



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

1. CAMPS

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

2. HOUSING

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

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

3. **WATER SUPPLY AND ABLUTION FACILITIES**

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

4. **SANITATION**

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

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

- 4.2 Latrines shall be so constructed, situated and maintained, and night soil so disposed of as to prevent access by animals, breeding of flies, pollution of streams and domestic water supplies, and other nuisances. Where a night soil removal service is operated by

a competent authority, use of such service shall be obligatory, and the use of pit latrines and atria pits will not be permitted.

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

5. **RATIONS**

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

TRANSNET LIMITED

(Registration no. 1990/000900/06)

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

- 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 the them, but at least once every month.
- 5.6 The Contractor shall stop any subcontractor from executing any construction work, which is not in accordance with the Contractor's, and/or subcontractor's Health and Safety Plan for the site or which poses a threat to the health and safety of persons.
- 5.7 The Contractor shall ensure that a copy of the Health and Safety Plan is available on site for inspection by an inspector, 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: _____

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.

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 :-** _____**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 : _____



GENERAL TENDER CONDITIONS - SERVICES

FORM CSS5

INDEX		
SUBJECT	CLAUSE NUMBER	PAGE NUMBER
GENERAL.....	1	2
LODGING OF TENDERS.....	2	2
USE OF TENDER FORMS.....	3	2
THE RAISING OF A CHARGE FOR PLANS, SPECIFICATIONS, AND TENDER FORMS	4	2
DEFAULTS BY RESPONDENTS.....	5	2
CURRENCY.....	6	4
EXCHANGE AND REMITTANCE.....	7	4
ACCEPTANCE OF TENDER OR QUOTATION.....	8	4
LAW GOVERNING CONTRACT.....	9	5
IDENTIFICATION.....	10	5
FORMAL NOTIFICATION REGARDING NAME OF SUCCESSFUL RESPONDENT.....	11	5
UNAUTHORISED COMMUNICATION ABOUT TENDERS.....	12	5
CONTRACT DOCUMENTS.....	13	6
SECURITIES.....	14	6
PRICES SUBJECT TO CONFIRMATION.....	15	6
DELETION OF SERVICES EXCLUDED FROM OFFER/BID.....	16	6
ALTERATIONS MADE BY THE RESPONDENT TO TENDERED PRICES...	17	7
VALUE-ADDED TAX.....	18	7
TERMS AND CONDITIONS OF TENDER.....	19	7
IMPORTANT NOTICE TO RESPONDENTS REGARDING PAYMENT.....	20	7
PLANS, DRAWINGS, DIAGRAMS, SPECIFICATIONS AND DOCUMENTS..	21	8
VISITS TO FOREIGN COUNTRIES.....	22	8
TENDERS BY FOREIGN RESPONDENTS OR ON THEIR BEHALF.....	23	9

1. GENERAL

All tenders and subsequent contracts and orders shall be subject to the following procedures as laid down by Transnet Limited (hereinafter referred to as “Transnet”) and are to be strictly adhered to by any person or enterprise or company responding to this tender (hereinafter referred to as “Respondents” or the “Respondent”).

2. LODGING OF TENDER

- 2.1 Tenders shall be lodged with Transnet no later than the closing date and time specified for the receipt thereof, in accordance with the directions issued with tender documents.
- 2.2 Tenders shall be transmitted in a sealed envelope and placed in the Tender Box at a venue stipulated in the Request for Tender (RFT) or Request for Proposal (RFP) or Request for Quotation (RFQ) (collectively “Tender Documents”), with the tender number and subject endorsed on the left hand bottom corner of the envelope.

3. USE OF TENDER FORMS

Where special forms are issued by Transnet for the submission of tenders, Respondents are required to submit their tenders by completion of the appropriate sections on such official forms and not on office stationery bearing their own special conditions of tender; non-compliance with this conditions may result in the rejection of a tender.

4. THE RAISING OF A CHARGE FOR PLANS, SPECIFICATIONS AND TENDER FORMS

- 4.1 A non-refundable charge may be raised for Tender Documents, depending on the nature, magnitude and value of technical information supplied.
- 4.2 If any of the drawings and specifications referred to in Tender Documents are the official publications of recognised standardising bodies, copies of such drawings and specifications shall be acquired by Respondents at their own expense.

5. DEFAULTS BY RESPONDENTS

- 5.1 If the Respondent, after it has been notified of the acceptance of its tender/quotation fails to:
 - (a) enter into a formal contract when called upon to do so in terms of clause 13 (*Contract Documents*), within such period as Transnet may specify; or
 - (b) accept an order in terms of the tender or quotation; or
 - (c) when called upon to do so, furnish satisfactory security of the fulfilment of the contract in terms of clause 14 (*Securities*);

Transnet may, in any such case, without prejudice to any other legal remedy which it may have, proceed to accept any other tender or quotation or, if it is necessary to do so, call for

Respondent's Signature

Date & Company Stamp

tenders or quotations afresh, and may recover from the defaulting Respondent any additional expense incurred by it in calling for new offers or in accepting a higher offer.

5.2 If any Respondent, who has submitted a tender or quotation, concluded a contract with Transnet (hereinafter referred to as "the Supplier"), or in the capacity of agent or subcontractor has been associated with such tender or contract -

- (a) has withdrawn such tender/quotation after the advertised date and hour for the receipt of tenders; or
- (b) has, after having been notified of the acceptance of its tender or quotation, failed or refused to sign a contract when called upon to do so in terms of any condition forming part of the tender documents; or
- (c) has carried out any contract resulting from such tender or quotation in an unsatisfactory manner or has breached any condition of such contract; or
- (d) has offered, promised or given a bribe in relation to the obtaining or the execution of such contract; or
- (e) has acted in a fraudulent or improper manner or in bad faith towards Transnet or any government department or towards any public body, company or person; or
- (f) has made any incorrect statement in the affidavit or certificate referred to in clause 11 (*Formal Notification Regarding Name of Successful Respondent*) and is unable to prove to the satisfaction of Transnet that
 - (i) it made the statement in good faith honestly believing it to be correct; and
 - (ii) before making such statement, it took all reasonable steps to satisfy itself of its correctness; or
- (g) caused Transnet damage, or to incur costs in order to meet the Supplier's requirements which could not be recovered from the Supplier;

then a tender from any such Respondent shall be disqualified and the person, enterprise or company (including any directors) shall, subject to clause 5.3 below, be disqualified from tendering for any Transnet business.

5.3 Any person or enterprise or company against whom a decision has been given under the provisions of sub-clauses 5.2(b), 5.2(d) or 5.2(e) above, may make representations to the Chief Operating Officer of Transnet Group, whose decision shall be final.

5.4 Any disqualification imposed upon any person or enterprise or company, unless Transnet determines otherwise, shall apply to any other enterprise under the same or different names of disqualified persons or enterprise or company (or associates thereof) and shall for avoidance of doubt also be applied to any agent or employee of the person or enterprise or company concerned.

Respondent's Signature

Date & Company Stamp

6. CURRENCY

Prices or fees must be quoted in the currency of the Republic of South Africa in respect of local Services. Prices or fees in any other currency may be rejected by Transnet save where such price is quoted by a foreign Respondent.

7. EXCHANGE AND REMITTANCE

The Respondent should note that where the whole or a portion of the contract or order value is to be remitted overseas, Transnet shall, if requested to do so by the Supplier, effect payment overseas directly to the foreign principal or service provider of such percentage of the contract or order value as may be stipulated by the Respondent in its Tender Documents and any variation in the amount to be so paid, which may arise as a result of fluctuations in the rate of exchange involved, will be for the account of the Supplier.

7.1 The Respondent who desires to avail itself of the aforementioned facility must at the time of tendering furnish the information called for in the clause "Exchange and Remittance" of the Tender Documents and also furnish full details of the principals or service providers to whom payment is to be made.

7.2 The Supplier shall at its own cost obtain forward exchange cover on foreign currency to protect itself against any currency rate fluctuation risks for the duration of any resulting contract or order. Transnet will NOT accept any fluctuations in the rate of exchange at the time when payments are made.

Transnet will not recognise any claim for adjustment of the order and/or contract price under clause 7.2 above, if the increase in price arises after the date on which the Services were to be delivered, as set out in the order and/or contract, or any subsequent agreement between the parties.

8. ACCEPTANCE OF TENDER OR QUOTATION

8.1 Transnet does not bind itself to accept the lowest or any tender or quotation nor will it give any reasons for the rejection of a tender or quotation. Transnet reserves the right to accept any tender in whole or in part.

8.2 Upon the acceptance of a tender or quotation by Transnet, the parties shall be bound by these General Tender Conditions and the Standard Terms and Conditions of Contract (Form US7 - Services).

8.3 Where the acceptance by Transnet of the Respondent's offer/bid is delivered by letter, the South African Post Office shall be regarded as the agent of Transnet and delivery of such notice of acceptance to the South African Post Office shall be considered as delivery to the Respondent.

Respondent's Signature

Date & Company Stamp

- 8.4 Where the Respondent has been informed by Transnet per facsimile message of the acceptance of its tender or quotation, the acknowledgement of receipt transmitted by its facsimile machine shall be regarded as proof of delivery to the Respondent.

9. LAW GOVERNING CONTRACT

The law of the Republic of South Africa shall govern the contract created by the acceptance of a tender/quotation. The *domicilium citandi et executandi* shall be a place in the Republic of South Africa to be specified by the Respondent in its tender/quotation at which all legal documents may be served on the Respondent who shall agree to submit to the jurisdiction of the courts of the Republic of South Africa. A foreign Respondent shall, therefore, state in its tender/quotation the name of its accredited agent in the Republic of South Africa who is empowered to sign any contract which may be entered into in the event of its tender/quotation being accepted and to act on its behalf in all matters relating to the contract.

10. IDENTIFICATION

If the Respondent is a company, the full names of the directors shall be stated in the tender/quotation. If the Respondent is a close corporation, the full names of the members shall be stated in the tender/quotation. If the Respondent is a partnership or an individual trading under a trade name, the full names of the partners or of such individual, as the case may be, shall be furnished.

11. FORMAL NOTIFICATION REGARDING NAME OF SUCCESSFUL RESPONDENT

In the case of tenders submitted to the Secretary of a Divisional Acquisition Council, unsuccessful Respondents will be formally notified of the names of successful Respondent(s) as soon as possible after the closing date for receipt of the tender in question. In the case of tenders or quotations submitted to Transnet Acquisition Council, unsuccessful Respondents shall, upon application, be furnished with similar information.

12. UNAUTHORISED COMMUNICATION ABOUT TENDERS

Where tenders are submitted to the Secretary of an Acquisition Council, Respondents may at any time communicate with the Secretary on any matter relating to its tender but, in the absence of written authority from the Secretary, no communication on a question affecting the subject of a tender shall take place between Respondents or other potential suppliers or any member of the Acquisition Council or official of Transnet during the period between the closing date for the receipt of the tender and the date of the notification of the successful Respondent(s). A tender, in respect of which any such unauthorised communication has occurred, may be disqualified.

Respondent's Signature

Date & Company Stamp

13. CONTRACT DOCUMENTS

The contract documents will comprise these General Tender Conditions and the Standard Terms and Conditions of Contract (Form US7 - Services) which will constitute the contract between the parties upon receipt by the Respondent of Transnet's letter of acceptance / intent, subject to all additional amendments and/or special conditions thereto as agreed to by the parties.

14. SECURITIES

- 14.1 The successful Respondent, when called upon to do so, shall provide security to the satisfaction of Transnet for the due fulfilment of a contract or order. Such security shall be in the form of a deed of suretyship furnished by an approved bank, building society, insurance or guarantee corporation carrying on business in South Africa.
- 14.2 The security may be applied in whole or part at the discretion of Transnet to make good any loss or damage which Transnet may incur in consequence of a breach of the contract or any part thereof.
- 14.3 Such security, if required, shall be an amount which will be stipulated in the Tender Documents.
- 14.4 For the purpose of clause 14.1 above, Transnet will supply "Deed of Suretyship" forms to the successful Respondent for completion and no guarantee in any other form will be accepted. Copies of such forms will be supplied to Respondents on request. For this purpose "Deed of Suretyship" forms will be provided which shall be completed and returned to Transnet or a designated official by the successful Respondent within 30 (thirty) days from the date of the letter of acceptance. No payment will be made until the forms, duly completed, are delivered to Transnet. Failure to return the Deed of Suretyship within the prescribed time shall, save where prior extension has been granted, entitle Transnet without notice to the Supplier to cancel the contract with immediate effect.
- 14.5 Additional costs incurred by Transnet necessitated by reason of default on the part of the Supplier in relation to the conditions of this clause 14 will be for the account of the Supplier.

15. PRICES SUBJECT TO CONFIRMATION

- 15.1 A tender or quotation with prices which are subject to confirmation will not be considered.
- 15.2 Tenders where firm prices are quoted for the duration of any resulting order and/or contract will receive precedence over prices which are subject to adjustment.

16. DELETION OF SERVICES EXCLUDED FROM OFFER/BID

The Respondent must delete Services for which it has not tendered or for which the price or fee has been included elsewhere in the tender.

Respondent's Signature

Date & Company Stamp

17. ALTERATIONS MADE BY THE RESPONDENT TO TENDERED PRICES

All alterations made by the Respondent to its tendered price(s) prior to the submission of its Tender Documents must be done by deleting the incorrect figures and words where required and by inserting the correct figures and words against the items/Services concerned. All such alterations must be initialled by the person who signs the Tender Documents. Failure to observe this requirement may result in the particular item(s) or Services concerned being excluded in the matter of the award of the business.

18. VALUE-ADDED TAX

18.1 In respect of local Services, i.e. Services to be provided by a South African company, the prices or fees quoted by the Respondent are to be exclusive of Value-Added Tax (VAT) which must be shown separately at the standard rate on the Supplier's Tax Invoice.

18.2 In respect of Services to be provided by a foreign principal -

- (a) The invoicing by a local Supplier on behalf of its foreign principal represents a Service rendered by the principal, which is not subject to VAT;
- (b) The Supplier's Tax Invoice(s) for the local portion only (i.e. the "commission" for the Services rendered locally) must show the Value-Added Tax (VAT) separately at zero percent if the Services are in compliance with Section 11(2) of the VAT Act, 89 of 1991.

19. TERMS AND CONDITIONS OF TENDER

The Supplier shall adhere to the Standard Terms and Conditions of Contract as set out in Form US7 - Services), a copy of which is attached hereto. Should the Respondent find any conditions unacceptable, it should indicate which conditions are unacceptable and offer an alternative. Please note that any alternative offered shall be compared with acceptance of the Form US7 conditions or alternatives offered by other Respondents.

20. IMPORTANT NOTICE TO RESPONDENTS REGARDING PAYMENT

20.1 Method of Payment

- (a) The attention of the Respondent is directed to clause 10 (*Invoicing and Payment*) of Form US7 – Services, which sets out the conditions of payment on which tender price(s) shall be based.
- (b) However, in addition to the foregoing the Respondent is invited to submit offers based on alternative methods of payment and/or financing proposals.
- (c) The Respondent is required to give full particulars of the terms that will be applicable to its alternative offer(s) and the financial merits thereof will be evaluated and taken into consideration when the tender is adjudicated.

Respondent's Signature

Date & Company Stamp

- (d) The Respondent must, therefore, in the first instance, tender strictly in accordance with sub-clause 20.1(a) above. Failure to comply with sub-clause 20.1(a) above may preclude a tender from further consideration.

NOTE: The successful Respondent (the Supplier) shall, where applicable, be required to furnish a guarantee covering any advance payments.

20.2 Conditional Discount

Respondents offering prices which are subject to a conditional discount applicable for payment within a specific period are to note that the conditional period will be calculated as from the date of receipt by Transnet of the Supplier's month-end statement reflecting the relevant Tax Invoice(s) for payment purposes, provided the conditions of the order or contract have been fulfilled and the Tax Invoice is correct in all respects as referred to in the contract or order. Incomplete and/or incorrect Tax Invoices shall be returned and the conditional period will be recalculated from the date of receipt of the correct documents.

21. PLANS, DRAWINGS, DIAGRAMS, SPECIFICATIONS AND DOCUMENTS

Copyright in plans, drawings, diagrams, specifications and documents compiled by the Supplier for the purpose of contract work shall be governed by the terms and conditions detailed in clause 12 of Form US7 - Services (*Intellectual Property Rights*).

22. VISITS TO FOREIGN COUNTRIES

22.1 Respondents must furnish details in a covering letter if it is considered necessary that employees of Transnet should carry out inspection and/or review any operational Services at the premises of the successful Respondent (the Supplier) or its subcontractors overseas for the purpose of a product demonstration and/or final acceptance or for any other reason.

22.2 If the Respondent considers overseas visits to be necessary it must provide the following information in a covering letter in respect of each visit -

- (a) countries and places to be visited;
- (b) number of employees and disciplines involved;
- (c) number of man-days involved; and
- (d) motivation for the visit.

22.3 Transnet will make all arrangements with regard to booking of air journeys, hotel reservations, transport to and from airports, places of inspection or demonstration, etc. and all expenses will be for the account of Transnet.

22.4 Before a visit is undertaken, such as envisage in this clause 22, Transnet and the Supplier will agree in writing on the number of employees of Transnet that should undertake the visit and the number of man-days involved in the visit.

Respondent's Signature

Date & Company Stamp

23. TENDERS BY FOREIGN RESPONDENTS OR ON THEIR BEHALF

- 23.1 Tenders submitted by foreign principals may be forwarded direct by the principals to the Secretary of the Acquisition Council or to a designated official of Transnet according to whichever officer is specified in the Tender Documents, or may be so forwarded on the principal's behalf by its South African representative and/or agent provided that written proof is submitted that such representative / agent has been duly authorised to act in that capacity by the principal. Failure to submit such authorisation by the representative / agent shall disqualify the tender.
- 23.2 When legally authorised to prepare and submit tenders on behalf of their principals not domiciled in the Republic of South Africa, representatives and/or agents must compile the tenders in the names of such principals and sign them on behalf of the latter.
- 23.3 South African representatives and/or agents of successful foreign Respondents must when so required enter into a formal contract in the name of their principals and must sign such contracts on behalf of the latter. In every such case a legal Power of Attorney from their principals must be furnished to Transnet by the South African representative and/or agents authorising them to enter into and sign such contracts.
- (a) Such Powers of Attorney must comply with Government Notice No. 1160 of 27 June 1930 (and any amendments thereto) - "Rules of the Supreme Court of South Africa for the authentication of documents executed outside the Republic for use within the Republic."
 - (b) The Powers of Attorney must be signed by principals under the same title as used in the Tender Documents.
 - (c) On arrival within the Republic of South Africa these Powers of Attorney are to be completed in terms of Section 8(2) of the Stamp Duties Act No. 77 of 1968, or any amendment thereof.
 - (d) If a Power of Attorney held by the South African representative or agent includes matters of a general nature besides provision for the entering into and signing of contracts with Transnet, a notarially certified copy thereof should be furnished.
 - (e) The Power of Attorney must authorise the South African representative or agent to choose the *domicilium citandi et executandi* as provided for in clause 26 (*Addresses for Notices*) of the Standard Conditions of Contract, Form US7 - Services.
- 23.4 If payment is to be made in South Africa, the foreign Supplier (i.e. the principal, or its South African agents or representatives), must notify Transnet in writing whether -
- (a) For payment by cheque –

Respondent's Signature

Date & Company Stamp

- (i) cheques are to be drawn for payment to the credit of the foreign Supplier's account at a bank in South Africa, in which case the name and branch of such bank shall be furnished; or
 - (ii) cheques are to be made out in favour of the foreign Supplier and forwarded to its South African agent or representative, in which case such agent or representative must be duly authorised to sign the receipt of the cheque and discharge it on behalf of its principal.
- (b) For payment by electronic funds transfer (EFT) –
- (i) funds are to be transferred to the credit of the foreign Supplier's account at a bank in South Africa, in which case the name and branch of such bank shall be furnished; or
 - (ii) funds are to be transferred to the credit of its South African agent or representative, in which case the name and branch of such bank shall be furnished

23.5 The attention of the Respondent is directed to clause 14 above (*Securities*) regarding the provision of security for the fulfilment of contracts and orders and the manner and form in which such security is to be furnished.

oooo000oooo

Respondent's Signature

Date & Company Stamp



E7/1 (July 1998)

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

(This Specification shall be used in Transnet Contracts)

CONTENTS

<u>CLAUSE</u>	<u>DESCRIPTION</u>	<u>PAGE NO'S</u>
1.	<u>DEFINITIONS</u>	3
	<u>PART A - GENERAL SPECIFICATION</u>	
2.	Authority of officers of Transnet	4
3.	Contractor's representatives	4
4.	Occupations and work permits	4
5.	Speed restrictions and protection	5
6.	Roads on Transnet property	5
7.	Clearances	5
8.	Stacking of material	5
9.	Excavation, shoring, dewatering and drainage	5
10.	Falsework for structures	6
11.	Piling	6
12.	Underground services	6
13.	Blasting	6
14.	Rail trolleys	7
15.	Signal track circuits	7
16.	Penalty for delays to trains	7
	<u>PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT</u>	
17.	General	8
18.	Work on buildings of fixed structures	8
19.	Work done on or outside of rolling stock, including loading and unloading	8
20.	Use of equipment	9
21.	Carrying and handling material and equipment	10
22.	Precautions to be taken when erecting or removing poles, antennae and trees	10
23.	Use of water	10
24.	Use of construction plant	10
25.	Work performed under dead conditions under cover of a work permit	11
26.	Traction return circuits in rails	11
27.	Blasting	11
28.	High-voltage electrical equipment not maintained and/or operated by Transnet	11
	<u>ANNEXURES</u>	
1.	Horizontal clearances 1 065 mm gauge	
2.	Vertical clearances 1 065 mm gauge	
3.	Platform clearances	
4.	Clearances 610 mm gauge	

1

DEFINITIONS

The following definitions shall apply :

Authorised Person. A person whether an employee of Transnet or not, who has been specially authorised to undertake specific duties in terms of Freight Rail's publication SAFETY INSTRUCTIONS: HIGH-VOLTAGE ELECTRICAL EQUIPMENT, 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 Transnet to carry out work on its behalf.

Dead. Isolated and earthed.

Electrical Officer (Contracts). The person appointed in writing by the responsible Electrical Engineer in Transnet 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 Transnet 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 1 000 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 Transnet 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.

Project Manager. The person or juristic person appointed by Transnet 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 staff under his control to work on, over, under or adjacent to railway lines and in the vicinity of high-voltage electrical equipment.

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

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.

PART A - GENERAL SPECIFICATION**2. AUTHORITY OF OFFICERS OF TRANSNET**

- 2.1 The Contractor shall co-operate with the officers of Transnet and shall comply with all instructions issued and restrictions imposed with respect to the Works which bear on the existence and operation of Transnet's railway lines and high-voltage equipment.
- 2.2 Without limiting the generality of the provisions of 2.1, any duly authorised representative of Transnet, having identified himself, may stop the work if, in his opinion, the safe passage of trains or the safety of Transnet assets or any person is affected. **CONSIDERATIONS OF SAFETY SHALL TAKE PRECEDENCE OVER ALL OTHER CONSIDERATIONS.**

3. CONTRACTOR'S REPRESENTATIVES

- 3.1 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 Technical Officer with the names, addresses and telephone numbers of the representatives.
- 3.2 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. OCCUPATIONS AND WORK PERMITS

- 4.1 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 Technical Officer and at times to suit Transnet requirements.
- 4.2 The Contractor shall organise the Works in a manner, which will minimise the number and duration of occupations and work permits required.
- 4.3 Transnet 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.
- 4.4 The Contractor shall submit to the Technical Officer, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 14 days before they are required. Transnet does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 4.5 Transnet 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 4.6 to 4.8.
- 4.6 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.
- 4.7 When the Contractor is notified less than 2 hours before the schedule 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.
- 4.8 Reimbursement the Contractor for any loss of working time in terms of 4.6 and 4.7, 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 Technical Officer certifies that no other work on which the labour and plant could be employed was immediately available.
- 4.9 Before starting any work for which an occupation has been arranged, the Contractor shall obtain from the Technical Officer written confirmation of the date, time and duration of the occupation.

- 4.10 Before starting any work for which a work permit has been arranged, the Responsible Representative shall read and sign portion C of form No. T.1276 signifying that he is aware of the limits 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 T.1276 form, thereby acknowledging that he is aware that the electrical equipment is to be made "live". The Contractor shall advise all his workmen accordingly.

5. **SPEED RESTRICTIONS AND PROTECTION**

- 5.1 When speed restrictions are imposed by Transnet 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.
- 5.2 When the Technical Officer 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 Transnet's and the Contractor's personnel and assets, the public and including trains. Transnet will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Technical Officer, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in appendixes 1 to 4.
- 5.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction, which may be given by Transnet personnel providing protection.

6. **ROADS ON TRANSNET PROPERTY**

The provision of clause 25 of the E.5, General Conditions of Contract, or clause 23 of the E.5 (MW), General Conditions of Contract for Maintenance Works, shall apply to the use of existing roads on Transnet's property.

7. **CLEARANCES**

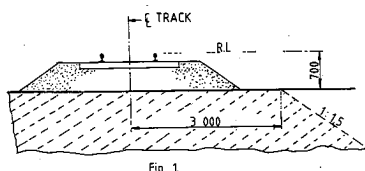
- 7.1 No temporary works shall encroach on the appropriate minimum clearances set out in Annexure 1 BE97-01 Sheets 1,2, 3 and 5 of 5.

8. **STACKING OF MATERIAL**

- 8.1 The Contractor shall not stack any material closer than 3 m from the centre line of any railway line without prior approval of the Technical Officer.

9. **EXCAVATION, SHORING, DEWATERING AND DRAINAGE**

- 9.1 Unless otherwise approved by the Technical Officer any excavation adjacent to a railway line shall not encroach on the hatched area shown in Figure 1.



- 9.2 The Contractor shall provide at his own cost any shoring, dewatering or drainage of any excavation unless otherwise stipulated elsewhere in the Contract.
- 9.3 Where required by the Technical Officer, 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.

9.4 The Contractor shall prevent ingress of water to the excavation but where water does enter, he shall dispose of it as directed by the Technical Officer.

9.5 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.

10. **FALSEWORK FOR STRUCTURES**

10.1 Drawings of falsework for the construction of any structure over, under or adjacent to any railway line shall be submitted to the Technical Officer 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.

10.2 After the falsework has been erected and before any load is applied, the Contractor shall submit to the Technical Officer 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 Technical Officer to proceed, the Contractor shall be entirely responsible for the safety and adequacy of the falsework.

11. **PILING**

11.1 The Technical Officer will specify the conditions under which piles may be installed on Transnet property.

12. **UNDERGROUND SERVICES**

12.1 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.

12.2 Any damage shall be reported immediately to the Technical Officer, or to the official in charge at the nearest station, or to the traffic controller in the case of centralised traffic control.

13. **BLASTING**

13.1 The provisions of clause 23 of the E.5, General Conditions of Contract or clause 21 of the E.5 (MW), General Conditions of Contract for Maintenance Work, shall apply to all blasting operations undertaken in terms of the Contract.

13.2 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).

13.3 Blasting within 500m of a railway line will only be permitted during intervals between trains. A person appointed by the Technical Officer, 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.

13.4 The flagmen described in 13.3, where provided by Transnet, are for the protection of trains and Transnet 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.

13.5 The person described in 13.3 will record in a book provided and retained by Transnet 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.

13.6 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 Technical Officer and the person who will do the blasting shall both sign the book whenever an entry described in 13.5 is made.

13.7 The terms of clause 27 hereof shall be strictly adhered to.

14. **RAIL TROLLEYS**

14.1 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 Technical Officer and under the conditions stipulated by him.

14.2 All costs in connection with such trolley working requested by the Contractor shall, unless otherwise agreed, be borne by the Contractor, excluding the costs of any train protection services normally provided free of charge by Transnet.

15. **SIGNAL TRACK CIRCUITS**

15.1 Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electrical current makes contact between rails of a railway line/lines.

15.2 No signal connections on track-circuited tracks shall be severed without the Technical Officer's knowledge and consent.

16. **PENALTY FOR DELAYS TO TRAINS**

16.1 If any trains are delayed by the Contractor and the Technical Officer is satisfied that the delay was avoidable, a penalty will be imposed on the Contractor of R5 000 per hour or part thereof for the period of delay, irrespective of the number of trains delayed.

PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT**17. GENERAL**

- 17.1 This specification is based on the contents of Freight Rail's publication SAFETY INSTRUCTIONS, HIGH-VOLTAGE ELECTRICAL EQUIPMENT, 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 Transnet, and the onus rests on the Contractor to ensure that he obtains a copy.
- 17.2 The Contractor's attention is drawn in particular to the contents of Part I, Sections 1 and 2 of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.3 The Safety Instructions : High-Voltage Electrical Equipment 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).
- 17.4 This specification must be read in conjunction with and not in lieu of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.5 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.
- 17.6 The Contractor shall regard all high-voltage equipment as live unless a work permit is in force.
- 17.7 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 Transnet staff where this is necessary.
- 17.8 No barrier shall be removed unless authorised by the Electrical Officer (Contracts).

18. WORK ON BUILDINGS OR FIXED STRUCTURES

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.

- 18.2 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.
- 18.3 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.

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

- 19.1 No person shall stand, climb or work whilst on any platform, surface or foothold higher than the normal unrestricted places of access, namely -
- (i) the floor level of trucks;
 - (ii) external walkways on diesel, steam and electric locomotives, steam heat vans, etc. and
 - (iii) walkways between coaches and locomotives.
- When in these positions, no person may raise his hands or any equipment or material he is handling

above his head.

- 19.2 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.
- 19.3 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.
- 19.4 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.
- 19.5 Where the conditions in 19.1 to 19.3 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 Freight Rail and at its costs, 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 in Transnet.

20. **USE OF EQUIPMENT**

20.1 Measuring Tapes and Devices

- 20.1.1 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.
- 20.1.2 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.
- 20.1.3 Special measuring devices longer than 2 metres such as survey staves and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer in Transnet, but these devices must not be used within 3 metres of live high-voltage equipment in rainy or wet conditions.
- 20.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in 20.1.1 to 20.1.3 are required.
- 20.1.5 The restrictions described in 20.1.1 to 20.1.3 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.

20.2 Portable Ladders

- 20.2.1 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.

21. CARRYING AND HANDLING MATERIAL AND EQUIPMENT

- 21.1 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 two or more persons so as to maintain it as nearly as possible in a horizontal position should carry such material. The utmost care must be taken to ensure that no part of the material comes within 3 metres of any live high-voltage equipment.
- 21.2 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.
- 21.3 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.

22. PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE, TREES ETC.

- 22.1 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.
- 22.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 22.3 The provisions of clauses 22.1 and 22.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

23. USE OF WATER

- 23.1 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.

24. USE OF CONSTRUCTION PLANT

- 24.1 "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.
- 24.2 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.
- 24.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 24.4 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.
- 24.5 Clauses 24.1 to 24.4 shall apply mutatis mutandis to the use of maintenance machines of any nature.

25. **WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT**

- 25.1 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.
- 25.2 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.

26. **TRACTION RETURN CIRCUITS IN RAILS**

- 26.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.
- 26.2 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 Transnet personnel.
- 26.3 The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Technical Officer at least 7 days written notice when removal of such bonds is necessary.
- 26.4 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.

27. **BLASTING**

- 27.1 The Contractor shall obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 14 days notice of his intention to blast.
- 27.2 No blasting shall be done in the vicinity of electrified lines unless a member of Transnet's electrical personnel is present.
- 27.3 The terms of clause 13 hereof shall be strictly adhered to.

28. **HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY TRANSNET**

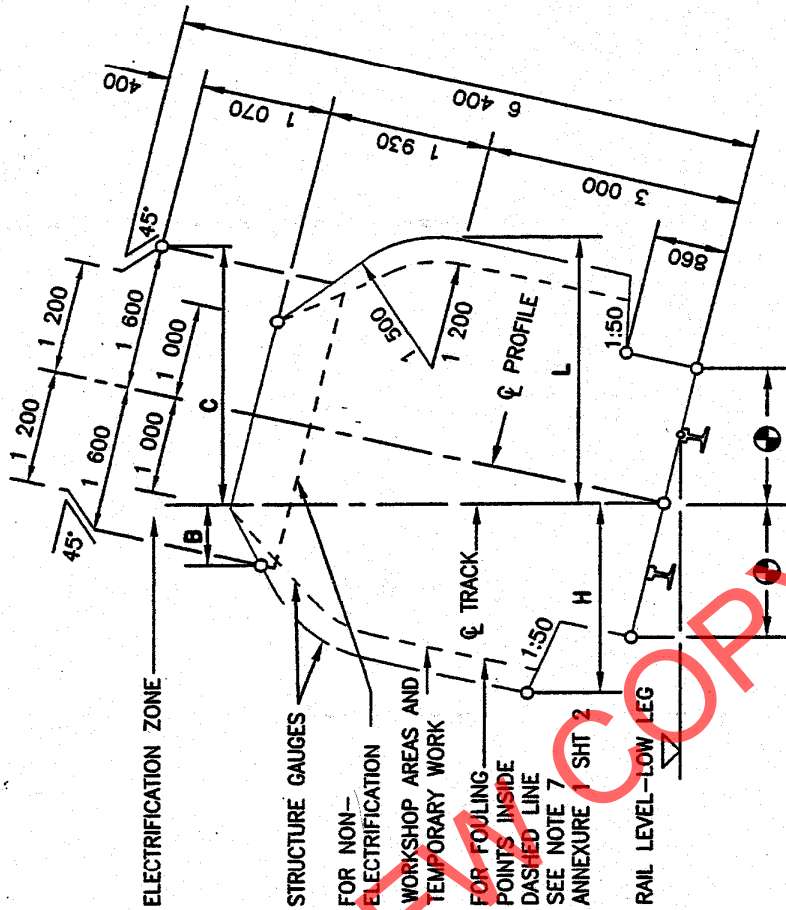
Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by Transnet, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

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.

ANNEXURE 1
SHEET 1 of 5
AMENDMENT

HORIZONTAL CLEARANCES :
1 065mm TRACK GAUGE



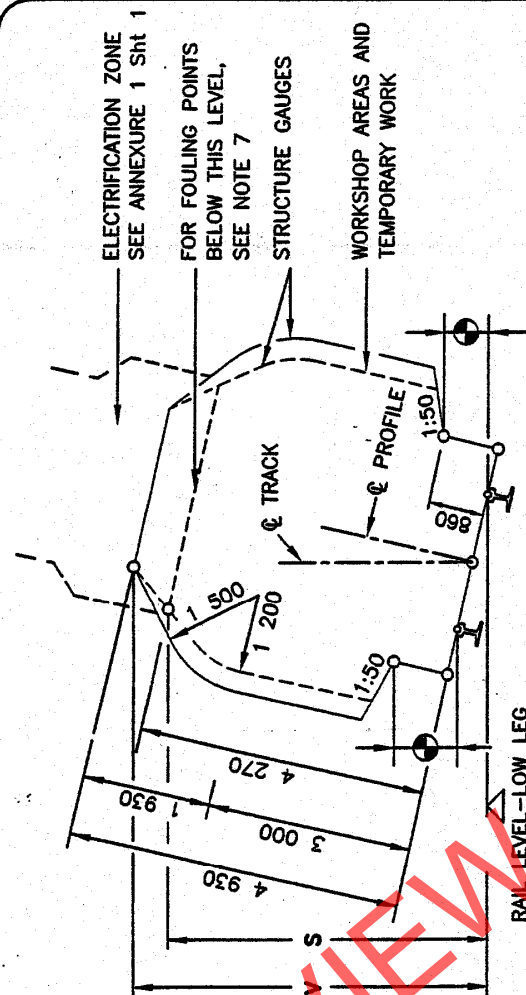
RADIUS (m)	WITH CANT		NO CANT		WITH CANT	
	H (mm)	L (mm)	H & L		B (mm)	C (mm)
90	2 730	3 090	2 780		1 130	2 100
100	2 700	3 030	2 750		1 140	2 050
120	2 650	2 970	2 700		1 160	2 010
140	2 620	2 920	2 660		1 175	1 990
170	2 590	2 870	2 630		1 190	1 970
200	2 570	2 820	2 600		1 205	1 950
250	2 550	2 790	2 580		1 230	1 930
300	2 540	2 760	2 560		1 250	1 900
350	2 530	2 730	2 540		1 270	1 890
400	2 520	2 710	2 530		1 290	1 875
500	2 510	2 680	2 520		1 320	1 850
600	2 500	2 660	2 510		1 340	1 830
800	2 490	2 620	2 500		1 365	1 790
1 000	2 480	2 600	2 490		1 380	1 760
1 200	2 480	2 580	2 490		1 200	1 730
1 500	2 480	2 550	2 480		1 415	1 700
2 000	2 480	2 500	2 480		1 440	1 660
3 000	2 470	2 470	2 470		1 500	1 600
>5 000	2 460	2 460	2 460		1 600	1 600

REMARKS:

1. H AND B IS THE REQUIRED HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
2. L AND C IS THE REQUIRED HORIZONTAL CLEARANCE ON THE INSIDE 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 H AND L MAY BE REDUCED BY 300mm.
5. SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.
6. ALSO REFER TO REMARKS 4 TO 8 OF ANNEXURE 1 SHEET 2.

ANNEXURE 1
SHEET 2 of 5
AMENDMENT

VERTICAL CLEARANCES :
1 065mm TRACK GAUGE



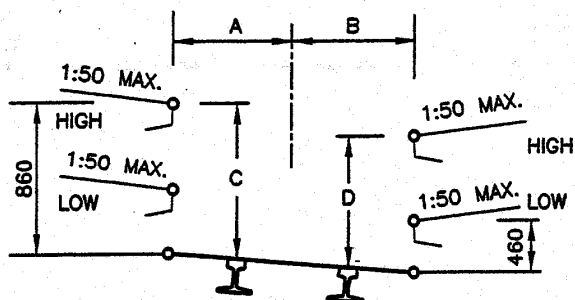
LOCATION	RADIUS (mm)	NOT ELECTRIFIED S (mm)	ELECTRIFIED (PRESENT OR FUTURE)	
			3kV & 25kV V (mm)	50kV V (mm)
* BELOW ALL AREAS OTHER THAN THOSE INDICATED BY	100	4 470	5 050	5 400
	300	4 410	5 020	5 370
	600	4 370	5 000	5 350
	1 000	4 350	4 990	5 340
	1 500	4 310	4 960	5 310
	2 000	4 290	4 940	5 290
	>3 000	4 270	4 930	5 280
* OVER OR NEAR POINTS AND CROSSING IF REQUIRED BY ELECTRICAL IRRESPECTIVE OF RADIUS			5 650	6 000

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


PASSENGERS



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

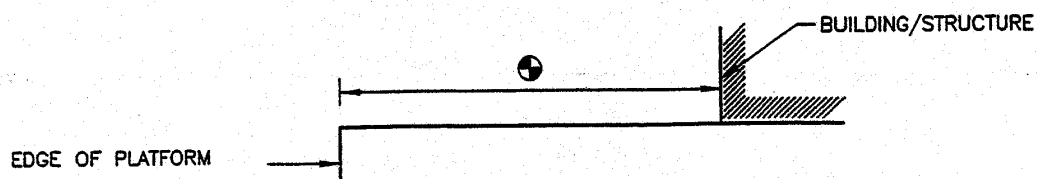
1. NO CANT TO BE APPLIED
EXCEPT WHEN THE GOODS
PLATFORM IS ON A
RUNNING LINE.

2. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.

3.  8m TO MAIN STATION--
BUILDINGS AND 3m TO
ALL OTHER STRUCTURES.

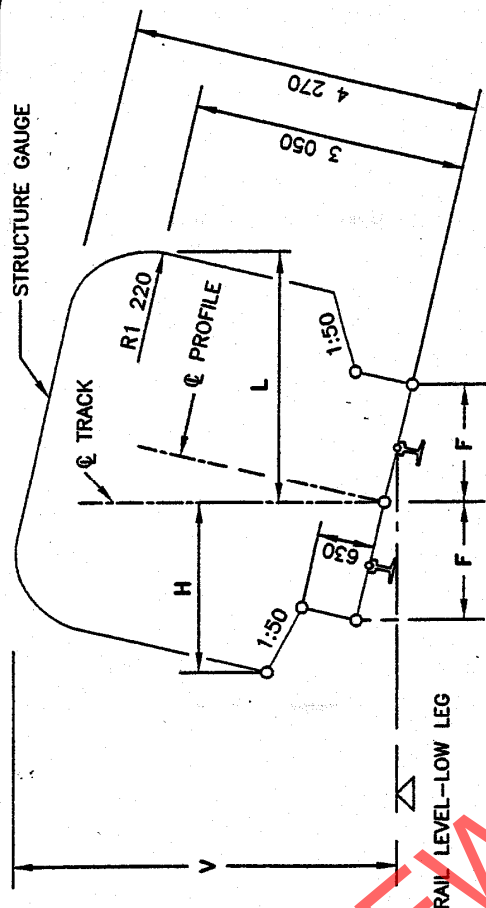
4. TOLERANCES : SEE
CLAUSE 8.0.10.

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

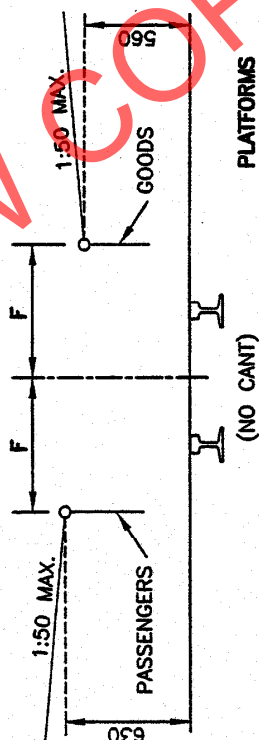


CLEARANCES : 610mm TRACK GAUGE

RADIUS (m)	WITH CANT		NO CANT	V (mm)
	H (mm)	L (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



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
600	1 330
1 000	1 320
>2 000	1 320
STRAIGHT	1 310



REMARKS:

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



E7/1 (July 1998)

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

(This Specification shall be used in Transnet Contracts)

CONTENTS

<u>CLAUSE</u>	<u>DESCRIPTION</u>	<u>PAGE NO'S</u>
1.	<u>DEFINITIONS</u>	3
	<u>PART A - GENERAL SPECIFICATION</u>	
2.	Authority of officers of Transnet	4
3.	Contractor's representatives	4
4.	Occupations and work permits	4
5.	Speed restrictions and protection	5
6.	Roads on Transnet property	5
7.	Clearances	5
8.	Stacking of material	5
9.	Excavation, shoring, dewatering and drainage	5
10.	Falsework for structures	6
11.	Piling	6
12.	Underground services	6
13.	Blasting	6
14.	Rail trolleys	7
15.	Signal track circuits	7
16.	Penalty for delays to trains	7
	<u>PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT</u>	
17.	General	8
18.	Work on buildings of fixed structures	8
19.	Work done on or outside of rolling stock, including loading and unloading	8
20.	Use of equipment	9
21.	Carrying and handling material and equipment	10
22.	Precautions to be taken when erecting or removing poles, antennae and trees	10
23.	Use of water	10
24.	Use of construction plant	10
25.	Work performed under dead conditions under cover of a work permit	11
26.	Traction return circuits in rails	11
27.	Blasting	11
28.	High-voltage electrical equipment not maintained and/or operated by Transnet	11
	<u>ANNEXURES</u>	
1.	Horizontal clearances 1 065 mm gauge	
2.	Vertical clearances 1 065 mm gauge	
3.	Platform clearances	
4.	Clearances 610 mm gauge	

1

DEFINITIONS

The following definitions shall apply :

Authorised Person. A person whether an employee of Transnet or not, who has been specially authorised to undertake specific duties in terms of Freight Rail's publication SAFETY INSTRUCTIONS: HIGH-VOLTAGE ELECTRICAL EQUIPMENT, 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 Transnet to carry out work on its behalf.

Dead. Isolated and earthed.

Electrical Officer (Contracts). The person appointed in writing by the responsible Electrical Engineer in Transnet 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 Transnet 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 1 000 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 Transnet 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.

Project Manager. The person or juristic person appointed by Transnet 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 staff under his control to work on, over, under or adjacent to railway lines and in the vicinity of high-voltage electrical equipment.

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

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.

PART A - GENERAL SPECIFICATION**2. AUTHORITY OF OFFICERS OF TRANSNET**

- 2.1 The Contractor shall co-operate with the officers of Transnet and shall comply with all instructions issued and restrictions imposed with respect to the Works which bear on the existence and operation of Transnet's railway lines and high-voltage equipment.
- 2.2 Without limiting the generality of the provisions of 2.1, any duly authorised representative of Transnet, having identified himself, may stop the work if, in his opinion, the safe passage of trains or the safety of Transnet assets or any person is affected. **CONSIDERATIONS OF SAFETY SHALL TAKE PRECEDENCE OVER ALL OTHER CONSIDERATIONS.**

3. CONTRACTOR'S REPRESENTATIVES

- 3.1 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 Technical Officer with the names, addresses and telephone numbers of the representatives.
- 3.2 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. OCCUPATIONS AND WORK PERMITS

- 4.1 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 Technical Officer and at times to suit Transnet requirements.
- 4.2 The Contractor shall organise the Works in a manner, which will minimise the number and duration of occupations and work permits required.
- 4.3 Transnet 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.
- 4.4 The Contractor shall submit to the Technical Officer, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 14 days before they are required. Transnet does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 4.5 Transnet 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 4.6 to 4.8.
- 4.6 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.
- 4.7 When the Contractor is notified less than 2 hours before the schedule 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.
- 4.8 Reimbursement the Contractor for any loss of working time in terms of 4.6 and 4.7, 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 Technical Officer certifies that no other work on which the labour and plant could be employed was immediately available.
- 4.9 Before starting any work for which an occupation has been arranged, the Contractor shall obtain from the Technical Officer written confirmation of the date, time and duration of the occupation.

- 4.10 Before starting any work for which a work permit has been arranged, the Responsible Representative shall read and sign portion C of form No. T.1276 signifying that he is aware of the limits 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 T.1276 form, thereby acknowledging that he is aware that the electrical equipment is to be made "live". The Contractor shall advise all his workmen accordingly.

5. **SPEED RESTRICTIONS AND PROTECTION**

- 5.1 When speed restrictions are imposed by Transnet 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.
- 5.2 When the Technical Officer 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 Transnet's and the Contractor's personnel and assets, the public and including trains. Transnet will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Technical Officer, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in appendixes 1 to 4.
- 5.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction, which may be given by Transnet personnel providing protection.

6. **ROADS ON TRANSNET PROPERTY**

The provision of clause 25 of the E.5, General Conditions of Contract, or clause 23 of the E.5 (MW), General Conditions of Contract for Maintenance Works, shall apply to the use of existing roads on Transnet's property.

7. **CLEARANCES**

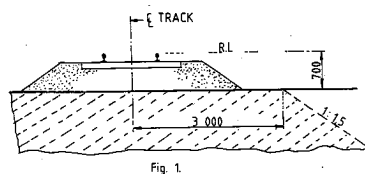
- 7.1 No temporary works shall encroach on the appropriate minimum clearances set out in Annexure 1 BE97-01 Sheets 1,2, 3 and 5 of 5.

8. **STACKING OF MATERIAL**

- 8.1 The Contractor shall not stack any material closer than 3 m from the centre line of any railway line without prior approval of the Technical Officer.

9. **EXCAVATION, SHORING, DEWATERING AND DRAINAGE**

- 9.1 Unless otherwise approved by the Technical Officer any excavation adjacent to a railway line shall not encroach on the hatched area shown in Figure 1.



- 9.2 The Contractor shall provide at his own cost any shoring, dewatering or drainage of any excavation unless otherwise stipulated elsewhere in the Contract.
- 9.3 Where required by the Technical Officer, 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.

9.4 The Contractor shall prevent ingress of water to the excavation but where water does enter, he shall dispose of it as directed by the Technical Officer.

9.5 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.

10. **FALSEWORK FOR STRUCTURES**

10.1 Drawings of falsework for the construction of any structure over, under or adjacent to any railway line shall be submitted to the Technical Officer 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.

10.2 After the falsework has been erected and before any load is applied, the Contractor shall submit to the Technical Officer 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 Technical Officer to proceed, the Contractor shall be entirely responsible for the safety and adequacy of the falsework.

11. **PILING**

11.1 The Technical Officer will specify the conditions under which piles may be installed on Transnet property.

12. **UNDERGROUND SERVICES**

12.1 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.

12.2 Any damage shall be reported immediately to the Technical Officer, or to the official in charge at the nearest station, or to the traffic controller in the case of centralised traffic control.

13. **BLASTING**

13.1 The provisions of clause 23 of the E.5, General Conditions of Contract or clause 21 of the E.5 (MW), General Conditions of Contract for Maintenance Work, shall apply to all blasting operations undertaken in terms of the Contract.

13.2 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).

13.3 Blasting within 500m of a railway line will only be permitted during intervals between trains. A person appointed by the Technical Officer, 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.

13.4 The flagmen described in 13.3, where provided by Transnet, are for the protection of trains and Transnet 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.

13.5 The person described in 13.3 will record in a book provided and retained by Transnet 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.

13.6 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 Technical Officer and the person who will do the blasting shall both sign the book whenever an entry described in 13.5 is made.

13.7 The terms of clause 27 hereof shall be strictly adhered to.

14. **RAIL TROLLEYS**

14.1 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 Technical Officer and under the conditions stipulated by him.

14.2 All costs in connection with such trolley working requested by the Contractor shall, unless otherwise agreed, be borne by the Contractor, excluding the costs of any train protection services normally provided free of charge by Transnet.

15. **SIGNAL TRACK CIRCUITS**

15.1 Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electrical current makes contact between rails of a railway line/lines.

15.2 No signal connections on track-circuited tracks shall be severed without the Technical Officer's knowledge and consent.

16. **PENALTY FOR DELAYS TO TRAINS**

16.1 If any trains are delayed by the Contractor and the Technical Officer is satisfied that the delay was avoidable, a penalty will be imposed on the Contractor of R5 000 per hour or part thereof for the period of delay, irrespective of the number of trains delayed.

PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT**17. GENERAL**

- 17.1 This specification is based on the contents of Freight Rail's publication SAFETY INSTRUCTIONS, HIGH-VOLTAGE ELECTRICAL EQUIPMENT, 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 Transnet, and the onus rests on the Contractor to ensure that he obtains a copy.
- 17.2 The Contractor's attention is drawn in particular to the contents of Part I, Sections 1 and 2 of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.3 The Safety Instructions : High-Voltage Electrical Equipment 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).
- 17.4 This specification must be read in conjunction with and not in lieu of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.5 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.
- 17.6 The Contractor shall regard all high-voltage equipment as live unless a work permit is in force.
- 17.7 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 Transnet staff where this is necessary.
- 17.8 No barrier shall be removed unless authorised by the Electrical Officer (Contracts).

18. WORK ON BUILDINGS OR FIXED STRUCTURES

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.

- 18.2 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.
- 18.3 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.

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

- 19.1 No person shall stand, climb or work whilst on any platform, surface or foothold higher than the normal unrestricted places of access, namely -
- (i) the floor level of trucks;
 - (ii) external walkways on diesel, steam and electric locomotives, steam heat vans, etc. and
 - (iii) walkways between coaches and locomotives.
- When in these positions, no person may raise his hands or any equipment or material he is handling

above his head.

- 19.2 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.
- 19.3 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.
- 19.4 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.
- 19.5 Where the conditions in 19.1 to 19.3 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 Freight Rail and at its costs, 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 in Transnet.

20. **USE OF EQUIPMENT**

20.1 Measuring Tapes and Devices

- 20.1.1 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.
- 20.1.2 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.
- 20.1.3 Special measuring devices longer than 2 metres such as survey staves and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer in Transnet, but these devices must not be used within 3 metres of live high-voltage equipment in rainy or wet conditions.
- 20.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in 20.1.1 to 20.1.3 are required.
- 20.1.5 The restrictions described in 20.1.1 to 20.1.3 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.

20.2 Portable Ladders

- 20.2.1 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.

21. CARRYING AND HANDLING MATERIAL AND EQUIPMENT

- 21.1 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 two or more persons so as to maintain it as nearly as possible in a horizontal position should carry such material. The utmost care must be taken to ensure that no part of the material comes within 3 metres of any live high-voltage equipment.
- 21.2 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.
- 21.3 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.

22. PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE, TREES ETC.

- 22.1 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.
- 22.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 22.3 The provisions of clauses 22.1 and 22.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

23. USE OF WATER

- 23.1 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.

24. USE OF CONSTRUCTION PLANT

- 24.1 "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.
- 24.2 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.
- 24.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 24.4 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.
- 24.5 Clauses 24.1 to 24.4 shall apply mutatis mutandis to the use of maintenance machines of any nature.

25. **WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT**

- 25.1 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.
- 25.2 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.

26. **TRACTION RETURN CIRCUITS IN RAILS**

- 26.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.
- 26.2 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 Transnet personnel.
- 26.3 The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Technical Officer at least 7 days written notice when removal of such bonds is necessary.
- 26.4 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.

27. **BLASTING**

- 27.1 The Contractor shall obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 14 days notice of his intention to blast.
- 27.2 No blasting shall be done in the vicinity of electrified lines unless a member of Transnet's electrical personnel is present.
- 27.3 The terms of clause 13 hereof shall be strictly adhered to.

28. **HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY TRANSNET**

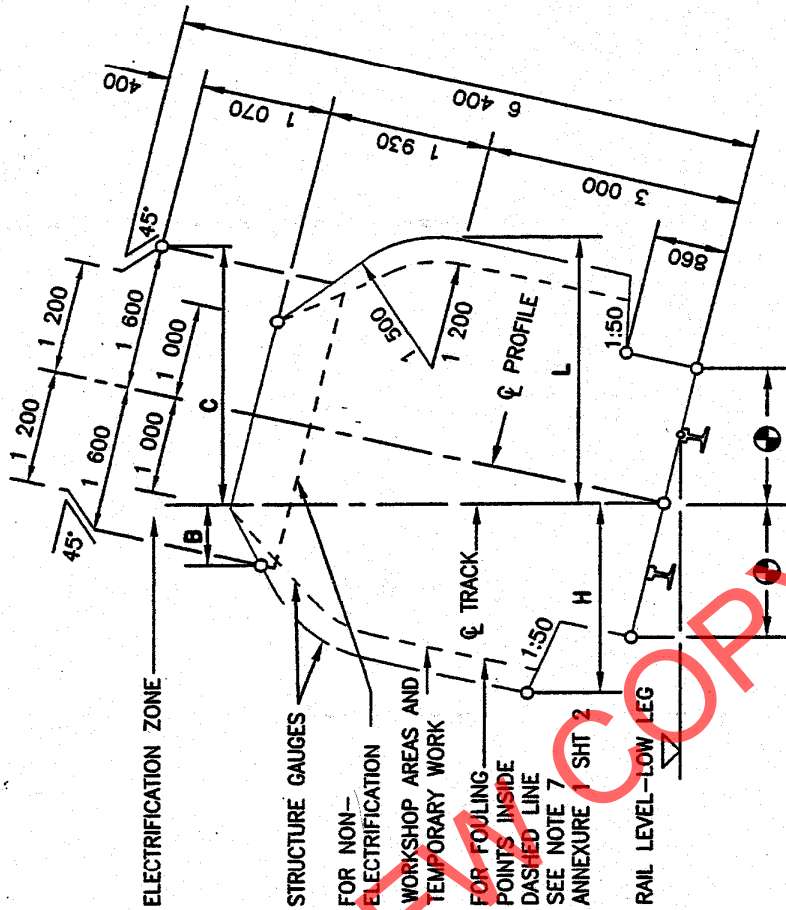
Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by Transnet, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

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.

ANNEXURE 1
SHEET 1 of 5
AMENDMENT

HORIZONTAL CLEARANCES :
1 065mm TRACK GAUGE



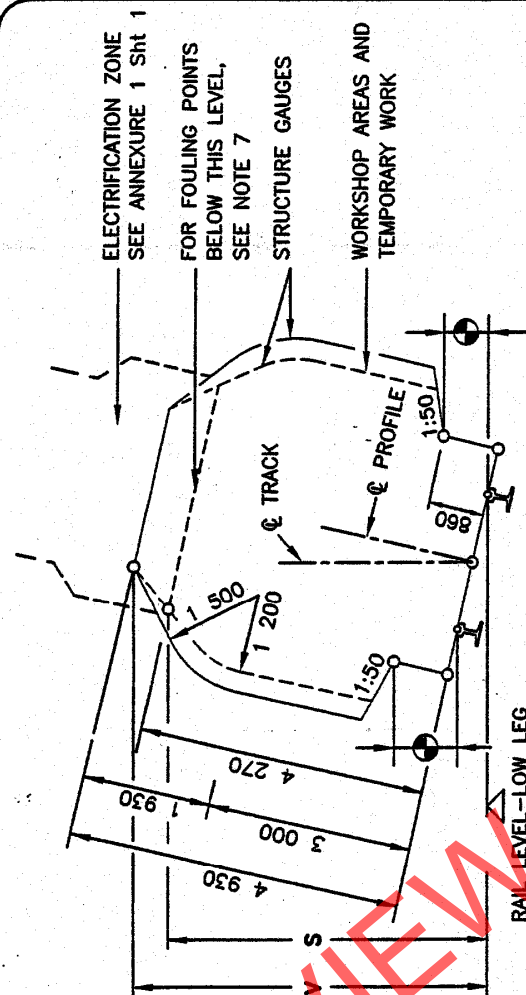
RADIUS (m)	WITH CANT		NO CANT		WITH CANT	
	H (mm)	L (mm)	H & L		B (mm)	C (mm)
90	2 730	3 090	2 780		1 130	2 100
100	2 700	3 030	2 750		1 140	2 050
120	2 650	2 970	2 700		1 160	2 010
140	2 620	2 920	2 660		1 175	1 990
170	2 590	2 870	2 630		1 190	1 970
200	2 570	2 820	2 600		1 205	1 950
250	2 550	2 790	2 580		1 230	1 930
300	2 540	2 760	2 560		1 250	1 900
350	2 530	2 730	2 540		1 270	1 890
400	2 520	2 710	2 530		1 290	1 875
500	2 510	2 680	2 520		1 320	1 850
600	2 500	2 660	2 510		1 340	1 830
800	2 490	2 620	2 500		1 365	1 790
1 000	2 480	2 600	2 490		1 380	1 760
1 200	2 480	2 580	2 490		1 200	1 730
1 500	2 480	2 550	2 480		1 415	1 700
2 000	2 480	2 500	2 480		1 440	1 660
3 000	2 470	2 470	2 470		1 500	1 600
>5 000	2 460	2 460	2 460		1 600	1 600

REMARKS:

1. H AND B IS THE REQUIRED HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
2. L AND C IS THE REQUIRED HORIZONTAL CLEARANCE ON THE INSIDE 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 H AND L MAY BE REDUCED BY 300mm.
5. SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.
6. ALSO REFER TO REMARKS 4 TO 8 OF ANNEXURE 1 SHEET 2.

ANNEXURE 1
SHEET 2 of 5
AMENDMENT

VERTICAL CLEARANCES :
1 065mm TRACK GAUGE



LOCATION	RADIUS (mm)	NOT ELECTRIFIED S (mm)	ELECTRIFIED (PRESENT OR FUTURE)	
			3kV & 25kV V (mm)	50kV V (mm)
ALL AREAS OTHER THAN THOSE INDICATED BY * BELOW	100	4 470	5 050	5 400
	300	4 410	5 020	5 370
	600	4 370	5 000	5 350
	1 000	4 350	4 990	5 340
	1 500	4 310	4 960	5 310
	2 000	4 290	4 940	5 290
	>3 000	4 270	4 930	5 280
* OVER OR NEAR POINTS AND CROSSING IF REQUIRED BY ELECTRICAL IRRESPECTIVE OF RADIUS			5 650	6 000

REMARKS:

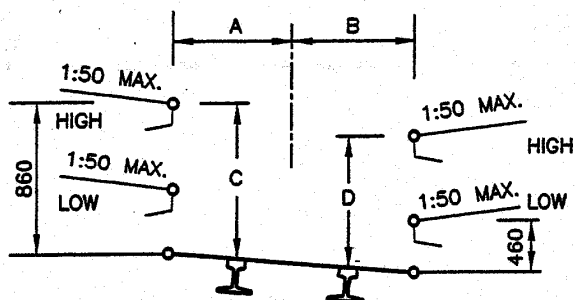
1. V IS THE REQUIRED VERTICAL CLEARANCE EXCEPT WHERE REDUCED CLEARANCE S APPLIES.
2. S IS THE MINIMUM VERTICAL CLEARANCE FOR STRUCTURES AND TEMPORARY WORK OVER NON-ELECTRIFIED LINES.
3. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
4. FOR APPLICATION AT CURVES
 - 4.1 APPLY INCREASED 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.

ANNEXURE 1
SHEET 3 of 5
AMENDMENT

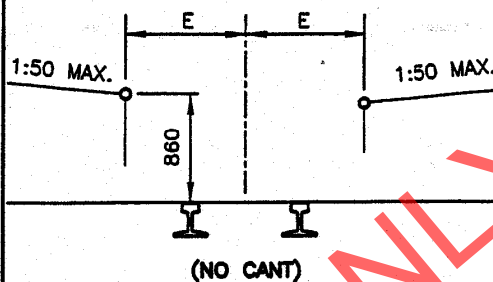
CLEARANCES : PLATFORMS

PLATFORMS : TRACK GAUGE 1 065mm

PASSENGERS



GOODS

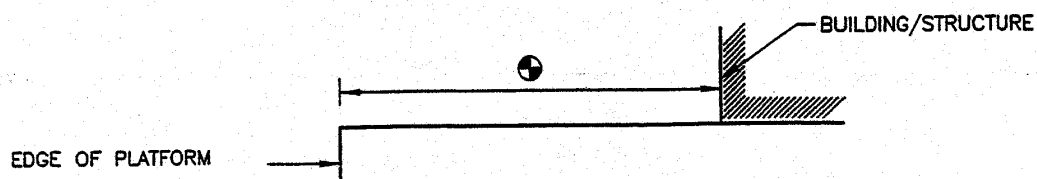


RADIUS (m)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
90	1 690	1 820	890	810	1 840
100	1 650	1 790	890	810	1 810
120	1 610	1 740	890	810	1 760
140	1 580	1 700	890	810	1 720
170	1 550	1 660	890	810	1 690
200	1 530	1 630	890	820	1 670
250	1 520	1 600	890	820	1 640
300	1 520	1 580	890	830	1 620
350	1 520	1 560	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:

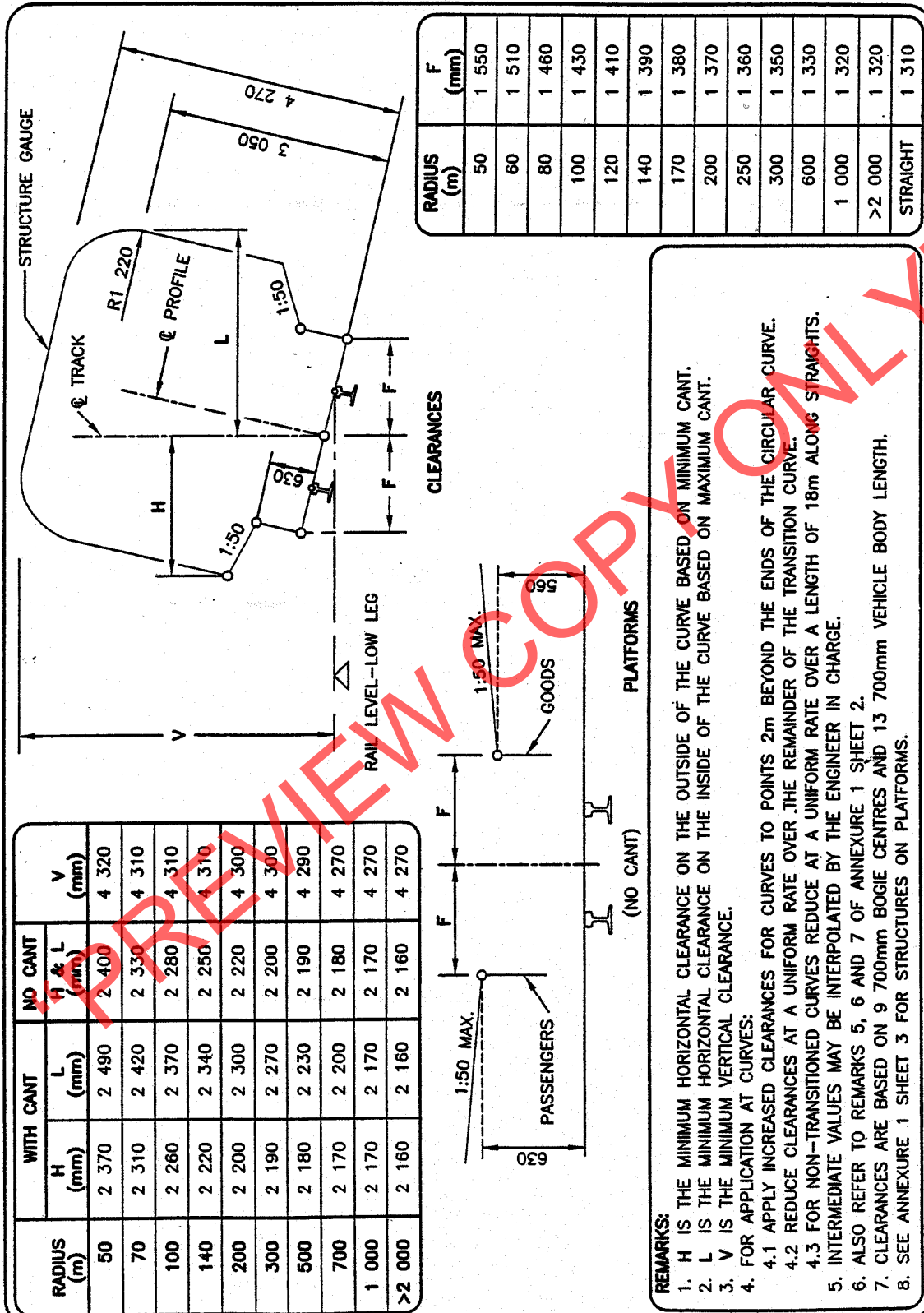
1. NO CANT TO BE APPLIED EXCEPT WHEN THE GOODS PLATFORM IS ON A RUNNING LINE.
2. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
3. 8m TO MAIN STATION-BUILDINGS AND 3m TO ALL OTHER STRUCTURES.
4. TOLERANCES : SEE CLAUSE 8.0.10.

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



ANNEXURE 1
SHEET 5 of 5
AMENDMENT

CLEARANCES : 610mm TRACK GAUGE





E7/1 (July 1998)

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

(This Specification shall be used in Transnet Contracts)

CONTENTS

<u>CLAUSE</u>	<u>DESCRIPTION</u>	<u>PAGE NO'S</u>
1.	<u>DEFINITIONS</u>	3
	<u>PART A - GENERAL SPECIFICATION</u>	
2.	Authority of officers of Transnet	4
3.	Contractor's representatives	4
4.	Occupations and work permits	4
5.	Speed restrictions and protection	5
6.	Roads on Transnet property	5
7.	Clearances	5
8.	Stacking of material	5
9.	Excavation, shoring, dewatering and drainage	5
10.	Falsework for structures	6
11.	Piling	6
12.	Underground services	6
13.	Blasting	6
14.	Rail trolleys	7
15.	Signal track circuits	7
16.	Penalty for delays to trains	7
	<u>PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT</u>	
17.	General	8
18.	Work on buildings of fixed structures	8
19.	Work done on or outside of rolling stock, including loading and unloading	8
20.	Use of equipment	9
21.	Carrying and handling material and equipment	10
22.	Precautions to be taken when erecting or removing poles, antennae and trees	10
23.	Use of water	10
24.	Use of construction plant	10
25.	Work performed under dead conditions under cover of a work permit	11
26.	Traction return circuits in rails	11
27.	Blasting	11
28.	High-voltage electrical equipment not maintained and/or operated by Transnet	11
	<u>ANNEXURES</u>	
1.	Horizontal clearances 1 065 mm gauge	
2.	Vertical clearances 1 065 mm gauge	
3.	Platform clearances	
4.	Clearances 610 mm gauge	

1

DEFINITIONS

The following definitions shall apply :

Authorised Person. A person whether an employee of Transnet or not, who has been specially authorised to undertake specific duties in terms of Freight Rail's publication SAFETY INSTRUCTIONS: HIGH-VOLTAGE ELECTRICAL EQUIPMENT, 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 Transnet to carry out work on its behalf.

Dead. Isolated and earthed.

Electrical Officer (Contracts). The person appointed in writing by the responsible Electrical Engineer in Transnet 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 Transnet 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 1 000 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 Transnet 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.

Project Manager. The person or juristic person appointed by Transnet 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 staff under his control to work on, over, under or adjacent to railway lines and in the vicinity of high-voltage electrical equipment.

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

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.

PART A - GENERAL SPECIFICATION**2. AUTHORITY OF OFFICERS OF TRANSNET**

- 2.1 The Contractor shall co-operate with the officers of Transnet and shall comply with all instructions issued and restrictions imposed with respect to the Works which bear on the existence and operation of Transnet's railway lines and high-voltage equipment.
- 2.2 Without limiting the generality of the provisions of 2.1, any duly authorised representative of Transnet, having identified himself, may stop the work if, in his opinion, the safe passage of trains or the safety of Transnet assets or any person is affected. **CONSIDERATIONS OF SAFETY SHALL TAKE PRECEDENCE OVER ALL OTHER CONSIDERATIONS.**

3. CONTRACTOR'S REPRESENTATIVES

- 3.1 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 Technical Officer with the names, addresses and telephone numbers of the representatives.
- 3.2 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. OCCUPATIONS AND WORK PERMITS

- 4.1 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 Technical Officer and at times to suit Transnet requirements.
- 4.2 The Contractor shall organise the Works in a manner, which will minimise the number and duration of occupations and work permits required.
- 4.3 Transnet 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.
- 4.4 The Contractor shall submit to the Technical Officer, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 14 days before they are required. Transnet does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 4.5 Transnet 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 4.6 to 4.8.
- 4.6 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.
- 4.7 When the Contractor is notified less than 2 hours before the schedule 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.
- 4.8 Reimbursement the Contractor for any loss of working time in terms of 4.6 and 4.7, 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 Technical Officer certifies that no other work on which the labour and plant could be employed was immediately available.
- 4.9 Before starting any work for which an occupation has been arranged, the Contractor shall obtain from the Technical Officer written confirmation of the date, time and duration of the occupation.

- 4.10 Before starting any work for which a work permit has been arranged, the Responsible Representative shall read and sign portion C of form No. T.1276 signifying that he is aware of the limits 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 T.1276 form, thereby acknowledging that he is aware that the electrical equipment is to be made "live". The Contractor shall advise all his workmen accordingly.

5. **SPEED RESTRICTIONS AND PROTECTION**

- 5.1 When speed restrictions are imposed by Transnet 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.
- 5.2 When the Technical Officer 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 Transnet's and the Contractor's personnel and assets, the public and including trains. Transnet will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Technical Officer, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in appendixes 1 to 4.
- 5.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction, which may be given by Transnet personnel providing protection.

6. **ROADS ON TRANSNET PROPERTY**

The provision of clause 25 of the E.5, General Conditions of Contract, or clause 23 of the E.5 (MW), General Conditions of Contract for Maintenance Works, shall apply to the use of existing roads on Transnet's property.

7. **CLEARANCES**

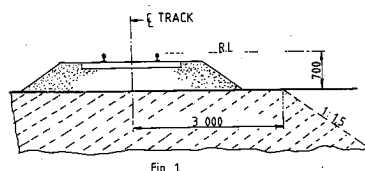
- 7.1 No temporary works shall encroach on the appropriate minimum clearances set out in Annexure 1 BE97-01 Sheets 1,2, 3 and 5 of 5.

8. **STACKING OF MATERIAL**

- 8.1 The Contractor shall not stack any material closer than 3 m from the centre line of any railway line without prior approval of the Technical Officer.

9. **EXCAVATION, SHORING, DEWATERING AND DRAINAGE**

- 9.1 Unless otherwise approved by the Technical Officer any excavation adjacent to a railway line shall not encroach on the hatched area shown in Figure 1.



- 9.2 The Contractor shall provide at his own cost any shoring, dewatering or drainage of any excavation unless otherwise stipulated elsewhere in the Contract.
- 9.3 Where required by the Technical Officer, 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.

9.4 The Contractor shall prevent ingress of water to the excavation but where water does enter, he shall dispose of it as directed by the Technical Officer.

9.5 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.

10. **FALSEWORK FOR STRUCTURES**

10.1 Drawings of falsework for the construction of any structure over, under or adjacent to any railway line shall be submitted to the Technical Officer 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.

10.2 After the falsework has been erected and before any load is applied, the Contractor shall submit to the Technical Officer 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 Technical Officer to proceed, the Contractor shall be entirely responsible for the safety and adequacy of the falsework.

11. **PILING**

11.1 The Technical Officer will specify the conditions under which piles may be installed on Transnet property.

12. **UNDERGROUND SERVICES**

12.1 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.

12.2 Any damage shall be reported immediately to the Technical Officer, or to the official in charge at the nearest station, or to the traffic controller in the case of centralised traffic control.

13. **BLASTING**

13.1 The provisions of clause 23 of the E.5, General Conditions of Contract or clause 21 of the E.5 (MW), General Conditions of Contract for Maintenance Work, shall apply to all blasting operations undertaken in terms of the Contract.

13.2 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).

13.3 Blasting within 500m of a railway line will only be permitted during intervals between trains. A person appointed by the Technical Officer, 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.

13.4 The flagmen described in 13.3, where provided by Transnet, are for the protection of trains and Transnet 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.

- 13.5 The person described in 13.3 will record in a book provided and retained by Transnet 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.
- 13.6 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 Technical Officer and the person who will do the blasting shall both sign the book whenever an entry described in 13.5 is made.
- 13.7 The terms of clause 27 hereof shall be strictly adhered to.
14. **RAIL TROLLEYS**
- 14.1 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 Technical Officer and under the conditions stipulated by him.
- 14.2 All costs in connection with such trolley working requested by the Contractor shall, unless otherwise agreed, be borne by the Contractor, excluding the costs of any train protection services normally provided free of charge by Transnet.
15. **SIGNAL TRACK CIRCUITS**
- 15.1 Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electrical current makes contact between rails of a railway line/lines.
- 15.2 No signal connections on track-circuited tracks shall be severed without the Technical Officer's knowledge and consent.
16. **PENALTY FOR DELAYS TO TRAINS**
- 16.1 If any trains are delayed by the Contractor and the Technical Officer is satisfied that the delay was avoidable, a penalty will be imposed on the Contractor of R5 000 per hour or part thereof for the period of delay, irrespective of the number of trains delayed.

PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT**17. GENERAL**

- 17.1 This specification is based on the contents of Freight Rail's publication SAFETY INSTRUCTIONS, HIGH-VOLTAGE ELECTRICAL EQUIPMENT, 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 Transnet, and the onus rests on the Contractor to ensure that he obtains a copy.
- 17.2 The Contractor's attention is drawn in particular to the contents of Part I, Sections 1 and 2 of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.3 The Safety Instructions : High-Voltage Electrical Equipment 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).
- 17.4 This specification must be read in conjunction with and not in lieu of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.5 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.
- 17.6 The Contractor shall regard all high-voltage equipment as live unless a work permit is in force.
- 17.7 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 Transnet staff where this is necessary.
- 17.8 No barrier shall be removed unless authorised by the Electrical Officer (Contracts).

18. WORK ON BUILDINGS OR FIXED STRUCTURES

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.

- 18.2 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.
- 18.3 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.

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

- 19.1 No person shall stand, climb or work whilst on any platform, surface or foothold higher than the normal unrestricted places of access, namely -
- (i) the floor level of trucks;
 - (ii) external walkways on diesel, steam and electric locomotives, steam heat vans, etc. and
 - (iii) walkways between coaches and locomotives.
- When in these positions, no person may raise his hands or any equipment or material he is handling

above his head.

- 19.2 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.
- 19.3 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.
- 19.4 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.
- 19.5 Where the conditions in 19.1 to 19.3 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 Freight Rail and at its costs, 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 in Transnet.

20. **USE OF EQUIPMENT**

20.1 Measuring Tapes and Devices

- 20.1.1 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.
- 20.1.2 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.
- 20.1.3 Special measuring devices longer than 2 metres such as survey staves and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer in Transnet, but these devices must not be used within 3 metres of live high-voltage equipment in rainy or wet conditions.
- 20.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in 20.1.1 to 20.1.3 are required.
- 20.1.5 The restrictions described in 20.1.1 to 20.1.3 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.

20.2 Portable Ladders

- 20.2.1 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.

21. CARRYING AND HANDLING MATERIAL AND EQUIPMENT

- 21.1 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 two or more persons so as to maintain it as nearly as possible in a horizontal position should carry such material. The utmost care must be taken to ensure that no part of the material comes within 3 metres of any live high-voltage equipment.
- 21.2 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.
- 21.3 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.

22. PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE, TREES ETC.

- 22.1 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.
- 22.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 22.3 The provisions of clauses 22.1 and 22.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

23. USE OF WATER

- 23.1 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.

24. USE OF CONSTRUCTION PLANT

- 24.1 "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.
- 24.2 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.
- 24.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 24.4 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.
- 24.5 Clauses 24.1 to 24.4 shall apply mutatis mutandis to the use of maintenance machines of any nature.

25. **WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT**

- 25.1 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.
- 25.2 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.

26. **TRACTION RETURN CIRCUITS IN RAILS**

- 26.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.
- 26.2 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 Transnet personnel.
- 26.3 The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Technical Officer at least 7 days written notice when removal of such bonds is necessary.
- 26.4 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.

27. **BLASTING**

- 27.1 The Contractor shall obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 14 days notice of his intention to blast.
- 27.2 No blasting shall be done in the vicinity of electrified lines unless a member of Transnet's electrical personnel is present.
- 27.3 The terms of clause 13 hereof shall be strictly adhered to.

28. **HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY TRANSNET**

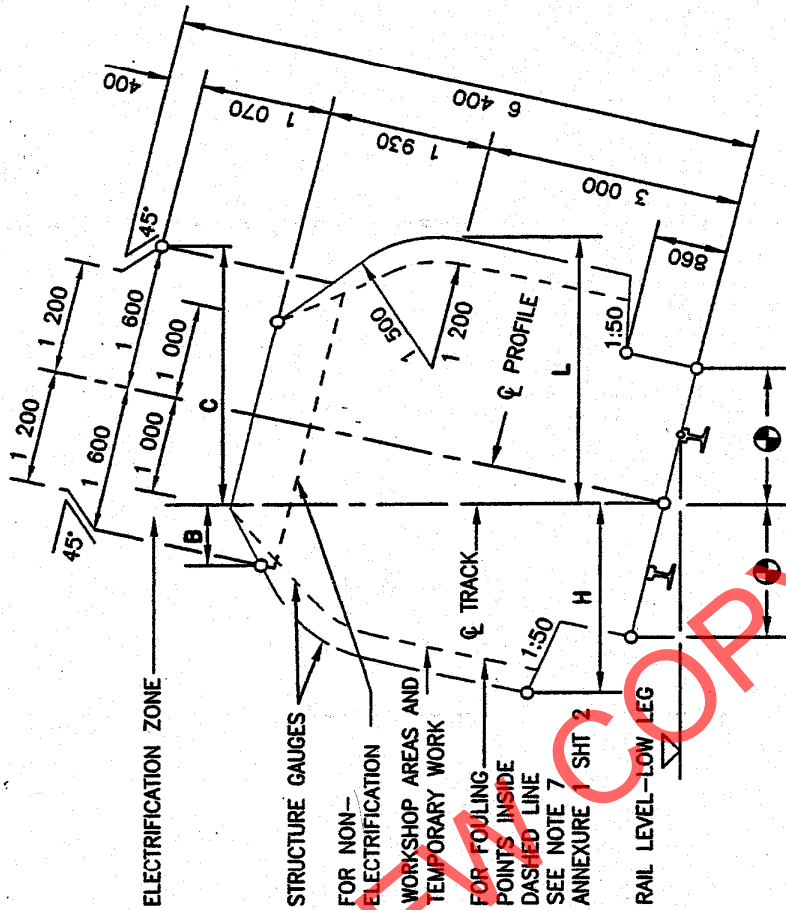
Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by Transnet, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

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.

ANNEXURE 1
SHEET 1 of 5
AMENDMENT

HORIZONTAL CLEARANCES :
1 065mm TRACK GAUGE



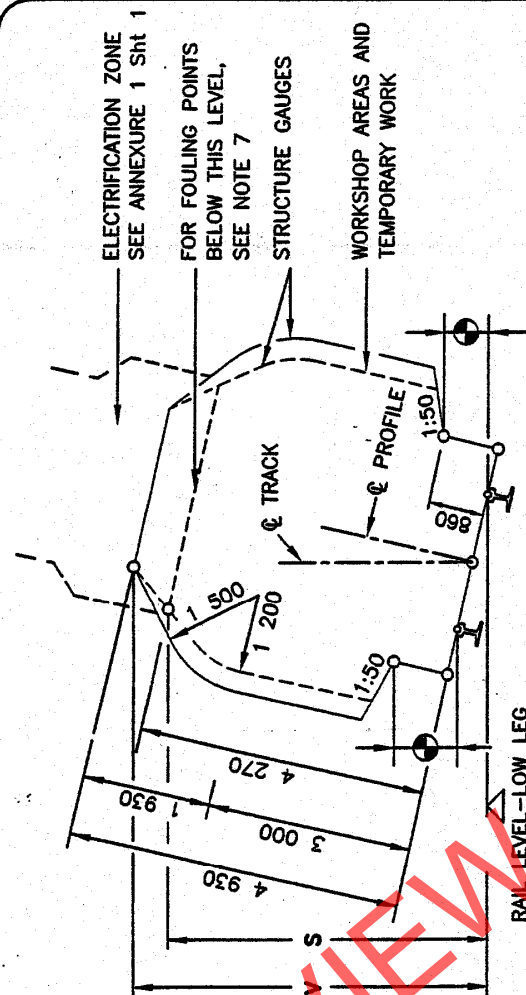
RADIUS (m)	WITH CANT		NO CANT		WITH CANT	
	H (mm)	L (mm)	H & L		B (mm)	C (mm)
90	2 730	3 090	2 780		1 130	2 100
100	2 700	3 030	2 750		1 140	2 050
120	2 650	2 970	2 700		1 160	2 010
140	2 620	2 920	2 660		1 175	1 990
170	2 590	2 870	2 630		1 190	1 970
200	2 570	2 820	2 600		1 205	1 950
250	2 550	2 790	2 580		1 230	1 930
300	2 540	2 760	2 560		1 250	1 900
350	2 530	2 730	2 540		1 270	1 890
400	2 520	2 710	2 530		1 290	1 875
500	2 510	2 680	2 520		1 320	1 850
600	2 500	2 660	2 510		1 340	1 830
800	2 490	2 620	2 500		1 365	1 790
1 000	2 480	2 600	2 490		1 380	1 760
1 200	2 480	2 580	2 490		1 200	1 730
1 500	2 480	2 550	2 480		1 415	1 700
2 000	2 480	2 500	2 480		1 440	1 660
3 000	2 470	2 470	2 470		1 500	1 600
>5 000	2 460	2 460	2 460		1 600	1 600

REMARKS:

1. H AND B IS THE REQUIRED HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
2. L AND C IS THE REQUIRED HORIZONTAL CLEARANCE ON THE INSIDE 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 H AND L MAY BE REDUCED BY 300mm.
5. SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.
6. ALSO REFER TO REMARKS 4 TO 8 OF ANNEXURE 1 SHEET 2.

ANNEXURE 1
SHEET 2 of 5
AMENDMENT

VERTICAL CLEARANCES :
1 065mm TRACK GAUGE



LOCATION	RADIUS (mm)	NOT ELECTRIFIED S (mm)	ELECTRIFIED (PRESENT OR FUTURE)	
			3kV & 25kV V (mm)	50kV V (mm)
* BELOW ALL AREAS OTHER THAN THOSE INDICATED BY	100	4 470	5 050	5 400
	300	4 410	5 020	5 370
	600	4 370	5 000	5 350
	1 000	4 350	4 990	5 340
	1 500	4 310	4 960	5 310
	2 000	4 290	4 940	5 290
	>3 000	4 270	4 930	5 280
* OVER OR NEAR POINTS AND CROSSING IF REQUIRED BY ELECTRICAL IRRESPECTIVE OF RADIUS			5 650	6 000

REMARKS:

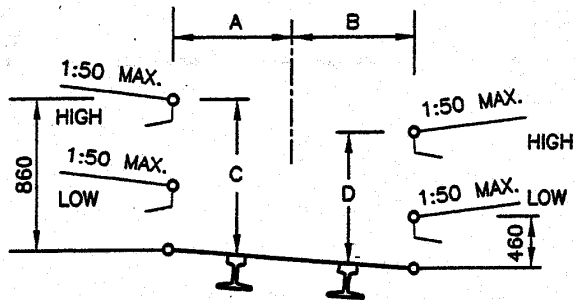
1. V IS THE REQUIRED VERTICAL CLEARANCE EXCEPT WHERE REDUCED CLEARANCE S APPLIES.
2. S IS THE MINIMUM VERTICAL CLEARANCE FOR STRUCTURES AND TEMPORARY WORK OVER NON-ELECTRIFIED LINES.
3. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
4. FOR APPLICATION AT CURVES
 - 4.1 APPLY INCREASED 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.

ANNEXURE 1
SHEET 3 of 5
AMENDMENT

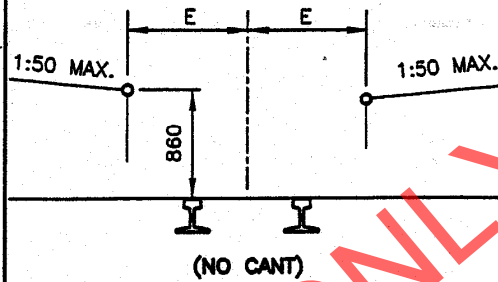
CLEARANCES : PLATFORMS

PLATFORMS : TRACK GAUGE 1 065mm

PASSENGERS



GOODS

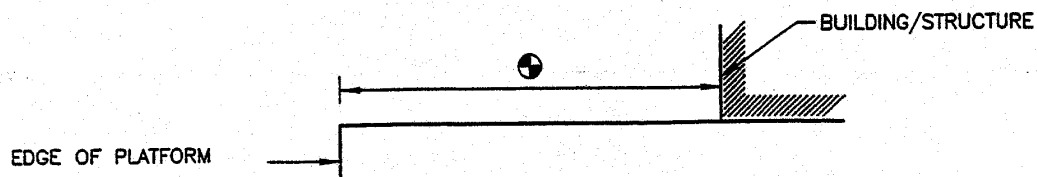


RADIUS (m)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
90	1 690	1 820	890	810	1 840
100	1 650	1 790	890	810	1 810
120	1 610	1 740	890	810	1 760
140	1 580	1 700	890	810	1 720
170	1 550	1 660	890	810	1 690
200	1 530	1 630	890	820	1 670
250	1 520	1 600	890	820	1 640
300	1 520	1 580	890	830	1 620
350	1 520	1 560	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:

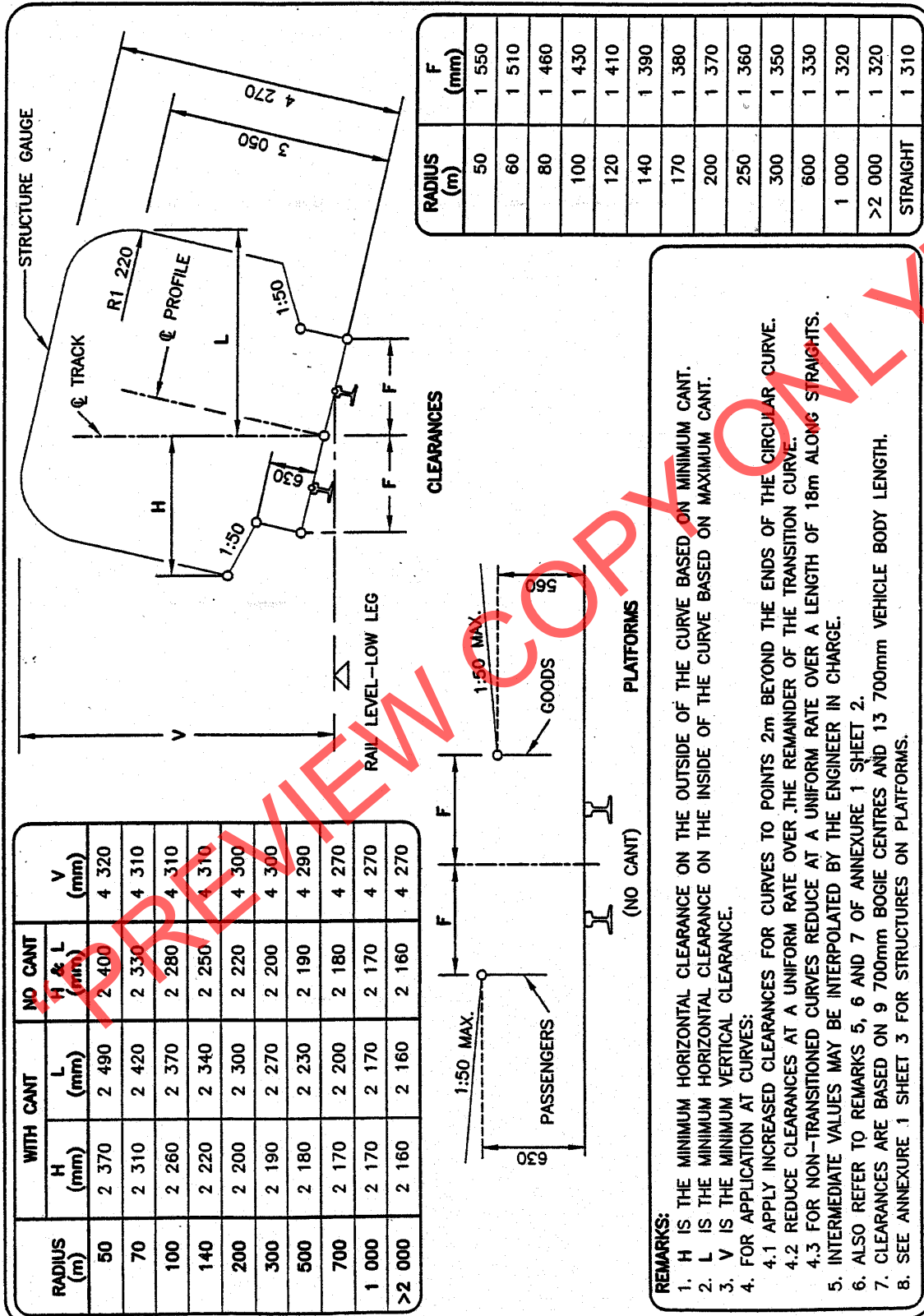
1. NO CANT TO BE APPLIED EXCEPT WHEN THE GOODS PLATFORM IS ON A RUNNING LINE.
2. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
3. 8m TO MAIN STATION-BUILDINGS AND 3m TO ALL OTHER STRUCTURES.
4. TOLERANCES : SEE CLAUSE 8.0.10.

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



ANNEXURE 1
SHEET 5 of 5
AMENDMENT

CLEARANCES : 610mm TRACK GAUGE





TRANSNET LIMITED

(REGISTRATION NO. 1990/000900/06)

GENERAL CONDITIONS OF CONTRACT

**FOR ALL CONSTRUCTION WORKS OF AN
ENGINEERING AND ARCHITECTURAL NATURE**

COPYRIGHT RESERVED JOINTLY BY: -
TRANSNET LIMITED & JURETEC ASSOCIATES

TRANSNET LIMITED**CONTRACT****Contract No.**

AGREEMENT made and entered into by and between Transnet Limited, registration number 1990/000900/06, a public company with limited liability registered under the Companies Act of the Republic of South Africa, with its registered address at Carlton Centre, 150 Commissioner street, Johannesburg (hereinafter referred to as "Transnet"), of the one part, and _____, No. _____ a company registered under the company laws of South Africa, with its head office or registered office at _____, _____ (hereinafter referred to as the "Contractor") of the other part, represented herein by _____ in his capacity as _____ being duly authorised thereto by a Resolution of the Board of Directors dated _____, a certified copy of which is annexed hereto.

WHEREAS Transnet is desirous of having _____ (hereinafter referred to as "the WORKS") and has caused to be prepared specifications, drawings of the work to be done and Schedule of Quantities and Prices (hereinafter referred to as the "Bill").

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS: -

1. The Contractor shall execute and complete the WORKS in accordance with the terms and conditions contained in the documents referred to in Clause 2 hereof.
2. This agreement, together with the documents annexed hereto and listed in the Schedule of Contract Documents, which schedule is it annexed hereto, shall constitute the Contract.
3. The amount to be paid by Transnet to the Contractor for the due and faithful performance of the WORKS and which will become payable at the times and in the manner specified in the General Conditions of Contract and Project Specification, will be: -
 - (i) a sum to be ascertained from the quantities of work carried out at the rates and prices shown in the schedule of requirements and prices amounting to approximately R_____ (Excluding VAT).
 - OR
 - (ii) where a Bill does not form part of the Contract, the sum of R.....
4. The whole of the WORKS included in the Contract shall be completed by the _____ subject to completion in stages as laid down in the Project Specification and to such extensions of time as may be granted.
5. Should the Contractor fail to complete the WORKS or any stage of the WORKS by the date(s) stipulated or by such extended date(s) as may be allowed by Transnet in terms of the General Conditions of Contract, the Contractor shall pay to Transnet the penalty for which provision is made in the Project Specification. Transnet's

claim for such penalty shall not in any way be prejudiced by either the ordering of variations or the encountering of adverse subsurface conditions.

Application for relief from the obligation to pay a penalty will be considered by Transnet, but shall be granted only if the Contractor can prove to the reasonable satisfaction of Transnet that the penalty is materially out of proportion to the prejudice suffered by Transnet by reason of the act or omission in respect of which the penalty was stipulated.

6. The several documents forming the Contract are to be taken as complementary to each other. In the event of any conflict between the contents of any of the documents which comprise the Contract, the Contractor's letter that accompanied his tender and subsequent letters exchanged between the Contractor and Transnet in concluding the Contract shall prevail over the Project Specification which shall prevail over the E5-General Conditions of Contract. The E5 shall prevail over all other documents forming the Contract.

Transnet standard specifications shall prevail over Transnet supplementary specifications to SABS 1200, which shall prevail over SABS 1200 specifications. The requirements shown on particular drawings shall prevail over standard or type drawings. Transnet standard or type drawings shall prevail over Transnet standard specifications.

7. As envisaged in the Legal Succession to the South African Transport Services Act 9 of 1989 (hereinafter referred to as "the Act") an Agreement was concluded between the SARCC and Transnet Limited for the division of immovable assets.

In terms of section 3 (2) and 25 (1) of the Act, and as reflected in the abovementioned Agreement assets of the South African Transport Services were transferred to SARCC and Transnet respectively. In terms of the Act, the SARCC acquired ownership of all assets pertaining to commuter rail transport, while Transnet acquired ownership of all assets relating to freight rail transport.

The SARCC is responsible for the ensuring that the rail commuter services are provided in South Africa. In order to achieve this objective the SARCC entered into a concessioning agreement with Transnet Ltd, trading as Metrorail. In terms of such Agreement, the SARCC would provide Metrorail with the assets required to provide the commuter services. This effectively means that the SARCC would retain ownership of the assets and Metrorail would use the assets to provide the necessary rail commuter service. The use of the assets includes maintenance of the said assets by Metrorail.

In the event of the current concession agreement between Metrorail and the SARCC (which expires on the 31 March 2003) not being extended up to, or beyond, the expiry date of this contract, Metrorail shall cede this contract to the SARCC or any other party being appointed by the SARCC as a successive concessionaire, after which Metrorail shall be absolved from all its obligations in terms of this contract.

8. The domicile citandi et executandi of the parties shall, for the purpose of the Contract, be as set out hereunder.

(i) **TRANSNET** :

(ii) **THE CONTRACTOR:**
Postal address:

_____ Street address: _____

Signed by _____ on behalf of the Contractor at Johannesburg
on this day of _____ in the presence of the undersigned witnesses.

.....
CONTRACTOR: _____

AS WITNESSES:

1. ID No.
2. ID No.

Signed by _____ on behalf of Transnet Limited at _____ on
this day of _____ in the presence of the undersigned
witnesses.

.....
P.p. TRANSNET LIMITED

AS WITNESSES:

1. ID No.
2. ID No.

GENERAL CONDITIONS OF CONTRACT

ITEM NO.	DESCRIPTION	CONTENTS	PAGE NO.
1.	DEFINITIONS, INTERPRETATION AND GENERAL PROVISIONS		9
1.1	DEFINITIONS		
1.2	SINGULAR AND PLURAL		
1.3	MARGINAL HEADINGS		
1.4	CONCESSIONS AND WAIVERS		
1.5	APPLICABLE LAW		
1.6	VALUE-ADDED TAX		
2.	CESSION, ASSIGNMENT AND SUBCONTRACTING		11
2.1	CONTRACT NOT TO BE ASSIGNED WITHOUT APPROVAL		
2.2	CONTRACT NOT TO BE SUBCONTRACTED WITHOUT APPROVAL		
2.3	CONTRACTOR SHALL REMAIN SOLELY LIABLE AND RESPONSIBLE		
3.	CONTRACTOR'S GENERAL OBLIGATIONS		11
3.1	CONSTRUCTION, INSTALLATION AND COMPLETION		
3.2	DESIGN OF THE WORKS		
3.3	INFRINGEMENT OF INCORPOREAL RIGHTS		
4.	DRAWINGS		12
4.1	CUSTODY OF DRAWINGS		
4.2	APPROVAL OF CONTRACTOR'S DESIGNS		
4.3	SCALE AND DIMENSIONS		
4.4	REGISTER OF DRAWINGS		
4.5	CONTRACTOR TO CHECK DRAWINGS		
4.6	COPYRIGHT		
5.	SITE AND SUFFICIENCY OF TENDER		13
5.1	INSPECTION OF SITE		
5.2	DISCLOSURE OF SITE INFORMATION		
5.3	SUFFICIENCY OF TENDER		
5.4	NOTIFICATION OF ADVERSE CONDITIONS ENCOUNTERED		
5.5	PROJECT MANAGER TO INSTRUCT RE ADVERSE SUBSURFACE CONDITIONS		
5.6	POSSESSION OF SITE		
5.7	SITE CLEARING		
5.8	INSTALLATIONS AND SERVICES		
5.9	FOSSILS AND ANTIQUITIES		
5.10	ADVERTISING OR TRADING ON TRANSNET PROPERTY		
6.	ACCESS, RIGHTS-OF-WAY AND CAMPSITES		15
6.1	ENTRY ON TRANSNET PROPERTY		
6.2	CAMPSITES, WORKPLACES AND TEMPORARY RIGHTS-OF-WAY		
6.3	MOVEMENT OF PLANT ETC. IN RIGHTS-OF-WAY		
6.4	ACCESS NO LONGER REQUIRED		
7.	WORKMEN		15
7.1	EMPLOYEES TO BE COMPETENT		
7.2	UNSUITABILITY OF PERSONNEL		
7.3	CONTRACTOR NOT TO CANVASS TRANSNET EMPLOYEES		
7.4	LABOUR STATEMENT		
8.	HOUSING OF EMPLOYEES		16
8.1	HOUSING OF EMPLOYEES		
8.2	AREA NOT TO BE FOULED		

9.	HOURS OF WORK	16
9.1	CONDITIONS FOR WORKING OUTSIDE NORMAL WORKING HOURS	
9.2	WORK PERMITTED AT CONTRACTOR'S REQUEST	
9.3	WORK ORDERED OUTSIDE NORMAL WORKING HOURS	
10.	COMPLIANCE WITH STATUTES AND SAFETY RULES	16
10.1	COST OF COMPLIANCE WITH STATUTES AND SAFETY REQUIREMENTS TO BE ALLOWED FOR	
10.2	CONTRACTOR TO COMPLY WITH OCCUPATIONAL HEALTH AND SAFETY ACT, ACT 85 OF 1993	
10.3	SAFETY PROGRAMME	
10.4	TRANSNET SAFETY RULES	
10.5	REPORTING OF ACCIDENTS	
11.	CONSTRUCTION PLANT, EQUIPMENT AND MATERIAL	17
11.1	CONTRACTOR TO SUPPLY AND USE SUITABLE CONSTRUCTION PLANT ETC.	
11.2	LOSS OR DAMAGES TO CONSTRUCTION PLANT, ETC.	
11.3	PLANT ETC. NOT TO BE REMOVED WITHOUT CONSENT	
11.4	LIEN OVER CONSTRUCTION PLANT, MATERIAL, ETC. SUPPLIED BY CONTRACTOR	
11.5	CARE OF MATERIAL SUPPLIED BY TRANSNET	
11.6	RECEIPTS FOR MATERIAL SUPPLIED BY TRANSNET	
11.7	SURPLUS MATERIAL SUPPLIED BY TRANSNET	
11.8	OFF-LOADING OF TRUCKS AND PENALTIES	
11.9	HIRE OF TRANSNET ROLLING STOCK, PLANT AND EQUIPMENT	
12.	TRANSPORT	19
12.1	TRANSNET TO HAVE THE RIGHT OF FIRST REFUSAL	
13.	SUPERVISION	19
13.1	SUPERINTENDENCE	
13.2	THE TECHNICAL OFFICER'S AUTHORITY TO BE DELEGATED	
13.3	CONTRACTOR'S SUPERVISION	
13.4	AVAILABILITY OF THE CONTRACTOR'S AGENT	
14.	EXECUTION OF WORK	19
14.1	DANGER OF CONTACT WITH ELECTRICAL CONDUCTORS	
14.2	SITING OF TEMPORARY BUILDINGS ETC.	
14.3	SETTING OUT	
14.4	INSTRUCTIONS TO CONTRACTOR, AND SITE BOOKS	
14.5	COMMUNICATION WITH THE PROJECT MANAGER AND EXECUTIVE OFFICER	
14.6	PROGRAMME OF WORK	
14.7	RATE OF PROGRESS	
14.8	CONTRACTOR TO ASSIST TRANSNET	
14.9	SPECIALIST SERVICES	
14.10	WORK UNDERTAKEN BY THE TECHNICAL OFFICER	
14.11	ALTERATIONS, EXTRAS, ADDITIONS AND OMISSIONS	
14.12	QUALITY OF MATERIAL AND WORKMANSHIP	
14.13	CONTRACTOR TO ATTEND UPON AND PROVIDE FACILITIES TO OTHERS	
14.14	PAYMENT FOR ATTENDANCE AND FACILITIES	
14.15	COLLABORATION BETWEEN TRADES	
14.16	EXAMINATION BEFORE COVERING UP	
14.17	UNCOVERING AND MAKING OPENINGS	
15.	SAMPLING AND TESTING OF MATERIAL AND INSTALLATIONS	23
15.1	SAMPLES AND TESTS OF MATERIAL AND INSTALLATIONS	
15.2	QUALITY OF MATERIAL	
15.3	QUALITY OF EQUIPMENT, INSTALLATIONS, ETC.	
15.4	COSTS OF SAMPLING AND TESTING REIMBURSABLE	
15.5	APPROVAL OF MATERIALS AND INSTALLATIONS	
16.	DAYWORK	24

16.1	ORDERING AND PAYMENT OF DAYWORK	
16.2	DAYWORK RETURNS	
17.	ADDITIONAL TIME	24
17.1	CONTRACTOR TO APPLY FOR ADDITIONAL TIME	
17.2	CIRCUMSTANCES JUSTIFYING ADDITIONAL TIME	
17.3	TIME LIMIT FOR APPLICATIONS	
17.4	SPECIFIC ADDITIONAL TIME TO BE APPLIED FOR	
17.5	RECORDING OF INFORMATION	
17.6	CONTRACTOR WILL BE ADVISED IN WRITING	
17.7	COMPENSATION FOR ADDITIONAL TIME	
18.	CARE OF THE WORKS AND REPAIRS	25
18.1	CARE OF THE WORKS	
18.2	REPAIRS	
18.3	EXCEPTED RISKS	
18.4	DAMAGE DURING THE DEFECTS LIABILITY AND MAINTENANCE PERIOD	
19.	SURVEY BEACONS AND PEGS	26
19.1	TRIGONOMETRICAL SURVEY BEACONS AND NATIONAL BENCH MARKS	
19.2	CADASTRAL AND MINING BEACONS	
19.3	PEGS AND BENCH MARKS	
19.4	NEW BOUNDARY BEACONS	
20.	TAKING OVER PORTIONS OF THE WORKS	27
20.1	TAKING OVER COMPLETED PORTIONS	
20.2	TAKING OVER UNCOMPLETED PORTIONS	
21.	COMPLETION OF THE WORKS	27
21.1	DATE OF COMPLETION	
21.2	CERTIFICATE OF COMPLETION	
21.3	CONTRACTOR TO REMOVE CONSTRUCTION PLANT	
21.4	CONTRACTOR TO CLEAR SITE	
22.	TEMPORARY LEVEL CROSSINGS	28
22.1	PERMISSION FOR TEMPORARY LEVEL CROSSINGS	
22.2	CONSTRUCTION	
22.3	RESTRICTION OF USE	
22.4	MAINTENANCE	
22.5	REMOVAL WHEN NO LONGER REQUIRED	
23.	BLASTING AND USE OF EXPLOSIVES	28
23.1	PERMISSION TO BLAST	
23.2	CONTRACTOR TO MAKE ARRANGEMENTS FOR BLASTING	
23.3	CONTRACTOR TO CLEAR AND REPAIR TRACK AND FORMATION	
23.4	NOTIFICATION OF INTENTION TO BLAST	
23.5	INSPECTION OF ADJACENT BUILDINGS AND STRUCTURES	
23.6	BLASTING CLOSE TO RAILWAY LINES	
23.7	CLEARANCE FROM LANDOWNERS	
24.	PROTECTION OF PERSONS AND PROPERTY	29
24.1	WATCHING AND LIGHTING	
24.2	PROTECTION BY CONTRACTOR	
24.3	PROTECTION BY TRANSNET	
24.4	PREVENTION OF DISORDER	
24.5	PREVENTION OF SOIL EROSION, POLLUTION, ETC.	
24.6	ENVIRONMENTAL PROTECTION	
25.	USE OF EXISTING ROADS	30
25.1	AVOIDING OF DAMAGE TO ROADS	
25.2	INTERFERENCE WITH FREE USE OF ROADS	

26.	INTERFERENCE WITH TRANSNET ASSETS AND WORK ON OPEN LINES	30
26.1	TRANSNET ASSETS AND OPEN LINES NOT TO BE INTERFERED WITH	
26.2	WORK ON OPEN LINES	
26.3	CARE OF SERVICES	
26.4	DUTY TO COMPLY WITH E7/1.	
27.	DEFECTS LIABILITY AND MAINTENANCE	30
27.1	THE TECHNICAL OFFICER MAY REJECT	
27.2	FAILURE TO COMPLY WITH ORDER	
27.3	CONTRACTOR TO SEARCH FOR DEFECTS	
27.4	ALL DEFECTS TO BE REMEDIED	
27.5	MAKING GOOD AND PERIOD (S) OF DEFECTS LIABILITY	
27.6	CONTINUING OBLIGATIONS	
27.7	FAILURE TO MAKE GOOD	
28.	DELAYS ATTRIBUTABLE TO TRANSNET OR TECHNICAL OFFICER	31
28.1	DEFAULT BY TRANSNET	
28.2	ADDITIONAL TIME AND COMPENSATION	
29.	SECURITY AND RETENTION MONEY	32
29.1	SECURITY	
29.2	RETENTION MONEY	
29.3	PERCENTAGE RETENTION MONEY	
30.	RATES FOR INCREASES OR DECREASES IN QUANTITIES OR VARIATIONS	33
30.1	DIFFERENCE IN FINAL MEASURED QUANTITY 20% OR LESS	
30.2	DIFFERENCE IN FINAL MEASURED QUANTITY MORE THAN 20%	
30.3	ADVERSE SUBSURFACE CONDITIONS AND CONDITIONS DIFFERENT FROM THOSE SPECIFIED	
30.4	ALTERATIONS ETC. SIMILAR IN CHARACTER TO SPECIFIED WORK	
30.5	ALTERATIONS ETC. NOT SIMILAR TO SPECIFIED WORK	
30.6	CONTRACTOR TO PROVIDE TENDER MAKE-UP	
30.7	PROJECT MANAGER TO DETERMINE REASONABLE RATES	
30.8	NEW RATES BY THE PROJECT MANAGER TO BE PROVISIONAL	
30.9	VARIATION ORDERS	
31.	NOMINATED CONTRACT WORKS	34
31.1	PROVISION FOR NOMINATED CONTRACTORS	
31.2	CONTRACTOR TO ATTEND UPON NOMINATED CONTRACTORS	
31.3	CONTRACTOR TO TAKE CUSTODY OF NOMINATED CONTRACT WORKS	
31.4	PAYMENT FOR ATTENDANCE UPON NOMINATED CONTRACTORS	
32.	NOMINATED SUPPLIERS AND PRIME COST SUMS	34
32.1	PROVISION FOR NOMINATED SUPPLIERS	
32.2	SET-OFF AGAINST PRIME COST SUMS	
32.3	PROVISIONS RELATING TO NOMINATED CONTRACTORS TO APPLY MUTATIS MUTANDIS	
33.	PROVISIONAL WORK	35
33.1	PROVISIONAL ITEMS TO BE MEASURED AND PAID AT RATES QUOTED	
33.2	CHANGE IN METHOD OR SCALE OF OPERATION	
33.3	NOTICE OF INTENTION TO CLAIM NEW RATE OR PRICE	
34.	RECOVERY OF MONEY FROM THE CONTRACTOR	35
35.	INCREASE OR DECREASE IN COSTS	35
35.1	APPLICATION OF CONTRACT PRICE ADJUSTMENT	
35.2	BASIS OF NEW RATES	
35.3	FACTOR TO BE USED AFTER STIPULATED COMPLETION DATE	
35.4	FACTOR COVERS ALL INCREASES OR DECREASES	

36.	PAYMENT CERTIFICATES AND CLAIMS PROCEDURE	36
36.1	DATE OF MONTHLY MEASUREMENT	
36.2	ISSUE OF CERTIFICATE	
36.3	PAYMENTS TO BE MADE WITHIN 30 DAYS	
36.4	INTEREST FOR LATE PAYMENT	
36.5	ACCEPTANCE OF WORK OR MATERIAL NOT IMPLIED	
36.6	FINAL CERTIFICATE TO BE APPROVED BY THE EXECUTIVE OFFICER	
36.7	ISSUE OF THE FINAL CERTIFICATE AND PARTICULARS OF OUTSTANDING MATTERS	
36.8	CONTRACTOR TO COUNTERSIGN FINAL CERTIFICATE AND PARTICULARS OF OUTSTANDING MATTERS	
36.9	NO NEW CLAIM TO BE PERMITTED	
36.10	REMITTANCE OF MONEYS IN TERMS OF FINAL CERTIFICATE	
36.11	FAILURE TO CERTIFY FINAL CERTIFICATE	
36.12	LIABILITY FOR CLAIMS BY THIRD PARTIES	
36.13	NOTICE OF INTENTION TO CLAIM	
36.14	INTEREST OR FINANCE COST I.R.O. UNLIQUIDATED CLAIMS	
36.15	PAYMENT BY CHEQUE	
37.	BREACHES AND REMEDIES	38
37.1	EXECUTIVE OFFICER MAY EXERCISE OPTIONS ETC.	
37.2	BREACHES	
37.3	REMEDIES	
37.4	COSTS RECOVERABLE FROM CONTRACTOR	
37.5	PROJECT MANAGER'S CERTIFICATE PROOF OF AMOUNT DUE	
37.6	RIGHTS OF TRANSNET NOT PREJUDICED	
38.	VOLUNTARY TERMINATION OF CONTRACT AND REMEDIES IN CONSEQUENCE THEREOF	40
38.1	CIRCUMSTANCES JUSTIFYING VOLUNTARY TERMINATION	
38.2	ACTIONS CONSEQUENT UPON NOTICE OF TERMINATION	
38.3	PAYMENT FOR WORK EXECUTED BEFORE TERMINATION	
38.4	TERMINATION BY TRANSNET	
38.5	TERMINATION BY THE CONTRACTOR	
38.6	CREDITS FOR ADVANCES MADE BY TRANSNET	
39.	INSURANCE OF THE WORKS AND RELATED RISKS	41
39.1	INSURANCE ARRANGED BY TRANSNET	
39.2	ADDITIONAL INSURANCES ARRANGED BY TRANSNET	
39.3	INSURANCES BY CONTRACTOR	
39.4	FAILURE TO INSURE	
39.5	UNSPECIFIED INSURANCE	
40.	RESOLUTION OF DISPUTES	44
40.1	DISPUTES TO BE REFERRED TO THE PROJECT MANAGER	
40.2	DISPUTES TO BE REFERRED TO THE EXECUTIVE OFFICER	
40.3	NEGOTIATED SETTLEMENT	
40.4	EXECUTIVE OFFICER TO DECIDE DISPUTE ON BEHALF OF TRANSNET	
40.5	CONTRACTOR TO PROCEED WITH ALL DUE DILIGENCE	
40.6	DISPUTE REFERRED FOR ARBITRATION	
40.7	APPOINTMENT OF THE ARBITRATOR	
40.8	REFERENCE TO ARBITRATION OF A SINGLE ARBITRATOR	
40.9	POWERS OF THE ARBITRATOR	
40.10	ARBITRATION PROCEEDINGS NOT TO AWAIT COMPLETION OF THE WORKS	
40.11	RECOVERY OF AMOUNTS FROM CONTRACTOR	
40.12	ARBITRATOR'S FEES	

TRANSNET LIMITED**GENERAL CONDITIONS OF CONTRACT****1. DEFINITIONS, INTERPRETATIONS AND GENERAL PROVISIONS****1.1 In this Contract, unless inconsistent with the context: -**

ADVERSE SUBSURFACE CONDITIONS means any latent condition of an extraordinary nature and/or extent which exists under the site, but which could not reasonably have been foreseen by anyone experienced in the type of work tendered for, and which results in material and/or method of construction being so different from that which was contemplated at the time of conclusion of this Contract as to materially affect the cost of the WORKS and the sufficiency and/or applicability of the rates and/or prices in the Bill.

BILL means any document titled Schedule of Quantities, Bill of Quantities, Schedule of Prices or Schedule of Quantities and Prices, forming part of the documents constituting the Contract, either by incorporation into the Project Specification or as a separate document and by which the amount to be paid to the Contractor for the performance of the Works is ascertained or to be ascertained.

CONSTRUCTION PLANT means any machine, excluding a tool, and any vehicle, excluding a passenger vehicle, used on the site for the carrying out of the WORKS.

DAY shall mean a calendar day. Where a specific number of days is allowed in the Contract for the performance of any act or is stipulated for the extinction of any right or the duration of any event or circumstance, the days between 16 December and 5 January (both days included) and the day from which the period concerned is stated to commence shall be excluded from the calculation of the number of days concerned.

DRAWINGS means all the drawings referred to in the contract documents, made by the Project Manager and furnished to the Contractor, or submitted by the Contractor and approved in writing by the Project Manager, any revisions of such drawings and any such other drawings as may from time to time be furnished or approved by the Project Manager.

EXECUTIVE OFFICER means the person appointed by Transnet from time to time as the EXECUTIVE OFFICER to act according to the rights, powers held by, and obligations placed upon him in terms of the Contract.

EQUIPMENT means any machine, appliance, apparatus, device or installation of a mechanical, electrical or electronic nature to be incorporated, provided or installed as part of the WORKS or any device used on site for the carrying out of the WORKS.

MATERIAL means any constructional substance or ingredient, which will form a permanent part of the WORKS, and the substances in or that has been removed from, excavations and earthworks.

NOMINATED CONTRACTOR means a Contractor appointed by Transnet in terms of clause 31.1.

NOMINATED SUPPLIER means a person, firm or company nominated by Transnet in terms of clause 32.1 hereof.

NORMAL WORKING HOURS means the hours of work, as determined by a wage regulating measure or statutory enactment for any trade or activity, in respect of which the basic minimum rate of pay is applicable, and excludes all time for which a higher rate of pay is obligatory. Where no wage regulating measure is in force, the normal hours will be 07h00 to 17h00 Mondays to Fridays, including a daily meal break.

OPEN LINE means a railway line in use for the movement of railway traffic.
PROJECT MANAGER means the person or juristic person appointed by Transnet 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.

PROJECT SPECIFICATION means any document titled Project Specification, Special Conditions of Contract and Specifications, Special Conditions and Specifications, or Special Conditions, forming part of the documents constituting the Contract and which stipulates the special contract provisions and specifications pertaining to the Contract.

SITE means the land and other place, including any river- or seabed, on, under, over, in or through which the WORKS are to be executed or carried out, and any other land or place made available by Transnet in connection with the WORKS.

SITE INSTRUCTION means any instruction, direction, order or clarification, other than a Variation Order, given by the Technical Officer or his duly authorised deputy, by way of the Site Instruction Book.

TECHNICAL OFFICER means the person or juristic person appointed by Transnet from time to time as the Technical Officer, to administer the Contractor's performance and execution of the WORKS according to the powers and rights held by and obligations placed upon the Technical Officer in terms of the Contract.
TEMPORARY WORKS means any work(s) or installation(s) required for or concerning the construction or installation of the WORKS, but not forming part of the permanent WORKS.

TOOL means any instrument, powered or otherwise, which is accepted as a hand tool by the industry concerned and which is normally used in a manual operation.

VARIATION ORDER means a written order given by the competent Transnet authority in terms of clause 14.11 hereof, and also in the form of a written addendum by which new and/or adjusted rates and/or prices are incorporated into the Contract in terms of clause 30.9 hereof.

WORKS means the works to be executed in terms of the Contract.

- 1.2 Where the context requires, a word importing the singular also includes the plural and vice versa and the male gender likewise includes the female gender.
- 1.3 The clause headings in these general conditions of contract are not deemed to be part thereof and will not be taken into consideration in the interpretation of the Contract.
- 1.4 Any grant by Transnet or the Contractor (the grantor), or by any of the persons authorised to act on their behalf, to the other of any concession, waiver, condonation or allowance shall not, in respect of any specific event or circumstance other than that in respect of which the grant was made, constitute a waiver of the rights of the grantor in terms of the Contract or an estoppel of the grantor's right to enforce the provisions of the Contract.
- 1.5 The law which is to govern the Contract and in terms of which the Contract is

to be interpreted shall be the law of the Republic of South Africa unless otherwise stated in the Project Specification.

- 1.6 Value-added tax in terms of the Value-added Tax Act No. 89 of 1991 shall be dealt with as follows: -

1.6.1 In Tendering;

Value-added tax shall not be included in the tendered rates and prices.

1.6.2 In payment;

Value-added tax shall not be reflected on monthly contract payment certificates, but paid separately on the presentation of a tax-invoice by the Contractor.

The value of the work reflected on the tax-invoice must correspond with the nett amount indicated on the contract payment certificate.

- 1.6.3 Changes to the VAT rate will be dealt with in accordance with sections 67 and 67A of the Act.

2. CESSION, ASSIGNMENT AND SUBCONTRACTING

- 2.1 The Contractor shall not cede or assign the Contract or any part thereof without the prior written approval of the Executive Officer.

- 2.2 The Contractor shall not enter into any subcontract without the prior written approval of the Project Manager, which approval will not unreasonably be withheld. The subcontractor, in respect of whom approval is so granted and his employees or workmen, shall for all the intentions and purposes of the Contract, be deemed to be workmen of the Contractor, as provided in clause 7 hereof.

- 2.3 Approval given in terms of clauses 2.1 and 2.2 hereof shall not relieve the Contractor of any responsibility, duty or obligation imposed upon him by the Contract, and the Contractor shall in particular be and remain solely liable and responsible for all acts, omissions, negligence or breaches of contract on the part of the assignee or any of his employees, and for all acts, omissions or negligence of any subcontractor or any of his employees.

3. CONTRACTOR'S GENERAL OBLIGATIONS

- 3.1 The Contractor's general obligations under the Contract comprise the design (to the extent stipulated in the Contract), construction, manufacture, installation, completion and maintenance of the WORKS and, unless otherwise stipulated, the provision at his own expense of all supervision, labour, plant, tools, equipment, material, transport, consumable stores, services, samples and temporary works, and everything, whether of a temporary or permanent nature, required in and for the construction, installation, completion and maintenance of the WORKS.

- 3.2 Where the Contract expressly provides that part of or the whole of the WORKS shall be designed by the Contractor, he shall, notwithstanding any approval of the Project Manager, be liable for any error or deficiency in such design and in any drawing or document supplied by him in respect thereof, and for any loss or damage arising out of such error or deficiency.

- 3.3 Save in respect of Transnet's design of the WORKS or specified method of construction and proprietary brand materials, the Contractor shall, and hereby does indemnify Transnet against -

- (i) liability for infringement of any patent, design, trade mark, name, or other protected right; and
- (ii) any legal costs or disbursements incurred in connection with any of

the matters referred to in subparagraph (i) hereof, whenever the liability contemplated in sub-paragraph (i) hereof is due to or arises out of anything done, omitted or undertaken, or the use of any plant, process, machine or material, in terms of or for the purpose of the Contract.

The indemnification shall cover all claims, demands proceedings, damages, costs, charges and expenses in relation thereto and arising therefrom.

4. DRAWINGS

4.1 The drawings will remain in the sole custody of the Technical Officer. Three copies thereof will be furnished to the Contractor free of cost, but any further copies shall be paid for by the Contractor. The Contractor shall give reasonable notice in writing to the Technical Officer of any further drawing or specification that may be required for the execution of the WORKS.

One copy of the drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the site, and shall at all reasonable times be available for inspection and use by the Technical Officer and his deputies appointed in terms of clause 13.2 hereof.

4.2 Where the design of the WORKS or part of the WORKS is done by the Contractor, he shall, unless otherwise directed, submit paper prints, in triplicate, of all plans or drawings of such WORKS to the Project Manager whose written approval must be obtained before the work concerned is commenced. Such approval shall be subject to clause 3.2 hereof.

4.3 Scaled dimensions are not to be used, and where no figure dimensions are given on the drawings or in the Bill or any specifications, the Technical Officer is to be requested in writing for an instruction regarding the correct dimensions.

4.4 The Contractor shall, in accordance with the Technical Officer's written instructions, maintain a register on site of all drawings and revisions thereof in the chronological order in which they are delivered to him or approved in terms of clause 4.2 hereof.

4.5 The Contractor shall timeously and carefully examine all drawings and shall immediately notify the Technical Officer in writing of any error, inaccuracy, discrepancy or inconsistency detected by him, or raise an objection thereto in order that it may be rectified or decided upon without disruption or delays to the progress of the work.

4.6 The Contractor hereby grants to Transnet a non-exclusive licence, in accordance with the provisions of section 22 of the Copyright Act, 1978 -

- (i) to copy any plan, diagram, drawing, specification, bill of quantities, design calculation or other similar document made by the Contractor, other than under the direction or control of Transnet, in connection with the WORKS;
- (ii) to make free and unrestricted use thereof for its own purposes;
- (iii) to provide copies thereof to consultants to be used by them for consultations and consulting services to Transnet;
- (iv) to provide other parties with copies thereof where tenders are invited by Transnet.

Such non-exclusive licence shall apply mutatis mutandis to any plan, diagram, drawing, specification, bill, design calculation or other similar document made, other than under the direction or control of Transnet, by any subcontractor of the Contractor. The provisions of this clause shall in the case of materials, machines or equipment to be provided as part of the WORKS, not apply in respect of documents created for the manufacturing thereof.

No separate or extra payment shall be made by Transnet in respect of any non-exclusive licence granted in terms hereof.

5. SITE AND SUFFICIENCY OF TENDER

- 5.1 The Contractor shall be held to have inspected and examined the site and its surroundings and to have satisfied himself before submitting his tender as to the nature of the ground and sub-surface, the underground services, the form and nature of the site, the extent and nature of the WORKS, the quantities and the materials necessary for the completion of the WORKS, the means of access to the site, the accommodation and camping sites he may require, and in general, to have obtained all requisite information as to the risks, contingencies and other circumstances including the local climatic conditions and environmental requirements which may influence or affect his tender.
- 5.2 Disclosure by Transnet of any information in respect of investigations into or exploratory work of whatever nature in regard to the site of the WORKS, either by reference to such investigation or exploratory work or reports thereon, or by inclusion of information in the tender/contract documents, shall not relieve the Contractor of his obligations under clause 5.1 hereof.
- 5.3.1 The Contractor shall be held to have satisfied himself before tendering as to the correctness and sufficiency of his tender and of the rates and prices stated in the Bill. These rates and prices shall be sufficient to cover all his obligations under the contract and everything necessary for the proper completion and maintenance of the WORKS, and shall not be conditional upon the correctness of any opinion or interpretation given in any information disclosed or provided by Transnet.
- 5.3.2 No claim by the Contractor will be considered in respect of any of the rates and prices being insufficient or inapplicable on account of the materials, methods of construction and site and/or subsurface conditions being different from those assumed by him in tendering for the Contract, except in the case of adverse subsurface conditions.
- 5.4 If, during the execution of the WORKS, the Contractor encounters or becomes aware of adverse subsurface conditions which in his opinion give rise to a claim in terms of clause 5.3.2 hereof, he shall notify the Project Manager within 2 days of the occurrence thereof.

The Contractor shall, within 14 days of giving such notification, deliver to the Project Manager full particulars of such claims or intended claims, with copies thereof to be delivered to the Technical Officer, stating: -

- (i) the nature and extent of the adverse subsurface conditions encountered;
- (ii) what effect they will have on the work and completion time of WORKS;
- (iii) the extent to which the sufficiency and/or applicability of the rates and prices in the Bill are affected thereby and
- (iv) whether or not he intends to lodge a claim in terms of clause 5.3.2 hereof.

Unless or until otherwise instructed by the Project Manager the Contractor shall continue with the execution of the WORKS and carry out such work as may be reasonable in the encountered subsurface conditions.

- 5.5 The Project Manager, shall, upon receipt of the Contractor's notification and particulars of claims or intended claims, in terms of clause 5.4 hereof, after having examined the site and the subsurface and after having considered the claims and the Technical Officer's comments and recommendations in respect thereof, report the circumstances to the Executive Officer, together with his own comments and recommendations. Thereafter, and subject to a special mandate from the Executive Officer, he may, either;
- (i) instruct the Contractor to suspend the further execution of the whole or part of the WORKS pending further investigation and redesign of the whole or part of the WORKS and determination of additional remuneration and additional time for executing the work in the adverse subsurface conditions encountered, all in terms of clauses 14.11, 17.2 and 30 hereof, or
 - (ii) instruct that the Contractor continues with the whole or part of the WORKS on the basis that the effect of the adverse subsurface conditions will constitute a variation to be dealt with in terms of clauses 14.11, 17.2 and 30 hereof, or
 - (iii) notify the Contractor that the contract is terminated in terms of clause 38.1.3 hereof.

Any instruction or notification, given in terms hereof shall not in any way affect or diminish the Project Manager's right to reject or deny the Contractor's claims in part or in full, should he disagree with any aspect thereof.

- 5.6 Transnet will make the site available to the Contractor in accordance with the programme of work submitted and approved in terms of clause 14.6 hereof. The site the Contractor occupies shall be as pointed out or agreed to by the Technical Officer or as shown on the drawings. The Contractor shall make his own arrangements for occupation or use of any area outside the designated site.
- 5.7 The Contractor shall clear the site of the WORKS to enable him to carry out and complete the Contract.
- 5.8 Should it be necessary to maintain, discontinue, disconnect, remove or relocate any installation or service on, under or above the site, the Contractor, with the prior approval of the Technical Officer and other person or authority concerned, shall cause it to be maintained, discontinued, disconnected, removed or relocated as the case may be in such a manner as may be required either by the owner of a private installation or by the local authority or statutory authority in the case of a public utility installation. The Contractor shall be responsible for sending all requisite notices to any person or authority concerned, and for making arrangements for the maintenance, discontinuance, disconnection, removal or relocation of the said installation or service as the case may be.

The Contractor shall be responsible for the payment of any fee or charge that may become payable to any person, local authority or statutory authority concerned in connection with any of the above-mentioned matters or arrangements. Transnet will reimburse the Contractor for these payments unless otherwise stipulated in the contract documents. Any alteration required to an installation controlled by Transnet or Telkom S.A. Limited will be arranged by Transnet at no cost to the Contractor. Where the existence or location of a service or installation was unknown or unforeseeable, the Technical Officer may order the removal or relocation thereof by the Contractor as a variation to be dealt with in terms of clauses 14.11 and 30, or on dayworks in terms of clause 16 hereof.

- 5.9 All fossils, coins, articles of value or antiquity and structures or other remains or things of archaeological interest discovered on the site shall, as between Transnet and the Contractor, be deemed to be the absolute property of Transnet.

The Contractor shall take reasonable precautions to prevent his workmen or any other person from removing or damaging any such article or thing and shall, immediately upon discovery thereof and before removal, inform the Technical Officer of such discovery and carry out the Technical Officer's orders as to the disposal thereof where necessary, at the expense of Transnet as a variation order in terms of clauses 14.11 and 30, or on a dayworks basis in terms of clause 16 hereof.

- 5.10 The Contractor shall not advertise or trade on Transnet property unless the written authority of the Project Manager has first been obtained. All information to be displayed on notice and advertising boards on the site regarding the nature of business to be conducted by the Contractor shall be submitted for approval before the boards are erected or trading is commenced.

6. ACCESS, RIGHTS-OF-WAY AND CAMPSITES

- 6.1 Where entry onto Transnet'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 lay down by Transnet.

- 6.2 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 Transnet'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 Technical Officer.

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 Technical Officer 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 Transnet'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 Transnet's or private property, and shall make the fences safe against trespass at the close of each day's work.

- 6.3 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.

- 6.4 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 Technical Officer and shall furnish the Technical Officer 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 Transnet 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 Technical Officer.

7. WORKMEN

- 7.1 All persons employed by the Contractor to carry out the Contract shall be competent, responsible and of good character.

- 7.2 If, in the opinion of the Technical Officer, any person employed by the Contractor is inefficient, negligent, disrespectful or objectionable, the Technical Officer may, after consultation with the Contractor, instruct that such person be removed from the WORKS.
- 7.3 During the currency of the Contract, the Contractor shall not approach any employee of Transnet with a view to offering him employment in any capacity whatsoever.
- 7.4 The Contractor shall, upon request, provide the Technical Officer with a weekly statement of the number of persons employed on the WORKS each day by the Contractor and any subcontractor, the capacity in which employed and the total number of hours worked in that week for each grade of staff separately. The statement shall be supported by documentary evidence when so required by the Technical Officer.
- 8. HOUSING OF EMPLOYEES**
- 8.1 The Contractor shall, where necessary, make his own arrangements for suitable housing of his employees. Where temporary housing is permitted by the Technical Officer 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 Transnet specification; Minimum Communal Health Requirements in Areas outside the Jurisdiction of a Local Authority - E.4B, as applicable.
- 8.2 Fouling the area inside or outside Transnet's boundaries shall be prevented. The Contractor will be called upon by the Technical Officer to dispose of any foul or waste matter generated by the Contractor.
- 9. HOURS OF WORK**
- 9.1 The Contractor shall confine his work to normal working hours except when work outside these hours is: -
- (i) specifically provided for in the Contract, or
 - (ii) permitted by the Technical Officer at the Contractor's request, or
 - (iii) ordered by the Technical Officer, or
 - (iv) normally carried out in multiple shifts.
- 9.2 When the Contractor proposes to work outside normal working hours, he shall apply to the Technical Officer at least seven days before he proposes to introduce such working. Permission will not be withheld unreasonably, and will be subject to such conditions as the Technical Officer may impose to protect Transnet's interests. Such permission may be withdrawn at any time. The Contractor shall not be entitled to any claim for additional payment arising from either the refusal to permit such working or the granting of such permission or withdrawal of permission.
- 9.3 Where the Contractor is ordered to work outside normal working hours, and where no specific provision exists in the Contract for such work, the work shall be carried out in terms of clause 16.1 hereof.
- 10. COMPLIANCE WITH STATUTES AND SAFETY RULES**
- 10.1 The Contractor shall comply with all applicable legislation and Transnet safety requirements. The costs of such compliance shall be borne by the Contractor and shall be deemed to have been allowed for in the rates and prices in the Contract.
- 10.2 The Contractor shall, in particular, comply with the following Acts: -
- (i) The Compensation for Occupational Injuries and Diseases Act, (Act 130 of 1993); The Contractor shall produce proof of his registration and good standing with the Compensation Commissioner in terms of the

Act.

- (ii) The Occupational Health and Safety Act (Act 85 of 1993); The Contractor is in terms of section 37(2) of the Occupational Health and Safety Act 85 of 1993, deemed to be an employer in his own right with duties as prescribed in the Act, and agrees to ensure that all work will be performed or machinery and plant used in accordance with the provisions of the Act in respect of all persons in his employ, other persons on the premises or the site or place of the works or on the works to be executed by him and under his control in terms of the Contract. The agreements in this Contract and all documents attached or referred to, form an integral part of the arrangements and procedures mentioned in the aforementioned section.
- (iii) The Explosives Act (Act. 26 of 1956) as amended; The Contractor shall when applicable, furnish the Project Manager with copies of the permits authorising him or his employee, to establish an explosives magazine on or near the site and to undertake blasting operations in compliance with the Act.

10.3 The Contractor shall comply with the current Transnet Specification E.4E, Safety Arrangements and Procedural Compliance with the Occupational Health and Safety Act, Act 85 of 1993 and Regulations, and shall, before commencement with the execution of the Contract, which shall include site establishment and delivery of construction plant, equipment or materials, submit to the Technical Officer,

- documentary proof of his procedural compliance with the Act and
- particulars of the Health and Safety Programme to be implemented on the site in accordance with the Specification E.4E.

The Contractor's Health and Safety Programme will be subject to agreement by the Technical Officer, who may order supplementary and/or additional safety arrangements and/or different safe working methods to ensure full compliance by the Contractor with his obligations as an employer in terms of the Act.

10.4 The Contractor shall comply with the current Specification for Works On, Over, Under or Adjacent to Railway Lines and near High Voltage Equipment - E7/1, if applicable, and shall take particular care of the safety of his employees working on or in close proximity to a railway line during track occupations as well as under normal operational conditions. He shall also comply with all other safety requirements, regulations and guidelines of Transnet applicable to the nature of WORKS carried out under the Contract, and as instructed by the Technical Officer from time to time.

10.5 In addition to compliance with clause 10.2 hereof, the Contractor shall report all incidents contemplated by Section 24 of Act. 85 of 1993 to the Technical Officer. Any incident resulting in the death of or injury to any person on the WORKS shall be reported within 24 hours of its occurrence and any other incident shall be reported within 48 hours of its occurrence.

11. CONSTRUCTION PLANT, EQUIPMENT AND MATERIAL

11.1 The Contractor shall supply and use suitable and sufficient construction plant, tools, equipment and material as may be required to carry out the WORKS efficiently. Only the construction plant, tools, equipment and material which are required for this purpose shall be brought onto the site and shall be stored, stacked or erected in such a way as not to interfere with other work or traffic. The Contractor shall furnish statements showing details of construction plant, tools, equipment and material employed or used on the WORKS on a day to day basis indicating types, numbers, quantities, hours worked, idle time, etc. all as stipulated in the Project Specification or as directed by the Technical Officer.

11.2 Transnet will not be responsible for any loss of or damage to any such plant,

tools, and equipment or material, excepting loss or damage of which the proximate cause is the negligence of Transnet or its employees.

- 11.3 No construction plant, tools or equipment brought onto the site shall be removed from the site without the written consent of the Technical Officer, which consent will not be withheld unreasonably.
- 11.4 Transnet shall, in the case of material breach of the Contract by the Contractor and cancellation thereof by Transnet in terms of Clause 37, have a lien over all the Contractor's site establishment and temporary buildings, construction plant, tools, equipment and material brought onto site by the Contractor or on his behalf.
- 11.5 The Contractor shall take all reasonable care to prevent loss of or damage to any material supplied by Transnet and shall use the material in the most economical way. Materials supplied by Transnet shall at all times be and remain the property of Transnet. Material lost or damaged through negligence on the part of the Contractor or his employees shall be made good by the Contractor, or the value thereof will be deducted from money falling due to him.
- 11.6 Receipts for all material supplied by Transnet shall be provided by the Contractor at the time of delivery thereof.
- 11.7 Material supplied by Transnet, which has become surplus to requirements, shall be handed back to Transnet and receipts obtained therefor.
- 11.8 When trucks consigned to Transnet or the Contractor are to be off-loaded by the Contractor, the Technical Officer will give the Contractor at least 24 hours notice of the place and expected date and time of placing of trucks for off-loading.

The Contractor shall off-load the trucks as expeditiously as possible, but if he fails to off-load any truck within 24 hours of it being placed for off-loading, he shall be liable to pay the penalties specified in the Project Specification for all the time between the expiry of the 24 hour period allowed and the time the truck is finally off-loaded.

As soon as he has off-loaded any truck, the Contractor shall advise the nearest trains operations centre and the Technical Officer giving the date, time and the number of the truck off-loaded.

The same conditions and penalties will apply to empty trucks into which the Contractor is to load released material or material supplied by Transnet surplus to requirements.

- 11.9 Transnet will not provide any rolling stock, plant or equipment for use on the contract works, save where such provision is expressly agreed to in terms of a special provision of the Contract, in which case the provision of such rolling stock, plant and equipment and the use thereof shall be subject to the following terms and conditions.
- (i) Specialised items of rolling stock essential to the WORKS, together with the necessary locomotive will be provided at the cost of Transnet.
 - (ii) The use of such rolling stock shall be limited to the periods and sections of track indicated by Transnet.
 - (iii) The Contractor shall pay Transnet a penalty for the use of the specified rolling stock for any period in excess of that determined in terms of paragraph (ii) hereof. The penalty shall be a fixed hourly charge based on the estimated all-inclusive hourly cost.
 - (iv) The Contractor shall not use the rolling stock for purposes other than for those expressly stipulated in the Project Specification

without permission of the Technical Officer.

Should the Contractor wish to hire from Transnet rolling stock other than that envisaged herein with or without a locomotive, or any other plant and equipment, for the purpose of the fulfilment of the Contractor's obligations under the Contract, a request from the Contractor to such effect will not be unreasonably refused by Transnet, provided that the parties are able to reach agreement as to the terms and conditions of such hire.

12. TRANSPORT

- 12.1 Transnet shall have the right of first refusal to contract for the provision of its rail, road, air and harbour services for the transport of material, plant, equipment and personnel required for the purposes of the Contract, both nationally and internationally, when applicable.

The use by the Contractor of such services shall be subject to the tariffs and conditions of contract applicable to the use of such services.

13. SUPERVISION

- 13.1 The Technical Officer 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 Technical Officer may require for the operations of Transnet, the safety of trains, property and workmen of Transnet, and for the safety of other property and persons. The Contractor shall carry out the directions of the Technical Officer. The superintendence exercised by the Technical Officer, 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 Transnet or by the Technical Officer of the legal and other responsibilities of the Contractor in carrying out the WORKS.
- 13.2 The Technical Officer 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 Technical Officer.
- 13.3 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 Technical Officer shall be notified in writing of such appointment which will be subject to his approval.
- 13.4 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 Technical Officer.
- ## **14. EXECUTION OF WORK**
- 14.1 The Contractor shall, before commencing work, ascertain from the Technical Officer whether overhead or underground electrical conductors are affected by the WORKS, and he shall ensure that any precautionary measures required by the Technical Officer are strictly observed.
- 14.2 The Contractor shall be responsible for the detailed siting of his temporary buildings and stocks of material. Where such siting is on Transnet property, the Contractor shall occupy only the sites indicated to him by the Technical Officer.
- 14.3 The Technical Officer will supply the basic lines and levels for the WORKS.

These shall be maintained and protected by the Contractor, who shall arrange for their replacement at his own cost if disturbed. The Contractor shall set out the WORKS from such lines and levels. The Contractor shall check the basic lines and levels supplied by the Technical Officer and, if any errors are found, shall notify the Technical Officer of such errors. He shall not do any further setting out or carry out any of the WORKS until these errors have been corrected.

Should the Technical Officer assist the Contractor at any time by setting out any portion of the WORKS, this will be at the entire risk and responsibility of the Contractor. Such setting out of the WORKS shall not relieve the Contractor of his responsibility for the correct setting out of the WORKS or provide any basis for a claim by the Contractor against Transnet. Any error by the Contractor in the setting out of the WORKS, at whatever time it may be discovered, shall forthwith be rectified by the Contractor at his own expense.

- 14.4 All instructions to the Contractor will be in writing and shall be deemed to have been received if left with the Contractor or his agent at the WORKS or at the business premises of the Contractor or at his office on the site. The Contractor shall supply and have available on the site at all times two A4 size triplicate carbon copy books. In one book, site instructions will be recorded. The other book shall be used by the Contractor as a diary for recording day by day the state of the weather, the work done each day and full details of any circumstance which may affect the progress of the WORKS. The original sheet of each set of 3 pages will be removed from both books and retained by the Technical Officer. The Contractor may remove the second sheet but the third sheet shall be retained on the site until completion of the WORKS, when it shall be handed over to the Technical Officer.
- 14.5 Except as provided for in clause 40 hereof, the Contractor shall not communicate with the Project Manager or the Executive Officer except through the Technical Officer.
- 14.6 A programme of work showing the order thereof shall be submitted for approval as follows: -
- 14.6.1 The Contractor shall, within 3 weeks of the date of acceptance of his tender, submit a programme of work in the form of a bar chart or other means acceptable to the Technical Officer, showing, inter alia, the duration, expected delivery dates of materials, plant and equipment, and the starting and completion dates of each major activity in the Contract. Where the activity is ongoing and not of a one-off nature the proposed weekly production rate shall be indicated.
- 14.6.2 A cash flow diagram showing the estimated monthly value of work based on the programme shall be submitted with the programme.
- 14.6.3 The programme will be subject to approval by the Technical Officer, but such approval will not relieve the Contractor of his obligations to undertake the work in an order and manner to ensure proper completion by the date/s specified in the Contract.
- 14.6.4 The Contractor shall, on an ongoing basis during the course of the Contract, monitor his progress against the programme which shall be reviewed and updated when necessary with the consent or at the direction of the Technical Officer. Details of such progress control shall be provided to the Technical Officer. Except where the provisions of clauses 17.1 to 17.7 and 28 hereof apply, a revision of the programme will not relieve the Contractor of his obligation to complete the WORKS by the specified date/s.

Neither the submission by the Contractor nor the approval by the Technical

Officer of a revised programme shall imply either that the Contractor is in any way relieved of his obligations in terms of the Contract, or that he is entitled to any extensions of time or compensation.

- 14.7 Should the Technical Officer, at any time, be of the opinion that the rate of progress of the WORKS or any part thereof is too slow to achieve the completion of the WORKS or any part thereof by the stipulated date or such extended date of completion as may have been determined in terms of clauses 17.1 to 17.7 and 28 hereof, and that such lack of progress will have a serious adverse effect on any of Transnet's interests or activities, he may notify the Contractor in writing, but the Contractor shall not be relieved of his obligations if such notice is not given.

The Contractor shall thereupon take steps to expedite progress to complete the WORKS or any part thereof by the stipulated date or extended date of completion. The Contractor shall advise the Technical Officer in writing immediately it becomes apparent to him that there will be a delay in the execution of the WORKS.

- 14.8 The Contractor and his employees shall give, without additional remuneration, safe and proper facilities as and when required to authorised officers of Transnet to enable them to inspect the WORKS or to perform any other duties or functions connected with the WORKS. The Contractor shall allow the Technical Officer access to workshops or other places where work is being prepared for the Contract, for the purpose of inspecting such work.

- 14.9 Specialist advisors may be appointed by Transnet in connection with matters relating to specialist portions of the WORKS or special work which may be required to be executed on the WORKS. Such specialist advisors will be referred to in the Project Specification by appropriate designations describing the nature of their functions.

Any instruction of such specialist advisor which involves a variation to or departure from the Contract, will be given in writing to the Contractor through the Technical Officer provided, however, that should an emergency arise during the execution of the WORKS, the advisor concerned will have authority to give instructions direct to the Contractor on behalf of Transnet for taking such steps as he may deem necessary to deal with such emergency.

The Contractor shall carry out these instructions which will be confirmed in writing by the Technical Officer within 7 days after the date that they were given. In the absence of receipt of such confirmation, the Contractor shall notify the Technical Officer, in writing, within the following 7 days that he has received such instructions from the specialist concerned.

- 14.10 The Project Manager may, at any time, execute or cause to be executed by persons other than the Contractor, any portion of the WORKS if he considers it necessary to carry out such portion of the WORKS to accelerate the programme for completion of the WORKS or in the interest of safety or to suit the requirements of Transnet. The portion of the WORKS executed by the Project Manager or by persons other than the Contractor shall be treated as an omission and the provisions of clauses 14.11, 30.1 and 30.2 hereof shall apply.

- 14.11 The Project Manager and, by his authority, the Technical Officer may order alterations, extras, additions to or omissions from the WORKS.

- 14.11.1 Such orders shall include, but not be limited to, any variation of the form, quality, quantity or execution of the WORKS or any part thereof that may in the Project Manager's discretion be necessary for the purposes of Transnet and/or for dealing with changed circumstances and conditions such as those

provided for under clauses 5.3.1 to 5.5 hereof. These orders may, inter alia, result in: -

- (i) an increase or decrease in the quantity of any work,
- (ii) an omission of any work,
- (iii) a change in the design, character, quality or kind of any work,
- (iv) a change in the levels, lines, position and dimensions of any part of the WORKS,
- (v) the execution of additional work of any kind necessary for completion of the WORKS,
- (vi) a change in any specified or approved sequence or timing of construction of any part of the WORKS,
- (vii) a suspension of the execution and/or construction of the whole or part of the WORKS or
- (viii) a change in the method of construction and/or execution of the WORKS.

14.11.2 The Contractor shall carry out or give effect to the orders of the Project Manager or Technical Officer in accordance with the drawings and specifications that may from time to time be issued in conjunction with such orders. The Contractor shall obtain written confirmation of all verbal orders given to him.

14.11.3 The Contractor shall not make any variation and shall not substitute new items of material and/or equipment without an instruction from the Project Manager or Technical Officer. He shall submit fully detailed and motivated proposals of any intended variation or substitution to the Technical Officer for his approval.

14.11.4 Where the quantity of work increases or decreases as a result of an instruction given in terms of this clause or as a result of the measured quantities exceeding or being less than those stated in the Bill, and where the amount to be paid to the Contractor is ascertained from the quantities of work carried out at schedule rates, a variation order is not required except where,

- due to the final measured quantity differing from the estimated quantity by more than 20%, or
- due to adverse subsurface conditions or different conditions the rate(s) and/or price(s) being insufficient or inapplicable, adjusted/new rates are to be determined in terms of clauses 30.2, 30.3 and 30.5, a variation order will be issued in terms of clause 30.9.

14.11.5 When the amount to be paid to the Contractor for the performance of the WORKS is a lumpsum and a Bill do not form part of the Contract, variation orders will be issued in respect of all instructions given in terms of clause 14.11.1 and which affect the amount to be paid to the Contractor.

14.12 The Contractor shall carry out the WORKS in a proper and workmanlike manner with the materials and to the quality standards described in the Bill and/or the Project Specification and shall complete the work to the satisfaction of the Technical Officer.

14.13 The Contractor shall, when required to do so in terms of a special provision of the Contract or by an order of the Project Manager, attend upon nominated suppliers, nominated and other contractors and Transnet workers performing work that are part of or contiguous to the WORKS. He shall, when requested, assist with their requirements for the effective performance of such works and shall afford such facilities, as may be available in his own site establishment, for the execution of such work.

14.14 Except where provision is made in the Bill for payment for attendance upon a Nominated Contractor in terms of clause 31.4, the Contractor will, be

reimbursed for direct expenses incurred by him in complying with the provisions of clause 14.13. Any dispute arising between the Contractor and Transnet workmen or other contractors in connection with such associated or contiguous work, will be settled by the Project Manager who will convey his decision to the Contractor and other parties concerned.

- 14.15 The Contractor shall co-ordinate the execution of the WORKS and ensure that close collaboration is achieved between all workmen and subcontractors under his supervision and control and nominated suppliers, nominated and other contractors and Transnet workers performing contiguous work or part of the WORKS.
- 14.16 No work, including excavations and foundations, shall be covered up or put out of view without the approval of the Technical Officer. The Contractor shall give due notice to the Technical Officer whenever any such work is ready or about to be ready for examination, and the Technical Officer will, without unreasonable delay, examine such work, unless he considers it unnecessary and advises the Contractor accordingly.
- 14.17 The Contractor shall uncover any part of the WORKS or make any opening in or through the WORKS as the Technical Officer may direct, and shall reinstate or make good such work to the satisfaction of the Technical Officer. If any part of the WORKS has been covered up or put out of view after compliance with the requirements of clause 14.16 hereof and, after such uncovering, is found to be executed in accordance with the Contract, the direct expenses of uncovering, making any opening in or through the WORKS and the reinstating and making good thereof will be borne by Transnet, but in any other case all such expenses shall be borne by the Contractor or will be recovered from the Contractor.

15. SAMPLING AND TESTING OF MATERIAL AND INSTALLATIONS

- 15.1 The Contractor shall furnish such samples or prototypes of materials or equipment as may be called for by the Technical Officer who may, in his discretion, require the Contractor to subject any such samples or prototypes to appropriate tests.

When required by the Technical Officer, the Contractor shall afford every facility for the inspection and testing of such materials or equipment and shall supply all material, instruments, assistance and facilities that may be required for the purpose of such inspection or tests.

- 15.2 Only materials and equipment, which comply in all respects with the approved samples and prototypes, shall be brought on to the site or used on the WORKS. Material and equipment, which do not comply in all respects with the approved samples and prototypes, may be rejected by the Technical Officer. The Contractor, at his own cost, shall remove and replace any rejected material or equipment together with that portion of the WORKS affected by it.
- 15.3 The Contractor shall arrange to carry out such further tests on completed works and equipment installed as ordered by the Technical Officer.
- 15.4 The direct cost of any sampling and testing ordered that is different from and/or additional to testing and sampling stipulated in the Project Specification, shall be reimbursed to the Contractor save in the event that the materials and workmanship tested do not comply with the Contract or where previous testing and sampling done by the Contractor did not comply with specified procedures or methods.
- 15.5 The approval by the Technical Officer of any materials or equipment shall not relieve the Contractor of his obligation to comply fully with the contract specifications for the complete WORKS.

16. DAYWORK

16.1 The Technical Officer may order that any additional or substituted work or work ordered in terms of clauses 9.1 (iii) and 9.3, be executed on a dayworks basis. For work so ordered and executed, the Contractor shall be paid in accordance with the dayworks schedules and at the rates and prices quoted by him in the Bill or, in the absence of provision in the daywork schedules for any particular item, the Contractor shall be paid-

- (i) the gross actual wages and benefits paid by him to and/or on behalf of the workmen for the period they were engaged on the additional or substituted work plus 30 percent, and
- (ii) the direct cost at the site of material supplied by the Contractor and actually used in the additional or substituted work plus 12 percent.

These payments will be held to fully recompense the Contractor for all costs for the use of tools and equipment and financial charges of any description incurred by him and his subcontractors, and will include all overhead costs and profits.

The use of construction plant will be charged out separately on a plant hire basis at the rates quoted in the Bill or, where no such rates exist, at rates agreed upon between the Project Manager and the Contractor. Rates for the hire of plant shall be deemed to cover all costs for the supply, operation, maintenance and repair of the plant.

16.2 The Contractor shall submit to the Technical Officer by Tuesday of each week, a detailed statement in triplicate, covering the work done on a daywork basis during the preceding week up to midnight on Saturday.

This statement, shall show the actual time worked, the rates of pay, the actual amounts earned by the workmen and the material and plant used on the WORKS. It shall be countersigned by the Technical Officer and shall be the sole source of information used to calculate payments due for such work.

17. ADDITIONAL TIME

17.1 When the Contractor considers that for any reason stipulated in clause 17.2 hereof he is entitled to additional time to complete the WORKS or portions of the WORKS, he shall submit an application in writing to the Technical Officer, setting out in detail the reasons for the application and stating the specific additional time required.

17.2 Applications for additional time will only be considered in respect of-

- (i) alterations, extras, or additions to the WORKS ordered by the Project Manager or the Technical Officer in terms of clause 14.11 hereof;
- (ii) an increase in the quantities shown in the Bill;
- (iii) delays caused by encountering adverse subsurface conditions in terms of clause 5.3.2 hereof;
- (iv) delays where the Contractor can prove to the reasonable satisfaction of the Project Manager that -

the circumstance that caused the delay was unforeseeable at the time of tendering,

and

that the Contractor had taken steps and/or displayed reasonable care and diligence in attempting to avoid or minimise the delay and consequences thereof,

or

the circumstance, if foreseeable, was such that it was beyond the Contractor's

control,

and

that he could not have been reasonably expected to have taken it into account in undertaking his obligations under the contract.

The extent of any additional time granted shall be commensurate with the delay attributable to such circumstance. (Delays attributable to Transnet, the Project Manager or Technical Officer are to be dealt with in terms of clause 28 hereof.)

- 17.3 No additional time will be granted unless the application is made in writing within 28 days after -
- (i) receipt of the order from the Project Manager or Technical Officer for alterations, extras or additions to the WORKS; or
 - (ii) receipt of the Project Manager's payment certificate in which quantities are increased beyond those shown in the Bill; or
 - (iii) the commencement of a delay qualifying in terms of clauses 17.2 (iii) and 17.2 (iv) hereof.
- 17.4 The application shall be for a specific additional time except in those cases where, in the opinion of the Project Manager, circumstances are such that a specific time cannot yet be determined, when written notice of intention to claim will be accepted as meeting the requirements of clause 17.3 hereof. In such cases, the Contractor shall submit the request for a definite period of time within the period stipulated by the Project Manager.
- 17.5 The entries in the site diary shall be deemed to be a comprehensive record of any and all facts/circumstances to be relied upon by the Contractor in respect of any application for additional time and/or compensation. Without detracting from the foregoing the Project Manager may, in his sole discretion, require the Contractor to supply and/or record any further information.
- 17.6 The Project Manager will advise the Contractor in writing what additional time, if any will be allowed. This additional time will not necessarily apply to the whole of the WORKS, but may in specific cases apply to only particular portions of the WORKS.
- 17.7 Compensation for increased costs related to additional time granted in terms hereof, will be payable only in respect of delays caused by circumstances and events stipulated in clauses 17.2 (i), (ii) and (iii) hereof and shall be determined as follows: -
- (i) Additional time-related preliminary and general allowances as are appropriate and applicable having regard to other compensation which may have been determined in respect of the circumstances concerned, but not exceeding the amounts payable in terms of the rates and prices in the Bill for such time-related preliminary and general costs.
 - (ii) Additional time-related expenses as are included in the determination of additional compensation in terms of clauses 30.1 to 30.6 hereof, where applicable and justifiable.
- 18. CARE OF THE WORKS AND REPAIRS**
- 18.1 From commencement to completion of the WORKS, the Contractor shall take full responsibility for the care thereof and of all, material and temporary worker works.
- 18.2 In the event of the WORKS or any part thereof or any material or temporary works being destroyed or damaged through any cause, except through any of the excepted risks as defined in clause 18.3 hereof, the Contractor shall, at his

own cost and subject to the provisions of clause 39, repair and make good such damage so that, on completion, the WORKS shall be in good order and condition and in conformity in every respect with the requirements of the Contract.

In the event of destruction or damage occurring through any of the excepted risks, the Contractor shall repair and make good the damage to the extent ordered by the Project Manager or Technical Officer in terms of clause 14.11 and/or 16 hereof at the cost of Transnet. Compensation will be determined in terms of clauses 30.1 to 30.6 or 16.1 hereof.

- 18.3 The "excepted risks" are -
- (i) any perils insurable through the South African Special Risks Insurance Association (SASRIA), such as riot, strike or public disorder or any act or activity which is calculated or directed to bring about such perils, but excluding any such perils as strike, public disorder, act or activity which is committed, caused or instigated by the Contractor, his employees and/or any subcontractors;
 - (ii) war hostilities including mutiny or military uprising or usurped power, insurrection, rebellion or revolution/or proclamation of martial law (whether war be declared or not);
 - (iii) any event which, after the closing date of tenders, is defined as a risk in terms of insurance offered by SASRIA;
 - (iv) any event for which a fund has been established in terms of the War Damage Insurance and Compensation Act, No 85 of 1976 as amended;
 - (v) a cause due solely to use or occupation by Transnet of any portion of the WORKS;
 - (vi) a cause due solely to the design of the WORKS when the Contractor did not provide the design.

- 18.4 The Contractor shall be responsible for damage caused by him during the period of defects liability and maintenance in terms of clause 27 hereof.

19. SURVEY BEACONS AND PEGS

- 19.1 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 Technical Officer.

Should the Contractor be responsible for any such occurrence, he shall report the circumstances to the Technical Officer who will arrange with the Director-General of Surveys for replacement of the beacon or mark at the cost of the Contractor.

- 19.2 The Contractor shall not move or damage any cadastral or mining beacon without the written approval of the Technical Officer 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 Technical Officer.

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 landsurveyor.

- 19.3 The Contractor shall preserve all pegs and bench marks. Such survey points shall not be removed without the written approval of the Technical Officer. Should any peg or benchmark be removed without authority, the Technical Officer 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.

- 19.4 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 Technical Officer.

20. TAKING OVER PORTIONS OF THE WORKS

20.1 Before completion of the whole contract, Transnet may take over any completed portion of the WORKS. The terms and conditions under which such completed portion will be taken over shall be as specified in the Contract and where no such terms and conditions are specified, the Project Manager will, after consultation with the Contractor, advise him in writing of the terms and conditions of such take-over. This will not relieve the Contractor of his obligation to complete the WORKS by the stipulated date or such extended date of completion as may have been agreed upon in terms of clauses 17.1 to 17.7 and 28 hereof.

20.2 If Transnet's interests are adversely affected by the failure of the Contractor to adhere to the approved programme of work, Transnet reserves the right to take over, occupy or use any uncompleted portion of the WORKS. The Contractor will be advised in writing by the Project Manager of the terms and conditions of such take-over, occupation or use, but this will not relieve the Contractor of his obligation to complete the WORKS by the stipulated date or such extended date of completion as may have been determined in terms of clauses 17.1 to 17.7 and 28 hereof.

21. COMPLETION OF THE WORKS

21.1 The whole of the WORKS, including all alterations, extras, additions and omissions, shall be completed and delivered to Transnet by the stipulated date or such extended date of completion as may have been determined in terms of clauses 17.1 to 17.7 and/or clause 28 hereof.

21.2 When the WORKS or portions thereof have been completed to the satisfaction of the Technical Officer and left in a clean, neat and tidy condition, the Technical Officer will give the Contractor a CERTIFICATE OF COMPLETION confirming that the WORKS or portions thereof have been completed and stating the date on which the defects liability and maintenance period referred to in clauses 27.5 and 27.6 hereof is to commence. Separate CERTIFICATES OF COMPLETION will be given for completed portions of the WORKS in cases where completion of such portions is specified in the Contract as being required before the completion of the entire WORKS, or for completed portions of the WORKS taken over by Transnet in terms of clause 20.1 hereof.

Until the Technical Officer, issues a CERTIFICATE OF COMPLETION, the WORKS or specified portions thereof shall not be deemed to have been completed.

21.3 On receipt of a CERTIFICATE OF COMPLETION for the entire WORKS or the finally completed portion thereof the Contractor shall, unless otherwise ordered by the Technical Officer, remove from the site all construction plant, material and temporary works not required for making good of defects in the WORKS or portions thereof covered by such CERTIFICATE, other than material which is the property of Transnet.

21.4 After expiry of the defects liability and maintenance period(s), and when all making good under clauses 27.5 and 27.6 hereof has been completed, the Contractor shall remove all the remaining construction plant and material from the site, other than material which is the property of Transnet, and leave the site in a clean, neat and tidy condition.

22. TEMPORARY LEVEL CROSSINGS

22.1 The Technical Officer 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 Technical Officer and at the Contractor's cost. The period for which the temporary level crossing is permitted will be at the discretion of the Technical

Officer.

- 22.2 Transnet will, at its own cost, provide protection and supervise the construction of the road over the track(s) and for a distance of 3 metres beyond the outermost rails, as well as the erection of all road signs and height gauges.

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 contact with "live" overhead electrical equipment. All Transnet electrical, telecommunications and signal services deviations or alterations to accommodate the level crossing will be done by Transnet at its own cost. All other work required by the Technical Officer to establish the temporary level crossing, including protection, deviation or support of other services and drainage, shall be carried out by the Contractor at his own cost.

- 22.3 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 Transnet and to such other persons as the Technical Officer may permit and of whose identity the Contractor will be advised. If so ordered by the Technical Officer, 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 metres of the temporary level crossing, and shall not allow road traffic to proceed over it until the lines are clear.

- 22.4 The Contractor shall maintain the temporary level crossing in good condition for the period it is in use. Maintenance of the portion of the temporary level crossing over the tracks and three metres beyond the outermost rail shall be done under the supervision and protection of Transnet, and at the cost of the Contractor.

- 22.5 When the temporary level crossing is no longer required by the Contractor, or permitted by Transnet, the Contractor shall remove it and restore the site to its original condition. Work over the tracks and up to three metres beyond the outermost tracks will be supervised by Transnet. Such supervision and restoration of Transnet electrical, telecommunication and signalling services to their original position will be undertaken by Transnet at its own cost. The Contractor at his own cost shall restore other services.

23. BLASTING AND USE OF EXPLOSIVES

- 23.1 No blasting shall be carried out except with the prior written permission of the Technical Officer and under such conditions as he may impose.

- 23.2 The Contractor shall arrange for the supply, transport storage and use of explosives.

- 23.3 The Contractor shall have labour, tools and plant, to the satisfaction of the Technical Officer, 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 Transnet.

- 23.4 The Contractor shall notify the Technical Officer of his intention to blast at least 14 days before the commencement of any blasting operations.

- 23.5 Before any blasting is undertaken, the Contractor and the Technical Officer 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 Insurance Policy in terms of clause 39 hereof, make good any deterioration of such buildings, houses, or structures, which, in the opinion of the Technical Officer, was directly caused by the blasting.

23.6 When blasting within 500m of a railway line, the Contractor shall observe the requirements stipulated in Transnet's current specification E7/1 for Works On, Over, Under or Adjacent to Railway Lines and near High Voltage Equipment.

23.7 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.

24. PROTECTION OF PERSONS AND PROPERTY

24.1 The Contractor shall provide and maintain all lights, guards, barriers, fencing and watchmen when and where necessary or as required by the Technical Officer 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, and red, yellow, green or white flags shall not be used by the Contractor in such a position that they can be mistaken for railway signals. The Contractor shall obtain the permission of the Port Captain before installing any light within the precincts of a port.

24.2 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 Transnet and the Contractor,
- (iii) avoid damage to and prevent trespass on adjoining properties, and
- (iv) ensure compliance with any instruction issued by the Technical Officer or other authorised person, and with any stipulation embodied in the contract documents which affects the safety of any person or thing.

24.3 Transnet will provide, at its own cost, protection for the safe working of trains during such operations as the Technical Officer may consider necessary. Protection by Transnet for any purpose whatsoever, does not absolve the Contractor of his responsibilities in terms of the Contract.

24.4 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 site of the WORKS and for the preservation of the peace and protection of persons and property in the neighbourhood of the WORKS. Any relocation of camps because of disorder shall be at the Contractor's expense.

24.5 All operations necessary for the execution of the WORKS, including the provision of any temporary works and camping sites, shall be carried out so as not to cause veld 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. The Contractor shall take all reasonable steps to minimise noise and disturbance when carrying out the WORKS, including work permitted outside normal working hours.

- 24.6 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 Technical Officer. The Contractor shall comply with environmental protection measures and specifications stipulated by the Technical Officer and/or local and environmental authorities.
- 25. USE OF EXISTING ROADS**
- 25.1 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.
- 25.2 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 Technical Officer has obtained the approval of the road authority concerned.
- 26. INTERFERENCE WITH TRANSNET'S ASSETS AND WORK ON OPEN LINES**
- 26.1 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 Technical Officer and in the presence of a duly authorised representative of Transnet.
- 26.2 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 Technical Officer and subject to such conditions as he may impose.
- 26.3 Care must be taken not to interfere with or damage any services such as overhead wire routes, cables or pipes, except as provided for in clauses 5.7 and 5.8 hereof. 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.
- 26.4 Authority granted by the Technical Officer and the presence of an authorised representative of Transnet in terms hereof, shall not relieve the Contractor of his duty to comply with Transnet's current specification E7/1 for Works On, Over, Under or Adjacent to Railway Lines and near High Voltage Equipment.
- 27. DEFECTS LIABILITY AND MAINTENANCE**
- 27.1 When, in the opinion of the Technical Officer, any part of the work done or any items of material used or equipment installed or intended for use or installation is not in accordance with the requirements of the Contract, whether or not payment for such work, equipment or material has been made, he may order the Contractor in writing to remove any such objectionable part, item or component thereof, to replace it with an acceptable part, item or component and to rectify or reconstruct the WORKS without cost to Transnet.
- 27.2 If the Contractor fails to comply with such an order within 10 days of the date thereof, the Technical Officer may cause the rejected parts or items to be removed, the defective work to be demolished and replaced by proper work, and the cost thereof to be recovered from the Contractor.
- 27.3 If requested in writing by the Technical Officer, the Contractor shall search

for the cause of any defect, imperfection or fault under the direction of the Technical Officer. When such defect, imperfection or fault is one for which the Contractor is not liable, the actual direct cost of the work carried out by the Contractor in searching as aforesaid and making good thereof will be borne by Transnet.

27.4 Transnet will not accept the WORKS as complete until all defects of every kind have been made good to the satisfaction of the Technical Officer.

27.5 Within a reasonable time after receipt of written instructions from the Technical Officer, the Contractor shall make good to the satisfaction of the Technical Officer all defective material and workmanship which are not in accordance with the Contract and which may appear within a period of 6 months, or such other period as stipulated in the Project Specification, after the date stated in the CERTIFICATE OF COMPLETION, and shall repair all damage caused thereby.

27.6 Where it is expressly stipulated, in respect of any particular work included in the Contract, that certain obligations are to continue beyond the period of six months and after the issue of the CERTIFICATE OF COMPLETION, the extended period shall apply in respect of such work.

Where such continuing obligations are to be undertaken by a subcontractor alone and not jointly with the Contractor, Transnet shall have the right to enforce compliance with such obligations, and where any cession of the Contractor's rights against such subcontractor may be required for this purpose, such rights shall be deemed to have been duly ceded to Transnet by the Contractor.

27.7 Should the Contractor fail to comply with the provisions of clauses 27.5 and 27.6 hereof, Transnet may cause the required work to be carried out at the expense of the Contractor and may recover the cost thereof from the Contractor.

Nothing contained in this clause shall be construed as absolving the Contractor from fulfilling the general obligations imposed on him in terms of clause 3 hereof, or any particular obligations stipulated elsewhere in the Contract.

28. DELAYS ATTRIBUTABLE TO TRANSNET OR THE TECHNICAL OFFICER

28.1 If the Contractor suffers delay and/or incurs extra expense as a result of: -

- (i) failure by Transnet to make available the site or part of the site or any right of access thereto which may have been agreed upon;
- (ii) delay on the part of Transnet in supplying such material as is to be provided by it;
- (iii) delay on the part of Transnet or the Technical Officer in giving or supplying orders or drawings or in complying with any of their respective duties and obligations under the Contract, with which compliance is necessary to enable the WORKS to proceed in accordance with any approved programme;
- (iv) the necessity for Transnet to correct or resolve any inaccuracy, discrepancy or inconsistency in drawings or other documents forming part of the Contract;

he shall, within 2 days of the commencement of such circumstances, notify the Technical Officer in writing of the delay, the particulars and the consequences thereof.

28.2 The Contractor may submit a claim for additional time and compensation in

respect of the direct losses and additional expenses caused by the delay, provided that such claim will be considered only if the full claim details are submitted to the Project Manager within 28 days after the delay has ended. The particulars of the delay and the consequences thereof shall be recorded in the site diary, which shall be deemed to be a comprehensive record of any and all circumstances relating to the claim.

The Contractor shall provide the Project Manager with such further information as he may require to investigate the claim and determine the amount of additional time and/or compensation. The Contractor will be advised in writing by the Project Manager what additional time, if any, will be allowed for delay, and what sum, if any, will be paid to the Contractor to compensate him for any direct loss and/or expense incurred by him as a consequence of the delay.

29. SECURITY AND RETENTION MONEY

29.1 Security in the amount equal to either ten per cent or five per cent of the contract price, as elected by the Contractor, shall be provided by the Contractor for the due and faithful performance by him of all the duties and obligations resting upon and assumed by him in terms of the Contract. Such security shall be in the form of -

- (i) Government or approved Municipal stocks in negotiable form, or
- (ii) a deed of suretyship furnished by an approved bank, insurance or guarantee corporation in such form as may be prescribed by Transnet, provided however that the Project Manager may, upon written application by the Contractor, return to the Contractor the whole or part of such security held by Transnet when the retention money, more fully described in clauses 29.2 and 29.3 hereof, has reached an amount which the Project Manager in his sole discretion considers sufficient for the protection of Transnet. Transnet is entitled to hold all or portion of the security until the completion of the Contract and the expiry of the defects liability and maintenance period.

29.2 Either five or ten per cent of the value of the work completed, as reflected by the nett monthly amounts certified for payment, will be retained by Transnet for the due and proper fulfilment of the Contract, until such retention money is sufficient, in the opinion of the Project Manager, for the protection of Transnet. Transnet is entitled to hold all or portion of the retention money until the completion of the Contract and the expiry of the maintenance period.

29.3 Retention money shall be 5 percent when the security referred to in clause 29.1 hereof is 10 percent and 10 percent when the said security is 5 percent.

30. RATES AND PRICES FOR INCREASES OR DECREASES IN QUANTITIES OR VARIATIONS

30.1 Where the final measured quantity of any scheduled item differs from the estimated quantity by 20 percent or less, the rate quoted in the Bill shall apply to the whole of the final measured quantity.

30.2 Where the final measured quantity of any scheduled item differs from the estimated quantity by more than 20 percent, either the Project Manager or the Contractor may request an adjustment of the scheduled rate for such item.

Where the quantity is increased, the adjustment shall be in respect only of that portion of the final measured quantity, which exceeds the original quantity plus 20 percent. Such rate adjustment shall be agreed between the Project Manager and the Contractor.

- 30.3 When, as a consequence of an order of the Project Manager or the Technical Officer given in terms of clauses 5.5 and/or 14.11 hereof, the WORKS or any part thereof which is covered by a scheduled item or items, is to be carried out in adverse subsurface conditions as provided in clause 5.3 hereof or under conditions which are different from those specified in the Contract, and as a consequence of such adverse or different conditions the respective rate(s) and/or price(s) are caused to be insufficient and/or inapplicable, sufficient and/or new rates and prices shall be determined in terms of clause 30.5 hereof.
- 30.4 When alterations, extras or additions ordered in terms of clauses 5.5 and/or 14.11 hereof, are similar in character and carried out under conditions similar to work which has been specified in the Contract and for which the Contractor has tendered rates in the items scheduled in the Bill, such rates shall apply to the alterations, extras or additions, subject to the provisions of clause 30.2 hereof.
- 30.5 When alterations, extras or additions are not of a character similar to work for which rates and prices were tendered, or are not executed under conditions similar to those specified in the Contract, the alterations, extras or additions shall be treated as new payment items for which rates and prices have to be determined by negotiation between the Contractor and the Project Manager.
- In the determination of such rates and prices, the rates quoted in the Bill shall form the basis, as far as may be reasonable, of such determination, failing which fair rates and/or prices shall be determined and agreed between the Project Manager and the Contractor.
- 30.5 When called upon to do so by the Project Manager for the purpose of the determination of adjusted and/or new rates and prices in terms of clauses 30.2, 30.3 and 30.5 hereof, the Contractor shall submit to the Project Manager full particulars of his tender assumptions and of the composite tender make-up of the appropriate rates and prices in the Bill so as to provide a basis for such determination.
- 30.7 Where the Project Manager and the Contractor cannot reach a negotiated agreement, the Project Manager will determine new rates and/or prices which he considers to be fair and reasonable, and shall issue a provisional variation order on the basis of such new rates and/or prices.
- 30.8 The determination of new and/or adjusted rates and prices, whether or not by way of a negotiated agreement between the Project Manager and the Contractor in terms of clauses 30.2, 30.3 and/or 30.5, or on a provisional basis by the Project Manager in terms of clause 30.7 hereof, shall all be provisional and subject to the approval of the Executive Officer.
- The Executive Officer shall have the power, subject to the provisions of clause 40, to vary and/or amend any or all such new and/or adjusted and varied rates and prices and to replace them with such rates and/or prices as he may deem reasonable and/or appropriate in the circumstances.
- 30.9 The incorporation into the Contract of all new or revised rates/prices shall be effected by way of a written variation order issued by the Project Manager.
- 31. NOMINATED CONTRACT WORKS**
- 31.1 Any work, for which an "estimated cost" is included in the Bill, may be undertaken by a contractor appointed by Transnet. Such contractor shall hereinafter be referred to as a Nominated Contractor. The "estimated cost"

will represent an estimated cost of the nominated contract work. The amount of the estimated cost shall not be included in the contract amount. Any nominated contractor will be employed in consultation with the Contractor and paid by Transnet. The Contractor, the Nominated Contractor and Transnet shall be the parties to the nominated contract.

31.2 The Contractor shall supervise, attend upon and work in conjunction with the Nominated Contractor and shall provide such access, services and facilities to him as he may require for the proper performance of the part of the WORKS included in the nominated contract.

31.3 The supervision of and attendance upon the Nominated Contractor by the Contractor, shall include the following duties and obligations in respect of the WORKS performed by the Nominated Contractor, all as provided for in the General Conditions of Contract for Works undertaken by Nominated Contract, E5 (N), a copy of which is available for inspection by the Contractor at the offices of the Project Manager.

- (i) The supervision and control of the Nominated Contractor's conformance to specification and quality during the execution of the nominated contract works and during the defects liability and maintenance period after completion thereof.
- (ii) The taking over and incorporation of the nominated contract works into the WORKS and providing custody and protection thereof as part and parcel of the WORKS for the duration of the Contract and defects liability and maintenance periods.
- (iii) On satisfactory completion thereof, to issue a CERTIFICATE OF COMPLETION and to advise the Technical Officer in respect of payments to be made by Transnet in terms of the nominated contract provisions.

31.4 The Contractor will be paid for such supervision and attendance upon the Nominated Contractor at the percentage fee tendered pro rata to the estimated cost in the Bill or to the contract price of the nominated contract, whichever is the highest.

32. NOMINATED SUPPLIERS AND PRIME COST SUMS

32.1 Any material for which a prime cost sum is included in the Bill and which is to be incorporated or installed in the WORKS by the Contractor, shall be supplied by the person or firm nominated in writing by Transnet. Such prime cost sum (hereinafter referred to as a "P.C. sum") is the net sum to be paid to the supplier.

Such supplier hereinafter referred to as a "Nominated Supplier" shall be appointed and paid either by the Contractor or Transnet, as agreed between the Project Manager and the Contractor. Transnet may, alternatively, elect to supply such material itself.

32.2 At the settlement of accounts, any amount paid or payable by the Contractor to a Nominated Supplier will be set against the appropriate P.C. sum and the balance, after allowing pro rata for the Contractor's attendance fee and profit, as shown in the Bill, will be added to or deducted from the contract amount as the case may be. Where, however, the Nominated Supplier is appointed and paid directly by Transnet, or the material has been supplied by Transnet in terms of clause 32.1 hereof, the amount of the P.C. sum will be deducted in full from the contract amount. If the Bill provides for the Contractor's attendance fee and profit on such P.C. sum, such provisions will remain unaltered.

- 32.3 The provisions of clauses 31.2 and 31.3 hereof relating to a Nominated Contractor and work executed by him shall apply mutatis mutandis to and in respect of a Nominated Supplier and material supplied by him.

33. PROVISIONAL WORK

- 33.1 Any item marked "provisional", the quantity of which may be nil or either more or less than that stated in the Bill when compared with the actual amount of work/material necessary and executed/supplied, shall be measured by the Technical Officer from time to time as the work proceeds, and in the presence of the Contractor or the Contractor's agent. The quantity of such work executed/material supplied, shall be paid for at the rates quoted in the Bill, and shall not be subject to the provisions of clause 30.2 hereof.

- 33.2 Where, in the case of a provisional item, the nature or amount of any variation or increase or decrease of the quantities stated in the Bill is such that it results in a change in method, process of construction or source of supply relative to the nature or amount of the whole or part of the work stated in the Contract, and which renders the rate or price for such item unreasonable or inapplicable, either the Project Manager or the Contractor shall be entitled, in compliance with clause 33.3, to require that a new rate or price be fixed which in the circumstances is fair and reasonable.

- 33.3 No change in terms of this clause shall be made to the Contract Price or to any rate or price unless, as soon as is practicable and, in the case of extra or additional work, before the commencement of such work, notice shall have been given in writing -

- (i) by the Contractor to the Project Manager of his intention to claim a new or varied rate or price in terms of clause 33.2 or
- (ii) by the Project Manager to the Contractor of his intention to vary a rate or price in terms of clause 33.2.

The provisions of clauses 30.4 to 30.9 inclusive shall apply mutatis mutandis to the determination of any new or varied rate or price in terms hereof.

34. RECOVERY OF MONEY FROM THE CONTRACTOR

All money, whether a liquidated amount or not, that may become payable to Transnet by the Contractor in terms of any clause or condition incorporated in the Contract may be recovered from the Contractor by deduction or recovery:

- (i) from money, including retention money, due to or to become due to the Contractor under this or any other contract he may have with Transnet, or
- (ii) from any money realised as a result of the sale of any stocks provided in terms of clause 29.1 hereof, or from the guarantor in the case of a deed of suretyship; or
- (iii) in any manner provided for in the Contract or decided upon by Transnet, provided that nothing herein contained shall affect the operation of setoff as between Transnet and the Contractor.

35. INCREASE OR DECREASE IN COSTS

- 35.1 Unless otherwise provided for in the Project Specification or unless a fixed contract price was tendered in the tender letter and accepted by Transnet, the amount payable under the Contract will be determined by the application of the contract price adjustment factor(s) derived from the formula (e) described in the Project Specification to allow for any increases or decreases, which may occur after the closing date of the submission of tenders and before the stipulated date or such extended date of completion as may have been determined in terms of clauses 17.1 to 17.7 and/or clause 28 hereof.

- 35.2 If a new rate or price is negotiated during the period of the Contract, the calendar month in which the new rates were applicable shall be clearly

stipulated in the variation order. The amounts arising from the application of the new rate to the affected quantity will be subject to the contract price adjustment factor based on the indexes ruling for the calendar month so stipulated.

35.3 The contract price adjustment factor to be applied after the stipulated completion date or such extended date of completion as may have been determined in terms of clauses 17.1 to 17.7 and/or 28 hereof, shall be half that applicable at the stipulated date or extended date of completion, except in respect of work completed prior to such date or extended date, and certified in terms of clause 36.3 hereof for payment thereafter, in which event the contract price adjustment factors applicable at the date of completion will be applied.

35.4 Any additions to or deductions from the amount payable, brought about by the application of the contract price adjustment factor, shall be deemed to have made full allowance for all increases or decreases in cost from any cause whatsoever, including all overhead costs and any increases and decreases therein, and profit.

36. PAYMENT CERTIFICATES AND CLAIMS PROCEDURE

36.1 On or about the fifteenth day of each month, the Technical Officer shall make either a progress measurement or an estimate of the work done, including any duly authorised alteration, extra, addition or omission.

36.2 Thereafter the Project Manager will issue a certificate authorising payment of such sum of money as he may consider represents the value of the work referred to in clause 36.1 hereof.

36.3 The Contractor shall be entitled to receive payment of the amount authorised in the said certificate, subject to the deduction of retention money in terms of clauses 29.2 and 29.3 hereof, within 30 days after the day of progress measurement or estimate by the Technical Officer or receipt of a VAT-invoice from the Contractor, whichever is the later.

Such payment shall be regarded as an open payment and both certificate and payment shall be subject to revision and adjustment by the Project Manager, if at any time he is of the opinion that the certificate does not represent accurately the proportion or value of work completed, having regard to the remaining portion of the WORKS still to be executed by the Contractor.

36.4 In the event of failure by Transnet to make payment within the time stipulated in clause 36.3, he shall pay to the Contractor interest at prime overdraft rate as certified by the Contractor's bankers upon all overdue payments of such certified amounts, from the date on which such payments should have been made.

36.5 The Project Manager's certificate authorising payment in respect of any work referred to in clause 36.1 hereof shall not imply acceptance of the work or of the material used, and shall not prejudice the right of the Technical Officer or Project Manager to reject work or material not in accordance with the Contract, nor the right of Transnet to recover any amounts paid to the Contractor in respect of such rejected work or material.

36.6 Notwithstanding any outstanding undetermined disputes, arbitrations and claims that may still exist, the Project Manager shall, within 28 days after the expiry of the defects liability and maintenance period/s or completion of the rectification of defects under clauses 27.5 and 27.6 hereof, whichever is the later, submit a Final Certificate for approval by the Executive Officer,

together with a statement of Particulars of Outstanding Matters such as undetermined claims, disputes and arbitrations.

- 36.7 The Project Manager shall, within 14 days after approval by the Executive Officer, issue the Final Certificate together with the Particulars of Outstanding Matters to the Contractor, authorising payment of all money due for completed work and payment of all retention money and return of all surety as is then held by Transnet, after deducting any money due by the Contractor to Transnet.
- 36.8 After receipt of the Final Certificate and the Particulars of Outstanding Matters, the Contractor, shall, by countersigning both documents, certify his acceptance and confirmation of the correctness of the amounts shown and particulars given and that no further claims or unresolved matters are outstanding in respect of the Contract.
- 36.9 After receipt of the Contractor's certification in terms of clause 36.8 hereof no new claims or matters will be permitted or considered by the Project Manager or Transnet.
- 36.10 Within 30 days after the receipt of the Contractor's certification, Transnet will pay to the Contractor the balance of all money due under the Contract in terms of the Final Certificate after deductions in terms of clause 36.7 have been effected.
- 36.11 Where the Contractor fails to certify the Final Certificate and Particulars of Outstanding Matters, and has not disputed the correctness thereof within 3 months after their receipt by him, the Contractor shall be deemed to be in agreement with such certificate and particulars, and Transnet will effect payment in terms thereof. Any claim arising from the Final Certificate or in connection with the Contract, whether contractual or delictual, which has not been lodged with the Project Manager previously or within a period of 3 months after receipt by the Contractor of the Final Certificate, will not be considered or admitted by Transnet, and the Contractor accepts and acknowledges that, by his failure to lodge a fully detailed and motivated claim within the above stipulated period of 3 months, he waives such claim and relieves Transnet of responsibility for, or any obligation to consider such claim.
- 36.12 Neither the issue of the Final Certificate nor any payment made thereunder shall release the Contractor from any liability, whether arising under the Contract or in common law, to indemnify Transnet against, and to reimburse it in respect of, any claim made or to be made against it by a third party for damage or loss sustained by such third party in consequence of any wrongful act or omission of the Contractor, his subcontractors or his or their employees or representatives during execution of the WORKS.
- 36.13 The following procedure shall apply to claims for additional payments in terms of the provisions of the Contract;
- 36.13.1 If the Contractor intends to claim any additional payment in terms of any clause in the Contract other than clauses 5, 17.1 to 17.7 and clause 28 hereof, he shall submit his claim, or give notice in writing of his intention to claim, to the Project Manager within 14 days of the commencement of the events giving rise to the claim.

The notice of intention to claim shall include the grounds upon which the claim will be based. From the commencement of these events, the Contractor shall keep all such contemporary records as are necessary to support any claim he may submit.

- 36.13.2 Without necessarily admitting liability, the Project Manager may instruct the Contractor to keep such further contemporary records of events as are material to a possible claim.
- 36.13.3 If the Contractor fails to comply with the provisions of clauses 36.13.1 and 36.13.2 hereof in respect of any claim or intended claim, such claim will not be considered.
- 36.13.4 If a notice of intention to claim has been submitted in terms of clause 36.13.1, the amount of the claim and detailed documentation in support thereof shall be submitted by the Contractor to the Project Manager within 28 days after the events giving rise to the claim have ceased. If it is not reasonably possible to assess the amount of the claim within this period, the Project Manager may agree in writing to such extended period as may be necessary.
- 36.14 Save for the provisions for interest payments in clause 36.4 hereof and, if provided in the Bill, for continuing finance charges, no liability will be accepted by Transnet in respect of interest or financing costs in respect of any unliquidated claims and unresolved matters arising and accumulating during the contract period or such extended period as determined in terms of clauses 17 or 28 hereof.
- 36.15 Payment of the amounts due by Transnet to the Contractor, save where expressly otherwise agreed, will be made by cheque and sent by registered post to the Contractor's postal address or any other address requested in writing by the Contractor. The Contractor authorises the S.A. Post Office Limited to act as his delivery agent, and the risk that payment may not be received transfers to the Contractor upon the posting thereof. The date of postage of the cheque shall be deemed to be the date of payment for the purposes of clause 36.4 hereof.
- 37. BREACHES AND REMEDIES**
- 37.1 Should the Contractor commit any breach or default of any kind mentioned in clause 37.2 hereof, the Executive Officer may exercise, subject to the provisions of clause 40 hereof, for and on behalf of Transnet, immediately, in whole or in part and consecutively or concurrently, all or any of the options, rights and powers set out in clause 37.3 hereof.
- 37.2 Breaches or defaults entitling the Executive Officer to act in terms of clause 37.3 hereof shall be the following: -
- 37.2.1 Insolvency of the Contractor or an act of insolvency comprising, inter alia, the following: -
- (i) liquidation or sequestration of the Contractor's estate (provisionally or finally); or
 - (ii) the Contractor publishing a notice of surrender of his estate as insolvent; or
 - (iii) the Contractor entering into a compromise with the general body of his creditors; or
 - (iv) the Contractor having an execution levied on his goods.
- 37.2.2 Material breach of the Contract by the Contractor comprising, inter alia: -
- (i) the abandonment or repudiation of the Contract;
 - (ii) suspension of progress of the WORKS without contractual cause;
 - (iii) failure to remove materials from the site or to demolish and replace work, which materials or work has been condemned or rejected by the Technical Officer;

- (iv) failure, after he has been notified in terms of clause 14.7 hereof to achieve a rate of progress on the WORKS which will ensure completion by the stipulated date or such extended date of completion as may have been determined in terms of clauses 17.1 to 17.7 and 28 hereof;
- (v) assigning of the Contract without the consent in writing of the Executive Officer having first been obtained;
- (vi) subcontracting any part of the Contract without the Project Manager's approval;
- (vii) failing to provide the deed of suretyship in terms of clause 29 hereof;
- (viii) failing to satisfy any judgement or arbitrator's award entered against him within 7 days after such judgement or award is so entered or to satisfy any attachment order against property within 3 days of its issue;
- (ix) conviction of the Contractor or any of his employees in a court of law for any offence which adversely affects the interests of Transnet.

37.3 In the event of any breach or default mentioned in clause 37.2 hereof, the Executive Officer may exercise any of the following options, rights and powers: -

- (i) To cancel the Contract and to invoke Transnet's lien over the Contractor's site establishment, temporary buildings, construction plant, equipment and materials, and any indemnities or safeguards in favour of Transnet in terms of the Contract.
- (ii) To take over full possession and control of the whole or any portion of the WORKS and the Contractor's construction plant, equipment, tools and material used thereon, and control of any or all of the Contractor's employees (with or without accepting any liability for arrear salaries or wages, or for any contracts of personal service) and to continue and complete the WORKS, by employment of such of the Contractor's employees and using such of his site establishment, temporary buildings, construction plant, equipment, tools and materials, as are necessary in the discretion of the Project Manager, all for the account of and at the cost and risk of the Contractor.
- (iii) To remove and dismiss any person employed by the Contractor and, for the account of and at the cost and risk of the Contractor, to engage or appoint any other person under such conditions and to pay him such salary or wage as the Project Manager may deem fit
- (iv) To obtain from any source whatsoever, at the cost of the Contractor, such construction plant, tools equipment and material as are necessary, in the opinion of the Project Manager, for the proper completion of the Contract.
- (v) To dismiss the Contractor from any further control of the execution of the Contract, and thereafter to take over full control of and to utilise the whole or any portion of the construction plant, equipment, tools and material belonging to the Contractor, and to employ any person other than the Contractor to complete the Contract, in each case for the account of and at the risk and cost of the Contractor, after or without offering such work for tender and without the interference or intervention in any way by the Contractor.
- (vi) After the said work has been completed by such other person and such other person has been paid therefor, the Project Manager shall issue the Final Certificate when so authorised by the Executive Officer. Should any money be shown to be due by the Contractor to Transnet, the Contractor and/or his guarantor shall forthwith pay

such money to Transnet, failing which Transnet may recover the said amount from the Contractor.

- (vii) To reduce, in the case where the Contractor's defective materials, workmanship and/or performance is accepted by Transnet, any one or all of the rates and prices in the Contract by the amounts of Transnet's losses, or by the costs of rectifying such defective materials, workmanship and/or performance of the Contractor, or by the amounts that the Contract WORKS are reduced in value as a consequence of the deficiencies.

37.4 All wages, salaries, costs, expenses and damages paid, incurred or sustained by Transnet for which the Contractor is liable in terms of the Contract, shall be paid by the Contractor on demand or shall be recovered as provided for in clause 34 hereof.

37.5 In any action taken or instituted by Transnet in terms of clauses 37.1 to 37.4 hereof, or any clause of the Contract read alone or in conjunction with these clauses, a certificate issued by the Project Manager shall be deemed to be proof of any amount due by the Contractor to Transnet or by Transnet to the Contractor.

37.6 No action taken or instituted by Transnet in terms of clauses 37.1 to 37.4 hereof or any clause of the Contract read alone or in conjunction with these clauses, shall prejudice or detract from Transnet's right to recover penalties for late completion or damages for any other breach or default committed by the Contractor in respect of the Contract.

38. VOLUNTARY TERMINATION OF THE CONTRACT AND REMEDIES IN CONSEQUENCE THEREOF

38.1 The occurrence of the following circumstances shall, subject to the provisions of clause 40, entitle either of the parties to voluntarily terminate the Contract by mutual agreement or by giving the other party 30 days written notice of such termination: -

38.1.1 The outbreak of war or armed hostilities (whether war be declared or not) in any part of the world, or the imposition of economic sanctions between governments or any other action of a like kind and if any such event will materially affect the execution or cost of the WORKS;

38.1.2 The declaration of a state of emergency by the Government, riots, commotion, politically motivated sabotage, acts of terrorism or disorder, which are all beyond the control of either the Contractor or Transnet, and which will materially affect the execution of the works or the supply of labour or materials or materially interfere with access to the site or constitute a material risk to persons or property associated with the Contract;

38.1.3 The occurrence of unforeseeable adverse subsurface conditions as envisaged in clause 5.3 hereof and which materially affects the cost of the WORKS to the extent that the entire project or the Contract is rendered uneconomical for either one or both of the parties;

38.1.4 A change of circumstances beyond the control of the parties and external to the contract provisions, to the extent that the viability or cost of the project or the Contract is materially and adversely affected to such an extent that the continued performance of the Contract would materially prejudice any one or both of the parties and that it would be reasonable to allow the prejudiced party to withdraw from the Contract.

38.2 Upon such notice of termination: -

- 38.2.1 the parties shall continue with the execution of the Contract during the period of notification unless otherwise directed by the Project Manager;
- 38.2.2 all the provisions of the Contract, including this clause shall continue to apply for the purpose of: -
(i) resolving any dispute, and
(ii) ascertaining the amounts payable by either Transnet or the Contractor to the other;
- 38.2.3 the Project Manager will be entitled to take possession and occupation of the site, the WORKS and any materials which are the property of Transnet; and
- 38.2.4 the Contractor and his subcontractors and all their employees and agents shall, within 7 days after the date of termination stipulated in the notice or as agreed, remove all construction plant materials and other assets, belonging to them from the site.
- 38.3 If the Contract is terminated as aforesaid, the Contractor shall be paid by Transnet such amounts or items that have not already been covered by payments made to the Contractor, for all the work executed prior to the date of termination, at the rates and prices provided in the Contract, and in addition
- 38.3.1 the amounts payable in respect of any provisional items and PC sums, referred to in the Bill, in so far as the work or service comprised therein has been carried out or performed by the Contractor, and a proper proportion of any such items which have been partially carried out or performed; plus
- 38.3.2 the cost of materials, plant or goods reasonably ordered for the WORKS, which have been delivered to the site and paid for by the Contractor, or of which the Contractor is legally liable to accept delivery, such materials, plant or goods becoming the property of Transnet upon such payments being made; plus
- 38.3.3 a sum, being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the WORKS in so far as such expenditure has not been covered by any other payments referred to in this clause.
- 38.4 In the event of termination of the Contract by Transnet in the circumstances described in clause 38.1.4 hereof, the Contractor shall be entitled to additional payment amounting to 12 percent of the total contract amount as tendered, after the total sum of the amounts determined in accordance with clauses 38.3, 38.3.1, 38.3.2 and 38.3.3 hereof has been deducted.
- 38.5 In the event of termination of the Contract by the Contractor in circumstances described in clause 38.1.4 hereof, the Contractor shall not be entitled to any payments in terms of clause 38.3.3 hereof, but he shall instead pay to Transnet an amount equal to 12 percent of the total contract amount as tendered after the total sum of the amounts determined in accordance with clauses 38.3, 38.3.1 and 38.3.2 hereof has been deducted.
- 38.6 Transnet shall, against any payments due under clause 38, be entitled to be credited with any outstanding balances due from the Contractor, for advances in respect of the Contractor's equipment, materials and construction plant and any other sums which, at the date of termination, were recoverable by Transnet from the Contractor under the terms of the Contract. Any sums payable under this clause shall be determined by the Executive Officer in conjunction with the Project Manager and the Contractor, and he shall notify the Contractor accordingly.

39. INDEMNITIES AND INSURANCE

- 39.1 Contractor and/or Sub-contractor shall take every precaution not to cause damage to property or injury to any person as a result of his execution of the work.
- 39.2 The Contractor and/or Sub-contractor shall insure against loss of or damage to his own machinery, tools, equipment, materials and site establishments and any consequential financial losses arising from such damage. This insurance is to be maintained in force during the entire period of the Contract. The Contractor shall likewise arrange his own insurances in respect of motor vehicle liabilities and employer's common law liabilities of the Contractor.
- 39.3 The Contractor and/or Sub-contractor shall, and hereby does indemnify the S.A.R.C.C. against -
- (i) liability for infringement of any patent, design, trade mark, name, or other protected right; and
 - (ii) any legal costs or disbursements incurred in connection with any of the matters referred to in paragraph (i) hereof,
- whenever the liability contemplated in paragraph (i) hereof is due to arise out of anything done, omitted or undertaken, or the use of any plant, process, machine or material, in terms of or for the purpose of the contract.
- 39.4 **Insurance Effected by the SARCC**
- a) Notwithstanding anything elsewhere contained in this Contract and without limiting the obligations, liabilities or responsibilities of the Contractor in any way whatsoever (including but not limited to any requirement for the provision by the Contractor of any other insurances) the SARCC shall effect and maintain as appropriate in the joint names of the SARCC, the Contractor and where relevant Sub-contractors the following insurances which are subject to the terms, limits, exceptions and conditions of the Policy.

CONTRACT WORKS Insurance - which will provide cover against accidental physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works.

PUBLIC LIABILITY Insurance - which will provide indemnity against legal liability in the event of accidental death of or injury to or illness or disease contracted by any third party persons and/or loss of or damage to third party property arising directly from the execution of the contract and occurring during any period of insurance with a limit of indemnity in respect of all claims arising from any one occurrence or series of occurrences consequent on or attributable to one source or original cause as specified in the Schedule hereto.
 - b) The SARCC shall pay the premium and stamp duty in connection with the insurance effected by the SARCC.
 - c) The Contractor shall not include any premium charges for this insurance except to the extent which he may deem necessary in his own interests to effect supplementary insurance to the insurance effected by the SARCC. The SARCC reserves the right to call for full information regarding insurance costs included by the Contractor.
 - d) The Contractor shall give all notices and observe all conditions and requirements of such insurances and shall communicate to the SARCC's Insurance Brokers any facts or information known to him which may in any

way affect the validity or enforceability of the policies.

- e) Any further clarification of the scope of cover provided by the Policies arranged by the SARCC should be obtained from the SARCC or their Insurance Brokers.

39.3 In the event of any occurrence which is likely to or could give rise to a claim under the Contract Works and Public Liability Insurances the Contractor and/or the Sub-contractor shall:

- a) in addition to any statutory requirement or other requirements contained in the Contract, immediately notify the SARCC's Insurance Brokers or the Insurers by telephone, telex, or telefax giving the circumstances, nature and an estimate of the loss or damage or liability.
- b) complete a Claims Advice Form available from the Insurance Brokers to whom the form must be returned without delay.
- c) negotiate the settlement of claims with the Insurers through the SARCC's Insurance Brokers and shall when required to do so obtain the SARCC's approval of such settlement.
- d) The SARCC and Insurers shall have the right to make all and any enquiries on the site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor and/or Sub-contractor shall co-operate in the carrying out of such enquiries.

39.4 The Contractor and/or Sub-contractor will be liable for the amount of the Deductible (First Amount Payable) in respect of any claim made by or against the Contractor or Sub-contractors under the insurances effected by the SARCC.

The Deductibles (First Amount Payable) for which the Contractors are responsible and which the Contractors are responsible and which are applicable in respect of each and every occurrence or series of occurrence attributable to one source or original cause giving rise to loss or damage or liability indemnifiable shall be as specified in the Schedule hereto.

Any amount which becomes payable to the Contractor or any of his Sub-contractors as a result of a claim under the Contract Works Insurance shall, if required by the SARCC, be paid net of the Deductible to the SARCC who shall pay the Contractor from the proceeds of such payment upon rectification, repair or reinstatement of the loss or damage but this provision shall not in any way affect the Contractor's obligations, liabilities or responsibilities in terms of the Contract.

39.5 **Insurance Effected by the Contractor**

The Contractor and Sub-contractor shall, where applicable, provide as a minimum the following:

- a) Insurance of Construction Plant and Equipment (including tools, offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
- b) Insurance in terms of the provisions of the Workmen's Compensation Act No. 30 of 1941 as amended.
- c) Employer's Common Law Liability Insurance with a limit of indemnity of not

less than the amount specified in the Schedule hereto.

- d) Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability indemnity with a limit of indemnity of not less than the amount specified in the Schedule hereto.
- e) Where the Contract involves manufacturing and/or fabrication of the Works or parts thereof at premises other than at the Contract Site the SARCC shall be entitled to require the Contractor and/or Sub-contractor to satisfy the SARCC that adequate Professional Indemnity Insurance in respect of liability arising from any act, omission or neglect in such design work has been arranged.

- 39.6 a) The insurances to be provided by the Contractor and his Sub-contractor shall be effected with Insurers and on terms approved by the SARCC (which approval shall not be unreasonably withheld) and shall be maintained in force for the duration required (including any period of maintenance). The Contractor and his Sub-contractor shall within fourteen (14) days of commencement of the contract produce to the SARCC the relevant Policy of Policies of Insurance.
- b) If the Contractor and his Sub-contractor fail to effect and keep in force the insurances referred to then the SARCC may effect and keep in force any such insurances and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount paid by the SARCC from any monies due or which may become due to the Contractor and/or Sub-contractor or recover same as a debt from the Contractor and his Sub-contractor.

39.7 **Sub-contractors**

The Contractor shall:

- a) ensure that all potential and appointed Sub-contractors are aware of the whole contents of this clause, and
- b) enforce the compliance by Sub-contractors with this clause where applicable.

39.8 **Riot Insurance**

SARCC shall arrange cover for any damage caused as a result of riot only in respect of those works for which in its opinion, it is deemed necessary. This shall be indicated on the attached Insurance Schedule.

Insurance of the WORKS and risks related to the execution of the Contract shall be arranged by Transnet and the Contractor in terms of the obligations stipulated hereafter.

40. **RESOLUTION OF DISPUTES**

- 40.1 If a dispute of any kind arises between the Contractor and the Technical Officer, in connection with or arising out of the Contract or the execution of the WORKS, whether during the execution of the WORKS or after their completion, and whether before or after repudiation or other termination of the Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation, the matter in dispute shall, within 14 days of dispute having arisen, be referred to the Project Manager with a

copy to the Executive Officer. The Project Manager shall decide the matter within 28 days of receipt of the reference and notify the Contractor and Technical Officer of his decision.

40.2 If a dispute arises between the Project Manager and the Contractor, including a dispute arising out of the Project Manager's decision in terms of clause 40.1 hereof, or if the Contractor is dissatisfied with any instruction, assessment, determination, valuation, variation or ruling given or made by the Executive Officer in terms of his powers under the Contract, the matter shall be referred in writing to the Executive Officer within 28 days of the decision of the Project Manager or of the dispute or dissatisfaction, as the case may be, having arisen.

40.3 The parties shall thereafter endeavour to settle the dispute by way of negotiation.

The procedure and forum for the negotiations shall be subject to agreement between the parties. The negotiations shall be without prejudice to either of the parties and neither shall be entitled to rely upon admissions or concessions made during such procedures in any ensuing arbitration and/or litigation proceedings.

Either of the parties may elect that the negotiation proceedings be facilitated by an independent Mediator. In such case, the provisions of Clause 40.7 shall apply mutatis mutandis to the appointment of the Mediator. Each party shall bear its own costs in respect of the mediation and pay half of the Mediator's agreed fees and expenses.

40.4 If the parties fail to reach a negotiated settlement, or negotiations break down on account of a deadlock, the Executive Officer shall decide the dispute on behalf of Transnet and shall advise his decision in writing to the Project Manager and the Contractor within 42 days after the day of receipt by him of the reference in terms of clause 40.2. The Executive Officer's decision shall forthwith be given effect to by the Project Manager, the Technical Officer and the Contractor.

40.5 Unless the Contract has already been completed, repudiated or otherwise terminated, the Contractor shall, in every case proceed with the WORKS with all due diligence, unless and until the Executive Officer's decision has been revised, as hereinafter provided for, by an arbitral award.

The Executive Officer's decision shall be final and binding on the parties unless it is disputed by the Contractor in terms of clause 40.6 hereof.

40.6 Should the Contractor be dissatisfied with the decision of the Executive Officer in terms of clause 40.4, he may, within 28 days after the receipt thereof, declare the matter to be in dispute by written notification to the Executive Officer. Unless otherwise agreed, the matter shall be referred to an Arbitrator appointed in terms of clause 40.7 hereof.

40.7 The appointment of an arbitrator shall be made by agreement between the parties, after a written submission has been made by either party to the other of a shortlist containing the names of 3 suitably qualified persons.

If the parties fail to agree within 14 days of receipt of the submission, either party may apply for the nomination of a suitably qualified person by the Chairperson for the time being of the Association of Arbitrators of South Africa, or by the Vice Chairperson in the absence of the Chairperson.

- 40.8 The reference to the Arbitrator shall, unless otherwise agreed, be deemed to be a submission to the arbitration of a single arbitrator in terms of the Arbitration Act (Act No. 42 of 1965, as amended), or any legislation passed in substitution thereof. The arbitration shall, unless otherwise agreed, be conducted in accordance with the Rules for the Conduct of Arbitrations published by the Association of Arbitrators.
- 40.9 The Arbitrator shall have full power to open up, review and revise any decision, opinion, direction, certificate or valuation of the Technical Officer, the Project Manager or the Executive Officer in so far as it may in his opinion be necessary to do so for the proper determination of the dispute. Neither party to the Contract shall be limited in the proceedings before the Arbitrator to the evidence or arguments submitted to the Technical Officer, the Project Manager or the Executive Officer, for the purposes of preceding proceedings. The award of the Arbitrator shall be final and binding on the parties.
- 40.10 Arbitration proceedings may be entered into after and at any time before the completion or alleged completion of the WORKS, provided always -
- (i) that the preceding dispute resolution procedures stipulated herein have been followed and fully exhausted,
 - (ii) that no decision given by the Technical Officer, the Project Manager or the Executive Officer in accordance with the foregoing provisions shall disqualify him as a witness and from giving evidence before the Arbitrator on any matter whatsoever relevant to the dispute so referred to the Arbitrator.
- 40.11 Any amount which may become payable by the Contractor to Transnet in consequence of any decision by the Executive Officer or of an arbitrator's award, as the case may be, in accordance with the foregoing provisions of this clause, may be recovered in any manner described in clause 34 hereof or by instituting action in a court of competent jurisdiction.
- 40.12 The Arbitrator's fees and expenses shall be borne by the parties concerned in accordance with the terms of the Arbitrator's award. Should one party pay the Arbitrator's fees, this party will have the right to recover from the other party any amount of such fee for which that party is responsible in terms of the Arbitrator's award.

oo0oo



Suppliers Code of Conduct

PREVIEW COPY ONLY



Suppliers Code of Conduct

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

These are:

- » Transnet Procurement Policy - A guide for tenderers;
- » Section 217 of the Constitution - the five pillars of Public PSCM (Procurement and Supply Chain Management): fair, equitable, transparent, competitive and cost effective;
- » The Public Finance Management Act (PFMA);
- » The Broad Based Black Economic Empowerment Act (BBBEE); and
- » The Anti-Corruption Act.

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

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

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

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

- » Transnet and its employees will follow the laws of this country and keep accurate business records that reflect actual transactions with, and payments to, our suppliers.



- » Employees must not accept or request money or anything of value, directly or indirectly, from suppliers.

Employees may not receive anything that is calculated to:

- Illegally influence their judgement or conduct or to influence the outcome of a sourcing activity;
 - Win or retain business or to influence any act or decision of any person involved in sourcing decisions; gain an improper advantage.
- » There may be times when a supplier is confronted with fraudulent or corrupt behaviour of Transnet employees. We expect our suppliers to use our "Tip-offs Anonymous" Hotline to report these acts - 0800 003 056.

Transnet is firmly committed to free and competitive enterprise.

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

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

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



These include, but are not limited to:

- Misrepresentation of their product (origin of manufacture, specifications, intellectual property rights, etc);
 - Collusion;
 - Failure to disclose accurate information required during the sourcing activity (ownership financial situation, BBBEE status, etc.);
 - Corrupt activities listed above; and harassment, intimidation or other aggressive actions towards Transnet employees.
- » Suppliers must be evaluated and approved before any materials, components, products or services are purchased from them. Rigorous due diligence must be conducted and the supplier is expected to participate in an honest and straight forward manner.
- » Suppliers must record and report facts accurately, honestly and objectively. Financial records must be accurate in all material respects.

Conflict of Interest

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

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



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

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

TIP-OFFS ANONYMOUS HOTLINE
0800 003 056

TRANSNET



**STANDARD TERMS AND CONDITIONS OF CONTRACT
FOR THE PROVISION OF SERVICES TO TRANSNET**

FORM US7 – SERVICES

“PREVIEW COPY ONLY”

TABLE OF CONTENTS

1.....	INTRODUCTION	3
2.....	DEFINITIONS	3
3.....	INTERPRETATION	7
4.....	NATURE AND SCOPE	8
5.....	AUTHORITY OF PARTIES	8
6.....	WARRANTIES.....	9
7.....	TRANSNET'S OBLIGATIONS	11
8.....	GENERAL OBLIGATIONS OF THE SUPPLIER.....	11
9.....	FEES AND EXPENSES.....	13
10.....	INVOICING AND PAYMENT.....	13
11.....	FEE ADJUSTMENTS.....	14
12.....	INTELLECTUAL PROPERTY RIGHTS.....	14
13.....	SUPPLIER'S PERSONNEL.....	17
14.....	LIMITATION OF LIABILITY	18
15.....	INSURANCES	19
16.....	CONFIDENTIALITY.....	19
17.....	TOTAL OR PARTIAL FAILURE TO PERFORM THE SCOPE OF SERVICES	22
18.....	TERM AND TERMINATION.....	22
19.....	CONSEQUENCE OF TERMINATION.....	23
20.....	ASSIGNMENT	24
21.....	FORCE MAJEURE.....	24
22.....	EQUALITY AND DIVERSITY	25
23.....	NON-WAIVER	25
24.....	PARTIAL INVALIDITY	25
25.....	DISPUTE RESOLUTION.....	25
26.....	ADDRESSES FOR NOTICES	26
27.....	WHOLE AND ONLY AGREEMENT	26
28.....	AMENDMENT AND CHANGE CONTROL	27
29.....	GOVERNING LAW.....	27
30.....	COUNTERPARTS.....	27

SCHEDULE 1 - ADDRESSES FOR NOTICES

SCHEDULE 2 - SCHEDULE OF REQUIREMENTS and / or WORK ORDER/S

SCHEDULE 3 - NON-DISCLOSURE AGREEMENT

1. INTRODUCTION

When an Agreement is entered into between Transnet and the Supplier of Services to Transnet, these Standard Terms and Conditions of Contract, the General Tender Conditions, a Schedule of Requirements and/or Work Order(s) including such special conditions as applicable, and any terms in the associated tender documents, exclusively govern the provision of Services by the Supplier to Transnet.

2. DEFINITIONS

Where the following words or phrases are used in the Agreement, such words or phrases shall have the meaning assigned thereto in this clause, except where the context clearly requires otherwise:

- 2.1. **"AFSA"** means the Arbitration Foundation of South Africa;
- 2.2. **"Agreement"** means the Agreement and its associated schedules and/or annexures and/or appendices, including the Schedule of Requirements and/or Work Order(s), specifications for the Services and such special conditions as shall apply to the Agreement, together with the General Tender Conditions and any additional provisions in the associated bid documents tendered by the Supplier (as agreed between the Parties), which collectively and exclusively govern the provision of Services by the Supplier to Transnet;
- 2.3. **"Background Intellectual Property"** means all Intellectual Property introduced and required by either Party to give effect to their obligations under the Agreement owned in whole or in part by or licensed to either Party or their affiliates prior to the Commencement Date or developed after the Commencement Date otherwise pursuant to the Agreement;
- 2.4. **"Business Day(s)"** means Mondays to Fridays between 07:30 and 16:00, excluding public holidays;
- 2.5. **"Commencement Date"** means the effective date at which time the Supplier's provision of Services to Transnet in terms of the Agreement shall commence, as detailed in Schedule 2 hereto (SCHEDULE OF REQUIREMENTS / WORK ORDER);
- 2.6. **"Confidential Information"** means any information or other data, whether in written, oral, graphic or in any other form such as in documents, papers, memoranda, correspondence, notebooks, reports, drawings, diagrams, discs, articles, samples, test results, prototypes, designs, plans, formulae, patents, or inventor's certificates, which a Party discloses or provides to the other Party (intentionally or unintentionally, or as a result of one Party permitting the

Respondent's Signature

Date & Company Stamp

representative of the other Party to visit any of its premises), or which otherwise becomes known to a Party, and which is not in the public domain and includes, without limiting the generality of the term –

- (a) information relating to methods of operation, data and plans of the disclosing Party;
- (b) the contents of the Agreement;
- (c) private and personal details of employees or clients of the disclosing Party or any other person where an onus rests on the disclosing Party to maintain the confidentiality of such information;
- (d) any information disclosed by either Party and which is clearly marked as being confidential or secret;
- (e) information relating to the strategic objectives and planning of the disclosing Party relating to its existing and planned future business activities;
- (f) information relating to the past, present and future research and development of the disclosing Party;
- (g) information relating to the business activities, business relationships, products, services, customers, clients and Subcontractors of the disclosing Party where an onus rests on the disclosing Party to maintain the confidentiality of such information;
- (h) information contained in the software and associated material and documentation belonging to the disclosing Party;
- (i) technical and scientific information, Know-How and trade secrets of a disclosing Party including inventions, applications and processes;
- (j) Copyright works;
- (k) commercial, financial and marketing information;
- (l) data concerning architecture, demonstrations, tools and techniques, processes, machinery and equipment of the disclosing Party;
- (m) plans, designs, concepts, drawings, functional and technical requirements and specifications of the disclosing Party;
- (n) information concerning faults or defects in goods, equipment, hardware or software or the incidence of such faults or defects; and

Respondent's Signature

Date & Company Stamp

- (o) information concerning the charges, Fees and / or costs of the disclosing Party or its authorised Subcontractors, or their methods, practices or service performance levels actually achieved;
- 2.7. **“Copyright”** means the right in expressions, procedures, methods of operations or mathematical concepts, computer program codes, compilations of data or other material, literary works, musical works, artistic works, sound recordings, broadcasts, program carrying signals, published editions, photographic works, or cinematographic works of the copyright owner to do or to authorise the doing of certain acts specified in respect of the different categories of works;
- 2.8. **“Default”** means any breach of the obligations of either Party (including but not limited to fundamental breach or breach of a fundamental term) or any Default, act, omission, negligence or statement of either Party, its employees, agents or Subcontractors in connection with or in relation to the subject of the Agreement and in respect of which such Party is liable to the other;
- 2.9. **“Deliverable(s)”** means any and all works of authorship, products and materials developed, written, prepared, assembled, integrated, modified or provided by the Supplier in relation to the Services;
- 2.10. **“Designs”** mean registered designs and/or design applications and will include the monopoly right granted for the protection of an independently created industrial design including designs dictated essentially by technical or functional considerations as well as topographies of integrated circuits and integrated circuits;
- 2.11. **“Fee(s)”** shall mean the agreed Fees for the Services to be purchased from the Supplier by Transnet, as detailed in the Schedule of Requirements or Work Order(s), issued in accordance with the Agreement, as amended by mutual agreement between the Parties and in accordance with the provisions of the Agreement from time to time;
- 2.12. **“Foreground Intellectual Property”** means all Intellectual Property developed by either Party pursuant to the Agreement;
- 2.13. **“Intellectual Property”** means Patents, Designs, Know-How, Copyright and Trade Marks and all rights having equivalent or similar effect which may exist anywhere in the world and includes all future additions and improvements to the Intellectual Property;
- 2.14. **“Know-How”** means all Confidential Information of whatever nature relating to the Intellectual Property and its exploitation as well as all other Confidential Information generally relating to

Respondent's Signature

Date & Company Stamp

Transnet's field of technology, including technical information, processing or manufacturing techniques, Designs, specifications, formulae, systems, processes, information concerning materials and marketing and business information in general;

- 2.15. **"Materials"** means the Deliverables, the Supplier Materials and the Third Party Materials;
- 2.16. **"Parties"** mean the Parties to the Agreement together with their subsidiaries, divisions, business units, successors-in-title and their assigns;
- 2.17. **"Party"** means either one of these Parties;
- 2.18. **"Patents"** mean registered patents and patent applications, once the latter have proceeded to grant, and includes a right granted for any inventions, products or processes in all fields of technology;
- 2.19. **"Permitted Purpose"** means any activity or process to be undertaken or supervised by Personnel or employees of one Party during the term of the Agreement, for which purpose authorised disclosure of the other Party's Confidential Information or Intellectual Property is a prerequisite in order to enable such activity or process to be accomplished;
- 2.20. **"Personnel"** means any partner, employee, agent, consultant, independent associate or supplier, Subcontractor and the staff of such Subcontractor, or other authorised representative of either Party;
- 2.21. **"Purchase Order(s)"** means official orders issued by an operating division of Transnet to the Supplier for the provision of Services;
- 2.22. **"Schedule of Requirements"** means Schedule 2 hereto, unless substituted by a Work Order or Work Orders, as defined;
- 2.23. **"Service(s)"** means the Service(s) provided to Transnet by the Supplier, pursuant to the Schedule of Requirements or Work Order(s) in terms of the Agreement;
- 2.24. **"Service Level Agreement" or "SLA"** means the processes, deliverables, key performance indicators and performance standards relating to the Services to be provided by the Supplier;
- 2.25. **"Subcontract"** means any contract or agreement or proposed contract or agreement between the Supplier and any third party whereby that third party agrees to provide to the Supplier the Services or any part thereof;
- 2.26. **"Subcontractor"** means the third party with whom the Supplier enters into a Subcontract;

Respondent's Signature

Date & Company Stamp

- 2.27. **“Supplier Materials”** means all works of authorship, products and materials (including, but not limited to, data, diagrams, charts, reports, specifications, studies, inventions, software, software development tools, methodologies, ideas, methods, processes, concepts and techniques) owned by, or licensed to, the Supplier prior to the Commencement Date or independently developed by the Supplier outside the scope of the Agreement at no expense to Transnet, and used by the Supplier in the performance of the Services;
- 2.28. **“Tax Invoice”** means the document as required by Section 20 of the Value-Added Tax Act, 89 of 1991;
- 2.29. **“Third Party Material”** means software, software development tools, methodologies, ideas, methods, processes, concepts and techniques owned by, or licensed to a third party and used by the Supplier in the performance of the Services;
- 2.30. **“Trade Marks”** mean registered trade marks and trade mark applications and includes any sign or logo, or combination of signs and/or logos capable of distinguishing the goods or services of one undertaking from those of another undertaking;
- 2.31. **“VAT”** means Value-Added Tax in terms of the Value-Added Tax Act, 89 of 1991; and
- 2.32. **“Work Order(s)”** means a detailed scope of work for a Service required by Transnet, including timeframes, Deliverable, Fees and costs for the supply of the Service to Transnet, which may be appended to the Agreement from time to time.

3. INTERPRETATION

- 3.1. Clause headings in the Agreement are included for ease of reference only and do not form part of the Agreement for the purposes of interpretation or for any other purpose. No provision shall be construed against or interpreted to the disadvantage of either Party hereto by reason of such Party having or being deemed to have structured or drafted such provision.
- 3.2. Any term, word, acronym or phrase used in the Agreement, other than those defined under the clause heading “DEFINITIONS,” shall be given its plain English meaning, and those terms, words, acronyms, and phrases used in the Agreement will be interpreted in accordance with the generally accepted meanings accorded thereto.
- 3.3. A reference to the singular incorporates a reference to the plural and vice versa.
- 3.4. A reference to natural persons incorporates a reference to legal persons and vice versa.
- 3.5. A reference to a particular gender incorporates a reference to the other genders.

Respondent's Signature

Date & Company Stamp

4. NATURE AND SCOPE

- 4.1. The Agreement is an agreement under the terms and conditions of which the Supplier will arrange for the provision to Transnet of the Services which meet the requirements of Transnet, the delivery of which Services is controlled by means of Purchase Orders to be issued by Transnet and executed by the Supplier, in accordance with the Agreement.
- 4.2. Such Purchase Orders shall be agreed between the Parties from time to time, subject to the terms of the Schedule of Requirements and / or relevant Work Order(s).
- 4.3. Each properly executed Purchase Order forms an inseparable part of the Agreement as if it were fully incorporated into the body of the Agreement.
- 4.4. During the period of the Agreement, both Parties can make written suggestions for amendments to the Schedule of Requirements or Work Orders, in accordance with procedures set out in clause 28 (AMENDMENT AND CHANGE CONTROL) below. A Party will advise the other Party within 14 (fourteen) Business Days, or such other period as mutually agreed, whether the amendment is acceptable.
- 4.5. Insofar as any term, provision or condition in the Schedule of Requirements and/or Work Order(s) conflicts with a like term, provision or condition in the Agreement and/or a Purchase Order, or where the Agreement is silent on the matter, the term, provision or condition in the Schedule of Requirements and/or Work Order(s) shall prevail.
- 4.6. Time will be of the essence and the Supplier will perform its obligations under the Agreement in accordance with the timeframe(s) (if any) set out in the relevant schedule, save that the Supplier will not be liable under this clause if it is unable to meet such obligation within the time required as a direct result of any act or omission by Transnet and it has used its best endeavours to advise Transnet of such act or omission. In the event of such delay, any time deadlines detailed in the relevant schedule shall be extended by a period equal to the period of that delay.

5. AUTHORITY OF PARTIES

- 5.1. Nothing in the Agreement will constitute or be deemed to constitute a partnership between the Parties, or constitute or be deemed to constitute the Parties as agents or employees of one another for any purpose or in any form whatsoever.
- 5.2. Neither Party shall be entitled to, or have the power or authority to enter into an agreement in the name of the other; or give any warranty, representation or undertaking on the other's behalf;

 Respondent's Signature

 Date & Company Stamp

or create any liability against the other or bind the other's credit in any way or for any purpose whatsoever.

6. WARRANTIES

6.1. The Supplier warrants to Transnet that -

- (a) it has full capacity and authority to enter into and to perform the Agreement and that the Agreement is executed by a duly authorised representatives of the Supplier;
- (b) it will discharge its obligations under the Agreement and any annexure or schedule hereto with all due skill, care and diligence;
- (c) it will be solely responsible for the payment of remuneration and associated benefits, if any, of its Personnel and for withholding and remitting income tax for its Personnel in conformance with any applicable laws and regulations;
- (d) it will procure licences for Transnet in respect of all Third Party Material detailed in the Work Order(s), and will procure the right for Transnet to take such copies (in whole or in part) of such Third Party Materials as it may reasonably require for the purposes of back-up for archiving and disaster recovery; and
- (e) the use or possession by Transnet of any Materials will not subject Transnet to any claim for infringement of any Intellectual Property Rights of any third party.

6.2. The Supplier warrants that it will perform its obligations under the Agreement in accordance with the Service Levels as defined in the relevant schedule. Transnet may at its discretion audit compliance with the Service Levels, provided that any such audit is carried out with reasonable prior notice and in a reasonable way so as not to have an adverse effect on the performance of the Services. Without prejudice to sub-clause 6.3 below, in the event that the Supplier fails to meet the Service Levels, Transnet may claim appropriate service credits or invoke a retention of Fees as detailed in the relevant schedule and/or Work Order.

6.3. The Supplier warrants that for a period of 90 (ninety) days from Acceptance of the Deliverables they will, if properly used, conform in all materials respects with the requirements set out in the relevant schedule. The Supplier will at its expense remedy any such non-conformance as soon as possible but in any event within 30 (thirty) days of notification by Transnet. In the event that the Supplier fails or is unable to remedy such non-conformance within such time-scale, Transnet will be entitled to employ a third party to do so in place of the Supplier and any excess charges or costs incurred by Transnet as a result shall be paid by the Supplier.

Respondent's Signature

Date & Company Stamp

- 6.4. The Supplier will remedy any defect within 14 (fourteen) days of being notified of that defect by Transnet in writing.
- 6.5. The Supplier will not be liable to remedy any problem arising from or caused by any modification made by Transnet to the Deliverables, or any part thereof, without the prior approval of the Supplier.
- 6.6. The Supplier shall advise Transnet of the effects of any steps proposed by Transnet pursuant to sub-clause 6.5 above, including but not limited to any cost implications or any disruption or delay in the performance of the Services. The Parties agree that any changes to the Services, including the charges for the Services or any timetables for delivery of the Services, will be agreed in accordance with the change control procedure, as set out in clause 28 (AMENDMENT AND CHANGE CONTROL).
- 6.7. The Supplier warrants that -
- (a) it has, using the most up-to-date software available, tested for (and deleted) all commonly known viruses in the Materials and for all viruses known by the Supplier at the date of the relevant Work Order; and
 - (b) at the time of delivery to Transnet, the Materials do not contain any trojan horse, worm, logic bomb, time bomb, back door, trap door, keys or other harmful components.
- The Supplier agrees that, in the event that a virus is found, it will at its own expense use its best endeavours to assist Transnet in reducing the effect of the virus and, particularly in the event that a virus causes loss of operational efficiency or loss of data, to assist Transnet to the same extent to mitigate such losses and to restore Transnet to its original operating efficiency.
- 6.8. The Supplier undertakes to comply with South Africa's general privacy protection in terms of the Bill of Rights (Section 14) in connection with the Agreement and shall procure that its Personnel shall observe the provisions of such Act (as applicable) or any amendments and re-enactments thereof and any regulations made pursuant thereto.
- 6.9. The Supplier warrants that it has taken all reasonable precautions to ensure that, in the event of a disaster, the impact of such disaster on the ability of the Supplier to comply with its obligations under the Agreement will be reduced to the greatest extent possible, and that the Supplier shall ensure that it has appropriate, tested and documented recovery arrangements in place.
- 6.10. In compliance with the National Railway Safety Regulator Act, 16 of 2002, the Supplier shall ensure that the Services, to be supplied to Transnet under the terms and conditions of the

Respondent's Signature

Date & Company Stamp

Agreement, comply fully with the Specifications as set forth in Schedule 2 hereto, and shall thereby adhere to railway safety requirements and/or regulations. Permission for the engagement of a Subcontractor by the Supplier, as applicable, shall be subject to a review of the capability of the proposed Subcontractor to comply with the specified railway safety requirements and/or regulations. The Supplier and/or its Subcontractor shall grant Transnet access, during the term of the Agreement, to review any safety-related activities, including the coordination of such activities across all parts of its organisation.

7. TRANSNET'S OBLIGATIONS

- 7.1. Transnet undertakes to promptly comply with any reasonable request by the Supplier for information, including information concerning Transnet's operations and activities, that relates to the Services as may be necessary for the Supplier to perform the Services, but for no other purpose. However, Transnet's compliance with any request for information is subject to any internal security rules and requirements and subject to the observance by the Supplier of its confidentiality obligations under the Agreement.
- 7.2. The Supplier shall give Transnet reasonable notice of any information it requires in accordance with sub-clause 7.1 above.
- 7.3. Subject to clause 13 (SUPPLIER'S PERSONNEL), Transnet agrees to provide the Supplier or its Personnel such access to and use of its facilities as is necessary to allow the Supplier to perform its obligations under the Agreement.

8. GENERAL OBLIGATIONS OF THE SUPPLIER

- 8.1. The Supplier shall –
 - (a) respond promptly to all complaints and enquiries from Transnet;
 - (b) inform Transnet immediately of any dispute or complaint arising in relation to the provision of the Services;
 - (c) conduct its business in a professional manner that will reflect positively upon the Supplier and the Supplier's Services;
 - (d) keep full records clearly indicating all transactions concluded by the Supplier relating to the performance of the Services and keep such records for at least 5 (five) years from the date of each such transaction;

 Respondent's Signature

 Date & Company Stamp

- (e) obtain, and at all times maintain in full force and effect, any and all licences, permits and the like required under applicable laws for the provision of the Services and the conduct of the business and activities of the Supplier;
- (f) observe and ensure compliance with all requirements and obligations as set out in the labour and related legislation of South Africa, including the Occupational Health and Safety Act, 85 of 1993; and
- (g) comply with all applicable environmental legislation and regulations, and demonstrate sound environmental policies, management and performance.

8.2. The Supplier acknowledges and agrees that it shall at all times -

- (a) render the Services and perform all its duties with honesty and integrity;
- (b) communicate openly and honestly with Transnet and demonstrate a commitment to performing the Services timeously, efficiently and to the required standards;
- (c) endeavour to provide the highest possible standards of service and professionalism, with a reasonable degree of care and diligence;
- (d) use its best endeavours and make every diligent effort to meet agreed deadlines;
- (e) treat its own Personnel, as well as all Transnet's officers, employees, agents and consultants, with fairness and courtesy and respect for their human rights;
- (f) practice and promote its own internal policies aimed at prohibiting and preventing unfair discrimination (as further referred to in clause 22 – EQUALITY AND DIVERSITY);
- (g) treat all enquiries from Transnet in connection with the Services with courtesy and respond to all enquiries promptly and efficiently. Where the Supplier is unable to comply with the provisions of this sub-clause, the Supplier will advise Transnet of the delay and the reasons therefor and will keep Transnet informed of progress made regarding the enquiry;
- (h) when requested by Transnet, provide clear and accurate information regarding the Supplier's own policies and procedures, excluding Know-How and other Confidential Information, except where a non-disclosure undertaking has been entered into between the Parties;
- (i) not allow a conflict of interest to develop between its own interests (or the interests of any of its other customers) and the interests of Transnet;

Respondent's Signature

Date & Company Stamp

- (j) not accept or offer, nor allow, induce or promote the acceptance or offering of any gratuity, enticement, incentive or gift that could reasonably be regarded as bribery or an attempt to otherwise exert undue influence over the recipient;
- (k) not mislead Transnet or its officers, employees and stakeholders, whether by act or omission;
- (l) not otherwise act in an unethical manner or do anything which could reasonably be expected to damage or tarnish Transnet's reputation or business image; and
- (m) immediately report to Transnet any unethical, fraudulent or otherwise unlawful conduct of which it becomes aware in connection with Transnet or the provision of Services.

9. FEES AND EXPENSES

- 9.1. In consideration of the provision of the Services, Transnet will pay to the Supplier the Fees detailed in the relevant schedule or Work Order.
- 9.2. Transnet will not be invoiced for materials used in the provision of the Services save for those materials (if any) set out in the Work Order and accepted by Transnet or in any relevant Work Order (which will be invoiced to Transnet at cost).
- 9.3. Unless otherwise agreed in a schedule or Work Order, Transnet will reimburse to the Supplier all reasonable and proper expenses incurred directly and solely in connection with the provision of the Services, provided that all such expenses -
 - (a) are agreed by Transnet in advance;
 - (b) are incurred in accordance with Transnet's standard travel and expenses policies;
 - (c) are passed on to Transnet at cost with no administration fee; and
 - (d) will only be reimbursed if supported by relevant receipts.
- 9.4. All Tax Invoices relating to Fees, out of pocket expenses and, if applicable, travel and accommodation costs, will provide the detail for each of the Personnel carrying out the Services and incurring the expenses, and the Tax Invoice will, where appropriate, include VAT as a separate item.

10. INVOICING AND PAYMENT

- 10.1. Transnet shall pay the Supplier the amounts stipulated in the relevant schedule or Work Order, subject to the terms and conditions of the Agreement.

Respondent's Signature

Date & Company Stamp

- 10.2. Transnet shall pay such amounts to the Supplier, upon receipt of a correct and undisputed Tax Invoice together with the supporting documentation as specified in the Schedule of Requirements or Work Order appended hereto, once the undisputed Tax Invoices, or such portion of the Tax Invoices which are undisputed become due and payable to the Supplier for the provision of the Services, in terms of sub-clause 10.4 below.
- 10.3. All Fees and other sums payable under the Agreement are exclusive of VAT, which will be payable at the applicable rate.
- 10.4. Unless otherwise provided for in the Schedule of Requirements or Work Order(s) appended to the Agreement, Tax Invoices shall be submitted together with a month-end statement. Payment against such month-end statement shall be made by Transnet within 30 (thirty) days after date of receipt by Transnet of the statement together with all undisputed Tax Invoices and supporting documentation.
- 10.5. Where the payment of any Tax Invoice, or any part thereof which is not in dispute, is not made in accordance with this clause 10, the Supplier shall be entitled to charge interest on the outstanding amount, at The Standard Bank of South Africa's prime rate of interest in force, for the period from the due date of payment until the outstanding amount is paid.

11. FEE ADJUSTMENTS

- 11.1. Fees for Services rendered in terms of the Agreement shall be subject to review as indicated in the Schedule of Requirements or Work Orders annexed hereto from time to time.
- 11.2. No less than 2 (two) months prior to any proposed Fee adjustment, the Parties shall commence negotiations for Fees for the next period or as otherwise indicated and appended hereto.
- 11.3. Should Transnet and the Supplier fail to reach an agreement on Fees for the successive period, either Party shall be entitled to terminate the Agreement and/or the relevant Work Order after giving 30 (thirty) days written notice to the other.
- 11.4. Neither Party shall have any claim against the other of whatsoever nature by reason of such cancellation as envisaged in sub-clause 11.3 above.

12. INTELLECTUAL PROPERTY RIGHTS

12.1. Title to Confidential Information

- (a) Transnet will retain all right, title and interest in and to its Confidential Information and Background Intellectual Property and the Supplier acknowledges that it has no claim of

Respondent's Signature

Date & Company Stamp

any nature in and to the Confidential Information and Background Intellectual Property that is proprietary to Transnet. For the avoidance of doubt, all the Supplier's Background Intellectual Property shall remain vested in the Supplier.

- (b) Transnet shall grant to the Supplier an irrevocable royalty free non-exclusive licence to use Transnet's Background Intellectual Property only for the Permitted Purpose. This licence shall not permit the Supplier to sub-license to other parties.
- (c) The Supplier shall grant to Transnet an irrevocable, royalty free, non-exclusive licence to use the Supplier's Background Intellectual Property for the Permitted Purpose. This licence shall not permit Transnet to sub-license to other parties.
- (d) The Supplier shall grant Transnet access to the Supplier's Background Intellectual Property on terms which shall be bona fide negotiated between the Parties for the purpose of commercially exploiting the Foreground Intellectual Property, to the extent that such access is required.

12.2. Title to Intellectual Property

- (a) All right, title and interest in and to Foreground Intellectual Property prepared conceived or developed by the Supplier, its researchers, agents and employees shall vest in Transnet and the Supplier acknowledges that it has no claim of any nature in and to the Foreground Intellectual Property. The Supplier shall not at any time during or after the termination or cancellation of the Agreement dispute the validity or enforceability of such Foreground Intellectual Property, or cause to be done any act or anything contesting or in any way impairing or tending to impair any part of that right, title and interest to any of the Foreground Intellectual Property and shall not counsel or assist any person to do so.
- (b) Transnet shall be entitled to seek protection in respect of the Foreground Intellectual Property anywhere in the world as it shall decide in its own absolute discretion and the Supplier shall reasonably assist Transnet in attaining and maintaining protection of the Foreground Intellectual Property.
- (c) Where the Foreground Intellectual Property was created by the Supplier or its researchers, agents and employees and where Transnet elects not to exercise its option to seek protection or decides to discontinue the financial support of the prosecution or maintenance of any such protection, Transnet shall notify the Supplier who shall have the right of first refusal to file or continue prosecution or maintain any such applications and to maintain any protection issuing on the Foreground Intellectual Property.

Respondent's Signature

Date & Company Stamp

- (d) No consideration shall be paid by Transnet to the Supplier for the assignment of any Foreground Intellectual Property from the Supplier to Transnet, over and above the sums payable in terms of the Agreement. The Supplier undertakes to sign all documents and do all things as may be necessary to effect, record and perfect the assignment of the Foreground Intellectual Property to Transnet.
- (e) Subject to anything contrary contained in the Agreement and/or the prior written consent of Transnet (which consent shall not be unreasonably withheld), the Supplier shall under no circumstances be entitled as of right, or to claim the right, to use Transnet's Background Intellectual Property and/or Foreground intellectual Property.

12.3. Title to Improvements

Any improvements, developments, adaptations and/or modifications to the Foreground Intellectual Property, and any and all new inventions or discoveries, based on or resulting from the use of Transnet's Background Intellectual Property and/or Confidential Information shall be exclusively owned by Transnet. The Supplier shall disclose promptly to Transnet all such improvements, developments, adaptations and/or modifications, inventions or discoveries. The Supplier hereby undertakes to sign all documents and do all things as may be necessary to effect, record and perfect the assignment of such improvements, developments, adaptations and/or modifications, inventions or discoveries to Transnet and the Supplier shall reasonably assist Transnet in attaining, maintaining or documenting ownership and/or protection of the improved Foreground Intellectual Property.

12.4. Unauthorised Use of Confidential Information

The Supplier shall not authorise any party to act on or use in any way any Confidential Information belonging to Transnet whether or not such party is aware of such Confidential Information, and shall promptly notify Transnet of the information if it becomes aware of any party so acting, and shall provide Transnet the information with such assistance as Transnet reasonably requires, at Transnet's cost and expense, to prevent such third party from so acting.

12.5. Unauthorised Use of Intellectual Property

- (a) The Supplier agrees to notify Transnet in writing of any conflicting uses of, and applications of registrations of Patents, Designs and Trade Marks or any act of infringement, unfair competition or passing off involving the Intellectual Property of Transnet of which the Supplier acquires knowledge and Transnet shall have the right, as its own option, to proceed against any party infringing its Intellectual Property.

Respondent's Signature

Date & Company Stamp

- (b) It shall be within the discretion of Transnet to determine what steps shall be taken against the infringer and the Supplier shall co-operate fully with Transnet, at Transnet's cost, in whatever measure including legal action to bring any infringement of illegal use to an end.
- (c) The Supplier shall cooperate to provide Transnet promptly with all relevant ascertainable facts.
- (d) If proceedings are commenced by Transnet alone, Transnet shall be responsible for all expenses but shall be entitled to all damages or other award arising out of such proceedings. If proceedings are commenced by both Parties, both Parties will be responsible for the expenses and both Parties shall be entitled to damages or other award arising out of proceedings.

13. SUPPLIER'S PERSONNEL

- 13.1. The Supplier's Personnel shall be regarded at all times as employees, agents or Subcontractors of the Supplier and no relationship of employer and employee shall arise between Transnet and any Supplier Personnel under any circumstances regardless of the degree of supervision that may be exercised over the Personnel by Transnet.
- 13.2. The Supplier warrants that all its Personnel will be entitled to work in South Africa or any other country in which the Services are to be performed.
- 13.3. The Supplier will ensure that its Personnel comply with all reasonable requirements made known to the Supplier by Transnet concerning conduct at any Transnet premises or any other premises upon which the Services are to be performed (including but not limited to security regulations, policy standards and codes of practice and health and safety requirements). The Supplier will ensure that such Personnel at all times act in a lawful and proper manner in accordance with these requirements.
- 13.4. Transnet reserves the right to refuse to admit or to remove from any premises occupied by or on behalf of it, any Supplier Personnel whose admission or presence would, in the reasonable opinion of Transnet, be undesirable or who represents a threat to confidentiality or security or whose presence would be in breach of any rules and regulations governing Transnet's Personnel, provided that Transnet notifies the Supplier of any such refusal (with reasons why). The reasonable exclusion of any such individual from such premises shall not relieve the Supplier from the performance of its obligations under the Agreement.

Respondent's Signature

Date & Company Stamp

13.5. The Supplier agrees to use all reasonable endeavours to ensure the continuity of its Personnel assigned to perform the Services. If any re-assignment by the Supplier of those Personnel is necessary, or if Transnet advises that any such Personnel assigned are in any respect unsatisfactory, including where any such Personnel are, or are expected to be or have been absent for any period, then the Supplier will promptly supply a replacement of equivalent calibre and experience, and any such replacement shall be approved by Transnet prior to commencing provision of the Services, such approval not to be unreasonably withheld.

14. LIMITATION OF LIABILITY

14.1. Neither Party excludes or limits liability to the other Party for -

- (a) death or personal injury due to negligence; or
- (b) fraud.

14.2. The Supplier shall indemnify and keep Transnet indemnified from and against liability for damage to any Transnet property (whether tangible or intangible) or any other loss, costs or damage suffered by Transnet to the extent that it results from any act of or omission by the Supplier or its Personnel in connection with the Agreement. The Supplier's liability arising out of this sub-clause 14.2 shall be limited to a maximum amount payable in respect of any one occurrence or a series of related occurrences in a single calendar year, such amount to be agreed in writing by the Parties.

14.3. Subject always to sub-clauses 14.1 and 14.2 above, the liability of either the Supplier or Transnet under or in connection with the Agreement, whether for negligence, misrepresentation, breach of contract or otherwise, for direct loss or damage arising out of each Default or series of related Defaults shall not exceed 100% (one hundred percent) of the Fees paid under the schedule or Work Order to which the Default(s) relates.

14.4. Subject to sub-clause 14.1 above, and except as provided in sub-clauses 14.2 and 14.3 above, in no event shall either Party be liable to the other for indirect or consequential loss or damage or including indirect or consequential loss of profits, business, revenue, goodwill or anticipated savings of an indirect nature or loss or damage incurred by the other Party as a result of third party claims.

14.5. If for any reason the exclusion of liability in sub-clause 14.4 above is void or unenforceable, either Party's total liability for all loss or damage under the Agreement shall be as provided in sub-clause 14.3 above.

Respondent's Signature

Date & Company Stamp

14.6. Nothing in this clause 14 shall be taken as limiting the liability of the Supplier in respect of clause 12 (INTELLECTUAL PROPERTY RIGHTS) or clause 16 (CONFIDENTIALITY).

15. INSURANCES

15.1. Without limiting the liability of the Supplier under the Agreement, the Supplier shall take out insurance in respect of all risks for which it is prudent for the Supplier to insure against, including any liability it may have as a result of its activities under the Agreement for theft, destruction, death or injury to any person and damage to property. The level of insurance will be kept under review by Transnet, on an annual basis, to ensure its adequacy, provided that any variation to the level of such insurance shall be entirely at the discretion of the Supplier.

15.2. The Supplier shall arrange insurance with reputable insurers and will produce to Transnet evidence of the existence of the policies on an annual basis within 30 (thirty) days after date of policy renewals.

15.3. Subject to sub-clause 15.4 below, if the Supplier fails to effect adequate insurance under this clause 15, it shall notify Transnet in writing as soon as it becomes aware of the reduction or inadequate cover and Transnet may arrange or purchase such insurance. The Supplier shall promptly reimburse Transnet for any premiums paid provided such insurance protects the Supplier's liability. Transnet assumes no responsibility for such insurance being adequate to protect all of the Supplier's liability.

15.4. In the event that the Supplier receives written notice from its insurers advising of the termination of its insurance cover referred to in sub-clause 15.1 above or if the insurance ceases to be available upon commercially reasonable terms, the Supplier shall immediately notify Transnet in writing of such termination and/or unavailability, whereafter either the Supplier or Transnet may terminate the Agreement on giving the other Party not less than 30 (thirty) days prior written notice to that effect.

16. CONFIDENTIALITY

16.1. The Parties hereby undertake the following, with regard to Confidential Information -

- (a) not to divulge or disclose to any person whomsoever in any form or manner whatsoever, either directly or indirectly, any Confidential Information of the other, without the prior written consent of such other Party, other than when called upon to do so in accordance with a statute, or by a court having jurisdiction, or by any other duly authorised and empowered authority or official, in which event the Party concerned shall do what is

Respondent's Signature

Date & Company Stamp

reasonably possible to inform the other of such a demand and each shall assist the other in seeking appropriate relief or the instituting of a defensive action to protect the Confidential Information concerned;

- (b) not to use, exploit, permit the use of, directly or indirectly, or in any other manner whatsoever apply the Confidential Information, disclosed to it as a result of the Agreement, for any purpose whatsoever other than for the purpose for which it is disclosed or otherwise than in strict compliance with the provisions in the Agreement;
- (c) not to make any notes, sketches, drawings, photographs or copies of any kind of any part of the disclosed Confidential Information, without the prior written consent of such other Party, except when reasonably necessary for the purpose of the Agreement, in which case such copies shall be regarded as Confidential Information;
- (d) not to de-compile, disassemble or reverse engineer any composition, compilation, concept application, item, component de-compilation, including software or hardware disclosed and shall not analyse any sample provided by Transnet, or otherwise determine the composition or structure or cause to permit these tasks to be carried out except in the performance of its obligations pursuant to the Agreement;
- (e) not to exercise less care to safeguard Transnet Confidential Information than the Party exercises in safeguarding its own competitive, sensitive or Confidential Information;
- (f) Confidential Information disclosed by either Party to the other or by either Party to any other party used by such Party in the performance of the Agreement, shall be dealt with as "restricted" or shall be dealt with according to any other appropriate level of confidentiality relevant to the nature of the information concerned, agreed between the Parties concerned and stipulated in writing for such information in such cases;
- (g) the Parties shall not make or permit to be made by any other person subject to their control, any public statements or issue press releases or disclose Confidential Information with regard to any matter related to the Agreement, unless written authorisation to do so has first been obtained from the Party first disclosing such information;
- (h) each Party shall be entitled to disclose such aspects of Confidential Information as may be relevant to one or more technically qualified employees or consultants of the Party who are required in the course of their duties to receive the Confidential Information for the Permitted Purpose provided that the employee or consultant concerned has a legitimate interest therein, and then only to the extent necessary for the Permitted Purpose, and is

Respondent's Signature

Date & Company Stamp

informed by the Party of the confidential nature of the Confidential Information and the obligations of the confidentiality to which such disclosure is subject and the Party shall ensure such employees or consultants honour such obligations;

- (i) each Party shall notify the other Party of the name of each person or entity to whom any Confidential Information has been disclosed as soon as practicable after such disclosure;
- (j) each Party shall ensure that any person or entity to which it discloses Confidential Information shall observe and perform all of the covenants the Party has accepted in the Agreement as if such person or entity has signed the Agreement. The Party disclosing the Confidential Information shall be responsible for any breach of the provisions of the Agreement by the person or entity; and
- (k) each Party may by written notice to the other Party specify which of the Party's employees, officers or agents are required to sign a non-disclosure undertaking.

16.2. The duties and obligations with regard to Confidential Information in this clause 16 shall not apply where -

- (a) a Party can demonstrate that such information is already in the public domain or becomes available to the public through no breach of the Agreement by that Party, or its Personnel; or
- (b) was rightfully in a Party's possession prior to receipt from the other Party, as proven by the first-mentioned Party's written records, without an infringement of an obligation or duty of confidentiality; or
- (c) can be proved to have been rightfully received by a Party from a third party without a breach of a duty or obligation of confidentiality; or
- (d) is independently developed by a Party as proven by its written records.

16.3. This clause 16 shall survive termination for any reason of the Agreement and shall remain in force and effect from the Commencement Date of the Agreement and 5 (five) years after the termination of the Agreement. Upon termination of the Agreement, all documentation furnished to the Supplier by Transnet pursuant to the Agreement shall be returned to Transnet including, without limitation all corporate identity equipment including dies, blocks, labels, advertising matter, printing matter and the like.

Respondent's Signature

Date & Company Stamp

17. TOTAL OR PARTIAL FAILURE TO PERFORM THE SCOPE OF SERVICES

Should the Supplier fail or neglect to execute the work or to deliver any portion of the Service, as required by the terms of the Agreement or Work Order, Transnet may cancel the Agreement or Work Order in so far as it relates to the unexecuted work or rejected portion of the Service, and, in such event, the provision of any remaining commitment shall remain subject in all respects to these conditions.

18. TERM AND TERMINATION

- 18.1. The Agreement shall commence on the Commencement Date, as specified in the schedules or Work Orders hereto, and shall continue subject to termination in accordance with the provisions of the Agreement or otherwise in accordance with law or equity.
- 18.2. Transnet may terminate the Agreement without cause by giving the Supplier 30 (thirty) days' notice in writing.
- 18.3. Either Party may terminate the Agreement forthwith by notice in writing to the other Party where the other Party has committed a material Default and, where such Default is capable of remedy, has failed to remedy such Default within 30 (thirty) days of receiving notice specifying the Default and requiring its remedy.
- 18.4. Either Party may terminate the Agreement forthwith by notice in writing to the other Party when the other Party is unable to pay its debts as they fall due or commits any act or omission which would be an act of insolvency in terms of the Insolvency Act, 1936 (as amended), or if any action, application or proceeding is made with regard to it for -
 - (a) a voluntary arrangement or composition or reconstruction of its debts;
 - (b) the presentation of an administrative petition;
 - (c) its winding-up or dissolution;
 - (d) the appointment of a liquidator, trustee, receiver, administrative receiver or similar officer; or
 - (e) any similar action, application or proceeding in any jurisdiction to which it is subject.
- 18.5. Transnet may terminate the Agreement at any time within 2 (two) months of becoming aware of a change of control of the Supplier by notice in writing to the Supplier. For the purposes of this clause, "control" means the right to direct the affairs of a company whether by ownership of shares, membership of the board of directors, agreement or otherwise.

 Respondent's Signature

 Date & Company Stamp

18.6. Transnet may cancel any schedule hereto or Work Order at any time on giving the Supplier 30 (thirty) days' notice.

19. CONSEQUENCE OF TERMINATION

19.1. Termination in accordance with clause 18 (TERM AND TERMINATION) shall not prejudice or affect any right of action or remedy which shall have accrued or shall thereafter accrue to either Party and all provisions which are to survive the Agreement or impliedly do so shall remain in force and in effect.

19.2. On termination of the Agreement or a Work Order, the Supplier will immediately deliver up, and procure that its Personnel will immediately deliver up to Transnet, all Deliverables and property belonging to Transnet (or, in the event of termination of a Work Order, such as is relevant to that Work Order) which may be in the possession of, or under the control of the Supplier, and certify to Transnet in writing that this has been done.

19.3. To the extent that any of the Deliverables and property referred to in sub-clause 19.2 above are in electronic form and contained on non-detachable storage devices, the Supplier will provide Transnet with unencrypted copies of the same on magnetic media and will irretrievably destroy and delete copies so held.

19.4. In the event that the Agreement is terminated by the Supplier under sub-clause 18.3 (TERM AND TERMINATION), or in the event that a Work Order is terminated by Transnet under sub-clause 18.6 (TERM AND TERMINATION), Transnet will pay to the Supplier all outstanding Fees (apportioned on a pro rata basis) relating to the work undertaken by the Supplier up until the date of such termination. Transnet will also pay the costs of any goods and materials ordered by the Supplier in relation to the such work for which the Supplier has paid or is legally obliged to pay, in which case, on delivery of such goods or materials, the Supplier will promptly deliver such goods and materials to Transnet or as it may direct.

19.5. The provisions of clauses 2 (DEFINITIONS), 6 (WARRANTIES), 12 (INTELLECTUAL PROPERTY RIGHTS), 14 (LIMITATION OF LIABILITY), 16 (CONFIDENTIALITY), 19 (CONSEQUENCE OF TERMINATION), 25 (DISPUTE RESOLUTION) and 29 (GOVERNING LAW) shall survive termination or expiry of the Agreement.

19.6. If either Party (the "Defaulting Party") commits a material breach of the Agreement and fails to remedy such breach within 30 (thirty) Business Days of written notice thereof, the other Party (hereinafter the "Aggrieved Party"), shall be entitled, in addition to any other rights and remedies that it may have in terms of the Agreement, to terminate the Agreement forthwith without any

Respondent's Signature

Date & Company Stamp

liability and without prejudice to any claims which the Aggrieved Party may have for damages against the Defaulting Party.

19.7. Should -

- (a) the Supplier effect or attempt to effect a compromise or composition with its creditors; or
- (b) either Party be provisionally or finally liquidated or placed under judicial management, whether provisionally or finally; or
- (c) either Party cease or threaten to cease to carry on its normal line of business or default or threaten to default in the payment of its liabilities generally, or commit any act or omission which would be an act of insolvency in terms of the Insolvency Act, 1936 (as amended);

then the other Party shall be entitled, but not obliged, to terminate the Agreement on written notice, in which event such termination shall be without any liability and without prejudice to any claims which either Party may have for damages against the other.

20. ASSIGNMENT

Neither Party may assign the benefit of the Agreement or any interest hereunder except with the prior written consent of the other. Further, in the event that Transnet wishes to assign or novate the Agreement to any third party, the Supplier agrees that it shall not unreasonably withhold or delay its consent to such assignment or novation and that it shall only be entitled to recover from Transnet any reasonable legal costs incurred by it as a direct result of such assignment or novation.

21. FORCE MAJEURE

21.1. Neither Party shall have any claim against the other Party arising from any failure or delay in the performance of any obligation of either Party under the Agreement caused by an act of force majeure such as acts of God, fire, flood, war, strike, lockout, industrial dispute, government action, laws or regulations, riots, terrorism or civil disturbance, defaults, delays or discontinuance on the part of independent contractors, suppliers, or other circumstances or factors beyond the reasonable control of either Party, and to the extent that the performance of obligations of either Party hereunder is delayed by virtue of the foregoing, any period stipulated for any such performance shall be reasonably extended.

21.2. Each Party will take all reasonable steps by whatever lawful means that are available, to resume full performance as soon as practicable and will seek agreement to modification of the relevant provisions of the Agreement in order to accommodate the new circumstances caused by the act of force majeure. If a Party fails to agree to such modifications proposed by the other

Respondent's Signature

Date & Company Stamp

Party within 90 (ninety) days of the act of force majeure first occurring, either Party may thereafter terminate the Agreement with immediate notice.

22. EQUALITY AND DIVERSITY

- 22.1. The Supplier will not victimise, harass or discriminate against any employee of either Party to the Agreement or any applicant for employment with either Party to the Agreement due to their gender, race, disability, age, religious belief, sexual orientation or part-time status. This provision applies, but is not limited to employment, upgrading, work environment, demotion, transfer, recruitment, recruitment advertising, termination of employment, rates of pay or other forms of compensation and selection for training.
- 22.2. Both Parties to the Agreement undertake that they will not, and shall procure that its employees, agents and Subcontractors will not breach any applicable discrimination legislation and any amendments and re-enactments thereof.

23. NON-WAIVER

- 23.1. Failure or neglect by either Party, at any time, to enforce any of the provisions of the Agreement, shall not, in any manner, be construed to be a waiver of any of that Party's rights in that regard and in terms of the Agreement.
- 23.2. Such failure or neglect shall not, in any manner, affect the continued, unaltered validity of the Agreement, or prejudice the right of that Party to institute subsequent action.

24. PARTIAL INVALIDITY

If any provision of the Agreement shall be held to be invalid, illegal or unenforceable, or shall be required to be modified, the validity, legality and enforceability of the remaining provisions shall not be affected thereby.

25. DISPUTE RESOLUTION

- 25.1. Should any dispute of whatsoever nature arise between the Parties concerning the Agreement, the Parties shall try to resolve the dispute by negotiation within 10 (ten) Business Days of such dispute arising.
- 25.2. If the dispute has not been resolved by such negotiation, either of the Parties may refer the dispute to AFSA and notify the other Party accordingly.
- 25.3. Such dispute shall be finally resolved in accordance with the rules of AFSA by an arbitrator or arbitrators appointed by AFSA.

Respondent's Signature

Date & Company Stamp

25.4. This clause constitutes an irrevocable consent by the Parties to any proceedings in terms hereof, and neither of the Parties shall be entitled to withdraw from the provisions of this clause or claim at any such proceedings that it is not bound by this clause 25.

25.5. This clause 25 is severable from the rest of the Agreement and shall remain in effect even if the Agreement is terminated for any reason.

25.6. This clause 25 shall not preclude either Party from seeking urgent relief in a court of appropriate jurisdiction, where grounds for urgency exist.

26. ADDRESSES FOR NOTICES

26.1. The Parties to the Agreement select the physical addresses and facsimile ("fax") numbers, detailed in Schedule 1 hereto, as their respective addresses for giving or sending any notice provided for or required in terms of the Agreement, provided that either Party shall be entitled to substitute such other address or fax number, as may be, by written notice to the other.

26.2. Any notice addressed to a Party at its physical or postal address shall be sent by prepaid registered post, or delivered by hand, or sent by fax.

26.3. Any notice shall be deemed to have been given -

- (a) if posted by prepaid registered post, 10 (ten) days after the date of posting thereof;
- (b) if hand delivered, on the day of delivery; or
- (c) if faxed, on the date and time of sending of such fax, as evidenced by a fax confirmation printout, provided that such notice shall be confirmed by prepaid registered post on the date of dispatch of such fax, or, should no postal facilities be available on that date, on the next Business Day.

27. WHOLE AND ONLY AGREEMENT

27.1. The Parties hereby confirm that the Agreement constitutes the whole and only agreement between them with regard to the subject matter of the Agreement.

27.2. The Parties hereby confirm that the Agreement replaces all other agreements which exist or may have existed in any form whatever between them, with regard to the subject matter dealt with in the Agreement, including any annexures, schedules or Work Order(s) appended hereto.

Respondent's Signature

Date & Company Stamp

28. AMENDMENT AND CHANGE CONTROL

- 28.1. Any requirement for an amendment or change to the Agreement or to the Schedule of Requirements or to a Work Order shall only be valid if it is in writing, signed by both Parties and added to the Agreement as an addendum hereto.
- 28.2. In the event the Parties cannot agree upon changes, the Parties shall in good faith seek to agree any proposed changes using the dispute resolution procedures in clause 25 (DISPUTE RESOLUTION).

29. GOVERNING LAW

The Agreement is exclusively governed by and construed in accordance with the laws of the Republic of South Africa and is subject to the jurisdiction of the courts of the Republic of South Africa.

- 29.1. **Change of Law:** In the Agreement, unless the context otherwise requires, references to a statutory provision include references to that statutory provision as from time to time amended, extended or re-enacted and any regulations made under it, provided that in the event that the amendment, extension or re-enactment of any statutory provision or introduction of any new statutory provision has a material impact on the obligations of either Party, the Parties will negotiate in good faith to agree such amendments to the Agreement as may be appropriate in the circumstances. If, within a reasonable period of time, the Supplier and Transnet cannot reach agreement on the nature of the changes required or on modification of Fees, Deliverables, warranties, or other terms and conditions, either Party may seek to have the matter determined in accordance with clause 25 (DISPUTE RESOLUTION) above.

30. COUNTERPARTS

The Agreement may be signed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Either Party may enter into the Agreement by signing any such counterpart.

oooOOOooo

Respondent's Signature

Date & Company Stamp