



**Transnet freight Rail**, a division of

**TRANSNET SOC LTD**

Registration Number 1990/000900/30

[hereinafter referred to as **Transnet**]

**REQUEST FOR QUOTATION [RFQ] No [FX] 52478  
FOR THE PROVISION OF VEGETATION CONTROL TFR GROUNDS  
BETHLEHEM**

**FOR A PERIOD OF 24 MONTHS OR R400 000, 00 (EXCL. VAT) WHICHEVER COMES  
FIRST**

**ISSUE DATE : 10 SEPTEMBER 2013**

**CLOSING DATE : 1 OCTOBER 2013**

**CLOSING TIME : 10:00**

**FORMAL BRIEFING : 18 SEPTEMBER AT 10:00 - A COMPULSORY PRE-QUOTATION  
SITE MEETING AND/OR BRIEFING SESSION WILL BE CONDUCTED AT  
TRANSNET FREIGHT RAIL MOVEMENT DEPOT, JOUBERT STREET,  
BETHLEHEM**

**Section 1**  
**NOTICE TO BIDDERS**

Quotations which must be completed as indicated in Section 2 of this RFQ are to be submitted as follows:

**METHOD:** Courier

**CLOSING VENUE:** The Secretariat  
Acquisition Council  
Admin support Office  
Tender Box  
Office no. 2  
Real Estate Management building  
Austen Street  
Beaconsfield  
Kimberley  
Contact person: Maggie Pain Tel. 053 – 828 3341)

**1 Responses to RFQ**

Responses to this RFQ [**Quotations**] must not include documents or reference relating to any other quotation or proposal. Any additional conditions must be embodied in an accompanying letter.

**2 Broad-Based Black Economic Empowerment [B-BBEE]**

Transnet fully endorses and supports the Government's Broad-Based Black Economic Empowerment Programme and it would therefore prefer to do business with local business enterprises who share these same values. Transnet will accordingly allow a "preference" to companies who provide a valid B-BBEE Verification Certificate. All procurement transactions will be evaluated accordingly.

**2.1 B-BBEE Scorecard and Rating**

As prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations, Respondents are to note the following:

- In this RFQ, Transnet will apply the 80/20 preference point system prescribed in the PPPFA.
- Proposals will be evaluated on price which will be allocated 80 points and preference which will be allocated 20 points.
- The 80/20 preference point system applies where the acquisition of the Services will be less than R1 000 000.00. However, if the 80/20 preference point system is stipulated in this RFQ and all Bids received exceed R1 000 000.00, the RFQ will be cancelled.

In compliance with the Government Gazette No 34612, Notice No. 754 dated 23 September 2011, as from 1 October 2011 valid B-BBEE Verification Certificates must be issued by:

- (i) Verification Agencies accredited by the South African National Accreditation System [SANAS]; or

Respondent's Signature

Date & Company Stamp

- (ii) Registered Auditors approved by the Independent Regulatory Board of Auditors [IRBA], in accordance with the approval granted by the Department of Trade and Industry.

Enterprises will be rated by such agencies based on the following:

- a) **Large Enterprises** [i.e. annual turnover greater than R35 million]:
  - Rating level based on all seven elements of the B-BBEE scorecard
- b) **Qualifying Small Enterprises – QSE** [i.e. annual turnover between R5 million and R35 million]:
  - Rating based on any four of the elements of the B-BBEE scorecard
- c) **Exempted Micro Enterprises – EME** [i.e. annual turnover less than R5 million]:

In accordance with B-BBEE Codes of Good Practice [Statement 000, Section 4], any enterprise with an annual total revenue of R 5 million or less qualifies as an EME.

- Automatic rating of B-BBEE Level 4 irrespective of race or ownership
- Black ownership greater than 50% or Black Women ownership greater than 50% automatically qualify as B-BBEE Level 3

Sufficient evidence to qualify as an EME would be a certificate (which may be in the form of a letter) from an auditor or accounting officer or a certificate from a Verification Agency accredited by SANAS. The certificate must confirm the company's turnover, black ownership / black female ownership, B-BBEE status level and validity date.

*Respondents are required to furnish proof of the above to Transnet. [i.e. a valid detailed scorecard as stipulated above in respect of Large Enterprises and QSEs, or a valid certificate in respect of EMEs].*

Transnet will accordingly allocate a maximum of **20 [twenty] points** to the Respondent's final score based on an entity's B-BBEE scorecard rating.

N.B. Failure to submit a B-BBEE certificate, which is valid as at the Closing Date of this RFP, will result in a score of zero being allocated for B-BBEE.

*[Refer clause 18 below for Returnable Documents required]*

### 3 Communication

- a) Respondents are warned that a response will be liable for disqualification should any attempt be made by a Respondent either directly or indirectly to canvass any officer(s) or employee of Transnet in respect of this RFQ between the closing date and the date of the award of the business.
- b) A Respondent may, however, before the closing date and time, direct any written enquiries relating to the RFQ to the following Transnet employee:

Name: Gideon Joubert

Email: Gideon.Joubert@Transnet.net

- c) Respondents may also, at any time after the closing date of the RFQ, communicate with Maggie Pain on any matter relating to its RFQ response:

Telephone 053 838 3341

Email Maggie.Pain@Transnet.net

**4 Tax Clearance**

The Respondent's original valid Tax Clearance Certificate must accompany the Quotation. Failure to provide this document with the RFQ submission may result in disqualification.

**5 VAT Registration**

The valid VAT registration number must be stated here: \_\_\_\_\_ *[if applicable]*.

**6 Legal Compliance**

The successful Respondent shall be in full and complete compliance with any and all applicable national and local laws and regulations.

**7 Changes to Quotations**

Changes by the Respondent to its submission will not be considered after the closing date and time.

**8 Pricing**

All prices must be quoted in South African Rand on a fixed price basis, excluding VAT.

**9 Prices Subject to Confirmation**

Prices quoted which are subject to confirmation will not be considered.

**10 Negotiations**

Transnet reserves the right to undertake post-tender negotiations with selected Respondents or any number of short-listed Respondents.

**11 Binding Offer**

Any Quotation furnished pursuant to this Request shall be deemed to be an offer. Any exceptions to this statement must be clearly and specifically indicated.

**12 Disclaimers**

Transnet is not committed to any course of action as a result of its issuance of this RFQ and/or its receipt of a Quotation in response to it. Please note that Transnet reserves the right to:

- modify the RFQ's goods / service(s) and request Respondents to re-bid on any changes;
- reject any Quotation which does not conform to instructions and specifications which are detailed herein;
- disqualify Quotations submitted after the stated submission deadline;
- not necessarily accept the lowest priced Quotation;
- reject all Quotations, if it so decides;
- place an order in connection with this Quotation at any time after the RFQ's closing date;
- award only a portion of the proposed goods / service/s which are reflected in the scope of this RFQ;
- split the award of the order/s between more than one Supplier/Service Provider; or
- make no award at all.

.....  
Respondent's Signature

.....  
Date & Company Stamp

In addition, Transnet reserves the right to exclude any Respondent from the bidding process who has been convicted of a serious breach of law during the preceding 5 [five] years, including but not limited to breaches of the Competition Act 89 of 1998. Respondents are required to indicate below whether or not they have been found guilty of a serious breach of law during the past 5 [five] years:

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

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

NATURE OF BREACH:

\_\_\_\_\_  
\_\_\_\_\_

DATE OF BREACH: \_\_\_\_\_

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

### 13 Evaluation Criteria

Transnet will utilise the following criteria [not necessarily in this order] in choosing a Supplier/Service Provider, if so required:

- **Administrative responsiveness** - Completeness of response and returnable documents
- **Substantive responsiveness** – Prequalification criteria, if any, must be met and whether the Bid materially complies with the scope and/or specification given.
- Weighted evaluation based on 80/20 preference point system as indicated in paragraph 2 above:
  - Pricing and price basis [firm] - whilst not the sole factor for consideration, competitive pricing and overall level of unconditional discounts<sup>1</sup> will be critical
  - B-BBEE status of company

<sup>1</sup> Only unconditional discounts will be taken into account during evaluation. A discount which has been offered conditionally will, despite not being taken into account for evaluation purposes, be implemented when payment is effected.

Preference points will be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

| B-BBEE Status Level of Contributor | Number of points (80/20 system) |
|------------------------------------|---------------------------------|
| 1                                  | 20                              |
| 2                                  | 18                              |
| 3                                  | 16                              |
| 4                                  | 12                              |
| 5                                  | 8                               |
| 6                                  | 6                               |
| 7                                  | 4                               |
| 8                                  | 2                               |
| Non-compliant contributor          | 0                               |

#### 14 Validity Period

Transnet desires a validity period of 90 [ninety] days from the closing date of this RFQ.

This RFQ is valid until \_\_\_\_\_

#### 15 Banking Details

BANK: \_\_\_\_\_

BRANCH NAME / CODE: \_\_\_\_\_

ACCOUNT HOLDER: \_\_\_\_\_

ACCOUNT NUMBER: \_\_\_\_\_

#### 16 Company Registration

Registration number of company / C.C. \_\_\_\_\_

Registered name of company / C.C. \_\_\_\_\_

#### 17 Disclosure of Prices Quoted

Respondents must indicate here whether Transnet may disclose their quoted prices and conditions to other Respondents:

YES  NO

#### 18 Returnable Documents

**Returnable Documents** means all the documents, Sections and Annexures, as listed in the tables below.

- a) Respondents are required to submit with their Quotations the **Returnable Documents**, as detailed below.

***Failure to provide all these Returnable Documents at the Closing Date and time of this RFQ may result in a Respondent's disqualification. Respondents are therefore urged to ensure that all these Documents are returned with their Quotations.***

.....  
Respondent's Signature

.....  
Date & Company Stamp

All Sections, as indicated in the footer of each page, must be signed, stamped and dated by the Respondent. Please confirm submission of these Returnable Documents by so indicating [Yes or No] in the table below:

| Returnable Documents   | Submitted<br>[Yes or No] |
|--|--------------------------|
| SECTION 1 : Notice to Bidders  |                          |
| - Valid B-BBEE Verification Certificate [RSA Large Enterprises and QSEs]<br>Note: failure to provide a valid B-BBEE Verification Certificate at the closing date and time of the tender will result in an automatic score of zero being allocated for B-BBEE scorecard                                       |                          |
| - Valid B-BBEE certificate from auditor, accounting officer or SANAS accredited Verification Agency [RSA EMEs]<br>Note: failure to provide a valid B-BBEE Verification Certificate at the closing date and time of the tender will result in an automatic score of zero being allocated for B-BBEE scorecard |                          |
| - In the case of Joint Ventures, a copy of the Joint Venture Agreement or written confirmation of the intention to enter into a Joint Venture Agreement  |                          |
| SECTION 2 : Quotation Form   |                          |
| SECTION 3: Vendor Application Form   |                          |
| • Original cancelled cheque or bank verification of banking details  |                          |
| • Certified copies of IDs of shareholder/directors/members [as applicable]   |                          |
| • Certified copy of Certificate of Incorporation [CM29/CM9 name change]  |                          |
| • Certified copy of share certificates [CK1/CK2 if C.C.]   |                          |
| • Entity's letterhead  |                          |
| • Certified copy of VAT Registration Certificate [RSA entities only]   |                          |
| • Certified copy of Land Company Registration Certificate [if applicable]  |                          |
| • Original valid Tax Clearance Certificate [Consortia / Joint Ventures must submit a separate Tax Clearance Certificate for each party]  |                          |
| ANNEXURES A - Specifications for Vegetation control TFR grounds Bethlehem  |                          |
| ANNEXURES B - Tender Price List for Ground maintenance   |                          |
| Form E.4E Transnet (Jan 2004) Safety arrangements and Procedural compliance with the Occupational Health and Safety act (Act 85 of 1993 and applicable regulations)  |                          |
| E7/1 (July 1998) Specification for general work and works on, over, under or adjacent to Railway lines and near high voltage equipment Special conditions  |                          |

- b) In addition to the requirements of paragraph a) above, Respondents are further requested to submit with their Proposals the following **additional documents** as detailed below.

Please confirm submission of these additional documents by so indicating [Yes or No] in the table below:

| ADDITIONAL DOCUMENTS           | SUBMITTED<br>[Yes or No] |
|--------------------------------|--------------------------|
| Letter of Good Standing        |                          |
| Proof of Pest Control Operator |                          |

## Section 2 QUOTATION FORM

I/We \_\_\_\_\_  
hereby offer to supply the goods/services at the prices quoted in the Price Schedule below, in accordance with the conditions related thereto.

I/We agree to be bound by those terms and conditions in:

- the Standard Terms and Conditions for the Supply of Goods or Services to Transnet [available on request]; and
- any other standard or special conditions mentioned and/or embodied in this Request for Quotation.

I/We accept that unless Transnet should otherwise decide and so inform me/us, this Quotation [and, if any, its covering letter and any subsequent exchange of correspondence], together with Transnet's acceptance thereof shall constitute a binding contract between Transnet and me/us.

I/We further agree that if, after I/we have been notified of the acceptance of my/our Quotation, I/we fail to deliver the said goods/service/s within the delivery lead-time quoted, Transnet may, without prejudice to any other legal remedy which it may have, cancel the order and recover from me/us any expenses incurred by Transnet in calling for Quotations afresh and/or having to accept any less favourable offer.

### Price Schedule

I/We quote as follows for the Service required, excluding VAT: See " Specification for Vegetation control TFR grounds Bethlehem" and Annexure B " Tender Price List for Ground maintenance "

**Delivery Lead-Time from date of purchase order :** \_\_\_\_\_ **[days/weeks]**

#### Notes to Pricing:

- a) All Prices must be quoted in South African Rand, exclusive of VAT
- b) Please note that should you have offered a discounted price(s), Transnet will only consider such price discount(s) in the final evaluation stage if offered on an unconditional basis.

.....  
Respondent's Signature

.....  
Date & Company Stamp



## **SPECIFICATION FOR VEGETATION CONTROL TRANSNET FREIGHT RAIL GROUNDS BETHLEHEM**

### **PROJECT REQUIREMENTS AND SPECIFICATIONS.**

#### **1. Location of sites in Bethlehem**

- A : Grounds asset No **BBX0922** Old Bethlehem Signal cabin area Pipeline fence to Baxter Street including Joubert Street and Helmand Street corner.
- B : Ground asset No **BBX0923** Good shed and station area from Petrol depot Mast pole 133/7 (Baxter Street) to Macnicol Street (Gideon Knoble bridge) between Cambridge Street and first rail line through Shunting/station yard.
- C : Ground asset No **BBX0156** INFRA, Wagons, Yard master areaa from Macnicol Street (Gideon Knoble bridge) up to Sout Control point Building Asset No 02AB104.
- D : Ground asset No **BBX0174** Warehouse Vacant depots area through to Atbara control point.
- E : Ground asset No **BBX0725** Movement depot area Joubert Street entrance to Transnet boundary fence Wittenberg Street

#### **2: Scope of work**

This contract is an "as and when" required contract to brush cut veld grass, small shrubs, herbaceous and other undesirable or unwanted plant growth on open and unutilized land and around buildings. Open land areas to be cut at a maximum of 12cm. Trimming of all indigenous trees and shrubs to up to above eye level and the eradication of all noxious weeds (Robinia, Gleditzia Gum Syringa) by means of Herbicide (Garlon and Diesel) as per area required. Spot poison as necessary all grass growing in tar

#### **3: Contract documents and hand over of work:**

This contract will consist of a contract document and letter of acceptance

The contract is for an "as and when" required basis for a period of two years (24 months from dated of acceptance) or R 400 000.00 (VAT excluded) witch ever comes first

The contractor will tender per square metre according to quantity on tender price list for each item. This quantity is just for tender purpose and can be more or less.

The Transnet freight rail Project manager will contact the Contract to do vegetation control to the areas as necessary and when necessary and or spray tar road as necessary. The Transnet freight rail Project manager and the contractor will meet on site and the areas to be will be shown to the contractor and the contractor and Transnet freight rail Project manager will agree to the quantity to be done. For first cut there will be a site hand over and the contractor and his staff will attend the Transnet freight rail safety induction that will take about 20 minutes. The TFR Project manager will give the Contractor instruction in the site book with the quantities as agreed on to do the vegetation control. Also in the site book the start date and completion date for the "cut" will be agreed on. Also if there is any house hold, garden or building rubble to be removed from the sites and the quantities to be removed. When the work is completed the contractor will inform the TFR Project Manager who will do inspection and approve the work. The contractor will then send in an invoice for the work done as set out in the site book for payment.

DEFINITIONS: Project Manager means any person appointed by Transnet Freight Rail from time to time to supervise and take charge of the Contract.

Transnet Freight Rail is a business unit of Transnet Limited, Registration No 90/00900/06, a Company registered under the Company Laws of the Republic of South Africa.

Works means the works to be executed in terms of this contract.

**Discrepancies in Tender:**

Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.

Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderers will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices

**Acquaintance with Contract Documents**

the tenderers are required to acquaint themselves with the contents of the aforesaid documents and complete the forms.

The tenderers are required to check the number of pages and should any be found to be missing or in duplicate or the figures or writing to be indistinct or should there be any doubt or obscurity as to the meaning of any particular word or phrase or descriptions or should tenderers consider that any item is incorrectly or inadequately described they must inform, the Senior Buyer (SCS) of the project, at once in writing, under reference and have the matter rectified or explained as the case may be, as no liability whatsoever will be admitted by Transnet freight rail in respect of errors in a tender due to the foregoing.

No alterations, erasures or additions of any kind shall be made by the tenderers, in from or to any part of this specification unless expressly required to be made by written notice and should any unauthorized alterations, erasures or additions be made, they will not be recognized by Transnet freight rail.

**Communication and Availability:**

The Contractor shall provide sufficient communication facilities including e-mail address and fax machine in order that he may be reached at any time and place during the duration of the contract.

**4: Specifications****A: Open land areas and fence line**

Brush cut veld grass on open land areas to a maximum of 12cm above natural ground level.

"Cut and drop" No necessary to remove cut grass. Trimming of all indigenous trees and shrubs to up to above eye level. Eradication of all noxious weeds (Robinia, Gleditzia Gum Syringa) by means of Herbicide (Garlon and Diesel) as per area required.

**B: Around buildings**

Brush cut veld grass 2.0m around building to a maximum of 10cm above natural ground level.

Remove cuttings removed to an official dumpsite. Cut small shrubs, herbaceous and other undesirable or unwanted plant growth 2.0m around buildings to maximum of 10cm above natural ground level and poison with Herbicide (Garlon and Diesel) as per area required.

Poison all small young trees that is closer than 2.5m from buildings

**C: Tar roads.**

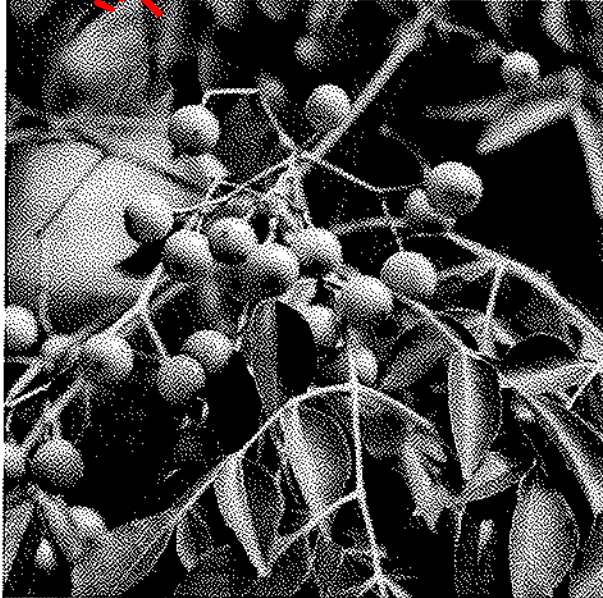
Spot poison as necessary all grass growing in tar (Glyphosate) Tar road to and next to good shed. Tar road around at station (around Horse shoe) and tar road in front of wagons to up to the Yard master building. Tar road section to Atbara cabin. The specification is for spot poison of grass and weeds growing in the tar road, tar parking areas and on platform area. Square area quantity will be paid only for areas that were spot poison as necessary.

Tender price shall include mechanical cutting of noxious weeds and spraying of re-growth with registered herbicides in consultation with Transnet Project Manager.

Robinia tree



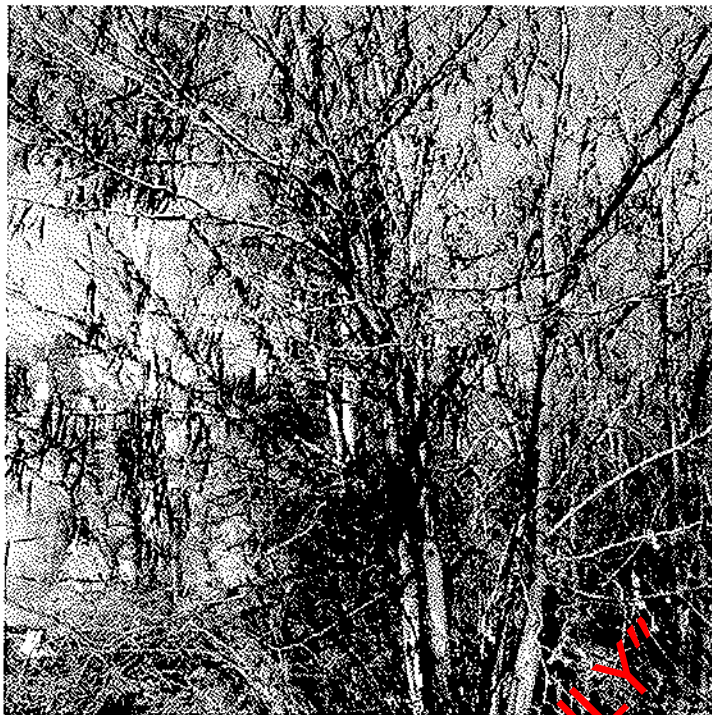
Syringa



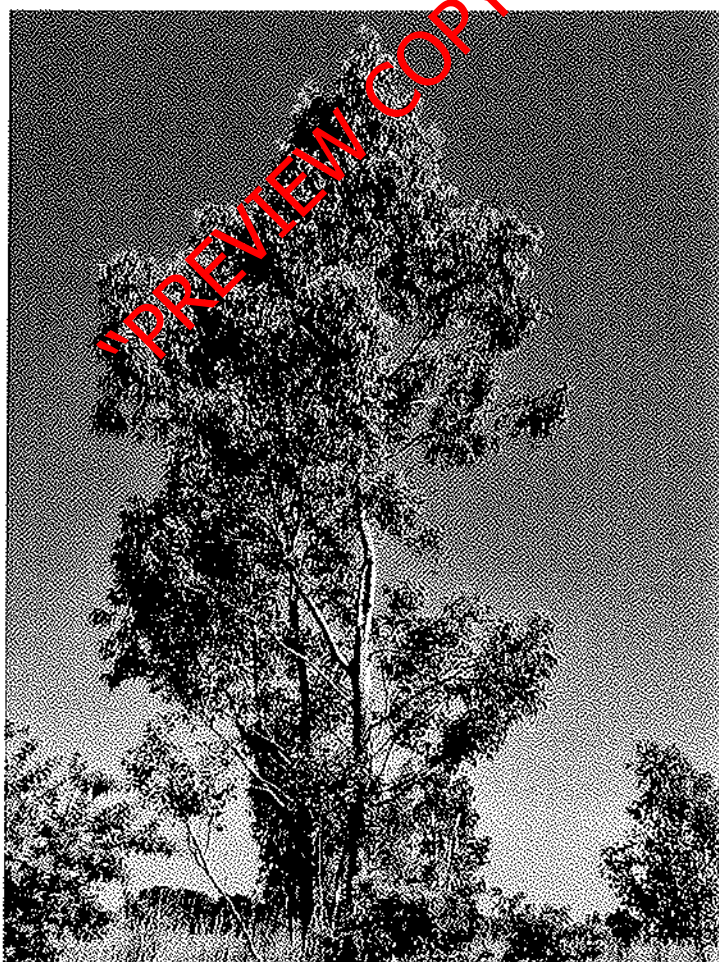
Gleditzia

.....  
Respondent's Signature

.....  
Date & Company Stamp



Gum tree



**5. Inspections and payment**

.....  
Respondent's Signature

.....  
Date & Company Stamp

**5. Inspections and payment**

Inspections will take place on date as agreed between Contractor and Transnet freight rail project manager. No payment will be released without inspection and certification having undertaken. **Prices are per cut.**

**6. To be supplied by the contractor**

All the necessary machinery, labour, personal protective clothing and equipment for his staff as required. Contractor also have to supply all herbicides required for the treatment of noxious weeds and trees.

**7. Certificates of Compliance, Competency and Qualifications**

Where required by law and as per the by laws of any Local Authority or Municipality the Contractor will provide the necessary Compliance certificates to handle and administer herbicide

**8. SAFETY OF STAFF AND PROTECTION OF TRAINS**

For the purposes of the Occupational health and Safety Act, (Act Number 85 of 1993) and the Environment Conservation Act, (Act No. 73 of 1989) the site is transferred, for the duration of the contract, to the control of the Contractor as if it is his property. As employer, he is in every respect responsible for the compliance with the provisions of these Acts, as well as the application of General Administrative regulation 13 to the employees of Transnet who visit the site.

The Contractor shall submit a Health and safety plan before any site will be handed over for approval. The health and safety plan will cover all the projects under the contract, the health and safety plan shall include a risk assessment to cover the standard risk and safety plan to general maintenance and alteration work to buildings. As per this list

- a. *Working within a public area*
- b. *Hazardous chemical substances*
- c. *Noise*
- d. *Hire plant and machinery*
- e. *Firefighting equipment*
- f. *Transport staff*
- g. *Transport material*
- h. *Occupational health*
- i. *Welfare facilities*
- j. *Speed restriction*
- k. *Permits*
- l. *Occupational health and safety signage*
- m. *Personal protective clothing, equipment (PPE)*
- n. *Potential hazard situations*
- o. *Working at Heights of more than 3metre*
- p. *Working Near to Electricity overhead lines*

**Precautions to be taken: See Transnet attached E7-1 document**

**Contractors working on or near the rail track must wear reflective clothing at all times. In addition hard hats with visors and safety footwear are necessary.**

**The making of fires on Transnet property is strictly forbidden.**

**9. Environment**

The Contractor shall, at all times, comply with the statutes that prohibit pollution of any kind. These statutes are enacted in the following legislation.

- i. The National Environmental Management Act, 107/1998;
- ii. The Environmental Conservation Act, 73/1989; and
- iii. The National Water Act, 36/1998.

The Contractor shall appoint a responsible person to ensure that no incident shall occur on site that could cause pollution. Where the Contractor was negligent and caused any form of

pollution the damage shall be rectified at the Contractor's cost.

A contractor who is required to cross the track at any time during the duration of the contract must be accompanied by flagman with a white flag 600m on either side of the work site, warning trains of people working on the track

**10. Handing over of Site**

No work will commence on any individual project before the site has been officially handed over by the project manager by means of a written site hand over document and instruction in the Site Instruction Book. Before any work can commence the contractor and his staff shall attend a Transnet safety induction session

**11. Inspection**

Inspection will take place in the first 10 working days of the following month. No payment will be released without inspection and certification having undertaken.

**12. Payment**

Payment for approved invoices will be thirty days after month-end statement.

**13. Escalation of costs**

This contract will not be subject to cost escalation.

**14. Sub-contractor**

The Contractor shall not assign his obligations under the contract, nor sublet the contract work. Where specialized work or part thereof is required the contractor can use a sub-contractor with the consent of the Transnet freight rail Project Manager. Specialized work will include Vertical blinds, carpets, tinting of window panes. Breach of this condition will entitle Transnet to cancel the contract forthwith.

**15. Breach of contract**

Transnet will terminate this contract by giving 30 (thirty) days' notice should the service you are Providing be found to be in error of the conditions/specifications or not performing their duties to Transnet satisfaction.

**16. Instructions to the contractor and Site records**

Instructions to the Contractor shall be confirmed in writing and only requests that are received in writing in site book will be accepted.

**Site Diary**

The Contractor shall keep a site diary in duplicate to record ALL day-to-day work done, weather conditions, staff on site and incidents that could occur during the contract period. This includes weather, number of workers on the site, incidences that have occurred and what work is to be done on that day. These records shall be used to enable the parties to determine exactly how many hours per day (including overtime) the Contractor and his staff have been working on a particular project

**17. Substance abuse**

The OHS Act (Act 85 of 1993) clearly states in the Safety Regulations no. 2A "INTOXICATION" An employer or user, as the case may be, shall not permit any person who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace". Transnet Freight Rail enforces this legislation by means of its Substance Abuse Policy, and therefore reserves the right to do substance abuse testing on anyone who enters their premises.

**18. Advertising rights & Trading**

The Contractor acknowledge that he is acquainted with the provisions of section 14(2) of the Merchandise Marks Act of 1941, in terms of which he is prohibited from advertising the fact that he is a Contractor to Transnet unless the written authority of Transnet thereto has first been obtained. Transnet reserves all advertising rights on Transnet's property.

The Contractor shall not trade on Transnet's property.

**19. Electricity supply and water supply**

Electricity will not be made available to the Contractor. The contractor shall not be allowed to use any electrical equipment to carry out the work.

Water may be made available for the purpose of the works only. The water shall be used conservatively and if not, this privilege shall be removed and the water shall be metered, and the cost of the metered water shall be borne by the Contractor as well as all charges as entertained by Transnet. The Contractor must supply all connections, hoses, etc., as necessary.

**20. Access to site, store for contractor material equipment**

Areas are restricted and the contractor must ensure he complies with the regulations of Transnet in every way.

If needed the contractor will provide his own portable store facilities, the store appearance shall be subject to the approval of the Transnet project manager. The location where the store may be placed shall be showed to the contractor by the Transnet freight rail Project manager and the store may only be place at this approved location.

The contractor is responsible for the safe keeping of all his material and equipment on site, the contractor can have two staff members on site 24 hours 7 day a week to protect his material and equipment, these staff members will act as security and will not be allowed to sleep, wash or cook food on the Transnet premises.

**21. Materials found on site**

The Contractor shall not use any materials found on the site without the prior written consent of the manager. No material that is lying on the site or on Transnet's property may be removed (even if deemed as scrap) by the contractor.

**22. Site meetings**

Site meetings to discuss the project will be held, on a regular basis as agreed upon, between Transnet Freight Rail Project manager and the Contractor

**23. Working hours and working outside normal working hours:**

Normal working hours are between 07:30 and 16:00 Mondays to Fridays.

The Project manager, the contractor and Manager of the Transnet staff using the building will meet to discuss and agree if contractor requests work outside the normal hours as indicated above and on Weekends and Public Holidays. Due to security reasons this may be disallowed...

**24. Insurance**

Contractor shall provide the insurance for the following: Public Liability and safety of contractor's employees.

Section 3

**Transnet Supplier Declaration/Application**

**"PREVIEW COPY ONLY"**

.....  
Respondent's Signature

.....  
Date & Company Stamp





## 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 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 (e.g. permanent SANAS Member).
- c) If your annual turnover is in excess of R35million, 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).
- d) To avoid PAYE tax being automatically deducted from any invoices received 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.
- f) 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 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 .Contact person Carol tell: 021 940-3846 fax 021 940-3883.**



## Supplier Declaration Form

|  |    |                         |         |                               |               |                 |  |
|--|----|-------------------------|---------|-------------------------------|---------------|-----------------|--|
| Company Trading Name   |    |                         |         |                               |               |                 |  |
| Company Registered Name  |    |                         |         |                               |               |                 |  |
| Company Registration Number Or ID Number If A Sole Proprietor    |    |                         |         |                               |               |                 |  |
| Form of entity   | CC | Trust                   | Pty Ltd | Limited                       | Partnership   | Sole Proprietor |  |
| VAT number (if registered)                                       |    |                         |         |                               |               |                 |  |
| Company Telephone Number   |    |                         |         |                               |               |                 |  |
| Company Fax Number   |    |                         |         |                               |               |                 |  |
| Company E-Mail Address   |    |                         |         |                               |               |                 |  |
| Company Website Address  |    |                         |         |                               |               |                 |  |
| Bank Name  |    |                         |         | Bank Account Number           |               |                 |  |
| Postal Address   |    |                         |         |                               |               | Code            |  |
| Physical Address   |    |                         |         |                               |               | Code            |  |
| Contact Person   |    |                         |         |                               |               |                 |  |
| Designation  |    |                         |         |                               |               |                 |  |
| Telephone  |    |                         |         |                               |               |                 |  |
| Email  |    |                         |         |                               |               |                 |  |
| Annual Turnover Range (Last Financial Year)                      |    | < R5 Million            |         | R5-35 million                 |               | >R35 million    |  |
| Does Your Company Provide  |    | Products                |         | Services                      |               | Both            |  |
| Area Of Delivery   |    | National                |         | Provincial                    |               | Local           |  |
| Is Your Company A Public Or Private Entity                       |    |                         |         | Public                        |               | Private         |  |
| Does Your Company Have A Tax Directive Or IRP30 Certificate      |    |                         |         | Yes                           |               | No              |  |
| Main Product Or Service Supplied (E.G.: Stationery/Consulting)   |    |                         |         |                               |               |                 |  |
| <b>BEE Ownership Details</b>                                     |    |                         |         |                               |               |                 |  |
| %Black Ownership   |    | % Black women ownership |         | % Disabled person/s ownership |               |                 |  |
| Does your company have a BEE certificate                         |    | Yes                     |         | No                            |               |                 |  |
| What is your broad based BEE status (Level 1 to 9 / Unknown)     |    |                         |         |                               |               |                 |  |
| How many personnel does the firm employ                          |    | Permanent               |         | Part time                     |               |                 |  |
| Transnet Contact Person  |    |                         |         |                               |               |                 |  |
| Contact number   |    |                         |         |                               |               |                 |  |
| Transnet operating division                                      |    |                         |         |                               |               |                 |  |
| Duly Authorised To Sign For And On Behalf Of Firm / Organisation |    |                         |         |                               |               |                 |  |
| Name   |    |                         |         |                               | Designation   |                 |  |
| Signature  |    |                         |         |                               | Date          |                 |  |
| <b>Stamp And Signature Of Commissioner Of Oath</b>               |    |                         |         |                               |               |                 |  |
| Name   |    |                         |         |                               | Date          |                 |  |
| Signature  |    |                         |         |                               | Telephone No. |                 |  |

**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.

Transnet Vendor/Supplier Management .Contact person Carol tell: 021 940-3846 fax 021 940-3883

Respondent's Signature

Date & Company Stamp

**ANNEXURE B**  
**TENDER PRICE LIST FOR GROUND MAINTENANCE**

ASSET DESCRIPTION: Transnet freight rail grounds

CITY / TOWN: Bethlehem

WORK DESCRIPTION: Vegetation control

The contractor is responsible to check the measurements and square meter of the areas for tender purposes.

Value Added Tax (VAT) shall be excluded in the schedule of rates and prices.

To be supplied by the Contractor: The Contractor shall provide all labour, material, transport, consumable stores, plant, equipment, tools, services, materials and ingredients of every description required for the carrying out and completion of the WORK as per the attached worklist and specification and as may be ordered by the Project Manager.

The contractor shall be liable for any damages cause by him or his staff to any Transnet Freight Rail property or equipment.

SAFETY: The contractor shall comply with the Occupational Health Safety Act, 1993 (Act 85 of 1993).

Page 1 of 2      SUB TOTAL PAGE 1     

TENDER NO: BFX/52281      ASSET NO: various

| ITEM NO                              | FAULT DISCRPTION   | ITEM TOTAL | MEASURE UNIT | UNIT RATE | ITEM AMOUNT |
|--------------------------------------|--|------------|--------------|-----------|-------------|
| <b>SITE CLEANING/CUT TREE/RUBBLE</b> |  |            |              |           |             |
| 1                                    | Open land brush cut and drop of veld grass, small shrubs, herbaceous and other undesirable or unwanted plant growth to be cut at a maximum of 12cm from natural ground level. (Not necessary to remove cuttings) As per specification Item 4 A           | 200000     | M^2          |           |             |
| 2                                    | Brush cut veld grass, small shrubs and other undesirable or unwanted plant growth 2.0m around buildings to 10cm. Poison with undesirable or unwanted plant growth and poison all small young trees that is closer than 2.5m from buildings. See Spec 4 B | 3500       | M^2          |           |             |
| 3                                    | Spot poison of grass and weeds growing in the tar road, tar parking areas and on platform area. Square area quantity is only for tender purpose. Actiue area to be spray will be detrmied on site with site handover to contractor. See Spec 4 C         | 500        | M^2          |           |             |
| 4                                    | If necessary to remove building rubble dump on areas where ground maintenance must be done as per area were require and quantity as per instruction in site book.  | 10         | M^3          |           |             |
| 5                                    | If necessary to remove to remove house hold rubbish and garden refuge dump on areas where ground maintenance must be done as per per area were require and quantity as per instruction in site book.   | 10         | M^3          |           |             |

Respondent's signature: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

TENDER NO: BFX/52281

ASSET NO: various

| ITEM NO | FAULT DISCRPTION | ITEM TOTAL | MEASURE UNIT | UNIT RATE | ITEM AMOUNT |
|---------|------------------|------------|--------------|-----------|-------------|
|---------|------------------|------------|--------------|-----------|-------------|

PRELIMINARY AND GENERAL

P and G shall include all cost not directly relate to a specific item on the schedule of prices and rates. All items not specifically mentioned in the Schedule of Rates and prices and form part of contractor's requirements such as cost of stationery, as well as establishment of workers on site and removal of site establishment, it will also include the handing over of the site to the contractor and the handing back of the site after completion of work .

P + G

RISK AND SAFETY

RISK ASSESSMENTAND SAFETY INDUCTION

Cost for the risk assessment must include a full identification of the risks before the work starts and the necessary equipment, appropriate precautions and systems of work must be provided and Implemented.

TOTAL

Cost for the risk assessment and safety include complete compliance with the current Occupational Health Safety Act.

Included in risk and safety, The standardised Transnet Freight Rail Induction shall be given to all staff of all contractors at the start of each project and the contractors shall send all his staff that will work on the Transnet Freight Rail site to the induction on the date as agreed on between TFR Project manager and the contractor.

"PREVIEW COPY ONLY"

Respondent's signature: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**TRANSNET LIMITED**

(Registration no. 1990/000900/30)

**SAFETY ARRANGEMENTS AND PROCEDURAL COMPLIANCE  
WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT  
(ACT 85 OF 1993) AND APPLICABLE REGULATIONS****1. General**

- 1.1 The Contractor and Transnet 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 Technical Officer 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;
  - (c) 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, Technical Officer 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 Technical Officer. 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 Technical Officer.
- 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 Technical Officer 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 Technical Officer 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 Technical Officer 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.
- 5.2 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;
  - (c) 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 Technical Officer 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 Technical Officer'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 Technical Officer'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 Technical Officer 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 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, Technical Officer, 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 health 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 Technical Officer 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 Technical Officer, 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 Technical Officer.
- 8.3 The Contractor shall hand over a consolidated health and safety file to the Technical Officer 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.

ANNEXURE 1

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: \_\_\_\_\_

PREVIEW COPY ONLY

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

12. Planned number of contractors on the construction site accountable to the principle contractor:

\_\_\_\_\_

13. Name(s) of contractors already chosen.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
**Principal Contractor**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Client**

\_\_\_\_\_  
**Date**

\* 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.

**PREVIEW COPY ONLY**

ANNEXURE 2

(COMPANY LETTER HEAD)

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

SECTION/REGULATION: \_\_\_\_\_

REQUIRED COMPETENCY: \_\_\_\_\_

In terms of \_\_\_\_\_ I, \_\_\_\_\_

representing the Employer) do hereby appoint \_\_\_\_\_

As the Competent Person on the premises at \_\_\_\_\_

(physical address) to assist in compliance with the Act and the applicable Regulations.

Your designated area/s is/are as follows :-

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date : \_\_\_\_\_

Signature :- \_\_\_\_\_

Designation :- \_\_\_\_\_

**“PREVIEW COPY ONLY”**

ACCEPTANCE OF DESIGNATION

I, \_\_\_\_\_ do hereby accept this Designation and acknowledge that I understand the requirements of this appointment.

Date : \_\_\_\_\_

Signature :- \_\_\_\_\_

Designation :- \_\_\_\_\_

ANNEXURE 3

(COMPANY LETTER HEAD)

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

## DECLARATION

In terms of the above Act I, \_\_\_\_\_ am personally assuming the duties and obligations as Chief Executive Officer, defined in Section 1 of the Act and in terms of Section 16(1), I will, as far as is reasonably practicable, ensure that the duties and obligations of the Employer as contemplated in the above Act are properly discharged.

*Signature :-* \_\_\_\_\_*Date :* \_\_\_\_\_

**"PREVIEW COPY ONLY"**

ANNEXURE 4

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

## SITE ACCESS CERTIFICATE

Access to : \_\_\_\_\_ (Area)  
 Name of Contractor/Builder :- \_\_\_\_\_  
 Contract/Order No.: \_\_\_\_\_

The contract works site/area described above are made available to you for the carrying out of associated works

In terms of your contract/order with  
 (company) \_\_\_\_\_

Kindly note that you are at all times responsible for the control and safety of the Works Site, and for persons under your control having access to the site.

As from the date hereof you will be responsible for compliance with the requirements of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended, and all conditions of the Contract pertaining to the site of the works as defined and demarcated in the contract documents including the plans of the site or work areas forming part thereof.

Signed : \_\_\_\_\_ Date : \_\_\_\_\_  
 TECHNICAL OFFICER

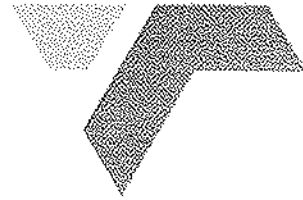
ACKNOWLEDGEMENT OF RECEIPT

Name of Contractor/Builder :- \_\_\_\_\_ I,  
 \_\_\_\_\_ do hereby acknowledge and accept the duties  
 and obligations in respect of the Safety of the site/area of Work in terms of the Occupational Health and  
 Safety Act; Act 85 of 1993.

Name : \_\_\_\_\_ Designation : \_\_\_\_\_

Signature : \_\_\_\_\_ Date : \_\_\_\_\_

TRANSNET



Transnet SOC Limited Registration Number 1990/00900/06

## TRANSNET SPECIFICATION

# E7/1 - SPECIFICATION FOR GENERAL WORK AND WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR HIGH VOLTAGE EQUIPMENT

(This specification shall be used in network operator contracts)

**"PREVIEW COPY ONLY"**

Circulation Not Restricted

© This document as a whole is protected by copyright. The information herein is the sole property of Transnet SOC Ltd. It may not be used, disclosed or reproduced in part or in whole in any manner whatsoever, except with the written permission of and in a manner permitted by the proprietors.

*(This page not to be issued with contract)*



**SPECIFICATION FOR GENERAL WORK AND WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR HIGH VOLTAGE EQUIPMENT**

Author: Project Manager  
Capital Program (Electrical)

G. Maposa



Approved: Senior Engineer  
Infra Engineering  
(Train Authorisation Systems)

J. van den Berg



Principal Engineer  
Infra Engineering (Track)

M. Marutla



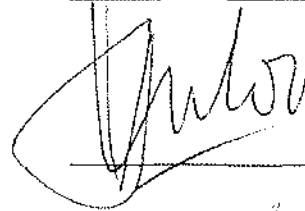
Principal Engineer  
Infra Engineering (Structures)

J. Homan



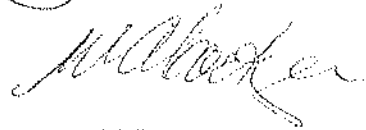
Principal Engineer  
Infra Engineering (Electrical)

J. Vosloo



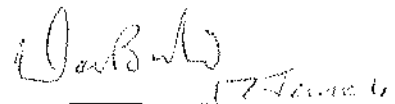
Principal Engineer  
Technology Management (Electrical)

W. Coetzee



Chief Engineer  
Transport Telecoms

D. Botha



Authorised: Chief Engineer  
Infrastructure Engineering

J. van Aardt



Date: May 2011

*(This page not to be issued with contract)*

TRANSNET



Transnet SOC Limited Registration Number 1990/00900/06

## TRANSNET SPECIFICATION

# E7/1 - SPECIFICATION FOR GENERAL WORK AND WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR HIGH VOLTAGE EQUIPMENT

(This specification shall be used in network operator contracts)

**"PREVIEW COPY ONLY"**

Circulation Not Restricted

© This document as a whole is protected by copyright. The information herein is the sole property of Transnet SOC Ltd. It may not be used, disclosed or reproduced in part or in whole in any manner whatsoever, except with the written permission of and in a manner permitted by the proprietors.

## CONTENTS

| <u>CLAUSE</u>  | <u>HEADING</u>   | <u>PAGE</u> |
|--|--|-------------|
| 1.0  | SCOPE  | 3           |
| 2.0  | DEFINITIONS  | 3           |
| <b>PART A - GENERAL SPECIFICATION</b>  |  |             |
| 3.0  | AUTHORITY OF OFFICERS OF TRANSNET  | 4           |
| 4.0  | CONTRACTOR'S REPRESENTATIVES AND STAFF   | 4           |
| 5.0  | OCCUPATIONS AND WORK PERMITS   | 4           |
| 6.0  | SPEED RESTRICTIONS AND PROTECTION  | 5           |
| 7.0  | ROADS ON THE NETWORK OPERATOR'S PROPERTY   | 5           |
| 8.0  | CLEARANCES   | 5           |
| 9.0  | STACKING OF MATERIAL   | 5           |
| 10.0   | EXCAVATION, SHORING, DEWATERING AND DRAINAGE   | 5           |
| 11.0   | FALSEWORK FOR STRUCTURES   | 6           |
| 12.0   | PILING   | 6           |
| 13.0   | UNDERGROUND SERVICES   | 6           |
| 14.0   | BLASTING AND USE OF EXPLOSIVES   | 6           |
| 15.0   | RAIL TROLLEYS  | 7           |
| 16.0   | SIGNAL TRACK CIRCUITS  | 7           |
| 17.0   | PENALTY FOR DELAYS TO TRAINS   | 7           |
| 18.0   | SURVEY BEACONS AND PEGS  | 7           |
| 19.0   | TEMPORARY LEVEL CROSSINGS  | 8           |
| 20.0   | COMPLETION OF THE WORKS  | 8           |
| 21.0   | PROTECTION OF PERSONS AND PROPERTY   | 9           |
| 22.0   | INTERFERENCE WITH THE NETWORK OPERATOR'S ASSETS AND WORK ON OPEN LINES                   | 10          |
| 23.0   | ACCESS, RIGHTS OF-WAY AND CAMPSITES  | 10          |
| 24.0   | SUPERVISION  | 10          |
| 25.0   | HOUSING OF EMPLOYEES   | 10          |
| 26.0   | OPTICAL FIBRE CABLE ROUTES   | 10          |
| <b>PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT</b> |  |             |
| 27.0   | GENERAL  | 11          |
| 28.0   | WORK ON BUILDINGS OR FIXED STRUCTURES  | 11          |
| 29.0   | WORK DONE ON OR OUTSIDE OF ROLLING STOCK, INCLUDING LOADING AND UNLOADING                | 11          |
| 30.0   | USE OF EQUIPMENT   | 12          |
| 31.0   | CARRYING AND HANDLING MATERIAL AND EQUIPMENT   | 12          |
| 32.0   | PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE AND TREES ETC.         | 12          |
| 33.0   | USE OF WATER   | 13          |
| 34.0   | USE OF CONSTRUCTION PLANT  | 13          |
| 35.0   | WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT                        | 13          |
| 36.0   | TRACTION RETURN CIRCUITS IN RAILS  | 13          |
| 37.0   | HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY THE NETWORK OPERATOR | 14          |

## 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.
- 3.2 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**

- 5.1 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.
- 5.3 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.
- 5.4 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.
- 5.6 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.

6.2 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. BBB0481):

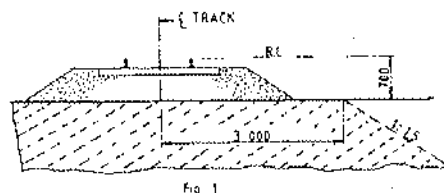
- Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
- Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
- Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
- Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)

## 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**

- 11.1 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**

- 13.1 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.
- 13.2 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**

- 14.1 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.
- 14.3 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.

14.9 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 clause 14.10, 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

15.1 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

16.1 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**
- 22.1 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.
- 22.3 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.

23.4 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.

24.4 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.

25.2 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.

**"PREVIEW COPY ONLY"**

**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.
- 29.5 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 than 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.
- 31.3 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

33.1 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.

34.2 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.

34.4 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.

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

END

**"PREVIEW COPY ONLY"**



HORIZONTAL CLEARANCES :  
1 065mm TRACK GAUGE

ANNEXURE 1  
SHEET 1 of 5



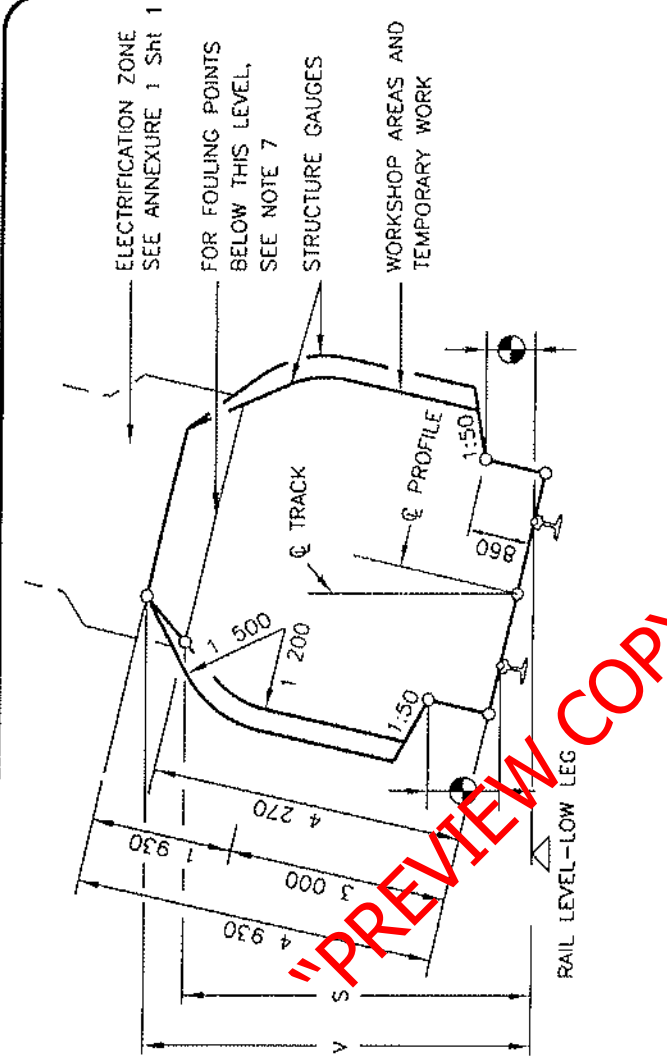
| RADIUS<br>(m) | WITH CANT |        | NO CANT |        | WITH CANT |        |
|---------------|-----------|--------|---------|--------|-----------|--------|
|               | H (mm)    | L (mm) | H & L   | B (mm) | C (mm)    | C (mm) |
| 90            | 2 730     | 3 090  | 2 780   | 1 130  | 2 100     | 2 100  |
| 100           | 2 700     | 3 030  | 2 750   | 1 140  | 2 050     | 2 050  |
| 120           | 2 650     | 2 970  | 2 700   | 1 160  | 2 010     | 2 010  |
| 140           | 2 620     | 2 920  | 2 660   | 1 175  | 1 990     | 1 990  |
| 170           | 2 590     | 2 870  | 2 630   | 1 190  | 1 970     | 1 970  |
| 200           | 2 570     | 2 820  | 2 600   | 1 205  | 1 950     | 1 950  |
| 250           | 2 550     | 2 790  | 2 580   | 1 230  | 1 920     | 1 920  |
| 300           | 2 540     | 2 760  | 2 560   | 1 250  | 1 900     | 1 900  |
| 350           | 2 530     | 2 730  | 2 540   | 1 270  | 1 890     | 1 890  |
| 400           | 2 520     | 2 710  | 2 530   | 1 290  | 1 875     | 1 875  |
| 500           | 2 510     | 2 680  | 2 520   | 1 320  | 1 850     | 1 850  |
| 600           | 2 500     | 2 660  | 2 510   | 1 340  | 1 830     | 1 830  |
| 800           | 2 490     | 2 620  | 2 500   | 1 365  | 1 790     | 1 790  |
| 1 000         | 2 480     | 2 600  | 2 490   | 1 380  | 1 760     | 1 760  |
| 1 200         | 2 480     | 2 580  | 2 490   | 1 200  | 1 730     | 1 730  |
| 1 500         | 2 480     | 2 550  | 2 480   | 1 415  | 1 700     | 1 700  |
| 2 000         | 2 480     | 2 500  | 2 480   | 1 440  | 1 660     | 1 660  |
| 3 000         | 2 470     | 2 470  | 2 470   | 1 500  | 1 600     | 1 600  |
| >5 000        | 2 460     | 2 450  | 2 460   | 1 600  | 1 600     | 1 600  |

REMARKS:

1. H AND B IS THE REQUIRED HORIZONTAL CLEARANCE ON THE HIGH LEG OF THE CURVE BASED ON MINIMUM CANT.
2. L AND C IS THE REQUIRED HORIZONTAL CLEARANCE ON THE LOW LEG OF THE CURVE BASED ON MAXIMUM CANT.
3. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
4. FOR WORKSHOP AREAS AND TEMPORARY WORK, CLEARANCES AND L MAY BE REDUCED BY 300mm.
5. SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES. H L
6. ALSO REFER TO REMARKS 4 TO 8 OF ANNEXURE 1 SHEET 2.
7. USE SMALLER RADIUS IF RADIUS INSBETWEEN

VERTICAL CLEARANCES :  
1 065mm TRACK GAUGE

ANNEXURE 1  
SHEET 2 of 5



| LOCATION  | NOT ELECTRIFIED | ELECTRIFIED (PRESENT OR FUTURE) |        |
|---|-----------------|---------------------------------|--------|
|   |                 | 3kV & 25kV                      | 50kV   |
|   | S (mm)          | V (mm)                          | V (mm) |
|   | 100             | 5 050                           | 5 400  |
|   | 300             | 5 020                           | 5 370  |
|   | 600             | 5 000                           | 5 350  |
|   | 1 000           | 4 990                           | 5 340  |
|   | 1 500           | 4 960                           | 5 310  |
|   | 2 000           | 4 940                           | 5 290  |
|   | >3 000          | 4 930                           | 5 280  |
| * OVER OR NEAR POINTS AND CROSSING IF REQUIRED BY ELECTRICAL IRRESPECTIVE OF RADIUS |                 | 5 650                           | 6 000  |

ALL AREAS OTHER THAN THOSE INDICATED BY \* BELOW

"PREVIEW COPY ONLY"

REMARKS:

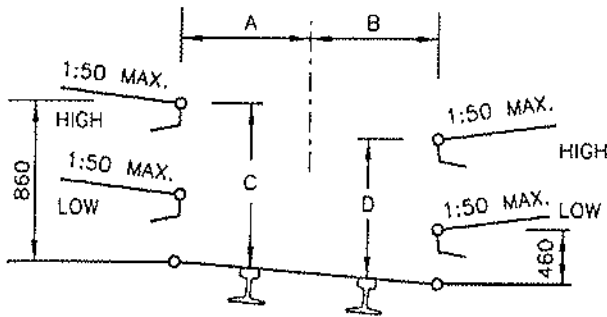
1. V IS THE REQUIRED VERTICAL CLEARANCE EXCEPT WHERE REDUCED CLEARANCE S APPLIES.
2. S IS THE MINIMUM VERTICAL CLEARANCE FOR STRUCTURES AND TEMPORARY WORK OVER NON-ELECTRIFIED LINES.
3. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
4. FOR APPLICATION AT CURVES
  - 4.1 APPLY INCREASED CLEARANCES FOR CURVES TO POINTS 3m BEYOND THE ENDS OF THE CIRCULAR CURVE.
  - 4.2 REDUCE CLEARANCES AT A UNIFORM RATE OVER THE REMAINDER OF THE TRANSITION CURVE.
  - 4.3 FOR NON-TRANSITIONED CURVES REDUCE AT A UNIFORM RATE OVER A LENGTH OF 15m ALONG STRAIGHTS.
5. NEW STRUCTURES: SEE BRIDGE CODE.
6. TUNNELS: SEE DRAWING BE 82-35.
7. FOULING POINTS: SEE CLAUSE 8.1.
8. CLEARANCES ARE BASED ON 15m BOGIE CENTRES AND 21.2m VEHICLE BODY LENGTH.
9. SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.

# CLEARANCES : PLATFORMS

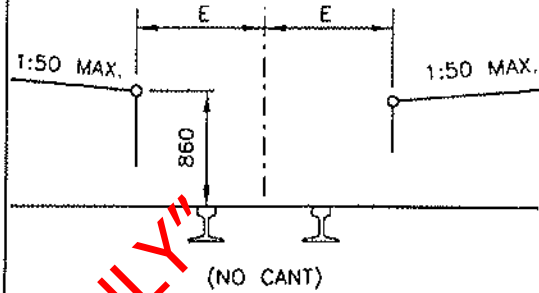
ANNEXURE 1  
SHEET 3 of 5

## PLATFORMS : TRACK GAUGE 1 065mm

### PASSENGERS



### GOODS

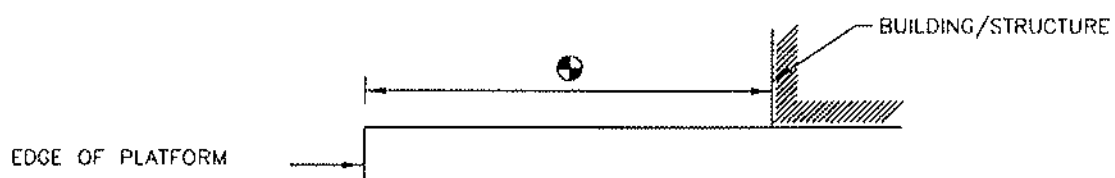


| RADIUS (m) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|------------|--------|--------|--------|--------|--------|
| 90         | 1 690  | 1 820  | 890    | 810    | 1 840  |
| 100        | 1 650  | 1 790  | 890    | 810    | 1 810  |
| 120        | 1 610  | 1 740  | 890    | 810    | 1 760  |
| 140        | 1 580  | 1 700  | 890    | 810    | 1 720  |
| 170        | 1 550  | 1 660  | 890    | 810    | 1 690  |
| 200        | 1 530  | 1 630  | 890    | 820    | 1 670  |
| 250        | 1 520  | 1 600  | 890    | 820    | 1 640  |
| 300        | 1 520  | 1 580  | 890    | 830    | 1 620  |
| 350        | 1 520  | 1 560  | 880    | 830    | 1 600  |
| 400        | 1 520  | 1 550  | 880    | 840    | 1 590  |
| 500        | 1 520  | 1 540  | 880    | 850    | 1 580  |
| 600        | 1 520  | 1 530  | 870    | 850    | 1 570  |
| 800        | 1 520  | 1 520  | 860    | 860    | 1 560  |
| 1 200      | 1 520  | 1 520  | 860    | 860    | 1 550  |
| 2 000      | 1 520  | 1 520  | 860    | 860    | 1 540  |
| 3 000      | 1 520  | 1 520  | 860    | 860    | 1 530  |
| STRAIGHT   | 1 520  | 1 520  | 860    | 860    | 1 520  |

#### REMARKS:

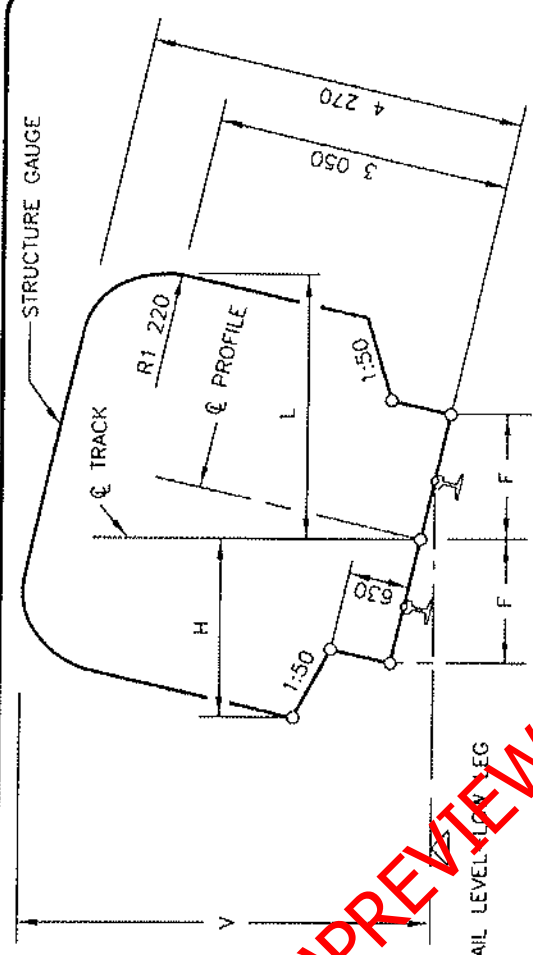
1. NO CANT TO BE APPLIED EXCEPT WHEN THE GOODS PLATFORM IS ON A RUNNING LINE.
2. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
3. 8m TO MAIN STATION-BUILDINGS AND 3m TO ALL OTHER STRUCTURES.
4. TOLERANCES : SEE CLAUSE 8.0.10.
5. ALWAYS USE THE SMALLEST RADIUS

## STRUCTURES ON PLATFORMS : 1 065mm AND 610mm TRACK GAUGE



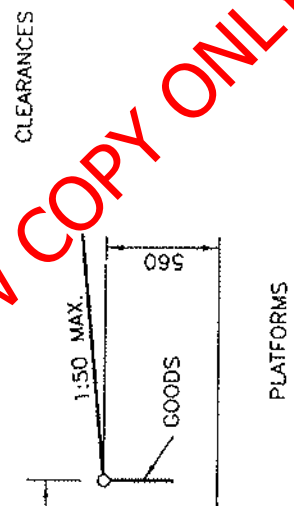
CLEARANCES : 610mm TRACK GAUGE

ANNEXURE 1  
SHEET 5 of 5



| RADIUS (m) | F (mm) |
|------------|--------|
| 50         | 1 550  |
| 60         | 1 510  |
| 80         | 1 460  |
| 100        | 1 430  |
| 120        | 1 410  |
| 140        | 1 390  |
| 170        | 1 380  |
| 200        | 1 370  |
| 250        | 1 360  |
| 300        | 1 350  |
| 500        | 1 330  |
| 1 000      | 1 320  |
| >2 000     | 1 320  |
| STRAIGHT   | 1 310  |

| RADIUS (m) | WITH CANT |        | NO CANT    |        |
|------------|-----------|--------|------------|--------|
|            | H (mm)    | L (mm) | H & L (mm) | V (mm) |
| 50         | 2 370     | 2 490  | 2 400      | 4 320  |
| 70         | 2 310     | 2 420  | 2 330      | 4 310  |
| 100        | 2 260     | 2 370  | 2 280      | 4 310  |
| 140        | 2 220     | 2 340  | 2 250      | 4 310  |
| 200        | 2 200     | 2 300  | 2 220      | 4 300  |
| 300        | 2 190     | 2 270  | 2 200      | 4 300  |
| 500        | 2 180     | 2 230  | 2 190      | 4 290  |
| 700        | 2 170     | 2 200  | 2 180      | 4 270  |
| 1 000      | 2 170     | 2 170  | 2 170      | 4 270  |
| >2 000     | 2 160     | 2 160  | 2 160      | 4 270  |



"PREVIEW COPY ONLY"

REMARKS:

- H IS THE MINIMUM HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
- L IS THE MINIMUM HORIZONTAL CLEARANCE ON THE INSIDE OF THE CURVE BASED ON MAXIMUM CANT.
- V IS THE MINIMUM VERTICAL CLEARANCE.
- FOR APPLICATION AT CURVES:
  - 1 APPLY INCREASED CLEARANCES FOR CURVES TO POINTS 2m BEYOND THE ENDS OF THE CIRCULAR CURVE.
  - 2 REDUCE CLEARANCES AT A UNIFORM RATE OVER THE REMAINDER OF THE TRANSITION CURVE.
  - 3 FOR NON-TRANSITIONED CURVES REDUCE AT A UNIFORM RATE OVER A LENGTH OF 18m ALONG STRAIGHTS.
- INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
- ALSO REFER TO REMARKS 5, 6 AND 7 OF ANNEXURE 1 SHEET 2.
- CLEARANCES ARE BASED ON 9 700mm BOGIE CENTRES AND 13 700mm VEHICLE BODY LENGTH.
- SEE ANNEXURE 1 SHEET 3 FOR STRUCTURES ON PLATFORMS.