

and must be dispatched in time for sorting by the Post Office to reach the Post Office Box indicated above, before the closing time of the tender.

If delivered by hand, to be deposited to the Transnet Freight Rail Acquisition Council tender box which is located in the fover, and to be addressed as follows:

The Chairperson **Transnet Freight Rail Acquisition Council** Ground Floor, Invanda House 21 Wellington Road Park Town **JOHANNESBURG** 2001

It should also be noted that the above tender box is accessible to the public 24 hours per day, 7 days a week.

The measurements of the "tender slot" are 500mm wide x 100mm high, and Tenderers must please ensure that tender documents/files are not 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.

Identification details

Tenders must be submitted before the closing hour on the date as shown in F.2.15 below, and must be enclosed in a sealed envelope which must have inscribed on the outside:

- Tender No
- Description of work
- Closing date of tender
- F.2.13.6 A two-envelope procedure will not be followed.
- F.2.15 The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.
- F.2.15 Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
- F.2.16 The tender offer validity period is 12 weeks.







- F.2.19 Access shall be provided for the following inspections, tests and analysis: Inspection of current arrangement foundation and steelwork condition and measurements in substation yards during the tender period after the site meeting and prior to the closing date of tender.
- F.2.23 The Tenderer is required to submit with his tender: Either a Certificate of Registration issued by the Construction Industry Development Board or a copy of the application Form for registration in terms of the construction Industry Development Board Act (Form F006) and an original valid Tax Clearance Certificate issued by the South African Revenue Services.
- The time and location for opening of the tender offers are: F.3.4

Time:.

10:00 on the closing date of tender.

Location:

Transnet Freight Rail Acquisition Council, Ground Floor, Invanda

21 Wellington Road, Park Town, JOHANNESBURG

F.3.11.1 The procedure for the evaluation of responsive tenders is Method 4

> The score for quality is to be calculated using the following formula: $W_0 = W_2 \times S_0/M_S$

Where:

W₂ is the percentage score given to quality and equals **50**

So is the score for quality allocated to the submission under consideration M_S is the maximum possible score for quality in respect of a submission

The score for financial offer is calculated using Formula 2 (option 1) of SANS294

Form	iula (Comparison a	imed at	achievi	ing	Option 1	Option 2
1	1	Highest price o	r discou	nt		A = (1 + (P - Pm))	A = P / Pm
						<u> </u>	
2] L	Lowest pric	e or	perc	centage	A = (1 - (P - Pm))	A = Pm / P
		commission / f	e			Pm	

where:

Pm =

the comparative offer of the most favourable tender offer.

P

the comparative offer of tender offer under consideration

 N_1 is the percentage score given to financial offer and equals 100 minus W_2 . Where

The score for quality and financial offer is to be combined, before the addition of the score for preference, as follows:

$$W_C = W_3 \times (1 + (\underline{S} - \underline{S}_m))$$

Where

W₃ is the number of tender evaluation points for quality and financial offer and equals:

- 1) 90 where the financial value, VAT inclusive, of all responsive tenders received have a value in excess of R500,000; or
- 2) 80 where the financial value, VAT inclusive, of one or more responsive tender offers equals or is less than R500,000.

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S is the sum of score for quality and financial offer of the submission under consideration.

 S_m is sum of the score for quality and financial offer of the submission scoring the highest number of points

Up to 100 minus W₃ tender evaluation points will be awarded to Tenderers who complete the preference schedule and who are found to be eligible for the preference claimed. Tenderers shall submit BBBEE rating certificates with detailed scorecards that will be issued by the verification agencies that do their BBBEE ratings in accordance with the latest Department of Trade and Industry codes of Good Practice.

F.3.11.3 Only those Tenderers who score a minimum score of 60 points in respect of the following quality criteria are eligible to submit tenders.

Description of quality criteria and sub criteria			Maximum number of tender evaluation points
	Weight	Sub weight	Effective weight
Fit for purpose/References/previous performance		%	
Clause by clause compliance to all specifications	50	%	
Risk/safety plan		%	
Technical capacity / resources		%	
Delivery / completion period		%	
Total evaluation points for quality (W _Q)			100

Criteria to be evaluated on the following scales as per CIDB BEST PRACTICE **GUIDELINES #A4**

a)	Poor		=	20 = 1
,	Satisfactory	1	=	40 = 2
	Good		=	60 = 3
	Very good		=	80 = 4
	Excellent		=	100 = 5

Tender offers will only be accepted if:

- a) The Tenderer has in his or her possession an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations.
- b) The Tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;
- c) The Tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector.
- d) The Tenderer has not:
 - abused the Employer's Supply Chain Management System; or



Tender

- ii) failed to perform on any previous contract and has been given a written notice to this effect: and
- e) has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.
- The number of paper copies of the signed contract to be provided by the employer is one. F 3 18

The additional conditions of tender are:

- 1. The Tenderer is deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the priced Activity Schedule in the works Information. The rates and prices (except in so far as otherwise provided in the Tender) collectively cover full payment for the discharge of all his obligations under the Contract and all matters and things necessary for the proper completion of the works.
- 2. The tenders shall be completed in black ink only.

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- An addendum reflecting changes to the project specification and 'Activity Schedule' shall be forwarded to the Tenderer after the site meeting and the Tenderer shall quote accordingly, failure of which will result in disqualification.
- 3.2 Tenderers shall duly fill in the attached 'Activity Schedule'. The prices shall be fixed for the duration of the contract and no escalation will be allowed. Items not reflected in the 'Activity Schedule', but covered in the project specification or agreed at site meetings, shall be added to the 'Activity Schedule' by the Tenderer and quoted for accordingly.
- Tenderers shall submit qualifications of staff that will be performing the works. Only qualified technical personnel shall perform the works on the electrical equipment or installations thereof.
- During the duration of the contract, the successful Tenderer shall be required to inform the Employer's Deputy of any staff changes and provide the qualifications of the replacement staff for approval.
- Tenderers shall indicate clause-by-clause compliance with the specifications. This shall take the form of a separate document listing all the specifications clause numbers indicating the individual statement of compliance or non-compliance.
- Tenderers shall motivate a statement of non-compliance.
- The successful Tenderer shall provide a Gantt or a similar chart showing when the works will be done and energised. This chart shall be submitted to the Employer or Deputy within 14 days after the award of the contract has been made to the successful Tenderer.
- Where equipment offered does not comply with standards or publications referred to in 3.8 the specification, Tenderers shall state which standards apply and submit a copy in English or certified translation.
- 3.9 Tenderers shall submit descriptive literature consisting of detailed technical specifications, general constructional details and principal dimensions, together with clear illustrations of the equipment offered.



Tender

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- 3.10 During the duration of the contract period, the successful Tenderer shall be required to inform the Employer / Deputy of any changes to equipment offered and submit detailed information on replacement equipment for approval prior to it being used on this contract.
- 3.11 Tenderer shall submit equipment type test certificates as specified on the contract. These shall be in English or certified translation.

3.12 BBBEE

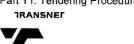
- BBBEE certificate and scorecard.
- Business with >50% Black ownership
- Business with >30% Black Women Ownership
- Black people with disabilities
- Black people in Rural areas
- Business with local community
- Black youth involvement in business

ADDITIONAL INFORMATION REQUIRED

PLEASE COMPLETE: (Very important)(Compulsory to complete

	YES	NO	%
Business with >50% Black ownership			
Business with>30% Black women Ownership			
Black people with disabilities			
Will make use of people in Rural areas			
Will make use of the local community			
Black youth involvement in business			





Part T2: Returnable Documents/Schedules

Contract
Agreement and Contract Data



PART T2: RETURNABLE DOCUMENTS / SCHEDULES

T2.1 LIST OF RETURNABLE DOCUMENTS

The tenderer must complete the following returnable documents:

1.0 Returnable documents required for tender evaluation purposes

No	Returnable Documents
1	Letter of Good Standing with the Compensation Commissioner
2	Safety Plan and Fall Protection Plan in accordance with the Construction Regulations of 2003 and Transnet's E4E
3	Quality Assurance/control Plan
4	Environmental Management Plan
5	Certified copy of CIDB certification
6	Proposed Organization and Staffing
7	Certified Copy of Share Certificates CK1 & CK2
8	Certified Copy of Certificate of Incorporation and CM29 and CM9
9	Certified Copy of Identity Documents of Shareholders / Directors / Members (where applicable)
10	Original or certified cancelled cheque OR original or certified letter from the bank verifying banking details (with bank stamp and signature)
11	Current and original or certified Tax Clearance Certificate
12	Certified VAT registration certificate
13	A signed letter from the Accountant/Auditor confirming most recent annual turnover and percentage black ownership in the company AND/OR certified BBBEE certificate and scorecard from an accredited rating agency
14	Programme and method statement
15	Statement of compliance or non-compliance with all clauses of the Scope of Works and all the technical specifications. The clause-by-clause statement of compliance shall take the form of a separate document listing all the clause numbers of all the above specifications indicating the individual statement of compliance or non-compliance. Tenderers shall motivate a statement of non-compliance.

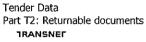


T2.2 RETURNABLE SCHEDULES

The tenderer must complete the following returnable schedules:

2.0 Returnable Schedules required for tender evaluation purposes

No	Returnable schedules
1	Certificate of Attendance of Information Briefing Session or site inspection
2	Certificate of Authority for Signatory (Resolution by Board)
3	Schedule of Tenderers experience
4	Schedule of Subcontractors (where applicable)
5	Certificate of authority for joint ventures (where applicable)
6	Schedule of Plant and Equipment (Tools and Machinery)
7	Foreign Exchange Rate Information (where applicable)
8	Record of Addenda to Tender Document
9	Supplier declaration form Duly completed SDF (Supplier declaration form)
10	Compulsory enterprise Questionnaire
11	Approach paper, which responds to the proposed scope of works.
12	Experience of Key Staff in the form of Curriculum Vitae
13	Transnet SOC limited contractual safety clauses which will form part of any resulting contract.
14	Proposed amendments and qualifications
15	Labour Payment Schedule





3.0	Returnable Schedules that will be incorporated into the contract
3.1 3.2 3.3 3.4	Certificate of attendance of information briefing session/site inspection Certificate of Authority for Signatory (Resolution by Board) Schedule of Tenderers experience Schedule of Sub-contractors
3.5 3.6	Certificate of authority for joint ventures (where applicable) Schedule of Plant and equipment
3.7 3.8	Foreign Exchange Rate Information (where applicable) Record of Addenda to Tender Document
3.9 3.10 3.11	Supplier declaration form duly completed (SDF) Compulsory Enterprise Questionnaire
3.12 3.13	Approach paper, which responds to the proposed scope of works. Experience of key staff in the form of Curriculum Vitae Transnet SOC Limited contractual safety clauses which will form part of any resulting contract
3.14 3.15	Proposed amendments and qualifications. Labour Payment Schedule.
4.	

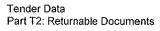
CERTIFICATE OF ATTENDANCE AT INFORMATION BRIEFING SESSION/SITE INSPECTION

This is to certify that	
(Tenderer) of	
(address)	
was represented by the person(s)	named below at the compulsory site meeting held for all
tenderers at	(location) on (date), starting
at We acknowled	lge that the purpose of the meeting was to acquaint
ourselves with the Site of the Work	s and/or matters incidental to doing the work specified in
the tender documents in order for	or us to take account of everything necessary when
compiling our rates and prices inclu-	ded in the tender.
Particulars of person(s) attending th	e meeting/site inspections:
Name:	Signature
Capacity:	
Capacity.	
Attendance of the above persor	ns at the meeting is confirmed by the Employer's
representative, namely:	
Name:	Signature
Capacity:	Date and time



RESOLUTION OF BOARD OF DIRECTORS

Nε	me of fi	irm										
lt	was	resolved	at	a	meeting	of	the	Board	of	Directors	held _ that	on
FU	LL NA!	VIE(S)					······································	SIG	NATU	IRE		
											18	•
in	his capa	acity of					is/ar	e hereby	autho	orised to ent	er into,	sign
										Contracts for		
		nd services.				\mathcal{C}	C	RY	Co	onfirm: Date		
										CHAIRN	IAN	
FU	LL NAI	/E			\overline{M}		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	······································	
Ce	rtified tri	ue copy:	1							SECRET	TARY	
	SNED A				ON TH	ils.	ח					
20												







SCHEDULE OF THE TENDERER'S EXPERIENCE

The following is a statement of similar work successfully executed by myself/ourselves:

The following is a statement	nt of similar work successfully e		iiseives.
Employer, contact person and telephone number	Description of contract	Value of work inclusive of VAT (Rand)	Date completed
Signed	Date		
Name	Positic	on	·

Tender Data Part T2: Returnable Documents

Tenderer _____

Page 3 of 28

T2.2 Returnable Schedules



SCHEDULE OF PROPOSED SUBCONTRACTORS

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

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

We confirm that all subcontractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor.
1.			
2.		5	0
3.			
4.			
5.			
	Signed	Date	
	Name	Position	
-	Tenderer		



CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed by joint ventures.
We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise
Mr/Ms , authorised signatory of the company
· · · · · · · · · · · · · · · · , acting
in the capacity of lead partner, to sign all documents in connection with the tender offer and
any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature
	õ	Designation
	C_{O_K}	Signature
		Signature Name Designation
02/		
		Signature Name Designation



SCHEDULE OF PLANT AND EQUIPMENT

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

(a) Details of major Plant and Equipment that is owned by and immediately available for this contract.

Quantity	Description, size, capacity, etc.
A LL to	tional manage if management is a second and the sec

Attach additional pages if more space is required.

(b) Details of major Plant and Equipment that will be hired, or acquired for this contract if my/our tender is acceptable.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed	Date
Name	Position
Tenderer	

Tender Data Part T2: Returnable Documents Page 6 of 28

T2.2 Returnable Schedules



FOREIGN EXCHANGE RATE INFORMATION REQUIRED TO BE FURNISHED BY TENDERERS.

1.	Partic	ulars of	the exchange	e rate on whic	h prices are	based:			
			(For	eign currency)	equals R_		_(South Afri	can currenc	;y)
2. Note 3. 4.	Note:	rate o	f exchange t	hat ruling on	material sh the last w	all base th orking day	neir tenders of the mor	on the sel oth prior to	lling the
2.	Africa	to and	other country	der prices whi	ich is to be of the f.o.l	remitted by b./c. and f.	y the Tender /f.o.r. in bor	rers from Send price (de	outh elete
Note	e :	(1)						even thoug	jh a
		(2)	(South the contractor of the tender prices which is to be remitted by the Tanother country is		allowed only	y on the			
3.	The para	tender agraphs	ed price shall 1 and 2 abov	be computed ve as applied t	at the rate to the perce	of exchang ntage of the	e stated by tendered p	the Tendere price quoted	er in
4.	tend rate the rem	dered postice mention goods in the ware mention in the ware mention in the mentio	orice as will be oned in paragr is made by Tra hole or portio	e affected by raph 1 above, ansnet Freigh on the contra	the rate of and the rat t Rail; provi- act price to	exchange, te ruling at ded that if t another co	any variation the date whe the Contracton cuntry in pay	on between en paymen or is require ment for go	the t for ed to oods
Note: Tenderers who offer imported material shall base their tenders rate of exchange that ruling on the last working day of the more closing date of tenders. 2. The percentage of the tender prices which is to be remitted by the Tende Africa to another country is% of the f.o.b./c. and f./f.o.r. in bot those not applicable). Note: (1) The percentage quoted above will be deemed to apply portion only of the item(s) tendered for is accepted. (2) Adjustment in respect of variation in exchange rate will be percentage of the tendered price quoted above. 3. The tendered price shall be computed at the rate of exchange stated by paragraphs 1 and 2 above as applied to the percentage of the tendered price as will be affected by the rate of exchange, any variation rate mentioned in paragraph 1 above, and the rate ruling at the date where the goods is made by Transnet Freight Rail; provided that if the Contract remit the whole or portion of the contract price to another country in payor portion thereof prior to receiving payment from Transnet Freight Rail such remittance(s) shall be deemed to be the date(s) of payment by T Rail for the purposes of this paragraph.	ransnet Fre	ight							
5.	prov adju	iso to istment	paragraph 3 to be effected	will apply, it	will be assu	umed that	the Contrac	tor desires	the
6 ((8	N.	te: Tenderers who offer imported material shall base the rate of exchange that ruling on the last working day closing date of tenders. The percentage of the tender prices which is to be remitted by fica to another country is	agraph 2 ha	s actually be	the een				
(t)	price shall	, to another co notify Transn	ountry as cont et Freight Ra	emplated in il forthwith	the proviso and furnish	o to paragra i documenta	ph 2 above, ary evidence	, he





remitted to another country and the amount to be retained in South Africa.

Invoices in respect of goods supplied must reflect the amount remitted or to be

7.

8. The Contractor shall take out forward cover for all imported materials and services within 14 days of award of the contract. Proof shall be submitted to the Project Manager of the contract. The cost of forward cover shall be invoiced separate from the contract invoices and shall not be included in the tender price.

SIGNATURE OF TENDERER			
DATE:			
			11
WITNESSES:			04
1		A	
2		N	
ADDRESS:	\sqrt{C}		
			- -
			-
02/			

Tender Data Part T2: Returnable Documents





RECORD OF ADDENDA TO TENDER DOCUMENTS

subm	onfirm that the following o lission of this tender offer s tender offer:	communications received from the Employer before the , amending the tender documents, have been taken into account
	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
Attacl	n additional pages if more	space is required.
8	Signed	Date
	Name	Position
Tei	nderer	



TRANSNET SUPPLIER DECLARATION/APPLICATION

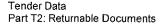
The Financial Director or Company Secretary

Transnet Vendor Management has received a request to load your company on to the Transnet vendor database. Please furnish us with the following to enable us to process this request:

- 1. Complete the "Supplier Declaration Form" (SDF) on page 2 of this letter
- 2. Original cancelled cheque OR letter from the bank verifying banking details (with bank stamp)
- 3. **Certified** copy of Identity document of Shareholders/Directors/Members (where applicable)
- 4. Certified copy of certificate of incorporation, CM29 / CM9 (name change)
- 5. Certified copy of share Certificates of Shareholders, CK1 / CK2 (if CC)
- 6. A letter with the company's letterhead confirming physical and postal addresses
- 7. **Original** or **certified** copy of SARS Tax Clearance certificate and Vat registration certificate
- 8. A signed letter from the Auditor / Accountant confirming most recent annual turnover and percentage black ownership in the company **AND/OR** BBBEE certificate and detailed scorecard from an accredited rating agency (SANAS member).
 - NB: Failure to submit the above documentation will delay the vendor creation process.
 - * Where applicable, the respective Transnet business unit processing your application may request further information from you. E.g. proof of an existence of a Service/Business contract between your business and the respective Transnet business unit etc.

IMPORTANT NOTES:

- a) If your annual turnover is less than R5 million, then in terms of the DTI codes, you are classified as an Exempted Micro Enterprise (EME). If your company is classified as an EME, please include in your submission, a signed letter from your Auditor / Accountant confirming your company's most recent annual turnover is less than R5 million and percentage of black ownership and black female ownership in the company AND/OR BBBEE certificate and detailed scorecard from an accredited rating agency (e.g. permanent SANAS Member), should you feel you will be able to attain a better BBBEE score.
- b) If your annual turnover is between R5 million and R35million, then in terms of the DTI codes, you are classified as a Qualifying Small Enterprise (QSE) and you claim a specific BBBEE level based on any 4 of the 7 elements of the BBBEE scorecard, please include your BEE certificate in your submission as confirmation of your status.
 - NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency e.g. permanent SANAS Member).
- c) <u>If your annual turnover is in excess of R35million</u>, then in terms of the DTI codes, you are classified as a Large Enterprise and you claim a specific BEE level based on all seven elements of the BBBEE generic score-card. Please include your BEE certificate in your submission as confirmation of your status.
 - NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency (permanent SANAS Member).



Supplier Declaration Form

- To avoid PAYE tax being automatically deducted from any invoices received d) from you, you must also contact the Transnet person who lodged this request on your behalf, so as to be correctly classified in terms of Tax legislation.
- e) Unfortunately, No payments can be made to a vendor until the vendor has been registered, and no vendor can be registered until the vendor application form. together with its supporting documentation, has been received and processed.
- Please return the completed Supplier Declaration Form (SDF) together with the f) required supporting documents mentioned above to the Transnet Official who is intending to procure your company's services/products in order that he/she should complete and Internal Transnet Departmental Questionnaire before referring the matter to the appropriate Transnet Vendor Master Office.

Regards,

Transnet Vendor/Supplier Management [please substitute this with your relevant Transnet department before sending this document out?

Company Trading	Name						
	gistered	***************************************					
Name							
Company Registre Proprietor	ation Numb	er Or ID	Number If A	Sole	U		
Form of entity	cc	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor	•
VAT number (if registered)				N			
Company Telepho Number	one)			
Company Fax Nur	nber	,	1				
Company E-Mail A	\ddress	^			., ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Company Website			V				
Address	77-1-						
Bank Name			Bank Numb	Account er			
Postal							
Address					C	ode	
Physical Address					С	ode	
Contact Person							
Designation	1. 1						
Telephone	4. 11						
Email	1						
Annual Turnove Financial Year)	r Range	(Last	< R5 Million	R5-35 r	million	> R35 million	
Does Your Compa	ny Provide		Products	Service	s	Both	
Area Of Delivery			National	Provinc	Provincial		
Is Your Company	A Public Or	Private E	ntity	Public		Private	
Does Your Compa Certificate	any Have A	A Tax Dir	ective Or IRF	Yes		No	
Main Product Stationery/Consult		vice S	upplied (E.	G.:			

Tender Data

Part T2: Returnable Documents

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BEE Ownership	Details					1 4 4 7
% Black	-	% Black women		% D	isabled	
Ownership		ownership		person/s	ownership	
Does your compa	any have a E	BEE certificate	Yes	8	No	
What is your broa	ad based BE	E status (Level 1	to 9 /	14.4		
Unknown)			***************************************			
How many perso	nnel does th	e firm employ	Permane t	∍n	Part time	
Transnet Contact	Person					
Contact number						
Transnet operatir	ng division					
Duly Authorised	To Sign Fo	or And On Behalf	f Of Firm	/ Organisatio	on	
Name				Designation		
Signature				Date		17'
Stamp And Sign	ature Of Co	mmissioner Of	Oath			1 1 1
Name				Date		
Signature			i	Telephone No.	N	
	i		L	110.		

NB: Please return the completed Supplier Declaration Form (SDF) together with the required supporting documents mentioned above to the Transnet Official who is intending to procure your company's services/products.

2. VENDOR TYPE OF BUSINESS

(Please tick as applicable) (* - Minimum requirements)

2.1 Indicate the business sector in which your company is involved/operating: Agriculture Mining and Quarrying Manufacturing Construction Electricity, Gas and Finance and Business Services Water Retail, Motor Trade and Wholesale Trade, Commercial Agents and Allied Repair Services Services Catering, accommodation and Transport, Storage and Communications Other Trade Community, Social and Other (Specify) Personal Services **Principal Business** Activity * Types of Services Provided Since when has the firm been in business? 2.2 What is your company's annual turnover (excluding VAT)? * <R20k >R0.3m >R16m | >R26m >R20k >R1m >R6m >R11m >R31m >R35

Tender Data
Part T2: Returnable Documents

<R0.3m

<R1m

<R5m |

T2.2 Returnable Schedules

m

<R34m



<R10m | <R15m | <R25m | <R30m

							·
2.3 Wher	e are your ope	rating/dist	ribution c	entres situa	ated *		

3. VENDOR O	WNERSHIP D	ETAIL					
(Please tick a	e annlicable)		<i>1</i> *	Minim			
	o applicable) Did the firm pr	eviously o			equirements) name? *		
YES		NO				447	
	f Yes state its	previous r	ıame:*			teles ellitik	
Registered Nar	ne						
Trading Name 3.3	Nho were its r	revious ov	vners / na	rtners / dire	ectors 2*		
SURNAME & II					MBERS		
			· · · · · · · · · · · · · · · · · · ·				

					d shareholders b rship as relevant:		
	DENTITY	CITI-		S - GEN		%	%
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3.5	ist details of	current dire	ctors, off	icers, chair	man, secretary et	~	in Harail
A contract to a contract contract to the contract of the contr	of the firm: *						
SURNAME	IDENTITY	TITLE	DIS -	GENDER	% OF TIME	CON	
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			<u> </u>	L	<u> </u>		
		irms perso	nnel who	have an ov	nership interest	in	
SURNAME	nother firm: *	ALABAT O					
SUKNAME	IDENTITY	NAME &	varna Milvi Nijavi i	TITLE	IN %	TYPE	OF THE

Tender Data Part T2: Returnable Documents Page 13 of 28

T2.2 Returnable Schedules



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							FIRM
	I.						
4. VENDOR	DETAI						
(Please tick	as ap	plicable)		(* - Mii	nîmum requir	rements)	
	1						
4.1			rsonnel does				
	l Br	.ACK	WHITE	COLOURE	INDIAN	OTHER	TOTAL
							493
Permanent							
Part Time							
4.1.1	in torm	se of abou	vo kindly pro	wido numb	ara an wana		d personnel? *
9.1. 1		LACK	WHITE	COLOURE			
Women	D	ACN	AAULTE //	COLOURE	DINDIAN	VINEK	TOTAL
Disabled	-						
	Prov	vide Detai	ils of Contac	t Person/s	Responsible	for Broad Bas	ed Black
4.2					n the Compa		ed Diack
SII	RNAMI		INITIALS		GNATION		HONE NO.
		-	INTIALO	101.0	OITA FIORE		HORLINO.
	ls yo	ur compa	any a value a	dding sup	olier (i.e. regi	stered as a ve	ndor under the
4.2.1	VAT	Act of 199	91, where NF	AT + total	abour cost >	25% of total i	revenue)?
YES	ļ		NO	- 40 - 40 - 10			
4.2.2	Is yo	ur compa	ny a recipier	nt of Enterp	rise Develop	ment Contrib	utions?*
YES			NO				
4.2.3	May 1	he above	mentioned	information	be shared a	nd included in	n Transnet Supp
	Datal	pase for					
	futur	re referen	ce? *				
YES			NO				
4.2.4							le) and this is
			ur company		organisat	ion, will this I	have a positive
	Impa	ct on you	r employmer	nt plans? *			
YES	1.0		NO	in Terration value		•	
4.2.5					ving informa		
	ы	_ACK	WHITE	COLOUR	E INDIAN	OTHER	TOTAL
		210111111111111111111111111111111111111		igi kin tigi Dama			
Permanent					-		
Part Time							
	1			<u> </u>		L	l .
4.2.6	in ter	ms of abo	ove kindly p	rovide num	bers on wom	an and disabl	ed personnel:
		ACK	WHITE	COLOURE		OTHER	TOTAL
Women							

Tender Data

Part T2: Returnable Documents

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T2.2



Disabled	·]									
4.2.7	Are	any o	f your	membe	ers/sha	rehold	ers/direc	tors ex	employees	of Transne
YES		-		NO						
4.2.8	Are	any o	f your		membe	ers em	oloyees o	of Trans	net?	
YES			[·	NO	irad					<u></u>
4.2.9	lf \	es to	points		4.2.8.	list det	ails of en	nplovee	s/ex-employ	/ees
SURNAME		IDEN		NAMI			TITL		%	TYPE OF
& INITIALS		NUM		ADDF	RESS C ER FIRI		OTHER	The state of the state of	OWNED	BUSINESS OF OTHER
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Internal Tra									4	
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Supplier's										
Supplier's										
Please indi	icate if	the Su	ıpplier l	has a co	ontract	with so	urcing Tra	ansnet	Yes	No
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lf yes pleas award	se sub	mit a c	ору от 1	ine lette	rot		<u>) </u>			
a) What is	s bein	g proc	ured fi	rom the	suppl	ier?	······································			
i. Produc	ts only	/		\	Yes			i in	No	
ii. Service			***		Yes				No	
i. Labour					Yes				No	
v. Mix of s				ts	Yes				No	
v. Mix of s	service	s and I	labour		Yes			1000	No	
whethe	r the net Op ement	elevant <mark>eratio</mark> r	PAYE	questi isions'	<mark>onnair</mark> decisio	es have n makir	been for g bodies	warded t	ove, please to the approp gic Supply payments t	priate
Yes			No							
c) If your i	reply to	o (b) is	"NO", j	please f	urnish					
								· · ·		
	···		~~~~~~~~~~	····						

Tender Data Part T2: Returnable Documents Page 15 of 28

d) Certification and Approval of proposed Vendor Creation/Unblocking/Other Changes by Transnet Official with Appropriate Delegated Authority:

T2.2



I HEREBY CERTIFY THAT THE TRANSNET DETAILED PROCUREMENT PROCESS (DPP) / PROCUREMENT MECHANISM HAS IN ALL RESPECTS BEEN ADHERED TO AND I THEREFORE APPROVE THE PROPOSED VENDOR CREATION/APPROVAL/OTHER CHANGES TO BE EFFECTED ON THE VENDOR MASTER

Grade				Da	ate	Signature			
		ΥΥ	Y	¥	9/4	Š/Ä	10	***	
Tel No:		Fax		• • • • •				••••	

Sectio	n 2: To	be co	mplete	d by the B	EE De	par	tme	nt (this	sect	ion i	s fo	r				:
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						Y	Y	¥	¥	M	M	10	7	7		***************************************	

TRANSNET

COMPULSORY ENTERPRISE QUESTIONNAIRE

		In the case of a joint venture, separate the must be completed and submitted.							
Section 1: Name of enterprise:									
Section 2: VAT registration number, if any:									
Section 3: CIDB registration number, if any:									
Section 4: Particulars of sole proprietors and partners in partnerships									
Name*	Identity number*	Personal income tax number*							
* Complete only if sole propri partners	etor or partnership	and attach separate page if more than 3							
Section 5: Particulars of	companies and clo	ose corporations							
Company registration number	r								
Close corporation number									
)							
Tax reference number									
Casting Co. Daniel in the									
partnership or director, mana	evant boxes with a ager, principal share	e cross, if any sole proprietor, partner in a eholder or stakeholder in a company or close last 12 months in the service of any of the							
□ a member of any municipal council □ a member of any provincial legislature □ a member of the National Assembly or the National Council of Province □ a member of the board of directors of any municipal entity □ an official of any municipality or municipal entity □ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) a member of an accounting authority of any national or provincial public entity an employee of Parliament or a provincial legislature									
If any of the above boxes are marked, disclose the following:									



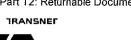
Name of sole proprietor, partner, director, manager, principal	Name of institution, public office, board or organ of state and position held	(tick appropriate column)				
shareholder or stakeholder		Curren	t Within last 12 months			
*insert separate page if nece	ssary					
	ses, children and parents in the serv					
Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sol proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been it the service of any of the following: a member of any municipal an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) Assembly or the National Council a member of the National Council a member of an accounting authority of any national or provincial public entity a member of the board of an employee of Parliament or a provincial legislature an employee of Parliament or a provincial legislature						
Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of (tick app column)				
		Current	Within last 12 months			

*insert separate page if necessary

The undersigned, who warrants that he / she is duly authorized 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 of those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- iv) 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		
Enterprise name		
"P		



EVALUATION SCHEDULE: APPROACH PAPER

The approach paper must respond to the scope of work and outline the proposed approach / methodology including that relating to health and safety. The approach paper should articulate what value add the tenderer will provide in achieving the stated objectives for the project.

The tenderer must as such explain his / her understanding of the objectives of the assignment and the Employer's stated and implied requirements, highlight the issues of importance, and explain the technical approach they would adopt to address them. The approach paper should explain the methodologies which are to be adopted, demonstrate the compatibility of those methodologies with the proposed approach. The approach should also include a quality plan which outlines processes, procedures and associated resources, applied by whom and when, to meet the requirements and indicate how risks will be managed and what contribution can be made regarding value management.

The tenderer must attach his / her approach paper to this page. The approach paper should not be longer than 8 pages.

The scoring of the approach paper will be as follows:

	Technical approach and methodology
Poor	The technical approach and / or methodology is poor / is unlikely to satisfy
(score 40)	project objectives or requirements. The tenderer has misunderstood certain
	aspects of the scope of work and does not deal with the critical aspects of the project.
Satisfactor	The approach is generic and not tailored to address the specific project
у	objectives and methodology. The approach does not adequately deal with the
(score 70)	critical characteristics of the project.
	The quality plan, manner in which risk is to be managed etc is too generic.
Good	The approach is specifically tailored to address the specific project objectives
(score 90)	and methodology and is sufficiently flexible to accommodate changes that may
	occur during execution. The quality plan and approach to managing risk etc is
	specifically tailored to the critical characteristics of the project.
Very good	Besides meeting the "good" rating, the important issues are approached in an
(score 100)	innovative and efficient way, indicating that the tenderer has outstanding
	knowledge of state-of-the- art approaches.
	The approach paper details ways to improve the project outcomes and the
	quality of the outputs

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

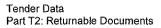
Tender Data Part T2: Returnable Documents Page 20 of 28

T2.



CURRICULUM VITAE OF KEY PERSONNEL

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional registration number:	
Name of employer (firm):	
Current Position: Employment record: (list in chronological order starting w	Years with the firm:
Experience record pertinent to required service Certification: I, the undersigned, certify that to the best of my knowledge a describes me, my qualifications and my experience. [Signature of person named in schedule]	
[Signature of person named in schedule]	Date





TRANSNET SOC LIMITED / CONTRACTORS / SUB-CONTRACTORS

CONTRACTUAL SAFETY CLAUSES WHICH WILL FORM PART OF ANY RESULTING CONTRACT

The parties agree on the following arrangements according to section 37 (2) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) to ensure compliance by the mandatory with provisions of the Act.

- 1) That the Contractor is an "employer" in his own right as defined in section 1 of Act 85 of 1993 and that he must fulfil all his obligations as an employer in terms of the Act.
- 2) The Contractor shall comply with the requirements of Act 85 of 1993 in its entirety.
- 3) Where special permits are required, such as electrical switching, hot work permits, etc. the Contractor shall obtain them from a person designated by Transnet SOC Limited for this purpose, and all requirements of the Contractor must rigidly comply with the permit.
- 4) The Contractor shall conduct a risk assessment of the work to be performed by a competent person prior to the commencement of work, to identify risks and hazards that persons may be exposed to, analyse and evaluate identified hazards.
- 5) The Contractor shall have a documented Health and Safety Plan based on the risks and hazards identified before commencement of work
- 6) The Health and Safety Plan shall include the following:
 - 6.1 The safety management structure to be instituted with all appointments in terms of the Act and Regulations
 - 6.2 The safe working methods and procedures to be implemented to ensure work are performed in compliance to the Act.
 - 6.3 The safety equipment, devices and clothing to be made available by the Contractor to his employees.
 - 6.4 The site access control measures pertaining to health and safety to be implemented.
 - 6.5 Control measures for ensuring that the Health and Safety Plan is maintained and monitored for the duration of the contract.
- 7) The Contractor shall ensure that all work is performed under the close supervision of a person trained to understand the hazards associated with the work performed and who has authority to ensure that the necessary precautionary measures are implemented.
- 8) The Contractor must appoint a Health and Safety Co-ordinator to liaise with Transnet SOC Limited on matters pertaining to occupational health and safety.
- 9) The appointed Safety Co-ordinator must liaise at least once a week with the* Health and Safety Section / Risk Manager /Occupational Risk Manager of Transnet SOC Limited.
- 10) The Contractor shall furnish the* Health and Safety Section/ Risk Manager/ Occupational Risk Manager of Transnet SOC Limited immediately with full particulars of any sub-Contractor which he may involve in the contract in order that the sub-

Tender Data Part T2: Returnable Documents Page 22 of 28

T2.2

Contractor himself can be made aware of all the clauses in this contract pertaining to health and safety.

- The Contractor shall stop any sub-contractor from executing work which is not in accordance with the Health and Safety Plan or which poses a threat to health and safety of persons.
- The Contractor shall ensure that all his employees and visitors undergoes health and safety induction pertaining to the hazards prevalent, proof of such training must be kept on file.
- In the event where the risk assessment reveals the risk relating to working from an elevated position the Contractor shall cause the designation of a competent person. responsible for the preparation of a Fall Protection Plan.
- The Fall Protection Plan shall include: 14)
 - 14.1 A risk assessment of all work carried out from an elevated position
 - 14.2 Procedures and methods to address all the identified risks per location
 - 14.3 Evaluation of employee's physical and psychological fitness necessary to work at elevated position.
 - 14.4 The training of employees working from an elevated position.
 - 14.5 Procedure addressing the inspection, testing and maintenance of all fall protection equipment.
- The Contractor shall advise the * Health and Safety Section / Risk Manager/ Occupational Risk Manager of Transnet SOC Limited of any hazardous situations which may arise from work being performed either by the Contractor or his sub-Contractor.
- Copies of all appointments required by the act must be given to * Health and Safety Section / Risk Manager / Occupational Risk Manager of Transnet SOC Limited.
- The Contractor shall ensure that a Health and Safety File is available which shall include all documentation as required by the Act, copy of his and his Sub-Contractors Risk Assessment and Health and Safety Plan.
- All incidents referred to in Section 24 of the Act involving the Contractor and his Sub-Contractor on Transnet Ltd premises, shall be reported as prescribed. Transnet Ltd hereby obtains an interest in the issue of any investigation, formal inquiry conducted in terms of Section 31 and 32 of the Act into any incident involving the Contractor, his Sub-Contractor, any person or machinery under his control on Transnet Ltd premises.
- 19) No alcohol or any other intoxicating substance shall be allowed on Transnet Ltd premises. The Contractor shall not allow anyone under or suspected to be under the influence of alcohol or any other intoxicating substance on Transnet Ltd premises.
- 20) Contractor to ensure its employees undergo medical surveillance as required by legislation
- 21) Contractor will be required to provide monthly safety performance reports and statistics



Tender Data

Part T2: Returnable Documents

- 22) A letter of good standing in terms of Section 80 (Employer to register with the Compensation Commissioner) of the Compensation for Occupational Injuries and Disease Act 1993 (Act 130 of 1993) must also be furnished.
- 23) All clauses in the contract pertaining health and safety form an integral part of the contract and if not complied with may be construed as breach of contract.

*As applicable

Tenderer OH & S Management System Questionnaire

This questionnaire forms part of TFR tender evaluation process and is to be completed by all Tenderer's and submitted with their tender offer. The objective of the questionnaire is to provide an overview of the status of the Tenderer's OH&S management system. Tenderers will be required to verify their responses noted in their questionnaire by providing evidence of their ability and capacity in relevant matters. TFR will verify accuracy of this information during the physical visit as part of the tender evaluation.

			<u> </u>
The information provided in this que occupational health and safety manag		y of the c	ompany's
Company Name:			
Signed:	Name:		
Position:	Date:	· · · · · · · · · · · · · · · · · · ·	
Tender Description:			
Tender Number:			
Tenderer OH&S Management Syste	m Questionnaire	Yes	No
1. OH&S Policy and Management			
 - Is there a written company health - If yes provide a copy of the policy 	and safety policy?		
- Does the company have an OH&S OHSAS, IRCA System etc - If yes provide details	Management system e.g NOSA,		
 Is there a company OH&S Manual or plan? If yes provide a copy of the content p 			
 Are health and safety responsite levels of Management and employed If yes provide details 			
2. Safe Work Practices and Procedu	ires		
 Are safe operating procedures relevant to its operations available? If yes provide a summary listing of procedures. 	, i		
- Is there a register of injury docume	ent?		



Page 24 of 28

T2.2 Returnable Schedules



If yes provide a copy		
- Are Risk Assessments conducted and appropriate techniques used? - If yes provide details		
3. OH&S Training		
Describe briefly how health and safety training is conducted in your company:		1,
	<u> </u>	i
 Is a record maintained of all training and induction programs undertaken for employees in your company? If yes provide examples of safety training records 		
4. Health and Safety Workplace Inspection		
- Are regular health and safety inspections at worksites undertaken? -If yes provide details		
- Is there a procedure by which employees can report hazards at workplaces? - If yes provide details		
5. Health and Safety Consultation		
- Is there a workplace health and safety committee?		
 Are employees involved in decision making over OH&S matters? If yes provide details 		
- Are there employee elected health and safety representatives? - Comments		
6. OH&S Performance Monitoring		
 Is there a system for recording and analysing health and safety performance statistics including injuries and incidents? If yes provide details 	7000	
- Are employees regularly provided with information on company health and safety performance? - If yes provide details		



Tender Data

Is company registered with workmen's compensation and up to date?	
- If yes provide proof of letter of good standing	
- Has the company ever been convicted of an occupational health and safety offence? - If yes provide details	

Safety Performance Report

Monthly DIFR for previous months

Previous Year	No of Disabling Injuries	Total Number of employees	DIFR per month
January			
February			
March			
April			>
Мау			
June		79	
July		V	
August			
September			
October			
November			
December			

DIFR = Number of Disabling injuries x 200000 divided by number of man hours worked for the period

Signed	
(Tenderer)	

Tender Data Part T2: Returnable Documents Page 26 of 28

T2.2 Returnable Schedules



PROPOSED AMENDMENTS AND QUALIFICATIONS

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

Signed	Date	
Name	Position	
Tenderer		***************************************

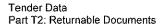


TRANSNET SOC LIMITED (REGISTRATION No. 1990/000900/06) TRADING AS TRANSNET FREIGHT RAIL

LABOUR PAYMENT SCHEDULE

TENDERERS ARE REQUIRED TO COMPLETE THE FOLLOWING SCHEDULE:

DAY LABOUR (IF	REQUIRED)			
Skilled		Per Hour		
Unskilled		Per Hour		
Labourer		Per Hour		1
Driver/Operator		Per Hour		
% Profit on Materi	al			
2. 5 Ton vehi	G cle up to 1 ton	RUM	NNING	
5. Scaffolding				
6. Generator	$\mathcal{N}_{\mathcal{N}}$	4		
7. Other equi	of any other charges:			
TENDERER:				
DATE:				







Part C1: Agreement and Contract Data

Contract
Agreement and Contract Data
TRANSNET





Contract Data

The Employer is:	
Name :	Transnet SOC Limited, trading as Transnet Freight Rail
Address:	Nzasm Building, Room 210, Corner of Paul Kruger and Minnaar Streets, Pretoria.
Telephone:	(012) 315 2059 Fax No. (012) 315-2125
E-mail:	Yvonne.scannell@transnet.net
The work is:	ROUTINE TESTING OF VARIOUS SUBSTATIONS UNDER THE CONTROL OF THE DEPOT ENGINEER, NELSPRUIT.
The sites are:	VARIOUS SUBSTATIONS, NELSPRUIT
The starting date is:	To be advised
The completion date is:	To be advised
The reply period is:	Two weeks
The defects date is:	Not applicable
The defect correction period	is: Not applicable.
The delay damages are:	Not applicable
The assessment day is the	13 th (thirteenth) of each month
The retention is:	Not applicable.
Does the United Kingdom Ho Regeneration Act (1996) app	ousing Grants, Construction and No ly?
The Adjudicator is:	
Name :	To be advised if disputes arises
Address:	
Telephone:	Fax No
F-mail:	



Contract Data

The interest rate on late payment is 2% (two percent) per complete week of delay.

The Contractor is not liable to the Employer for loss of or damage to the Employer's property in excess of **R1,000,000.00** (one million) for any one event.

The Employer provides this Insurance: Transnet Principal Control Insurance

The minimum amount of cover for the third insurance stated in the Insurance Table is: >R25, 000.00 (Limited to R10, 000,000.00. for any one event)

The minimum amount of cover for the fourth insurance stated in the Insurance Table is: Not applicable.....

The adjudicator nominating body is: The Chairman of the Association of Arbitrators (Southern Africa)

The tribunal is: Arbitration.....

If the tribunal is arbitration, the arbitration procedure is. The rules for the Conduct of Arbitrators of the Association of Arbitrators (Southern Africa).....

The conditions of contract are the NEC3 Engineering and Construction Short Contract (June 2005) and the following additional conditions:

As mentioned in paragraph 1.0 (Contractual obligations)

1.0 CONTRACTUAL OBLIGATIONS

This project specification covers Fransnet Freight Rail's requirements for the routine testing of various substations under the control of the Depot Engineer, Nelspruit.

- 1.1 The Contractor shall not make use of any sub-Contractor to perform the works or parts thereof without prior permission from the Employer's Deputy.
- 1.2 The Contractor shall ensure that a safety representative is at site at all times.
- 1.3 The Contractor shall comply with all applicable legislation and Transnet safety requirements adopted from time to time and instructed by the Employer's Deputy / Supervisor. Such compliance shall be entirely at his own cost, and shall be deemed to have been allowed for in the rates and prices in the contract.
- 1.4 The Contractor shall, in particular, comply with the following Acts and Transnet Specifications:-
- 1.4.1 The Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993. The Contractor shall produce proof of his registration and good standing with the Compensation Commissioner in terms of the Act.
- 1.4.2 The Occupational Health and Safety Act (Act 85 of 1993).
- 1.4.3 The explosive Act No. 26 of 1956 (as amended). The Contractor shall, when applicable, furnish the Employer's Deputy / Supervisor with copies of the permits authorising him or his employees, to establish an explosives magazine on or near the site and to undertake blasting operations in compliance with the Act.



- 1.4.4 The Contractor shall comply with the current Transnet Specification E.4E, Safety Arrangements and Procedural Compliance with the Occupational Health and Safety Act, Act 85 of 1993 and Regulations and shall before commencement with the execution of the contract, which shall include site establishment and delivery of plant, equipment or materials, submit to the Employer's Deputy / Supervisor.
- 1.4.5 The Contractor shall comply with the current Specification for Works On, Over, Under or Adjacent to Railway Lines and near High Voltage Equipment E7/1, if applicable, and shall take particular care of the safety of his employees on or in close proximity to a railway line during track occupations as well as under normal operational conditions.
- The Contractor's Health and Safety Programme shall be subject to agreement by the Employer's Deputy / Supervisor, who may, in consultation with the Contractor, order supplementary and/or additional safety arrangements and/or different safe working methods to ensure full compliance by the Contractor with his obligations as an employer in terms of the Act.
- 1.6 In addition to compliance with clause 1.4 hereof, the Contractor shall report all incidents in writing to the Employer's Deputy / Supervisor. Any incident resulting in the death of or injury to any person on the works shall be reported within 24 hours of its occurrence and any other incident shall be reported within 48 hours of its occurrence.
- 1.7 The Contractor shall make necessary arrangements for sanitation, water and electricity at these relevant sites during the installation of the equipments.
- 1.8 A penalty charge of R5,000.00 per day will be levied for late completion.
- 1.9 10% Retention money will be retained and will be released 12 months after the completion date of the contract.
- The Contractor shall supply a site diary (with triplicate pages). This book shall be used to record any unusual events during the period of the work. Any delays to the work shall also be recorded such as delays caused by poor weather conditions, delays caused by permits being cancelled etc. The appointed Employer's Deputy or Supervisor must countersign such delays. Other delays such as non-availability of equipment from 3rd party suppliers must be communicated to the Employer's Deputy or Supervisor in writing.
- 1.11 The Contractor shall supply a site instruction book (with triplicate pages). This book shall be used to record any instructions to the Contractor regarding problems encountered on site for example the quality of work or the placement of equipment. This book shall be filled in by the Employer's Deputy or Supervisor and must be countersigned by the Contractor.
- 1.12 Both books mentioned in 1.10 and 1.11 shall be the property of Transnet Freight Rail and shall be handed over to the Employer's Deputy or Supervisor on the day of energising or handing over.
- 1.13 All processes or the manufacture and assembly of the product components must be subjected to a quality assurance system.
- 1.14 The Contractor will assume full responsibility for assuring that the products purchased meet the requirements of Transnet Freight Rail for function, performance, and reliability, including purchased products from 3rd part suppliers/Manufacturers.
- 1.15 The Contractor shall prove to Transnet Freight Rail that his equipment or those supplied from 3rd party suppliers/manufacturers confirms to Transnet Freight Rail specifications.
- 1.16 The Contractor will remain liable for contractual delivery dates irrespective of deficiencies discovered during workshop inspections.
- 1.17 The Contractor shall ensure that equipment to be supplied are suitable installation for coastal areas. All porcelain equipment should be coated with insulating coating before commissioning.



- 1.18 Transnet Freight Rail reserves the right to award the contract based on delivery period due to the urgency of this substation.
- 1.19 Transnet Freight Rail reserves the right to award the contract in portions pertaining different work execution specialisation.

00000

"PREVIEW



Contract Data

The Contractor's Offer

The Contractor is:	
Name :	
Address:	
Telephone:	Fax No
E-mail:	
The percentage for overh	neads and profit added to the Defined Cost for people is%.
The percentage for overh	neads and profit added to other Defined Cost is%%.
The Contractor offers to perfect to be determined in accordance.	provide the Works in accordance with the conditions of contract for an amount rdance with the conditions of contract
The offered total of the Pi (En	rices is Rter the total of the prices in numbers from the price list, inclusive of VAT)
State amount in words (Ir	
Signed on behalf of the	Contractor;
Name:	
Position:	
Signature:	Date
The Employer's	Acceptance
The Employer accepts to	he Contractor's Offer to Provide the Works
Signed on behalf of the	Employer
Name:	
Position:	
	Date

Part C2: Pricing Data

Contract
Agreement and Contract Data
TRANSNET





Pricing Data Price Instructions

2.0 PRICING INSTRUCTIONS

- 2.1 The agreement is based on the NEC Engineering and Construction Short Contract 3. The contract specific variables are as stated in the contract data. Only the headings and clause numbers for which allowance must be made in the Price list are recited.
- 2.2 Preliminary and General Requirements are based on part 1 of SANS 1921, 'Construction and Management Requirements for Works Contracts'. The additions, deletions and alterations to SANS 1921 as well as the contract specific variables are as stated in the contract data. Only the headings and clause numbers for which allowance must be made in the Price list are recited.
- 2.3. It will be assumed that prices included in the Price list are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders.
- 2.4. Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
- 2.5. The Price list is not intended for the ordering of materials. Any ordering of materials, based only on the Price list, is at the Contractor's risk.
- 2.6. The amount of the Preliminaries to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount of the Preliminaries and any amount in respect of contract price adjustment provided for in the contract.
- 2.7. The amount or items of the Preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Price list:
 - a) An amount which is not to be varied, namely Fixed (F).
 - b) An amount which is to be varied in proportion to the contract value, namely Value Related (V).
 - c) An amount which is to be varied in proportion to the contract period as compared to the initial construction period, excluding revisions to the construction period for which no adjustment the Contractor is entitled to in terms of the contract, namely Time Related (T).
- 2.8. The following abbreviations are used in the Price list:

Hr = Hour Ea = Each Quant = Quantity

2.9 The prices and rates in these Price list are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the scope of work and shall cover liabilities and obligations set forth or implied in the Contract data, as well as profit.



Pricing Data Price Instructions

- 2.10 Where the scope of work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered for such items.
- 2.11 Where no quantity has been provided against an item in the Price list, the Contractor shall use their discretion and provide the quantity.
- 2.12 The quantities set out in these Price list are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in these Price list.
- 2.13 The short descriptions of the items of payment given in these Price list are only for purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
- 2.14 Contractor shall ensure that provision (financial as well as time) for excavations in a range of soil types is made for in their tenders.
- 2.15 For each item in the Price list, including Preliminaries, the Contractor shall provide in the appropriate column the portion of the tendered sum (inclusive of labour and material) which has been sourced locally (Republic of South Africa).
- 2.16 The Contractor shall also arrange forward cover within two weeks after contract award on all imported items.
- 2.17 The Contractor shall provide information related to imported content, i.e. equipment to be imported, value and applicable exchange rates. This information shall be provided as an Annexure to the Price list.
- 2.18 The total in the Price list shall be exclusive of VAT.

PREN





Pricing Data Pricing list

Item No	Description	Qty	Testing period	Price
Α	3kV DC Double Unit Traction Substat	ions	Del log	
1	Westaffin	1		
2	Ngodwana	1		
3	Rivulets	1		
4	Boulders	1		
5	Komatipoort	1		4
6	Droogland	1		

1 .	
3 A	Total waise Part 1/AT
, /~	Total price Excl. VAT
ŧ	

Item No	Description	Qty	Testing	Price
В	3kV DC Single Unit Traction Substati	ons	period	
1	Waterval Onder	1 1		
2	Elandshoek			
3	Alkmaar			
4	Mayfern	1		
5	Granietpoort	1		
6	Althorpe	1		
7	Impala	1		
8	Tenbosh	1		
9	Krokodil	1		
10	Numbi	1		
11	Legogote	1		
12	Kudu	1		
13	Hazyview	1		
14	Ireagh	1		
15	M bumba	1		
16	Acornhoek	1		
17	Klaserie	1		
18	Drakensig	1		
19	Hoedspruit	1		
20	Vienna	1		
21	Braakspruitbrug	1		
22	Palmloop	1		
23	Olifants	1		
В		Total pr	ice Excl. VAT	



Item No.	Description	Qty	Testing Price period	
С	3kV DC Tie stations			
1	Kaapmuiden	1		
2	Ondervale	1		
С		Total p	orice Excl. VAT	┪

Item No.	Description	Qty	Testing period	Price
D	11kV ac Distribution substations			
1	Nelspruit loco(4 breakers)	1		
2	Boulders(3 breakers)	1		
3	Hazyview(3 breakers)	1		
4	Klaserie(3 breakers)	1		
5	Hoedspruit(3 breakers)	1		
D		Total	rice Excl. VAT	

1		
	1 1	
-		
-	I 🔚 1	Total price(A+B+C+D) Excl. VAT
		IUtal Direct (THE LEGIT MATELLE)
		TOTAL DICECTOL EXCL. VALL
-	ı	· · · · · · · · · · · · · · · · · · ·

F	Unit rate for minor repair work R	/Hour
Cr. K		

Part C3: Scope of Work

Contract
Agreement and Contract Data
TRANSNET

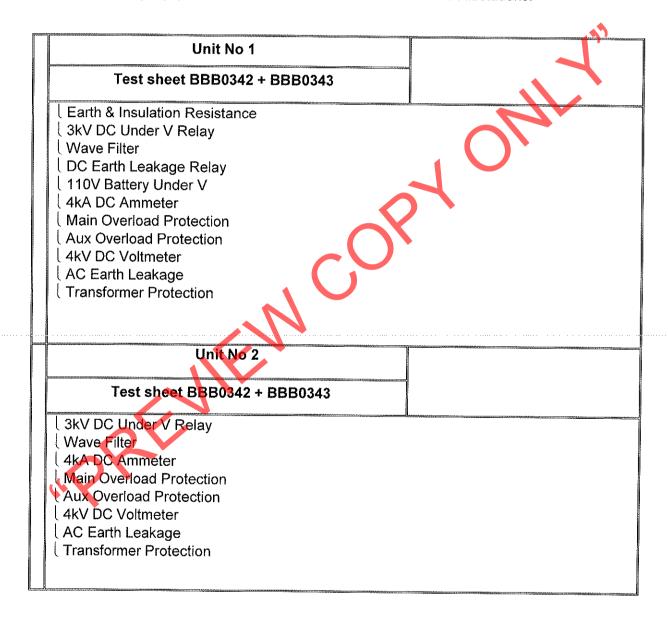




Scope of Works

Works Information

- 3.1 No tests will take place in any substation unless the substation is completely isolated from the source of supply and the OHTE and a work permit issued.
- 3.2 The Contractor shall submit the latest calibration certificate for the testing equipment he is using.
- 3.3 The following equipment needs to be tested at all double unit substations:



3.4 The following equipment needs to be tested at all single unit substations:



Test sheet BBB0342 + BBB0343 | Earth & Insulation Resistance | 3kV DC Under V Relay | Wave Filter | DC Earth Leakage Relay | 110V Battery Under V | 4kA DC Ammeter | Main Overload Protection | Aux Overload Protection | 4kV DC Voltmeter | AC Earth Leakage | Transformer Protection

3.5 The following equipment needs to be tested in 3kV DC tie stations and also the resistance of the earth spike must be tested.

Test sheet BBB0343 + EME-TY-3 Earth & Insulation Resistance (Applicable items only) 3kV DC Under V Relay DC Earth Leakage Relay 110V Battery Under Voltage The two 3kV Protection devices (See drawing EME-TY – 3)

- 3.6 The Contractor shall use test sheet BBB0346 to record results for 11kV AC distribution substations.
- 3.7 There must be there copies of test sheet. One test sheet must be pasted in the substation test book, and one test sheet must be submitted to the Transnet technician in charge so that he can file it in the Depot.
- 3.8 The Contractor shall report all defects immediately to the Employer's deputy.
- 3.9 The Contractor shall perform minor repair work and re-testing where faulty equipment is identified during the above testing period. Transnet Freight Rail will supply the material for these minor-repair works.



Scope of Works Works Information

4.0	SPECIFICATIONS	
4.1	Transnet Freight Rail	Specification
4.1.1	BBB 0342 version 2	Electrical Test Laboratory Traction
4.1.2	Substation Test sheet	
4.1.3	BBB0343 version 2	Electrical Test Laboratory Traction
4.1.4	Substation Test sheet	and the second s
4.1.5	BBB0346 version 2	Electrical Test laboratory EL&P Substation Test Speet
4.1.6	Occupational Health an	nd Safety Act No. 85 of 1993 (Available at depot for referral)
4.2	Constraints on how th	ne Contractor Provides the Works
4.2.1	The constraints shall b	e as specified in the specifications of the particular equipment.
5.0	REQUIREMENTS FOR	THE PROGRAMME
5.1 5.2	Programme of work CIDB rating	: To be submitted by successful Contractor : 2EP and above
5.3	Format	: Any
5.4	Information	How work is going to be executed
 5.5 5.6	Submission Site diary	: 1 weeks after the award of contract Successful Contractor to supply in triplicates carbon copies
5.7	Site instruction book	: Successful Contractor to supply in triplicates carbon copies
	2	
W	•	

Electrical Test Laboratory Traction Substation Test Sheet



TRANSNET

freight rail

Location / N	lame:										
Date:				Nati	ure:			Unit:			

	4 kA	DC An	meter			4 kV DC V	oltmeter		AC Earth leakage		
Shunt:	·		A	mV	Indication	Sub st	andard	% Error	CT Ratio:		
Indication	m	v	Amps	% Error	1000 V				Volt	Amp	
500 A					2 000 V					*****	
1 000 A	<u></u>				2 500 V					_	
2 000 A					3 000 V					137	
2 500 A					3 500 V				4		
3 000 A					4 000 V						
Main O/L:					Aux. O/L:				Relay Make & T	vpe:	
CT Ratio:					CT Ratio:					,,,	
V	R An	np	Y Amp	B Amp	V	R Amp	Y Amp	B Amp	Relay set at:		
								1	Relay setting:		
Relay Make	& Ty	ре:			Relay Make	& Type: _	<u> </u>		Relay checked fo	r parallel path:	
Full Load:	=			A	Full Load:			A	Yes		
Thermal O/	L.,				Thermal O/I				Connect to AC E/L:		
Relay was te	ested	by prin	n. / sec. / `	Tw.	Relay was te	ested by pr	im. / sec	/Tw.	Main X/F tank:		
Injection to d	operat	e at:			Injection to c	perate at:		OCB structure:			
x (FL) =		***	Amp.		x (FL)		Amp.		CT's structure:		
Phase		R	Y	В	Phase	R	Y	В	Aux. X/F fence:		
Time (sec)					Time (sec)				Relay trip and lock-out OCB;		
Current Set.					Current Set.				Yes / No		
Time Set.					Time Set.				Indication: Yes / No		
Instantaneo	us O/	L.			Instantaneo	us O/L.					
Relay was te			n. / sec. / T	Γw.	Relay was te	sted by pri	m. / sec. /	Tw.			
Injection to c	perat	e at:			Injection to o	perate at:					
x (FL) =			Amp.	1	x (FL) =		Amp.				
Phase		R	Y	В	Phase	R	Y	В			
Time (sec)			ļ		Time (sec)						
Current Set.		······			Current Set.						
Time Setting					Time Setting				Tested	Ву:	
Relay Trip OCB					Relay Trip OCB					į	
Indication					Indication						
Bucholz Relay cc					Bucholz Rel	ау		cc	Approve	d By:	
Relay trip, lo	ck-out	OCB:			Relay trip, loc	k-out OC	3:				
Indication:					Indication:						
				Γemperat _i	ture Relay						
Oil			°C		Winding		°C				
Relay trip, lo	ck-out	OCB:		U/B	Relay trip, loc	k-out OCI	3:	U/B.	Date	•	
Indication					Indication						

Electrical Test Laboratory Traction Substation Test Sheet



Test Sneet								ţr	eight rail	
EARTH & IN:	SULATION RES	E	NAM							
EARTH RESISTANCE:	ure	e Acceptable					W.W.4		····	
Test spike			<2000 (Ω	NATU	JRE:			***	
Test spike - Sub earth		<5Ω						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Test spike - Rail		>5 Ω	7.000	1						
Test spike - DC E/L			>25 Ω			DC	. EARTH	LEAKAGE	RELAY	
Test spike - Neg. busbar			>3000 \$	3	Make	& Type:	~~~~~~		*****	
Test spike - RUA AC E/L			>10 Ω		1					
Test spike - RUB AC E/L			>10 Ω		Relay	operate at:				·
Test spike - RUC AC E/L			>10 Ω		Relay	Setting:				
Test spike - Track switch ear	h		<5 Ω						•	\
INSULATION RESISTANCE					Check	ed for parallel p	ath:			
DC. E/L – Sub. Earth			>25 Ω			······································				
DC. E/L - Neg. Busbar			>3000 ኗ	2	Conne	ected to DC. E/L		RUA	RUB	RUC
DC. E/L – Rail			>30 Ω	····	Rectif	ier frame		11311	1102	1100
DC. E/L – RUA AC E/L			>35 Ω		-	or frame				
DC. E/L - RUB AC E/L			>35 Ω			ushing plate				
DC. E/L - RUC AC E/L			>35 Ω		-	ol panels			 	
Sub. Earth - Neg. busbar	,		>3000 €)		filter room earth				
Sub. Earth - Rail			>5 Ω	<u> </u>		(/F starpoint				
Sub. Earth - RUA AC E/L			>10 Ω			y charger				
Sub. Earth – RUB AC E/L			>10 Ω			ontrol panel				
Sub. Earth – RUC AC E/L			>10 Ω		_	voltage relay				
Neg. Busbar - Rail			>3000 \(\infty	·		breaker cells				
Neg. Busbar – RUA AC E/L					-					
Neg. Busbar – RUB AC E/L			>3000 €	_	_	er plates				
Neg. Busbar – RUC AC E/L			>3000 £		Tubing in sub.					
Rail – RUA AC E/L			>3000 £		+	tion of relay resi	ults in:		T	
Rail – RUB AC E/L			>15 Ω		Relay L/O. OCB.					
			>15 Ω	New Property Access Control of the C	Relay L/O U/B.					
Rail – RUC AC E/L			>15 Ω			L/O T/B.				
RUA AC E/L - RUB AC E/L			>20 Ω Fault indication							
	KV DC UNDER	Ť	OLTAGE RELAY				110	V BATTER	Y UNDERVOL	TAGE
RUA		RUB	0.77				<u> </u>			
Make &Type: Pick-Up:	V	·······	Make &Type:				Make &Type:			
Drop-Out:	V	Pick-Up:				V	Pick-Up: V			
Drop-Out delay:	Sec.	Drop-Out:				V	Drop-Out: V			V
Relay drop-out results:	Sec.	Drop-Out delay:			Sec.					
Trip all T/B			Relay drop-out results: Trip all T/B			Relay drop		rop-out results:		
Counter operation		 	er opera:	lion						
Fault indication			ndication	····			Trip and	l lock-out of C	OCB:	
T don't maloution	FILTER		1			ļ				
RUA	RUB					Check z	ero voltage b	etween:		
			nic	Cap (u	f).	Industica/mt IV	Detter	naalthee + 1	4L.	
6			,,,,,,	oap (u	· <i>J</i>	Induction(mH)	Dattery	positive - ear	ui;	
							Ratten	negative - ea	eth:	
12 1 1							Dattery	regative - ea	161.	
24		24								
DISCHARGE RESISTOR :			IARGE F	L	DR :				***************************************	
SERIES RESISTOR :		 	DISCHARGE RESISTOR : SERIES RESISTOR :					***************************************		
FUSE TESTED :			TESTEC							
	1. 352 (20,20).									

TESTED BY	APPROVED BY	DATE

Electrical Test Laboratory E L & P Substation Test Sheet



TRANSNET

freight rail

NAME:		***************************************										***************************************		
DESIGNATION:									OCB No. :					
PANEL NO). :								DATE: NATURE: R/C					
D.M.I.T. Ri	ELAY.							***************************************	SOLKOR R/TRANSLAY					
CT RATIO:									CT RAT					
V		RAn	np	Y	Amp		ВА	mp	V		R Amp	Y An	np gr	B Amp
														_
	_			ļ									1) '
DOLADITE				<u> </u>					ļ					
POLARITIE O/L SETTI				A /0/			- 14 0	-		. ,	PILO	CABLE	<u> </u>	
E/L SETTI		······································		A/% A/%			.M.S.		Loop res					
	••••	STED	PRIM	/ SEC/	T\A/ I		***************************************	•	T1 – E:	n resistano	e:			
MULTIPLE	1	₹ ph.		Y ph.		B ph.	T	=/L	T2-E:	1				
Of P.C.S.	Α	Sec	A	Sec	A	Sec	T A	Sec	T1 - T2					
2							<u> </u>				ERALL E	AULT SETT	ING	
4					***************************************	!			FAULT	T.W./	A	B	AC	OPERA-
6									1	Sec. A	mA	mA	mA	TION %
	II	NSTAN	ITANI	EOUS	RELA	Y			R-E					
O/L Setting				E/L S	Setting		4		Y-E					
R ph. Trips	at		Α						B-E					
Y ph. Trips	at		Α	Relay	y trips	at		A	R-Y					
B ph. Trips	at		Α					· · · · · · · · · · · · · · · · · · ·	B-Y					
BUCHOLZ	RELA'	Y		CC					R-B					
Relay trip 8				re indic	ation.				CURRENT BETWEEN RELAY OUTPUT				PUT	
TEMPERA	***************************************		-	C					R-E 1.10A \				V	
Relay trip C	*******************************		_						Y-E	Y-E 1.40A			V	
		4		AGE F	·····	Y: ,		·····	В-Е	2.00) A			V
V 1 A	2 A	3 A		ZONE		1	2	3	R-Y	4.50				V
) 			TYPE					B-Y	4.50				V
			PLUG				R-B	2.25	6 A			V		
	-			2 / Amr		-+			RELAY T					
	+			TRIPS		+			SETTING					
RATIO								/EASUREN	IENTS	··········				
		_	-						ZONE		1	2		3
	 		Tr	OT OF	IIVES	,		Ohm	E					
····	-	+		ST SP ARTH N		·		Ohm	1					
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TESTED BY	APPROVED BY	DATE



MINIMUM COMMUNAL **HEALTH** REQUIREMENTS IN **AREAS** OUTSIDE THE JURISDICTION OF Α LOCAL **AUTHORITY TEMPORARY** : **FACILITIES FOR** CONTRACTOR'S PERSONNEL

1. CAMPS

- 1.1 Prior to the erection of any camp, the Contractor shall submit to the Employer's Deputy, for his approval, details of his proposals as to the site, water supply, sanitation, and size and type of buildings. Where the site is on private land, the Contractor shall submit the written approval for the use of the site of the relevant statutory authority and of the owner and occupier of the land (as applicable).
- 1.2 Camps must not be erected on land infested with field rodents
- 1.3 Adequate drainage shall be provided to carry off storm and waste water.
- 1.4 Buildings shall be built to a neat and orderly pattern.
- 1.5 All buildings shall have smooth, hard, impervious floors, graded to provide effective drainage and to permit washing.
- 1.6 Camps shall be maintained by the Contractor at his own expense in a clean and tidy condition. The Contractor shall take such steps as the Employer's Deputy and landowner/occupier may demand to prevent the creation of a nuisance.
- 1.7 When so instructed by the Employer's Deputy, the Contractor shall, at his own expense, erect suitable screens between the camp and any public road, thoroughfare or railway line.
- 1.8 After removal of a camp, the Contractor shall, at his own expense, restore the site to its original condition to the satisfaction of the Employer's Deputy and of the landowner and occupier where the site is on private land.

2. HOUSING

- 2.1 Every living room shall have cross ventilation, both constant and occasional. Where only one window is provided, it shall not be in the same wall as the door.
- 2.2 Dimensions of living rooms shall be sufficient to allow 3.5 square metres of floor area and 11 cubic metres of air space for each person over the age of 10 years. The floor area of any living room shall not be less than 7,8 square metres.

- 2.3 Flat-roofed quarters shall have a minimum roof height of 3 metres above floor level. For quarters with pitched roofs, the wall height shall be not less than 2,6 metres above the floor with a minimum height above floor of 3 metres at the top of the pitch.
- 2.4 Doors shall not be less than 2m x 0,75m and must be halved.
- 2.5 Windows of each living room shall have an area not less than one twelfth of the floor area and shall be capable of opening to at least half their full area.
- 2.6 In areas where malaria is prevalent, doors and windows must be fitted with gauze screens.
- 2.7 Cooking shelters shall comprise roofed structures, three sides of which shall be enclosed by a weatherproof material, approved by the Employer's Deputy to a height of at least **1m** above ground level.
 - 2.7.1 Sleeping quarters shall not accommodate more than 8 persons per room.
 - 2.7.2 Pegboards shall be carried on metal or concrete supports and shall be separated by partitions not less than 0,4 metres high extending to within 150mm of the end of the bunk. Pegboards shall be removable for cleaning.

3. WATER SUPPLY AND ABLUTION FACILITIES

- 3.1 The Contractor shall ensure that an adequate and conveniently situated supply of potable water is provided.
- 3.2 Separate buildings for ablution facilities shall be provided. Where approval has been obtained for the housing of both males and females, separate facilities for each sex shall be provided. The proportion shall be 1 cubicle for 20 persons.
- 3.3 Waste water shall be hygienically disposed of.

4. **SANITATION**

4.1 Separate buildings for latrine facilities shall be provided. Where housing are provided for both males and females, separate facilities for each sex shall be provided. The proportions shall be at least one squatting seat for every 15 persons or less in the case of pit latrines, or one for every 10 persons or less in case of pail latrines.

Latrines shall be fly proof and sited at least 10 metres from any other building, and shall not face on any public road, thoroughfare, railway line or residential property. Pits shall not be less than 2,5 metres deep and sited not less than 120 metres from nearest underground water source.

4.2 Latrines shall be so constructed, situated and maintained, and night soil so disposed of as to prevent access by animals, breeding of flies, pollution of streams and domestic water supplies, and other nuisances. Where a night soil removal service is operated by a competent authority, use of such service shall be obligatory, and the use of pit latrines and atria pits will not be permitted.

- 4.3 At least one refuse bin of adequate size with close fitting lid shall be provided for each building. Refuse bins shall be emptied and cleaned out daily.
- 4.4 Labour shall be employed on camp sanitation duties on the following basis:-
 - 4.4.1 Where the number of persons living at the camp is 20 or less one unit.
 - 4.4.2 For additional numbers over 20 living at the camp one unit per 100 or part thereof.
- 4.5 Unless refuse is removed by a competent authority, it shall be disposed of in pits and covered over daily with a layer of earth or ash of sufficient thickness to prevent depredations by rodents and the breeding of flies.
- 4.6 Adequate measures shall be taken against all vermin and insects responsible for the spread of disease. Any instructions of a competent health authority shall be carried out promptly and implicitly.
- 4.7 Buildings and bedboards shall be treated whenever necessary with an approved insecticide.
- 4.8 The Contractor shall permit and facilitate inspection of the camp and structures on the site by the staff of Transnet or any other competent authority, and shall comply with any reasonable request by such staff or any other competent authority to eliminate any unsanitary condition.
- 4.9 Any outbreak of infectious disease shall immediately be reported telephonically and confirmed in writing to the Employer's Deputy.
- 4.10 The keeping of animals of any sort is not permitted.
- 4.11 The Contractor shall have on hand at the camp the necessary tools, disinfectants and cleaning materials to maintain and clean the sanitary facilities.

RATIONS

Rations where supplied by the Contractor, shall be stored in a suitable and rodent proof building with sufficient shelving.

P02b-06 (JLH)

TRANSNET SOC LIMITED

(Registration no. 1990/000900//06)

SAFETY ARRANGEMENTS AND PROCEDURAL COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993) AND APPLICABLE REGULATIONS

1. General

- The Contractor and Transnet SOC Limited (hereinafter referred to as "Transnet") are individual employers, each in its own right, with their respective duties and obligations set out in the Occupational Health and Safety Act, Act 85 of 1993 (the Act) and applicable Regulations.
- 1.2 The Contractor accepts, in terms of the General Conditions of Contract and in terms of the Act, his obligations as an employer in respect of all persons in his employ, other persons on the premises or the Site or place of work or on the work to be executed by him, and under his control. He shall, before commencement with the execution of the contract work, comply with the provisions set out in the Act, and shall implement and maintain a Health and Safety Plan as described in the Construction Regulations, 2003 and as approved by Transnet, on the Site and place of work for the duration of the Contract.
- 1.3 The Contractor accepts his obligation to complying fully with the Act and applicable Regulations notwithstanding the omission of some of the provisions of the Act and the Regulations from this document.
- 1.4 Transnet accepts, in terms of the Act, its obligations as an employer of its own employees working on or associated with the site or place of work, and the Contractor and Project Manager or his deputy shall at all times, co-operate in respect of the health and safety management of the site, and shall agree on the practical arrangements and procedures to be implemented and maintained during execution of the Works.
- 1.5 In the event of any discrepancies between any legislation and this specification, the applicable legislation will take precedence.

2. Definitions

- 2.1 In this Specification any word or expression to which a meaning has been assigned in the Construction Regulations, shall have the meaning so assigned to it, unless the context otherwise indicates: -
- 2.2 The work included in this Contract shall for the purposes of compliance with the Act be deemed to be "Construction Work", which, in terms of the Construction Regulations, 2003 means any work in connection with: -
 - (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;



- (b) the installation, erection, dismantling or maintenance of fixed plant where such work includes the risk of a person falling;
- the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;
- 2.3 "competent person" in relation to construction work, means any person having the knowledge, training and experience specific to the work or task being performed: Provided that where appropriate qualifications and training are registered as per the South African Qualifications Authority Act, 1995 these qualifications and training shall be deemed to be the required qualifications and training:
- 2.4 "contractor" means principal contractor and "subcontractor" means contractor as defined by the Construction Regulations, 2003.
- 2.5 "fall protection plan" means a documented plan, of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods applied to eliminate the risk;
- 2.6 "health and safety file" means a file, or other record in permanent form, containing the information required to be kept on site in accordance with the Act and applicable Regulations;
- 2.7 "Health and Safety Plan" means a documented plan which addresses the hazards identified and include safe work procedures to mitigate, reduce or control the hazards identified;
- 2.8 "Risk Assessment" means a programme to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard;
- 2.9 "the Act" means the Occupational Health and Safety Act No. 85 of 1993.

3. Procedural Compliance

- 3.1 The Contractor who intends to carry out any construction work shall, before carrying out such work, notify the Provincial Director in writing if the construction work:-
 - (a) includes the demolition of a structure exceeding a height of 3 metres; or
 - (b) includes the use of explosives to perform construction work; or
 - (c) includes the dismantling of fixed plant at a height greater than 3m,

and shall also notify the Provincial Director in writing when the construction work exceeds 30 days or will involve more than 300 person days of construction work and if the construction work:-

(a) includes excavation work deeper than 1m; or



- (b) includes working at a height greater than 3 metres above ground or a landing.
- 3.2 The notification to the Provincial Director shall be on a form similar to Annexure A of the Construction Regulations, 2003, also shown in Annexure 1 of this Specification. The Contractor shall ensure that a copy of the completed notification form is kept on site for inspection by an inspector, Project Manager or employee.
- 3.3 The Contractor shall, in accordance with the Act and applicable Regulations, make all the necessary appointments of competent persons in writing on a form similar to Annexure 2 of this Specification and deliver copies thereof to the Project Manager. Copies should also be retained on the health and safety file.
- 3.4 Subcontractors shall also make the above written appointments and the Contractor shall deliver copies thereof to the Project Manager.
- 3.5 In the case of a self-employed Contractor or any subcontractor who has the appropriate competencies and supervises the work himself, the appointment of a construction supervisor in terms of regulation 6.1 of the Construction Regulations, 2003 will not be necessary. The Contractor shall in such a case execute and sign a declaration, as in Annexure 3, by which he personally undertakes the duties and obligations of the "Chief Executive Officer" in terms of section 16(1) of the Act.
- 3.6 The Contractor shall, before commencing any work, obtain from the Project Manager an access certificate as in Annexure 4 executed and signed by him, permitting and limiting access to the designated site or place of work by the Contractor and any subcontractors under his control.
- 3.7 Procedural compliance with Act and Regulations, as above, shall also apply to any subcontractors as employers in their own right. The Contractor shall furnish the Project Manager with full particulars of such subcontractors and shall ensure that they comply with the Act and Regulations and Transnet's safety requirements and procedures.

4. Special Permits

Where special permits are required before work may be carried out such as for hotwork, isolation permits, work permits and occupations, the Contractor shall apply to the Project Manager or the relevant authority for such permits to be issued. The Contractor shall strictly comply with the conditions and requirements pertaining to the issue of such permits.

5. 🔭 Health and Safety Programme

- 5.1 The Tenderer shall, with his tender, submit a Health and Safety Programme setting out the practical arrangements and procedures to be implemented by him to ensure compliance by him with the Act and Regulations and particularly in respect of: -
 - (i) The provision, as far as is reasonably practical, of a working environment that is safe and without risk to the health of his employees and subcontractors in terms of section 8 of the Act;



- (ii) the execution of the contract work in such a manner as to ensure in terms of section 9 of the Act that persons other than those in the Contractor's employment, who may be directly affected by the contract work are not thereby exposed to hazards to their health and safety:
- (iii) ensuring, as far as is reasonably practical, in terms of section 37 of the Act that no employee or subcontractor of the Contractor does or omits to do any act which would be an offence for the Contractor to do or omit to do.
- The Contractor's Health and Safety Programme shall be based on a risk assessment in respect of the hazards to health and safety of his employees and other persons under his control that are associated with or directly affected by the Contractor's activities in performing the contract work and shall establish precautionary measures as are reasonable and practical in protecting the safety and health of such employees and persons.
- 5.3 The Contractor shall cause a risk assessment contemplated in clause 5.2 above to be performed by a competent person, appointed in writing, before commencement of any Construction Work and reviewed during construction. The Risk Assessments shall form part of the Health and Safety programme to be applied on the site and shall include at least the following:
 - (a) The identification of the risks and hazards that persons may be exposed to;
 - (b) the analysis and evaluation of the hazards identified;
 - a documented Health and Safety Plan including safe work procedures to mitigate, reduce or control the risks identified;
 - (d) a monitoring and review plan.
- 5.4 The Health and Safety Plan shall include full particulars in respect of: -
 - (a) The safety management structure to be instituted on site or place of work and the names of the Contractor's health and safety representatives and members of safety committees where applicable;
 - (b) the safe working methods and procedures to be implemented to ensure the work is performed in compliance with the Act and Regulations;
 - (c) the safety equipment, devices and clothing to be made available by the Contractor to his employees;
 - (d) the site access control measures pertaining to health and safety to be implemented;
 - (e) the arrangements in respect of communication of health and safety related matters and incidents between the Contractor, his employees, subcontractors and the Project Manager with particular reference to the reporting of incidents in compliance with Section 24 and General Administrative Regulation 8 of the Act and with the pertinent clause of the General Conditions of Contract forming part of the Contract and



- (f) the introduction of control measures for ensuring that the Safety Plan is maintained and monitored for the duration of the Contract.
- 5.4 The Health and Safety programme shall be subject to the Project Manager's approval and he may, in consultation with the Contractor, order that additional and/or supplementary practical arrangements and procedures be implemented and maintained by the Contractor or that different working methods or safety equipment be used or safety clothes be issued which, in the Project Manager's opinion, are necessary to ensure full compliance by the Contractor with his obligations as an employer in terms of the Act and Regulations. The Project Manager or his deputy shall be allowed to attend meetings of the Contractor's safety committee as an observer.
- 5.5 The Contractor shall take reasonable steps to ensure that each subcontractor's Health and Safety Plan is implemented and maintained on the construction site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed to between the them, but at least once every month.
- 5.6 The Contractor shall stop any subcontractor from executing any construction work, which is not in accordance with the Contractor's, and/or subcontractor's Health and Safety Plan for the site or which poses a threat to the health and safety of persons.
- 5.7 The Contractor shall ensure that a copy of the Health and Safety Plan is available on site for inspection by an inspector, Project Manager, agent, subcontractor, employee, registered employee organisation, health and safety representative or any member of the health and safety committee.
- 5.8 The Contractor shall consult with the nealth and safety committee or, if no health and safety committee exists, with a representative group of employees, on the development, monitoring and review of the Risk Assessment.
- 5.9 The Contractor shall ensure that all employees under his control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the Risk Assessment.
- 5.10 The Contractor shall ensure that all subcontractors are informed regarding any hazard as stipulated in the Risk Assessment before any work commences, and thereafter at such times as may be determined in the Risk Assessment.
- 5.11 The Contractor shall ensure that all visitors to a construction site undergoes health and safety induction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment.

6. Fall Protection Plan

6.1 In the event of the risk and hazard identification, as required in terms of clause 5.3 of this Specification, revealing risks relating to working from an elevated position the contractor shall cause the designation of a competent person, responsible for the preparation of a fall protection plan;



- 6.2 The Contractor shall implement, maintain and monitor the fall protection plan for the duration of Contract. The Contractor shall also take such steps to ensure the continued adherence to the fall protection plan.
- 6.3 The fall protection plan shall include:-
 - (a) A Risk Assessment of all work carried out from an elevated position;
 - (b) the procedures and methods to address all the identified risks per location;
 - (c) the evaluation of the employees physical and psychological fitness necessary to work at elevated positions;
 - (d) the training of employees working from elevated positions; and
 - (e) the procedure addressing the inspection, testing and maintenance of all fall protection equipment.

7. Hazards and Potential Hazardous Situations

The Contractor and the Project Manager shall immediately notify one another of any hazardous or potentially hazardous situations which may arise during performance of the Contract by the Contractor or any subcontractor and, in particular, of such hazards as may be caused by the design, execution and/or location and any other aspect pertaining to the contract work.

8. Health and Safety File

- 8.1 The Contractor shall ensure that a health and safety file is opened and kept on site and shall include all documentation required as per the Act and applicable regulations, and made available to an inspector, the Project Manager, or subcontractor upon request.
- 8.2 The Contractor shall ensure that a copy of the both his Health and Safety Plan as well as any subcontractor's Health and Safety Plan is available on request to an employee, inspector, contractor or the Project Manager.
- 8.3 The Contractor shall hand over a consolidated health and safety file to the Project Manager upon completion of the Construction Work and shall in addition to documentation mentioned in the Act and applicable Regulations include a record of all drawings, designs, materials used and other similar information concerning the completed structure.



OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

Regulation 3(1) of the Construction Regulations

NOTIFICATION OF CONSTRUCTION WORK

1(a)	Name and postal address of principal contractor:
(b)	Name and tel. no of principal contractor's contact person:
2	Principal contractor's compensation registration number:
3.(a)	Name and postal address of client:
(b)	Name and tel no of client's contact person or agent:
4.(a)	Name and postal address of designer(s) for the project:
(b)	Name and tel. no of designer(s) contact person.
5.	Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 6(1).
6.	Name/s of principal contractor's construction sub-ordinate supervisors on site appointed in terms of regulation 6(2).
7.	Exact physical address of the construction site or site office:
8.	Nature of the construction work:
9.	Expected commencement date:
10.	Expected completion date:



12. P		tractors on the construction site:
13.	Name(s) of contracto	ors already chosen.
Principal Contractor		Date
Clien	t	

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR PRIOR TO COMMENCEMENT OF WORK ON SITE.
- * ALL PRINCIPAL CONTRACTORS THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER PRINCIPAL CONTRACTOR ON THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.



(COMPANY LETTER HEAD)

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 OF 1993):

SECTION/RE	EGULATION:		
REQUIRED (COMPETENCY:		
In	terms	of I,	
representing appoint	the Employer) do herel		
As the Cor premises at	mpetent Person on the		
(physical add	ress) to assist in compliance w	ith the Act and the app	licable Regulations.
Your designa	ted area/s is/are as follows :-	N	
Date :			
Signature :-			
Designation			
	ACCEPTANCE	OF DESIGNATION	
l,	a a he requirements of this appo	cknowledge that I	this Designation and
anacistana ti	пе геципететь от апъ арро	munent.	
Date :			
Signature :-			
Designation :			





(COMPANY LETTER HEAD)

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 OF 1993):

DECLARATION

In terms of the above Act I, and obligations as Chief Executive Officer, defined in Section Section 16(1), I will, as far as is reasonably practicable, ensure t of the Employer as contemplated in the above Act are properly di	hat the duties and obligations
Signature :-	OML,
Date:	



(LETTER HEAD OF BUSINESS DIVISION OR UNIT OF TRANSNET SOC LIMITED)

SITE ACCESS CERTIFICATE

Access to :	(Area)
Name of	
Contractor/Builder :-	
Contract/Order No.:	
of associated works	ribed above are made available to you for the carrying ou
In terms of your contract/order	
with (company)	
Kindly note that you are at all time and for persons under your contro	es responsible for the control and safety of the Works Site I having access to the site.
Occupational Health and Safety A the Contract pertaining to the site	be responsible for compliance with the requirements of the ct, 1993 (Act 85 of 1993) as amended, and all conditions of the works as defined and demarcated in the contract he site or work areas forming part thereof.
Signed :	
Signed .	Date :
<u></u>	
PROJECT MANAGER	
ACKNO	OWLEDGEMENT OF RECEIPT
Name of	
Contractor/Builder :-	I,
	do hereby acknowledge and accept
and obligations in respect of t	he Safety of the site/area of Work in terms of the
Occupational Health and Safety I	Act; Act 85 of 1993.
Vama :	-
Name :	Designation :
N	
Signature :	Date :

TRANSNEF



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TRANSNET



Transnet SOC Limited Registration Number 1990/00900/06

TRANSNET SPECIFICATION



(This specification shall be used in network operator contracts)

Circulation Not Restricted

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1.0 SCOPE

1.1 This specification covers the network operator's requirements for general work and works on, over, under or adjacent to railway lines and near high voltage equipment.

2.0 DEFINITIONS

The following definitions shall apply:

"Authorised Person" - A person whether an employee of the network operator or not, who has been specially authorised to undertake specific duties in terms of Transnet' publication Electrical Safety Instructions, and who holds a certificate or letter of authority to that effect.

"Barrier" Any device designed to restrict access to "live" high-voltage electrical equipment.

"Bond" - A short conductor installed to provide electrical continuity.

"Contractor" - Any person or organisation appointed by the network operator to carry out work on its behalf.

"Contract Supervisor" - The person or juristic person appointed by the network operator from time to time as the Contract Supervisor, to administer the Contractor's performance and execution of the Works according to the powers and rights held by and obligations placed upon the Contract Supervisor in terms of the Contract.

"Dead" - Isolated and earthed.

"Electrical Officer (Contracts)" - The person appointed in writing by the Project Manager in terms of this specification as the person who shall be consulted by the Contractor in all electrical matters to ensure that adequate safety precautions are taken by the Contractor.

"Executive Officer" - The person appointed by the network operator from time to time as the Executive Officer to act according to the rights and powers held by and obligations placed upon him in terms of the Contract.

"High-Voltage" - A voltage normally exceeding 1000 volts."

"Live" - A conductor is said to be "live" when it is at a potential different from that of the earth or any other conductor of the system of which it forms a part.

"Near" - To be in such a position that a person's body or the tools he is using or any equipment he is handling may come within 3 metres of "live" exposed high-voltage electrical equipment.

"Occupation" - An authorisation granted by the network operator for work to be carried out under specified conditions on, over, under or adjacent to railway lines.

"Occupation Between Trains" - An occupation during an interval between successive trains.

"Optical Fibre Cable" - Buried or suspended composite cable containing optical fibres used in:

- · telecommunication networks for transmission of digital information and
- · safety sensitive train operations systems.

"Project Manager" – As defined in the special conditions of the contract. The person or juristic person appointed by the network operator from time to time as the Project Manager, to administer the Contract according to the powers and rights held by and obligations placed upon him in terms of the Contract.

"Responsible Representative" - The responsible person in charge, appointed by a contractor, who has undergone specific training (and holds a certificate) to supervise (general or direct) staff under his control who perform general work or to work on, over, under or adjacent to railway lines and in the vicinity of high-voltage electrical equipment.

"Total Occupation" - An occupation for a period when trains are not to traverse the section of line covered by the occupation.

"Work on" - Work undertaken on or so close to the equipment that the specified working clearances to the "live" equipment cannot be maintained.

"Work Permit" - A combined written application and authority to proceed with work on or near dead electrical equipment.

"Works" – The contractual intent for the work to be done as defined in the contract at a defined work site.

PART A - GENERAL SPECIFICATION

3.0 AUTHORITY OF OFFICERS OF TRANSNET

- 3.1 The Contractor shall co-operate with the officers of the network operator and shall comply with all instructions issued and restrictions imposed with respect to the Works which bear on the existence and operation of the network operator's railway lines and high-voltage equipment.
- Without limiting the generality of the provisions of clause 3.1, any duly authorised representative of the network operator, having identified himself, may stop the work if, in his opinion, the safe passage of trains or the safety of the network operator's assets or any person is affected. CONSIDERATIONS OF SAFETY SHALL TAKE PRECEDENCE OVER ALL OTHER CONSIDERATIONS.

4.0 CONTRACTOR'S REPRESENTATIVES AND STAFF

- 4.1 The Contractor shall nominate Responsible Representatives of whom at least one shall be available at any hour for call-out in cases of emergency. The Contractor shall provide the Contract Supervisor with the names, addresses and telephone numbers of the representatives.
- 4.2 The Contractor guarantees that he has satisfied himself that the Responsible Representative is fully conversant with this specification and that he shall comply with all his obligations in respect thereof.
- 4.3 The Contractor shall ensure that all contractor staff receives relevant awareness, educational and competence training regarding safety as prescribed.

5.0 OCCUPATIONS AND WORK PERMITS

- Work to be done during total occupation or during an occupation between trains or under a work permit shall be done in a manner decided by the Contract Supervisor and at times to suit the network operator requirements.
- 5.2 The Contractor shall organise the Works in a manner which will minimise the number and duration of occupations and work permits required.
- The network operator will not be liable for any financial or other loss suffered by the Contractor arising from his failure to complete any work scheduled during the period of an occupation or work permit.
- The Contractor shall submit to the Contract Supervisor, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 21 days before they are required. The network operator does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 5.5 The network operator reserves the right to cancel any occupation or work permit at any time before or during the period of occupation or work permit. If, due to cancellation or change in date or time, the Contractor is not permitted to start work under conditions of total occupation or work permit at the time arranged, all costs caused by the cancellation shall be born by the Contractor except as provided for in clauses 5.6 to 5.8.
- When the Contractor is notified less than 2 hours before the scheduled starting time that the occupation or work permit is cancelled, he may claim reimbursement of his direct financial losses caused by the loss of working time up to the time his labour and plant are employed on other work, but not exceeding the period of the cancelled occupation or work permit.
- 5.7 When the Contractor is notified less than 2 hours before the scheduled starting time, or during an occupation or work permit, that the duration of the occupation or work permit is reduced, he may claim reimbursement of his direct financial losses caused by the loss of working time due to the reduced duration of the occupation or work permit.
- 5.8 Reimbursement of the Contractor for any loss of working time in terms of clause 5.6 and 5.7, shall be subject to his claims being submitted within 14 days of the event with full details of labour and plant involved, and provided that the Contract Supervisor certifies that no other work on which the labour and plant could be employed was immediately available.
- 5.9 Before starting any work for which an occupation has been arranged, the Contractor shall obtain from the Contract Supervisor written confirmation of the date, time and duration of the occupation.
- 5.10 Before starting any work for which a work permit has been arranged, the Responsible Representative shall read and sign portion C of the Work Permit, signifying that he is aware of the work boundaries within which work may be undertaken. After the work for which the permit was granted has been completed, or when the

work permit is due to be terminated, or if the permit is cancelled after the start, the same person who signed portion C shall sign portion D of the Work Permit, thereby acknowledging that he is aware that the electrical equipment is to be made "live". The Contractor shall advise all his workmen accordingly.

6.0 SPEED RESTRICTIONS AND PROTECTION

- 6.1 When speed restrictions are imposed by the network operator because of the Contractor's activities, the Contractor shall organise and carry out his work so as to permit the removal of the restrictions as soon as possible.
- When the Contract Supervisor considers protection to be necessary the Contractor shall, unless otherwise agreed, provide all protection including flagmen, other personnel and all equipment for the protection of the network operator's and the Contractor's personnel and assets, the public and including trains.
- 6.2.1 The network operator will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Contract Supervisor, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in the Manual for Track Maintenance (Document no. BBB0481):
 - Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
 - Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
 - Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
 - Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)
- 6.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction which may be given by the network operator personnel providing protection.

7.0 ROADS AND ROADS ON THE NETWORK OPERATOR'S PROPERTY

- 7.1 The Contractor shall take every reasonable precaution to prevent damage to any roads or bridges used to obtain access to the site, and shall select routes, use vehicles, and restrict loads so that any extraordinary traffic as may arise from the moving of plant or material to or from the site shall be limited as far as is reasonably possible.
- 7.2 The Contractor shall not occupy or interfere in any way with the free use of any public or private road, right-of-way, path or street unless the Contract Supervisor has obtained the approval of the road authority concerned.

8.0 CLEARANCES

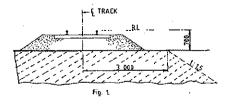
- 8.1 No temporary works shall encroach on the appropriate minimum clearances set out in the Manual for Track Maintenance (Document no. EBB0481):
 - Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
 - Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
 - Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
 - Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)

9.0 STACKING OF MATERIAL

9.1 The Contractor shall not stack any material closer than 3m from the centre line of any railway line without prior approval of the Contract Supervisor.

10.0 EXCAVATION, SHORING, DEWATERING AND DRAINAGE

10.1 Unless otherwise approved by the Contract Supervisor any excavation adjacent to a railway line shall not encroach on the hatched area shown in Figure 1.



- 10.2 The Contractor shall provide, at his own cost any shoring, dewatering or drainage of any excavation unless otherwise stipulated elsewhere in the Contract.
- 10.3 Where required by the Contract Supervisor, drawings of shoring for any excavation under or adjacent to a railway line shall be submitted and permission to proceed, obtained before the excavation is commenced.
- 10.4 The Contractor shall prevent ingress of water to the excavation but where water does enter, he shall dispose of it as directed by the Contract Supervisor.
- 10.5 The Contractor shall not block, obstruct or damage any existing drains either above or below ground level unless he has made adequate prior arrangements to deal with drainage.

11.0 FALSEWORK FOR STRUCTURES

- Drawings of falsework for the construction of any structure over, under or adjacent to any railway line shall be submitted to the Contract Supervisor and his permission to proceed obtained before the falsework is erected. Each drawing shall be given a title and a distinguishing number and shall be signed by a registered professional engineer certifying that he has checked the design of the falsework and that the drawings are correct and in accordance with the design.
- 11.2 After the falsework has been erected and before any load is applied, the Contractor shall submit to the Contract Supervisor a certificate signed by a registered professional engineer certifying that he has checked the falsework and that it has been erected in accordance with the drawings. Titles and numbers of the drawings shall be stated in the certificate. Notwithstanding permission given by the Contract Supervisor to proceed, the Contractor shall be entirely responsible for the safety and adequacy of the falsework.

12.0 PILING

12.1 The Contract Supervisor will specify the conditions under which piles may be installed on the network operator's property.

13.0 UNDERGROUND SERVICES

- No pegs or stakes shall be driven or any excavation made before the Contractor has established that there are no underground services which may be damaged thereby.
- Any damage shall be reported immediately to the Contract Supervisor, or to the official in charge at the nearest station, or to the traffic controller in the case of centralised traffic control.

14.0 BLASTING AND USE OF EXPLOSIVES

- When blasting within 500m of a railway line, the Contractor shall observe the requirements stipulated in this specification.
- 14.2 No blasting shall be carried out except with the prior written permission of the Contract Supervisor and under such conditions as he may impose.
- On electrified lines the Contractor shall also obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 21 days notice of his intention to blast. No blasting shall be done in the vicinity of electrified lines unless a member of the network operator's electrical personnel is present.
- 14.4 The Contractor shall arrange for the supply, transport storage and use of explosives.
- 14.5 The Contractor shall have labour, tools and plant, to the satisfaction of the Contract Supervisor, available on the site to clear immediately any stones or debris deposited on the track or formation by blasting, and to repair any damage to the track or formation immediately after blasting. Repairs to the track shall be carried out only under the supervision of a duly authorised representative of the network operator.
- 14.6 The Contractor shall notify the Contract Supervisor of his intention to blast at least 21 days before the commencement of any blasting operations.
- 14.7 Before any blasting is undertaken, the Contractor and the Contract Supervisor shall jointly examine and measure up any buildings, houses or structures in the vicinity of the proposed blasting to establish the extent of any existing cracking or damage to such structures, etc. The Contractor, shall, subject to the provisions stipulated in the Contract Insurance Policy, make good any deterioration of such buildings, houses, or structures, which, in the opinion of the Contract Supervisor, was directly caused by the blasting.
- 14.8 After completion of the blasting the Contractor shall obtain a written clearance from each landowner in

- the vicinity of the blasting operations to the effect that all claims for compensation in respect of damage caused by the blasting operations to their respective properties, have been settled.
- The Contractor shall provide proof that he has complied with the provisions of clauses 10.17.1 to 10.17.4 of the Explosives Regulations (Act 26 of 1956 as amended).
- 14.10 Blasting within 500m of a railway line will only be permitted during intervals between trains. A person appointed by the Contract Supervisor, assisted by flagmen with the necessary protective equipment, will be in communication with the controlling railway station.
 - Only this person will be authorised to give the Contractor permission to blast, and the Contractor shall obey his instructions implicitly regarding the time during which blasting may take place.
- 14.11 The flagmen described in clause14.10, where provided by the network operator, are for the protection of trains and the network operator's property only, and their presence does not relieve the Contractor in any manner of his responsibilities in terms of Explosives Act or Regulations, or any obligation in terms of this Contract.
- 14.12 The person described in clause 14.10 will record in a book provided and retained by the network operator, the dates and times:-
 - (i) when each request is made by him to the controlling station for permission to blast;
 - (ii) when blasting may take place;
 - (iii) when blasting actually takes place; and
 - (iv) when he advises the controlling station that the line is safe for the passage of trains,
- 14.13 Before each blast the Contractor shall record in the same book, the details of the blast to be carried out. The person appointed by the Contract Supervisor and the person who will do the blasting shall both sign the book whenever an entry described in clause 14.12 is made.

15.0 RAIL TROLLEYS

- The use of rail trolleys or trestle trolleys on a railway line for working on high voltage equipment will be permitted only if approved by the Contract Supervisor and under the conditions stipulated by him.
- 15.2 All costs in connection with trolley working and any train protection services requested by the Contractor shall, be borne by the Contractor, unless otherwise agreed.

16.0 SIGNAL TRACK CIRCUITS

- Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electrical current makes contact between rails of railway line/lines.
- 16.2 No signal connections on track-circuited tracks shall be severed without the Contract Supervisor's knowledge and consent.

17.0 PENALTY FOR DELAYS TO TRAINS

17.1 If any trains are delayed by the Contractor and the Contract Supervisor is satisfied that the delay was avoidable a penalty will be imposed on the Contractor as stipulated in the contract, for the period and number of trains delayed.

18.0 SURVEY BEACONS AND PEGS

- 18.1 The Contractor shall not on any account move or damage any beacon, bench mark, reference mark, signal or trigonometrical station in the execution of the Works without the written approval of the Contract Supervisor.
 - Should the Contractor be responsible for any such occurrence, he shall report the circumstances to the Contract Supervisor who will arrange with the Director-General of Surveys for replacement of the beacon or mark at the cost of the Contractor.
- 18.2 The Contractor shall not move or damage any cadastral or mining beacon without the written approval of the Contract Supervisor and before it has been referenced by a registered land surveyor. Any old boundary beacon, which becomes an internal beacon on creation of new boundaries, shall not be moved without the written approval of the Contract Supervisor.

Should the Contractor move or damage any cadastral or mining beacon without authority, he shall be responsible for having it replaced, at his cost, by a land surveyor.

- 18.3 The Contractor shall preserve all pegs and bench marks. Such survey points shall not be removed without the written approval of the Contract Supervisor. Should any peg or benchmark be removed without authority, the Contract Supervisor will arrange for its replacement and the cost will be recovered from the Contractor. No claim will be considered for delay in replacing any such peg or bench mark. Each peg replaced shall be checked by the Contractor.
- 18.4 Where a new boundary has been established, beacons on the fence line shall not be disturbed, and fence posts or anchors may not be placed or excavations made within 0,6 m of any beacon without the prior written approval of the Contract Supervisor.

19.0 TEMPORARY LEVEL CROSSINGS

- 19.1 The Contract Supervisor may, on request of the Contractor, and if necessary for the purpose of execution of the Works, permit the construction of a temporary level crossing over a railway a line at a position approved by the Contract Supervisor and at the Contractor's cost. The period for which the temporary level crossing is permitted will be at the discretion of the Contract Supervisor.
- 19.2 The Contractor will provide protection and supervise the construction of the road over the track(s) and within the railway servitude at the level crossing, as well as the erection of all road signs and height gauges. All cost to be borne by the applicant.

The Contractor shall exercise extreme caution in carrying out this work, especially in respect of damage to tracks, services, overhead power and communications routes and prevent contact with "live" overhead electrical equipment.

Unless otherwise agreed, the Contractor will provide the service deviations or alterations to the network operator's track-, structure-, drainage-, electrical-, telecommunications- and train authorisation systems to accommodate the level crossing.

- 19.3 The Contractor shall take all necessary steps including the provision of gates, locks and, where necessary, watchmen to restrict the use of the temporary level crossing to himself and his employees, his subcontractors and their employees, the staff of the network operator and to such other persons as the Contract Supervisor may permit and of whose identity the Contractor will be advised. If so ordered by the Contract Supervisor, the Contractor shall provide persons to control road traffic using the temporary level crossing. Such persons shall stop all road traffic when any approaching train is within seven hundred and fifty (750) metres of the temporary level crossing, and shall not allow road traffic to proceed over it until the lines are clear.
- 19.4 The Contractor shall maintain the temporary level crossing within the railway servitude in good condition for the period it is in use. A temporary agreement with the road authority to be concluded for the maintenance of the level crossing outside the railway servitude.
- 19.5 When the temporary level crossing is no longer required by the Contractor, or permitted by the network operator, the Contractor shall at his own cost remove it and restore the site and the network operator's track-, structure-, drainage-, electrical-, telecommunications- and train authorisation systems to its original condition. Work over the tracks and within the railway servitude will be supervised by the network operator.

20.0 COMPLETION OF THE WORKS

20.1 On completion of the works, the Contractor shall remove all the remaining construction plant and material from the site, other than material which is the property of the network operator, and leave the site in a clean, neat and tidy condition. If material and plant is required for the liability and maintenance period the Contract supervisor must authorise it's retention on site.

21.0 PROTECTION OF PERSONS AND PROPERTY

21.1 The Contractor shall provide and maintain all lights, guards, barriers, fencing and watchmen when and where necessary or as required by the Contract Supervisor or by any statutory authority, for the protection of the Works and for the safety and convenience of the public.

Red, yellow, green or blue lights may not be used by the Contractor as they can be mistaken for signals. Red, yellow, green or white flags shall only be used for protection by the Contractor. Within the precincts of a port the Contractor shall obtain the permission of the Port Captain before installing any light.

- 21.2 The Contractor shall take all the requisite measures and precautions during the course of the Works to:
 - (i) protect the public and property of the public,
 - (ii) protect the property and workmen of both the network operator and the Contractor,
 - (iii) avoid damage to and prevent trespass on adjoining properties, and
 - (iv) ensure compliance with any instruction issued by the Contract Supervisor or other authorised person, and with any stipulation embodied in the contract documents which affects the safety of any person or thing.
- 21.3 The network operator will provide, at its own cost, protection for the safe working of trains during such operations as the Contract Supervisor may consider necessary. Protection by the network operator for any purpose whatsoever, does not absolve the Contractor of his responsibilities in terms of the Contract.
- 21.4 The Contractor shall take all precautions and appoint guards, watchmen and compound managers for prevention of disorder among and misconduct by the persons employed on the Works and by any other persons, whether employees or not, on the work site and for the preservation of the peace and protection of persons and property in the direct neighbourhood. Any relocation of camps because of disorder shall be at the Contractor's expense.
- 21.5 All operations necessary for the execution of the Works, including the provision of any temporary work and camping sites, shall be carried out so as not to cause veldt fires, ground and environmental pollution, soil erosion or restriction of or interference with streams, furrows, drains and water supplies.
 - If the original surface of the ground is disturbed in connection with the Works, it shall be made good by the Contractor to the satisfaction of the land owner, occupier or responsible authority.
- 21.6 The Contractor shall take all reasonable steps to minimise noise and disturbance when carrying out the Works, including work permitted outside normal working hours.
- 21.7 Dumping of waste or excess materials by the Contractor shall, in urban areas, be done under the direction and control of, and at sites made available by the local authority. Dumping outside local authority boundaries shall be done only with the express permission and under the direction and control of the Contract Supervisor.
- 21.8 The Contractor shall comply with environmental protection measures and specifications stipulated by the Contract Supervisor and/or local and environmental authorities.

22.0 INTERFERENCE WITH THE NETWORK OPERATOR'S ASSETS AND WORK ON OPEN LINES

- The Contractor shall not interfere in any manner whatsoever with an open line, nor shall he carry out any work or perform any act which affects the security, use or safety of an open line except with the authority of the Contract Supervisor and in the presence of a duly authorised representative of the network operator.
- 22.2 The Contractor shall not carry out any work or operate any plant, or place any material whatsoever nearer than three metres from the centre line of any open line except with the written permission of the Contract Supervisor and subject to such conditions as he may impose.
- Care must be taken not to interfere with or damage any services such as overhead wire routes, cables or pipes and optical fibre cable, except as provided for the work specified. The Contractor will be held responsible for any damage to or interruption of such services arising from any act or omission on his part or of any of his employees, or persons engaged by him on the Works. The cost of repairing, replacing or restoring the services, as well as all other costs arising from any damage to services, shall be borne by, and will be recovered from the Contractor.
- 22.4 Authority granted by the Contract Supervisor and the presence of an authorised representative of the network operator in terms hereof, shall not relieve the Contractor of his duty to comply with this specification.

23.0 ACCESS, RIGHTS-OF-WAY AND CAMPSITES

- 23.1 Where entry onto the network operator's property is restricted, permission to enter will be given only for the purpose of carrying out the Works and will be subject to the terms and conditions laid down by the network operator.
- 23.2 The Contractor shall arrange for campsites, workplaces and access thereto as well as for any right-of-

way over private property to the site of the Works, and for access within the boundaries of the network operator's property. The owners of private property to be traversed shall be approached and treated with tact and courtesy by the Contractor, who shall, if necessary, obtain a letter of introduction to such property owners from the Contract Supervisor.

The Contractor shall be responsible for the closing of all gates on roads and tracks used by him or his employees. Except with the prior approval of the Contract Supervisor and the owner or occupier of any private land to be traversed, the Contractor shall not cut, lower, damage, remove or otherwise interfere with any fence or gate which is either on the network operator's property or on private property and which restricts access to the Works. Where such approval has been given, the Contractor shall prevent entry of animals or unauthorised persons onto the network operator's or private property, and shall make the fences safe against trespass at the close of each day's work.

- 23.3 The Contractor shall take all reasonable steps to confine the movement of vehicles and plant to the approved right-of-way to minimise damage to property, crops and natural vegetation.
- When access is no longer required, and before completion of the Works, the Contractor shall repair, restore or replace any fence or gate damaged during execution of the Works to the satisfaction of the Contract Supervisor and shall furnish the Contract Supervisor with a certificate signed by the owner and occupier of land over which he has gained access to a campsite, workplace and the Works, certifying that the owner and occupier have no claim against the Contractor or the network operator arising from the Contractor's use of the land. Should the Contractor be unable to obtain the required certificate, he shall report the circumstances to the Contract Supervisor.

24.0 SUPERVISION

- 24.1 The Contract Supervisor will provide overall technical superintendence of the Works, and may direct the Contractor in terms of the provisions of the Contract or in respect of any measures which the Contract Supervisor may require for the operations of the network operator, the safety of trains, property and workmen of the network operator, and for the safety of other property and persons. The Contractor shall carry out the directions of the Contract Supervisor. The superintendence exercised by the Contract Supervisor, including any agreement, approval, refusal or withdrawal of any approval given, shall not relieve the Contractor of any of his duties and liabilities under the Contract, and shall not imply any assumption by the network operator or by the Contract Supervisor of the legal and other responsibilities of the Contractor in carrying out the Works.
- 24.2 The Contract Supervisor may delegate to any deputy or other person, any of his duties or functions under the Contract. On receiving notice in writing of such delegation, the Contractor shall recognise and obey the deputy or person to whom any such duties or functions have been delegated as if he were the Contract Supervisor.
- 24.3 The Contractor shall exercise supervision over the Works at all times when work is performed or shall be represented by an agent having full power and authority to act on behalf of the Contractor. Such agent shall be competent and responsible, and have adequate experience in carrying out work of a similar nature to the Works, and shall exercise personal supervision on behalf of the Contractor. The Contract Supervisor shall be notified in writing of such appointment which will be subject to his approval.
- The Contractor or his duly authorised agent shall be available on the site at all times while the Works are in progress to receive the orders and directions of the Contract Supervisor.

25.0 HOUSING OF EMPLOYEES

- 25.1 The Contractor shall, where necessary, make his own arrangements for suitable housing of his employees. Where temporary housing is permitted by the Contract Supervisor on any part of the site, the Contractor shall provide suitable sanitation, lighting and potable water supplies in terms of the requirements of the local authority or the current network operator's specification; Minimum Communal Health Requirements in Areas outside the Jurisdiction of a Local Authority E.4B, as applicable.
- Fouling the area inside or outside the network operator's boundaries shall be prevented. The Contractor will be called upon by the Contract Supervisor to dispose of any foul or waste matter generated by the Contractor.

26.0 OPTICAL FIBRE CABLE ROUTES

- 26.1 The Contractor shall not handle, impact, move or deviate any optical fibre cable without prior approval.
- 26.2 Works that in any way affect the optical fibre cable requires prior approval from the Contract Supervisor

who will determine the work method and procedures to be followed.



PART B - SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT

27.0 GENERAL

- 27.1 This specification is based on the contents of Transnet's publication ELECTRICAL SAFETY INSTRUCTIONS, as amended, a copy of which will be made available on loan to the Contractor for the duration of the contract.
 - These instructions apply to all work near "live" high-voltage equipment maintained and/or operated by the network operator, and the onus rests on the Contractor to ensure that he obtains a copy.
- 27.2 This specification must be read in conjunction with and not in lieu of the Electrical Safety Instructions.
- 27.3 The Contractor's attention is drawn in particular to the contents of Part I, Sections 1 and 2 of the Electrical Safety Instructions.
- 27.4 The Electrical Safety Instructions cover the minimum safety precautions which must be taken to ensure safe working on or near high-voltage electrical equipment, and must be observed at all times. Should additional safety measures be considered necessary because of peculiar local conditions, these may be ordered by and at the discretion of the Electrical Officer (Contracts).
- 27.5 The Contractor shall obtain the approval of the Electrical Officer (Contracts) before any work is done which causes or could cause any portion of a person's body or the tools he is using or any equipment he is handling, to come within 3 metres of any "live" high-voltage equipment.
- 27.6 The Contractor shall regard all high-voltage equipment as "live" unless a work permit is in force.
- 27.7 Safety precautions taken or barriers erected shall comply with the requirements of the Electrical Officer (Contracts), and shall be approved by him before the work to be protected is undertaken by the Contractor. The Contractor shall unless otherwise agreed, bear the cost of the provision of the barriers and other safety precautions required, including the attendance of the network operator's staff where this is necessary.
- 27.8 No barrier shall be removed unless authorised by the Electrical Officer (Contracts).

28.0 WORK ON BUILDINGS OR FIXED STRUCTURES

- 28.1 Before any work is carried out or measurements are taken on any part of a building, fixed structure or earthworks of any kind above ground level situated within 3 metres of "live" high-voltage equipment, the Electrical Officer (Contracts) shall be consulted to ascertain the conditions under which the work may be carried out.
- 28.2 No barrier erected to comply with the requirements of the Electrical Officer (Contracts) shall be used as temporary staging or shuttering for any part of the Works.
- 28.3 The shuttering for bridge piers, abutments, retaining walls or parapets adjacent to or over any track may be permitted to serve as a barrier, provided that it extends at least 2,5 metres above any working level in the case of piers, abutments and retaining walls and 1,5 metres above any working level in the case of parapets.

29.0 WORK DONE ON OR OUTSIDE OF ROLLING STOCK, INCLUDING LOADING OR UNLOADING

- 29.1 No person may stand, climb or work, whilst on any platform, surface or foothold:
- 29.1.1 higher than the normal unrestricted access way, namely -
- 29.1.1.1 external walkways on diesel, steam and electric locomotives, steam heat vans, etc. and
- 29.1.1.2 walkways between coaches and locomotives.
- 29.1.2 of restricted access ways in terms of the Electrical Safety Instructions namely -
- 29.1.2.1 the floor level of open wagons
- 29.1.2.2 external walkways or decks of road-rail vehicles, on-track maintenance machines and material trains.
- 29.1.3 Unauthorised staff working on these platforms must be directly supervised by duly authorised persons in terms of clause 607.1.3 of the Electrical Safety Instructions. These persons must attend the relevant electrical safety module training. A letter of training must then be issued by an accredited training authority. A Category C Certificate of Authority must be obtained from the

local depot examining officer.

- 29.2 When in the above positions no person may raise his hands or any equipment he is handling above his head.
- 29.3 In cases where the Contractor operates his own rail mounted equipment, he shall arrange for the walkways on this plant to be inspected by the Electrical Officer (Contracts) and approved, before commencement of work.
- 29.4 The handling of long lengths of material such as metal pipes, reinforcing bars, etc should be avoided, but if essential they shall be handled as nearly as possible in a horizontal position below head height.
- The Responsible Representative shall warn all persons under his control of the danger of being near "live" high-voltage equipment, and shall ensure that the warning is fully understood.
- 29.6 Where the conditions in clauses 30.1 to 30.4 cannot be observed the Electrical Officer (Contracts), shall be notified. He will arrange for suitable Safety measures to be taken. The Electrical Officer (Contracts), may in his discretion and in appropriate circumstances, arrange for a suitable employee of the Contractor to be specially trained by the network operator and at the Contractor's cost, as an Authorised Person to work closer than 3 metres from "live" overhead conductors and under such conditions as may be imposed by the senior responsible electrical engineer of the network operator.

30.0 USE OF EQUIPMENT

- 30.1 Measuring Tapes and Devices
- 30.1.1 Measuring tapes may be used near "live" high-voltage equipment provided that no part of any tape or a person's body comes within 3 metres of the "live" equipment.
- 30.1.2 In windy conditions the distance shall be increased to ensure that if the tape should fall it will not be blown nearer than 3 metres from the "live" high-voltage equipment.
- 30.1.3 Special measuring devices longer than 2 metres such as survey sticks and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer of the network operator, but these devices must not be used within 3 metres of "live" high-voltage equipment in rainy or wet conditions.
- 30.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in clauses 31.1.1 to 31.1.3 are required.
- 30.1.5 The restrictions described in 31.1.1 to 31.1.3 do not apply on a bridge deck between permanent parapets nor in other situations where a barrier effectively prevents contact with the "live" high-voltage equipment.
- 30.2 Portable Ladders
- 30.2.1 Any type of portable ladder longer then 2 metres may only be used near "live" high-voltage equipment under the direct supervision of the Responsible Representative. He shall ensure that the ladder is always used in such a manner that the distance from the base of the ladder to any "live" high-voltage equipment is greater than the fully extended length of the ladder plus 3 metres. Where these conditions cannot be observed, the Electrical Officer (Contracts) shall be advised, and he will arrange for suitable safety measures to be taken.

31.0 CARRYING AND HANDLING MATERIAL AND EQUIPMENT

- 31.1 Pipes, scaffolding, iron sheets, reinforcing bars and other material which exceeds 2 metres in length shall be carried completely below head height near "live" high-voltage equipment. For maximum safety such material should be carried by two or more persons so as to maintain it as nearly as possible in a horizontal position. The utmost care must be taken to ensure that no part of the material comes within 3 metres of any "live" high-voltage equipment.
- 31.2 Long lengths of wire or cable shall never be run out in conditions where a part of a wire or cable can come within 3 metres of any "live" high-voltage equipment unless the Electrical Officer (Contracts) has been advised and has approved appropriate safety precautions.
- The presence of overhead power lines shall always be taken account of especially when communications lines or cables or aerial cables, stay wires, etc. are being erected above ground level.
- 32.0 PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE, TREES ETC.
- 32.1 A pole may be handled for the purpose of erection or removal near high-voltage equipment under the following conditions:

- (i) If the distance between the point at which the pole is to be erected or removed and the nearest "live" high-voltage equipment is more than the length of the pole plus 3 metres, the work shall be supervised by the Responsible Representative.
- (ii) If the distance described in (i) is less than the length of the pole plus 3 metres, the Electrical Officer (Contracts) shall be consulted to arrange for an Authorised Person to supervise the work and to ensure that the pole is earthed where possible. The pole shall be kept in contact with the point of erection, and adequate precautions shall be taken to prevent contact with "live" high-voltage equipment.
- 32.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 32.3 The provisions of clauses 33.1 and 33.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

33.0 USE OF WATER

No water shall be used in the form of a jet if it can make contact with any "live" high-voltage equipment or with any person working on such equipment.

34.0 USE OF CONSTRUCTION PLANT

- 34.1 "Construction plant" entails all types of plant including cranes, piling frames, boring machines, excavators, draglines, dewatering equipment and road vehicles with or without lifting equipment.
- When work is being undertaken in such a position that it is possible for construction plant or its load to come within 3 metres of "live" high-voltage equipment, the Electrical Officer (Contracts) shall be consulted. He will arrange for an Authorised Person to supervise the work and to ensure that the plant is adequately earthed. The Electrical Officer (Contracts) will decide whether further safety measures are necessary.
- 34.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- When loads are handled by cranes, non-metallic rope hand lines shall be used, affixed to such loads so as to prevent their swinging and coming within 3 metres of "live" high-voltage equipment.
- 34.5 Clauses 35.1 to 35.4 shall apply mutatis mutandis to the use of maintenance machines of any nature.

35.0 WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT

- 35.1 If the Responsible Representative finds that the work cannot be done in safety with the high-voltage electrical equipment "live", he shall consult the Electrical Officer (Contracts) who will decide on the action to be taken.
- 35.2 If a work permit is issued the Responsible Representative shall-
 - (i) before commencement of work ensure that the limits within which work may be carried out have been explained to him by the Authorised Person who issued the permit to him, and that he fully understands these limits.
 - (ii) sign portion C of the permit before commencement of work;
 - (iii) explain to all persons under his control the limits within which work may be carried out, and ensure that they fully understand these limits;
 - (iv) care for the safety of all persons under his control whilst work is in progress; and
 - (v) withdraw all personnel under his control from the equipment on completion of the work before he signs portion D of the work permit.

36.0 TRACTION RETURN CIRCUITS IN RAILS

- 36.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.
- 36.2 Broken rails with an air gap between the ends, and joints at which fishplates are removed under "broken bond" conditions, are potentially lethal. The rails on either side of an air gap between rail ends on electrified lines shall not be touched simultaneously until rendered safe by the network operator personnel.
- 36.3 The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Contract Supervisor at least 7 days written notice when removal of such bonds is necessary.

36.4 No work on the track which involves interference with the traction return rail circuit either by cutting or removing the rails, or by removal of bonds shall be done unless the Electrical Officer (Contracts) is consulted. He will take such precautions as may be necessary to ensure continuity of the return circuit before permitting the work to be commenced.

HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY THE 37.0 **NETWORK OPERATOR**

Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by the network operator, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

Such equipment includes:-

- (i) Eskom and municipal equipment;
- (ii) The Contractor's own power supplies; and
- (iii) Electrical equipment being installed but not yet taken over from the Contractor.



Contract Data

Site Information

6.0 **SITE INFORMATION:**

6.1 The works shall be performed at the following substations:

Α	3kV DC double unit traction subst	ations
1	Westaffin	1
2	Ngodwana	1
3	Rivulets	1
4	Boulders	1
5	Komatipoort	1
6	Droogland	1
В	3kV DC single unit traction substa	tions
1	Waterval Onder	11
2	Elandshoek	
3	Alkmaar	1

В	3kV DC single unit traction substation	S
1	Waterval Onder	1 1
2	Elandshoek	
3	Alkmaar	1
4	Mayfern	1
5	Granietpoort	1
6	Althorpe	1
7	Impala	1
8	Tenbosh	1
9	Krokodil	1
10	Numbi	1
11	Legogote	1
12	Kudu	1
13	Hazyview	1
14	Ireagh	1
15	Mbumba	1
16	Acornhoek	1
17	Klaserie	1
18	Drakensig	1
19	Hoedspruit	1
20	Vienna	1
21	Braakspruitbrug	1
22	Palmloop	1
23	Olifants	1



С	3kV DC tie stations	
1	Kaapmuiden	1
2	Ondervale	1

D	11kV AC distribution substations	
1	Nelspruit loco(4 breakers)	1
2	Boulders(3 breakers)	1
3	Hazyview(3 breakers)	1
4	Klaserie(3 breakers)	1
5	Hoedspruit(3 breakers)	1

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