

PART C3: SCOPE OF WORK (AMENDED)

Document reference	Title	No of page
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C3.1 EMPLOYER'S WORKS INFORMATION

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SECTION 1

1 Description of the *works*

1.1 Executive overview

Transnet owns and manages a nationwide Telecommunications Radio Network that uses High Sites equipment for connectivity and communication services. Transnet makes use of Trunking, Radio Train Order (RTO) networks within these High Sites. These Networks control train movements directly and are instrumental in safety and security. Radio network is a primary means of communication within Transnet Freight Rail (TFR), train operations, train control officer (TCO) and train drivers. The radio High Sites are situated in secluded areas in order to take advantage of elevated terrains for the ease of network coverage. For this reason, the High Sites are susceptible to security threats, thefts and vandalisms because they cannot be physically monitored. Madeira, Hobbs Hill, Dohne Peak, Loppersberg and Colesberg high sites have been vandalised and damaged, causing vulnerability to train operations, affecting train movement and threats to safety of personnel, infrastructure and rolling stock. To mitigate unsafe train traffic operation, it necessitates the reinstatement of the High Sites in the East London Depot.

The sites are located on mountainous areas along the railway line and the co-ordinates are as follows:

Site names	Longitude	Latitude
Dohne Peak	32°30'29.67"S	27°24'8.66"E
Hobbs Hill	32°16'46.41"S	27° 8'34.03"E
Madeira	31°52'18.52" S	26°48'50.51" E
Loppersberg	31°25'51.83" S	26°26'16.23" E
Colesberg	30°43'31.39" S	25°08'15.86" E

Note: To access the above-mentioned sites the use of a 4x4 bakkie is highly recommended.

Works to be executed on the High Sites:

- To supply and install the perimeter fence (security fence) around the Transnet Telecom equipment rooms.
- To supply and install the security gate locking system at the Transnet Telecom equipment rooms.
- To supply and apply the epoxy coating on the Transnet Telecom Container storage.
- To supply and install locking protection system for the container storage.

1.2 ***Employer's objectives***

The Employer objectives for this project is to request for the East London Depot to initiate a contract for the supply, delivery and installation of perimeter fence and refurbishment of container storage at the five RTO High Sites to mitigate unsafe train traffic operation, security threats, theft and vandalism.

1.3 **Interpretation and terminology**

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
CEMP	Authorised Inspection Authority
DWG	Drawings
PIRPMP	Project Industrial Relations Policy and Management Plan
SANS	South African National Standards
SASRIA	South African Special Risks Insurance Association
SES	Standard Environmental Specification
SHE	Safety, Health and Environment

2 Engineering and the *Contractor's* design

2.1 *Employer's* design

2.1.1 The *Employer's* design for the *works* is:

- Works Information
- Technical specifications

2.2 Parts of the *works* which the *Contractor* is to design

2.2.1 The *Contractor* is to design the following parts of the *works*:

- All temporary works
- All other items required for the works

2.3 Procedure for submission and acceptance of *Contractor's* design

The *Contractor* shall address the following procedures:

The *Contractor* submits details of his temporary works and all other items required for the works to the *Employer's* Representative for review and acceptance.

The *Contractor* shall submit to the *Employer's* Representative samples of all materials to be used in the *Works* and which are to be supplied by the *Contractor* for the approval of the *Employer's* Representative prior to their incorporation into the work. If accepted, the samples so submitted will be kept by the *Employer's* Representative as standards for the duration of the Contract. No materials inferior in quality, workmanship or appearance to the accepted samples shall be used.

All alternative materials not defined herein or SANS proposed by the *Contractor* shall be tested for acceptability by the *Contractor* and the results of the tests made available to the *Employer's* Representative. All such materials then require the approval of the *Employer's* Representative. The costs of the tests shall be borne by the *Contractor*.

The *Employer's* Representative's approval is required for any manufacturer's published instructions prior to their use by the *Contractor*.

2.4 Equipment required to be included in the *works*

2.4.1 As required in the scope of work.

3 Construction

3.1 Temporary works, Site services & construction constraints

3.1.1 Employer's Site entry and security control, permits, and Site regulations

The work is to be carried out for **Hobbs Hill, Dohne Peak, Madeira, Loppersberg** and **Colesberg** RTO High Sites under East London Depot Control.

The *Contractor* shall always ensure the safe passage of traffic to and around the working areas. This shall entail the provision of flagmen, protective barriers, lanterns, signs, etc. for protection, direction, and control of traffic. No lights are to be fixed anywhere without written approval from the *Employer's Representative*.

The *Contractor* shall organise the work to cause the least possible inconvenience to any operations at the **RTO High Sites**.

Access permits shall be made by the *Contractor* to a standard acceptable to the *Employer's Representative*, be allowed for within the *Contractor's* access control provision and shall include at least the following information:

- Company name and logo.
- Employees name and ID number.
- Date of issue and period of validity.
- Company details
- Telephone number
- Fax number
- E-mail address

3.1.2 Restrictions to access on Site, roads, walkways and barricades

The working hours shall be in accordance with the requirements of the Department of Labour or with the agreement of the relevant trade unions. This information relating to working hours shall be supplied to the *Employer's Representative* prior to commencement of the proposed working hours.

The *Contractor* keeps daily records of his people engaged on the Site and Working Areas (including Subcontractors) with access to such daily records available for inspection by the *Employer's Representative* at all reasonable times.

3.1.3 Health and safety facilities on Site

The provision of security for the *Contractor's* site establishment shall be his own responsibility.

Both the "Factories, Machinery and Building work Act (Act 22 of 1941) and the "Machinery and Occupational Safety Act (Act 6 of 1983)" shall, wherever they appear in the SANS 1200 standardized specifications, be substituted by the "Occupational Health and Safety Act (Act 85 of 1993)".

3.1.4 Title to Materials from demolition and excavation

Before any material arising from the demolitions is removed from site, the material must be offered to Transnet at no cost.

3.1.5 Cooperating with and obtaining acceptance of others

The *Contractor* shall not commit or permit any act that may interfere with the performance of the other parties operating in the area and shall carry out work in close liaison with the *Employer's Representative*.

3.1.6 Publicity and progress photographs

The *Contractor* shall obtain the permission and approval of the *Employer* before erecting any notice boards or using the details of the contract in any advertising media.

The *Contractor* does not advertise the contract or the project to any third party, nor communicate directly with the media (in any jurisdiction) whatsoever without the express written notification and consent of the *Employer's Representative*.

3.1.7 Contractor's Equipment

The *Contractor* keeps daily records of his Equipment used on Site and the Working Areas (distinguishing between owned and hired Equipment) with access to such daily records available for inspection by the *Employer's Representative* at all reasonable times.

All equipment or any other equipment necessary shall be supplied by the *Contractor* to successfully execute the Works safely, to completion. All tools, test equipment, i.e. wind-speed indicators, rain meter etc. shall be supplied by the *Contractor*.

3.1.8 Equipment provided by the Employer

No equipment will be provided by the Employer.

3.1.9 Site services and facilities:

The *Contractor* shall make his own arrangements for the supply of services such as electricity, potable water, ablutions, fire protection, lighting and all other services required for undertaking the works. The Contractor shall provide, maintain and finally remove proper portable latrines of sufficient number at his cost. Latrines shall be properly constructed and placed in suitable positions and maintained in a clean and sanitary working condition.

Where any of the above services can be made available by the *Employer*, the cost of meters, connections, reticulation and all other usage costs associated with the provision of services shall be to

the *Contractor's* account. The applicable tariffs will be those that the Local Authority charges Transnet and shall be obtained by the *Contractor*.

3.1.10 The *Employer* provides the following facilities for the *Contractor*:

A Suitable construction site will be made available free of charge to the *Contractor* for the duration of the contract.

The site shall be clearly sign posted as being a construction site and shall be compliant with the relevant prevailing safety regulations and restrictions that might be in place until the *Contractor* has de-established from site and has been approved by the *Employer's Representative* or his duly appointed representative.

The layout of any construction site, if required, shall be submitted to the *Employer's Representative* for his approval before the *Contractor* starts erecting his camp

3.1.11 Wherever the *Employer* provides facilities (including, *inter alia*, temporary power, water, waste disposal, telecommunications etc) for the *Contractor's* use within the Working Areas and the *Contractor* adapts such facilities for use, then the *Contractor* makes good and provides full reinstatement to the land (including all apparatus of the *Employer* and Others in, on or under the land) and surrounding areas to its original standard upon dismantling of such facilities and hand-back to the *Employer*.

3.1.12 Facilities provided by the *Contractor*:

The *Contractor* shall make his own arrangements for the accommodation of all labour and comply with the requirements of the respective authorities.

No accommodation for the *Contractor's* and/or sub-contractor's employees will be available on site. No employee, with the exception of security watchmen, may, without written approval from the *Employer's Representative*, be accommodated on site.

The *Contractor* shall, at his own expense, provide for security and access to his construction sites as he may require. Control of access for construction plant onto public roads shall be in accordance with the requirements of the relevant roads authority and *Employer's Representative*.

No liability will be accepted by Transnet for the safekeeping of the *Contractor's* materials. The *Contractor* will not be required to provide any facilities for the use of the *Employer's Representative*.

The facilities for the *Contractor* shall be at the contractor's discretion but shall not be less than that as prescribed by law and to ensure that the standards required are met.

3.1.13 Existing premises, inspection of adjoining properties and checking work of Others

The *Contractor* and the *Employer's Representative* will inspect the immediate surroundings and record any damage before work is started.

3.1.14 Underground services, other existing services, cable and pipe trenches and covers

The *Contractor* is required to liaise with the *Employer's Representative* and establish as accurately as possible, the location of the various existing services situated within the Works area and record all such information on a suitable "marked-up" drawing for reference at all times. No services drawings are to be supplied.

NB: Use specialist equipment to detect and note existing underground services so as to prevent future damage and / or injury to persons.

All existing services shall at all times be protected and/or barricaded where these may be affected by the Works or where these may endanger the safety of personnel. Should relocation of existing services be necessary, this will either be carried out by Transnet or the Contractor under day works rates were instructed by the *Employer's Representative* in writing. Should known services be damaged by construction, the cost of repairs will be for the *Contractors* account. Where the *Contractor* damages a service due to negligence, he shall bear full cost of repairs to the service. These repairs will be carried out by the relevant authority, or at their discretion, by the Contractor to the satisfaction of the relevant authority.

3.1.15 Giving notice of work to be covered up

The *Contractor* shall give 24 hour notice to the *Employer's Representative* before covering any work.

3.1.16 Restoring of work site:

During the construction of works, the site shall at all times be kept neat and in a tidy condition. The *Employer's Representative* may order the *Contractor* to stop all work, until such time as , in his opinion, this condition has been met.

The *Contractor* must clear away all rubble/waste within 14 days of completion of work or part of the works and leave the site and surrounding area in a clean and acceptable state. All rubble to be dumped at an approved dumping site; and proof of dumping must be produced.

3.2 Completion, testing, commissioning and correction of Defects

3.2.1 The work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to provide the Works. The *Employer* cannot certify Completion until all the work listed below has been done and is also free of Defects, which would have, in his opinion, prevented the *Employer* from using the Works and Others from doing their work.

3.2.2 Access Given by the Employer for Correction of Defects

The *Employer's Representative* arranges for the Employer to allow the Contractor access to and use of part of the works which he has taken over if they are needed for correcting a Defect. In this case the defect correction period begins when the necessary access and use have been provided.

4 Plant and Materials Standards and Workmanship

4.1 General

- 4.1.1** The works that the Contractor is to perform involve the supply, delivery and installation of perimeter fence (security fence) and refurbishment of container storage for Transnet Freight Rail at the Hobbs Hill, Dohne Peak, Madeira, Loppersberg and Colesberg RTO High Sites under the East London Depot Control.

4.2 Scope of Work

The installation work at these high sites includes the following:

- To supply and install the perimeter fence (security fence) around the Transnet Telecom equipment rooms.
- To supply and install the security gate locking system at the Transnet Telecom equipment rooms.
- To supply and apply the epoxy coating on the Transnet Telecom Container storage.
- To supply and install locking protection system for the container storage.

• 4.2.1 Site Clearance

- The area on which the fence is to be constructed shall be cleared from all vegetation in accordance to SANS 1200 A and C. The service provider shall level the area to remove uneven surfaces.

4.2.2 Post

- Post holes shall be cleared of loose material.
- The foundation excavations for the post shall be 700 mm deep for 450 mm length x 450 mm breadth. The concrete strength of 20 MPa to be casted on the foundation.
- The post length shall be 3000 mm where 2400 mm to be above ground level.
- The pole size shall be 85 mm x 45 mm x 85 mm.
- The pole must be hot dipped galvanised steel. Concrete shall be thoroughly consolidated around each post, free of voids, and finished with a domed shaped surface, with the base of dome at grade elevation.
- Concrete shall be allowed to cure prior to installing any additional components to the posts.
- Where a rock layer is encountered within the required depth to which the post is to be erected, a hole of a diameter slightly larger than the largest dimension of the post may be drilled into the rock and the post grouted in.
- Where the ground is firm enough to permit excavation of the post hole to neat lines, the concrete may be placed without forms by completely filling the hole.

- Post shall include 'Locking Recess Mechanism' to secure panel edge.
- Post finish shall be Galvanized, then Marine Fusion Bond coated.
- Where concrete plinth is already constructed or existing, the post shall have a base plate of 7mm and grouted into the plinth using chemical grout with 4 bolts.

4.2.3 Panels

- Excavation of 200 mm depth and casting concrete (50 mm above the ground) for the kerbing underneath the mesh panel. Panel fence shall be of a height of 2.400 m and 3 mm thickness (wire diameter) of security fence. The spacing for the mesh shall be 76.2 mm vertical x 12.7 mm horizontal. The panel shall have 2 or more v-bends in the horizontal direction of the panel. The panel shall be reinforced with 4 x 50mm deep 'V' formation horizontal recessed bands (rigidity). The wire to be hot dipped galvanised panels, then Marine Fusion Bond coated.
- The measurements of the fence shall be 3.500m x 3.500m.
- Panel shall have 2 x 70° flanges along sides (internal fixtures- all fixtures shall be on the inside of fence line).
- Panel shall have 1 x 90° flange along top and 1 x 30° flange along toe (integrated rigid angle, anti-scale locking device).
- Panel shall be affixed to post over 48-line wires using 8 x Double bolt comb clamps and 8 x Single bolt comb clamps using 24 x Anti vandal bolts.
- The panel fence shall be 500 mm offset the Telecom container housing/storage on all 4 sides.
- The post panel shall have a flush panel post finish with no climbing aid and shall be affixed to post.
- Panel Post connection minimum break force.
- The security fence should look the one indicated on Figure 1 & 2 below.

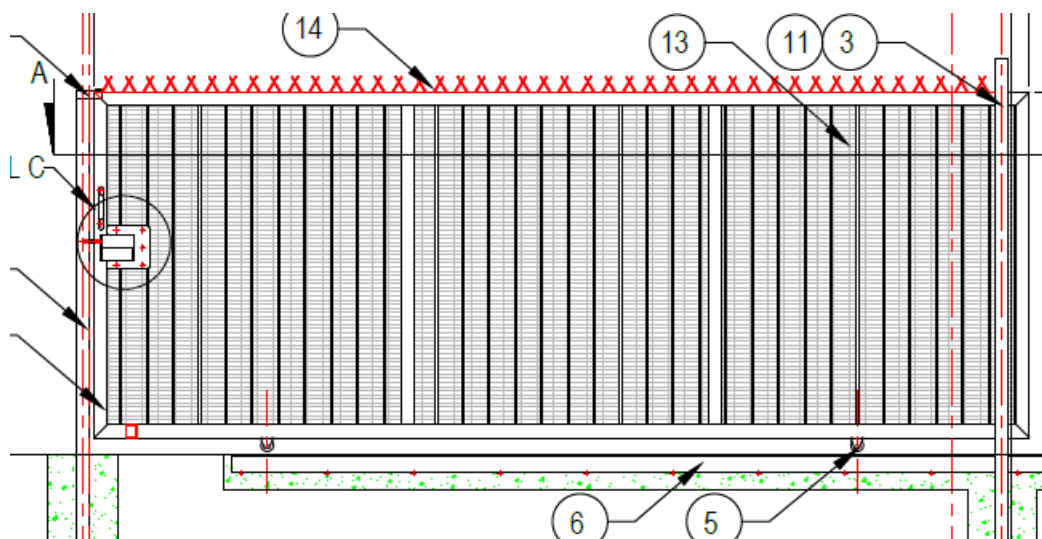


Figure 1: security fence dwg

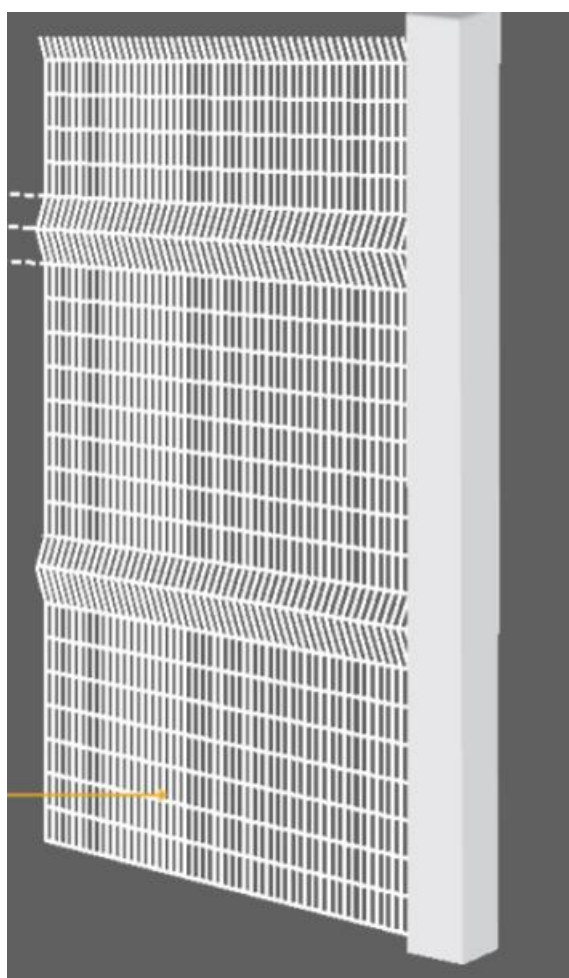


Figure 2: Security fence 3D

4.2.4 Topping on the panel and gate

- A high toughened steel Shark Tooth spike shall be affixed to panel edge throughout the entire security fence using Anti-vandal bolts.
- Spike finish shall be Hot Dipped Galvanized.

4.2.5 Gate and locking system

- Gate shall be manufactured with the material of the panel to the size of 1 m width and 2.4 m high of a complete system in every respect including hinges, washers, bolts and locking chain.
- The locks system shall of anti-temper fixator solution.
- All connections and joints shall be welded to form rigid frames or assembled with corner fittings.
- Hinges shall not twist or turn under the action of the gate, shall be so arranged that a closed gate cannot be lifted off the hinges to obtain entry.

4.2.6 Epoxy coating product onto the container

- The service provider shall also supply and apply the Epoxy coating to the Telecom container storage / housing.
- The size of the container is estimated to be 2.5 m x 2.5 m.

4.2.7 Application of Epoxy coating

- The surface should be clean prior the application of the coating for proper bond.
- The coating layer be 20 mm thickness to be applied to the entire container storage to ensure security.
- The epoxy coating of polyurethane coating system to be suitable for all surfaces and great wear abrasion characteristics.
- The coating system to be of a higher performance, giving it superior paint adhesion and moisture resistance.
- The colour of the coating to be the same as the existing colour of the container.

4.2.8 Locking protection system for container storage / housing

- The service provider shall supply and install the locking protection system for the container storage consists of 400 mm x 200 mm x 5 mm steel of rectangular shape welded into container to cover the locks.
- The protection system shall not be closed underneath to allow hand access to the lock.

4.2.9 Installation and Guarantees

- Guarantee terms and condition should be clearly addressed in the submission and shall be included in a price turnkey installation, provide a detailed schedule for installation and requirements.
- Provide 12 months guarantee on all workmanship and materials.

4.2.10 Risk and Safety

- The service provider will be responsible for risk and safety adherences as per as per Transnet policies.

5. List of Drawings

5.1 Drawings issued by the *Employer*

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title
Figure 1 & 2	0	Security fence

SECTION 2

6 MANAGEMENT AND START UP

6.1 Management meetings

The Contractor shall attend management meetings at the *Employer's Representative's* request. The Contractor will also be required to attend a safety meeting. The Contractor will also attend a kick off meeting and a close off meeting. The Contractor will be required to present all relevant information including early warnings of compensation events, quality plans, schedules, (including progress) subcontractor management, and health, environmental and safety issues at such meetings

All meetings are to be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register are not to be used for the purpose of confirming actions or instructions under the contract as these are to be done separately by the person identified in the conditions of contract to carry out such actions or instructions.

6.2 Documentation Control

The Contractor shall submit all documentation complying with the *Employer's* standards and requirements. The Employer will issue all relevant documentation and drawings, including revisions, to the Contractor, but control, maintenance and handling of these documents will be the Contractor's sole responsibility and at its expense, and managed with a suitable document control system.

6.3 Safety Risk Management

6.3.1 General:

The Contractor's attention is directed to the Health and Safety Specification: TRN-IMS-GRP-GDL-014.2, and in particular to his Health & Safety Program, which must be submitted with his tender, as well as the requirements of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended and Regulations issued in terms thereof or un-repealed regulations issued in terms of the former Act no. 6 of 1983, in their entirety.

Without derogating from the Act or any un-repealed regulations issued in terms of legislation, or without purporting to limit the Contractor's responsibilities, the following are brought to the Contractor's attention:

- (a) For the purpose of the Act the site/s, to be demarcated as agreed to between the *Contractor* and the *Employer's Representative* before the works start, will be transferred to the control of the *Contractor* for the duration of the contract.
- (b) The *Contractor* shall appoint a health and safety coordinator to liaise at least fortnightly with the *Employer's Representative* on matters pertaining to occupational health and safety.
- (c) The *Contractor* is an 'employer' in his own right as defined in Section 1 of the Act 85 of 1993 and he shall fulfil all his obligations as an employer in terms of the Act.
- (d) The *Contractor* shall furnish the *Employer's Representative* with full particulars of any Sub-Contractor which he may involve in the contract and the Sub-Contractor shall be made aware of all the clauses in this contract pertaining to health and safety.
- (e) The *Contractor* shall advise the *Employer's Representative* of any hazardous or potentially hazardous situation, which may arise from, work being performed either by the *Contractor* or Sub-Contractor.

- (f) A letter of good standing in terms of Section 80 (*Employer* to register with the Compensation Commissioner) of the Compensation for Occupational Injuries and Deceases Act 1993 (Act 130 of 1993), must also be furnished.
- (g) The *Contractor* shall comply with the current Transnet Specification TRN-IMS-GRP-GDL-014.2, 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 *Employer's Representative*:
 - documentary proof of his procedural compliance with the Act, and
 - particulars of the Health and Safety Program to be implemented on the site in accordance with the Transnet Specification E.4E.
 - The *Contractor's* Health and Safety Program will be subject to agreement by the *Employer's Representative*, 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.
- (h) All clauses in this contract pertaining to health and safety form an integral part of this contract and if not complied with may be construed as breach of contract entitling the *Employer* to the appropriate remedies.
- (i) Personal Protective Equipment (PPE) applicable to the work must be worn at all times. Induction will be held with successful Contractor and will take approximately twenty (20) minutes.

NB: The Contractor and his employees shall have valid safety inductions and medical certificates when accessing or working on site. Copies of which shall be submitted to the Employer's Representative. This will be at a time and location Transnet will arrange.

6.3.2 Hazard identification and risk assessment

The Contractor's appointed Site Representative and the *Employer's Representative* shall finalize a site-specific HIRA (Hazard Identification and Risk Assessment) document, on the day of site handover to the Contractor. This site-specific HIRA document, based on a continuous HIRA, must cover site-specific hazards and the safe management of these hazards. The HIRA document must be signed by the abovementioned representatives, and be accepted by the Employer's Representative, before any construction work can commence.

6.3.3 Substance abuse

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

6.3.4 Safety meetings

The *Contractor* shall ensure that a safety representative is appointed and regular safety meetings are held. Written minutes of these safety meetings shall be forwarded to the *Employer's Representative*. All costs related to the safety aspects required under this contract will be carried by the *Contractor's* and therefore be covered under the rates tendered.

NB! The tendered amount shall include for all costs to conform to the Health and Safety requirements.

6.4 Environmental constraints and management

The *Contractor* shall provide a Contractor's Environmental Management Plan (CEMP) addressing all the potential impacts of his activities. The Employer's Representative has the right to request additional specific work method statements should in his opinion this be required.

Progressive and systematic finishing and tidying-up will form an essential part of this contract. Under no circumstances shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate unnecessarily.

No material shall be dumped on the *Employer's* property and no suitable material shall be disposed of if it is required elsewhere for the proper completion of the contract.

All discarded/spoiled/hazardous material shall be disposed of at an accepted registered dumpsite and the *Contractor* shall furnish the Employer's Representative with receipts and official disposal certificates from the dumpsite.

The *Contractor* shall make good all damages to the environment to the satisfaction of the Employer's Representative's Waste Management Objective.

USE OF CEMENT & CONCRETE

Cement and concrete are regarded as hazardous to the natural environment on account of the very high pH of the material, and the chemicals contained therein. The contractor shall therefore ensure that concrete is not mixed directly on the ground and that the visibility remains of concrete, either solid, or from washings, are physically removed immediately and disposed of as waste. Washing the visible remains into the ground will not be acceptable.

NOISE POLLUTION

Equipment used on the site shall be properly muffled and maintained so as to reduce noise generation to the minimum. Working procedures shall be structured so as to avoid the unnecessary generation of noise.

DUST CONTROL

Dust has been identified as having a serious environmental impact. The *Contractor* is required to prevent the creation of dust.

The *Contractor* shall ensure that no dust is generated during the mixing process of construction materials used during any stage of the construction process.

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

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

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

NB! The tendered amount shall include for all costs to confirm to the Health and Safety requirements

6.5 Quality assurance requirements

The onus rests on the Contractor to produce work which will conform in quality and accuracy of detail to the requirements of the Specifications and Drawings, and the *Contractor* must, at his own expense, institute a quality control system and provide experienced technical staff together with all transport, instruments and equipment to ensure adequate supervision and positive control of the works at all times.

All materials should conform to the specifications and standards set for the project and shall be inspected in accordance with accepted Quality Control Plans (QCP's). All plant should be checked before work commences.

The *Contractor* shall submit his proposed Quality Control Procedures (QCP) to the Employer's Representative for approval. Site Access will not be permitted until the QCP is to the Employer's Representatives satisfaction

Transnet Freight Rail will have the right to inspect the work at any time during the progress of the contract.

6.6 Programming constraints

6.6.1 General

The programme, progress reports, subsequent updates, revisions and supplementary programmes as detailed in this section are an essential part of the iPAS project control system used by the *Employer* for managing the Works and in monitoring the progress of the work under the Contract. The information and data provided by the *Contractor* pursuant to this procedure must therefore be reliable, accurate and timely in presentation.

6.6.2 Programme submission

The program must be submitted with the tender. This program shall comply with the requirements as indicated on the returnable schedule **T2.2-03**. The program shall be submitted in both hard and soft copy forms using a computer software package accepted by the *Employer's Representative*.

The preferred software package is Microsoft Projects.

6.6.3 Progress Reporting

To demonstrate the actual progress of the work under the Contract the *Contractor* shall, on a weekly basis, update and submit to the *Employer's Representative*;

- a) The revised program, in the form of a three week look-ahead, that shall show two (2) separate bars for each activity as per i) and ii) below so as to enable a comparison of the actual progress with the first program;
 - (i) The first programme activity bar, and
 - (ii) The revised activity bar identifying the currently forecast start and finish dates of the activity, and the status (% complete of each activity)
- b) Deviations of the "current" activity schedule from the "baseline" activity schedule will form the basis for assessing progress and performance.

6.6.4 Progress monitoring and review

Monitoring and review of the progress of work under the Contract shall consist of an assessment of all activities currently in progress. The following shall be determined:

- percentage complete;
- forecast completion date;
- showing actual versus baseline figures;
- deviations from the Accepted Programme; and
- Actions required to remedy any deviations.

Weekly progress reviews shall be conducted to assist control of the work under the Contract. The *Contractor* shall provide this information upon request from the *Employer's Representative*; however any identified deviations shall be automatically reported to the *Employer's Representative*.

6.6.5 Monthly Status Report

The *Contractor* shall provide a written status report by the 20th of each month or such other reporting period as may be required by the *Employer's Representative* from time-to-time. The report shall summarise progress and problems encountered during that month in respect of all parts of the work under the Contract.

As a minimum the report shall include:

- progress against the Accepted Programme;
- summary of progress achieved during the period using progress 'S curves';
- list of milestones achieved during the period;
- status of design, procurement, and off-site works;
- status of on-site works;
- deviations from the Accepted Programme and in particular, the forecast completion dates of activities which have or should have commenced;
- status of approvals;
- actual or anticipated problems with corresponding action plans to minimise the impact;
- summary of works planned for the following period, and
- Cash flow status versus the original forecast.

The progress report shall form the basis of the monthly progress meeting between the *Employer's Representative* and the *Contractor*.

6.7 Contractor's management, supervision and key people

The *Contractor* shall provide an organogram showing his key people and their lines of authority and communication.

The *Contractor* shall not change the project team as detailed in the organogram submitted by the *Contractor* and accepted by the *Employer's Representative* without the prior written approval of the *Employer's Representative*, which approval will not unreasonably be withheld by the *Employer's Representative*.

The contract work must conform to current professional engineering practices, standards and specifications and the work must be completed to the satisfaction of the *Employer's Representative*.

The *Contractor* and his sub-contractors, if any shall have suitably qualified Supervisors in charge of the project. The names and qualifications of the Supervisors together with full details of their experience in this field of work must be furnished. The tenderer must furnish the names and addresses of all proposed sub-contractors, which is subject to approval.

6.8 Insurance provided by the Employer

6.8.1 Insurance provided by the *Employer* is contained in the Contract Data – Part 1.

6.9 Contract change management

The standard reporting forms that shall be used will be provided to the *Contractor*.

6.9.1 No additional requirements apply to ECC Clause 60 series.

6.10 The Contractor's Invoices

6.10.1 When the *Project Manager* certifies payment (see ECC Clause 51.1) following an assessment date, the *Contractor* complies with the *Employer's* procedure for invoice submission.

6.10.2 The invoice must correspond to the *Project Manager's* assessment of the amount due to the *Contractor* as stated in the payment certificate.

6.10.3 The invoice states the following:

- Invoice addressed to Transnet SOC Ltd;
- Transnet SOC Limited's VAT No: 4720103177;
- Invoice number;
- The *Contractor's* VAT Number; and
- The Contract number [TFR/2022/08/1229/9592/RFQ].
- The invoice contains the supporting detail.

6.10.4 The invoice is presented either by post or by hand delivery.

Invoices submitted by hand or post are presented to:

**Transnet Freight Rail
Rail Network Telecoms
2 Industrie Road
Johannesburg, 2001**

For the attention of **Nqabisa Nyubatya**

The invoice is presented as an original.

6.11 People

6.11.1 The *Contractor* complies with the following PIRPMP

CONTRACTOR LIABILITY

6.11.1.1 The *Contractor* warrants that it will be liable to Transnet for any loss or damage caused by strikes, riots, lockouts or any labour disputes by and/or confined to the *Contractor's* employees, which loss will include any indirect or consequential damages;

6.11.1.2 The *Contractor* warrants that no negotiations or feedback meetings by the *Contractor's* employees shall take place on Transnet premises, whether owned or rented by Transnet.

6.11.1.3 The *Contractor* shall give notice to Transnet of any industrial action by the *Contractor's* employees immediately upon becoming aware of any actual or contemplated action that is or may be carried out on Transnet's premises, whether owned or rented, and shall notify Transnet of all matters associated with such action that may potentially affect Transnet.

6.11.1.4 The *Contractor* is responsible for educating its employees on relevant provisions of the Labour Relations Act which deal with industrial action processes, and the risks of non-compliance.

6.11.1.5 The *Contractor* is required to develop a Contingency Strike Handling Plan, which plan the *Contractor* is obliged to update on a three-monthly basis. The *Contractor* must provide Transnet with this plan and all updates to the Plan. The *Contractor* is responsible to communicate with its employees on site details of the plan.

6.11.2 INDUSTRIAL ACTION BY CONTRACTOR EMPLOYEES

6.11.2.1 In the event of any industrial action by the *Contractor's* employees, the *Contractor* is required to provide competent contingency resources permitted in law to carry out any of the duties that are or could potentially be interrupted by industrial action in delivering the Service.

6.11.2.2 The *Contractor* warrants that it will compensate Transnet for any costs Transnet incurs in providing additional security to deal with any industrial action by the *Contractor's* employees.

6.11.2.3 In the event of any industrial action by the *Contractor's* employees, the *Contractor* is obliged:

6.11.2.4 To prepare and deliver to Transnet, within two (2) hours of the commencement of industrial action an Industrial Action Report. If the industrial action persists the *Contractor* is required to deliver the report at 8h30 each day.

6.11.2.5 The Industrial Action Report must provide at least the following information:

- Industrial incident report,
- Attendance register,
- Productivity / progress to schedule reports,
- Operational contingency plan,
- Site security report,
- Industrial action intelligence gathered.

6.11.2.6 The final Industrial Action Report is to be delivered 24 hours after finalisation of the industrial

action.

6.11.2.7 The management of the Contractor is required to hold a daily industrial action teleconference with personnel identified by Transnet to discuss the industrial action, settlement of the industrial action, security issues and the impact on delivery under the contract.

6.11.2.8 The resolution of any disputes or industrial action by the Contractor's employees is the sole responsibility of the Contractor.

6.11.2.9 Access to Transnet premises by the Contractor and its employees is only provided for purposes of the Contractor delivering its services to Transnet. Should the Contractor and its employees not, for any reason, be capable of delivering its services Transnet is entitled to restrict or deny access onto its premises and unless otherwise authorized; such person will be deemed to be trespassing.

6.12 Plant and Materials

All plant used by the *Contractor* on site shall be properly maintained and operated. All vehicles on public roads shall be roadworthy, with the necessary licenses, permits and safety requirements. No transporting of people in the load box of any LDV's without the correct seating and seatbelts or a Kombi may be utilized providing that it has RWC.

The *Contractor* replaces any Plant and Materials subject to breakages (whether in the Work in areas or not) or any Plant and Materials not conforming to standards or specifications stated and notifies the *Employer's Representative* on each occasion where replacement is required.

The *Contractor* provides all other Plant and Materials necessary for the works not specifically stated to be provided "free issue" by the Employer.

6.13 Marking Plant and Materials outside the Working Areas

The *Contractor* prepares and marks items of Plant and Materials outside the Working Areas with the Contractor's Logo.