



T F R , a division of

TRANSNET SOC LTD

Registration Number 1990/000900/30

[hereinafter referred to as **Transnet**]

REQUEST FOR QUOTATION No : BLE 52113

**FOR THE SUPPLY OF: REMOVE ASBESTOS ROOFS AND REPLACE WITH IBR
ROOF SHEETS AT LAINSBURG**

FOR DELIVERY TO: Transnet Freight Rail

ISSUE DATE: 25 February 2013

CLOSING DATE: 12 March 2013

CLOSING TIME: 10:00



RFQ BLE52113

SCHEDULE OF DOCUMENTS

REMOVE ASBESTOS ROOFS AND REPLACE WITH IBR ROOF SHEETS AT LAINSBURG

Section

1. Notice to Bidders
2. Quotation Form
3. Vendor application Form
4. Standard Term and Conditions for the supply of Goods or services to Transnet
5. General Bid Conditions – Appendix (i)
6. Standard term and conditions of contract (services) Appendix (ii)

E4E document

Annexure A – Project Specifications

Annexure B - Tender price list

Annexure C – Special conditions

Annexure D - Annexure D - Policy on the handling & disposal of asbestos

Annexure E – Area plan and photos of assets

Section 1
NOTICE TO BIDDERS

Quotations are requested from interested companies, close corporations or enterprises (hereinafter referred to as the "Respondent(s) to supply the above-mentioned to Transnet.

A briefing session will be conducted on the 5 March 2013, time 12:00 at the Lainsburg station, for a period of ± one hour. **(Respondent to provide own transportation and accommodation).**

Respondents arriving late will not be accommodated.

Respondents failing to attend the compulsory briefing session will be disqualified.

Respondents without a valid RFQ document in their possession will not be allowed to attend the briefing session.

Quotations must reach the Secretary, Local Acquisition Council before the closing hour on the date shown below, and must be enclosed in a sealed envelope which must have inscribed on the outside:

RFQ No : BLE 52113
Description : REMOVE AC ROOFS AT LAINSBURG AND REPLACE WITH IBR SHEETS
Closing date : 12 March 2013
Closing time : 10:00

DELIVERY INSTRUCTIONS FOR THIS RFQ

If posted, the envelope must be addressed to the Acquisition Council, P.O. Box 2986, Bellville, 7535, and must be dispatched in time for sorting by the Post Office to reach the Secretary before the closing time of the RFQ. In the event of the late receipt of a Quotation, the Respondent's franking machine impression will not be accepted as proof that the response was posted in time.

If delivered by hand, the envelope is to be deposited in the TRANSNET tender box which is located at the main entrance, Transnet Park Building, Modderdam road, Bellville, and should be addressed as follows:

**ACQUISITION COUNCIL
TRANSNET PARK BUILDING
MODDERDAM ROAD
BELLVILLE**

It should also be noted that the above tender box is located at the main entrance and is if dispatched by courier, the envelope must be addressed as follows and delivered to the Office of The Acquisition Council.

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

METHOD: the RFQ document may be post and/or courier .

CLOSING VENUE: Transnet Park Building, Modderdam road, Bellville

It should also be noted that the above tender box is located at the main entrance and is If dispatched by courier, the envelope must be addressed as follows and delivered to the Office of The Secretary, Local Acquisition Council.

1 Responses to RFQ

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

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

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

2.1 B-BBEE Scorecard and Rating

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

- Proposals will be evaluated on price which will be allocated 80 points and preference which will be allocated 20 points, dependent on the value of the Services
- The 80/20 preference point system applies where the acquisition of the Services will be less than R1 000 000.00.
- If the 80/20 preference point system is stipulated and all Bids received exceed R1 000 000.00, the RFP will be cancelled

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

- a) Verification Agencies accredited by the South African National Accreditation System [SANAS]; or
- b) Registered Auditors approved by the Independent Regulatory Board of Auditors [IRBA], in accordance with the approval granted by the Department of Trade and Industry.

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

- c) **Large Enterprises** [i.e. annual turnover greater than R35 million]:
 - Rating level based on all seven elements of the B-BBEE scorecard

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

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

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

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

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

Transnet will accordingly allocate a maximum of **20 [twenty] points** in accordance with the **80/20** preference point system prescribed in the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations to the Respondent's final score based on an entity's B-BBEE scorecard rating.

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

[Refer Section 3, Vendor Application Form, for Returnable Documents required]

3 Communication

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

Name: Mr JP Carstens
 Email: cobus.carstens@transnet.net

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

Telephone 021 940-3833
 Email cobus.carstens@transnet.net

4 Tax Clearance

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

5 VAT Registration

The valid VAT registration number must be stated here: _____ [if applicable].

6 Legal Compliance

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

7 Changes to Quotations

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

8 Pricing

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

9 Prices Subject to Confirmation

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

10 Negotiations

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

11 Binding Offer

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

12 Disclaimers

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

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

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

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

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

NATURE OF BREACH:

DATE OF BREACH: _____

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

13 Evaluation Criteria

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

- Administrative responsiveness - Completeness of response and returnable documents
- Technical Compliance to specification / quality, previous performance, delivery lead-time
- Weighted evaluation based on 80/20 preference point system:
 - Pricing and price basis [firm] - whilst not the sole factor for consideration, competitive pricing and overall level of unconditional discounts¹ will be critical

Transnet will utilise the following formula in its evaluation of Price:

$$PS = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where:

Ps = Score for the Bid under consideration
Pt = Price of Bid under consideration
Pmin = Price of lowest acceptable Bid

- B-BBEE status of company

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

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

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

14 Validity Period

Transnet desires a validity period of 30 [thirty] days from the closing date of this RFQ.
This RFQ is valid until _____.

15 Banking Details

BANK: _____

BRANCH NAME / CODE: _____

ACCOUNT HOLDER: _____

ACCOUNT NUMBER: _____

16 Company Registration

Registration number of company / C.C. _____

Registered name of company / C.C. _____

17 Disclosure of Prices Quoted

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

YES NO

18 Returnable Documents

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

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

Failure to provide all these Returnable Documents may result in a Respondent's disqualification. Respondents are therefore urged to ensure that all these Documents are returned with their Quotations.

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

Returnable Documents	Submitted [Yes or No]
SECTION 1 : Notice to Bidders	
<ul style="list-style-type: none"> - Valid B-BBEE Verification Certificate [RSA Large Enterprises and QSEs] Note: failure to provide a valid B-BBEE Verification Certificate at the closing date and time of the tender will result in an automatic score of zero being allocated for B-BBEE scorecard 	
<ul style="list-style-type: none"> - Valid B-BBEE certificate from auditor, accounting officer or SANAS accredited Verification Agency [RSA EMEs] Note: failure to provide a valid B-BBEE Verification Certificate at the closing date and time of the tender will result in an automatic score of zero being allocated for B-BBEE scorecard 	
SECTION 2 : Quotation Form	
SECTION 3: Vendor Application Form <ul style="list-style-type: none"> • Original cancelled cheque or bank verification of banking details • Certified copies of IDs of shareholder/directors/members [as applicable] • Certified copy of Certificate of Incorporation [CM29/CM9 name change] • Certified copy of share certificates [CK1/CK2 if C.C.] • Entity's letterhead • Certified copy of VAT Registration Certificate [RSA entities only] • Certified copy of valid Company Registration Certificate [if applicable] • Original valid Tax Clearance Certificate [Consortia / Joint Ventures / Sub-contractors must submit a separate Tax Clearance Certificate for each party] 	
Letter of Good Standing - issued by the Compensation commissioner	

 Respondent's Signature

 Date & Company Stamp

Section 2
QUOTATION FORM

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

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

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

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

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

Respondent's Signature

Date & Company Stamp

RFQ BLE 52113 : Price Schedule

I/We quote as follows for the services required, , excluding VAT:

Total price brought forwarded from the Price list :

Total : _____ (excluding VAT)

Notes to Pricing:

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

Respondent's Signature

Date & Company Stamp

Section 3
VENDOR APPLICATION FORM

"Preview Copy Only"

Respondent's Signature

Date & Company Stamp



Transnet Supplier Declaration/Application

The Financial Director or Company Secretary

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

1. Complete the "Supplier Declaration Form" (SDF) on page 2 of this letter
2. **Original** cancelled cheque **OR** letter from the bank verifying banking details (**with bank stamp**)
3. **Certified** copy of Identity document of Shareholders/Directors/Members (where applicable)
4. **Certified** copy of certificate of incorporation, CM29 / CM9 (name change)
5. **Certified** copy of share Certificates of Shareholders, CK1 / CK2 (if CC)
6. A letter with the company's letterhead confirming physical and postal addresses
7. **Original or certified** copy of SARS Tax Clearance certificate and Vat registration certificate
8. A signed letter from the Auditor / Accountant confirming most recent annual turnover and percentage black ownership in the company **AND/OR** BBBEE certificate and detailed scorecard from an accredited rating agency (SANAS member).

NB:

- **Failure to submit the above documentation will delay the vendor creation process.**
- *Where applicable, the respective Transnet business unit processing your application may request further information from you. E.g. proof of an existence of a Service/Business contract between your business and the respective Transnet business unit etc.*

IMPORTANT NOTES:

- a) **If your annual turnover is less than R5 million**, then in terms of the DTI codes, you are classified as an Exempted Micro Enterprise (EME). If your company is classified as an EME, please include in your submission, a signed letter from your Auditor / Accountant confirming your company's most recent annual turnover is less than R5 million and percentage of black ownership and black female ownership in the company **AND/OR** BBBEE certificate and detailed scorecard from an accredited rating agency (e.g. permanent SANAS Member), should you feel you will be able to attain a better BBBEE score.
- b) **If your annual turnover is between R5 million and R35million**, then in terms of the DTI codes, you are classified as a Qualifying Small Enterprise (QSE) and you claim a specific BBBEE level based on any 4 of the 7 elements of the BBBEE score-card, please include your BEE certificate in your submission as confirmation of your status.
NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency (e.g. permanent SANAS Member).
- c) **If your annual turnover is in excess of R35million**, then in terms of the DTI codes, you are classified as a Large Enterprise and you claim a specific BEE level based on all seven elements of the BBBEE generic score-card. Please include your BEE certificate in your submission as confirmation of your status.
NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency (permanent SANAS Member).
- d) **To avoid PAYE tax being automatically deducted from any invoices received from you**, you must also contact the Transnet person who lodged this request on your behalf, so as to be correctly classified in terms of Tax legislation.
- e) Unfortunately, **No payments can be made to a vendor** until the vendor has been registered, and no vendor can be registered until the vendor application form, together with its supporting documentation, has been received and processed.
- f) Please return the completed Supplier Declaration Form (SDF) together with the required supporting documents mentioned above to the Transnet Official who is intending to procure your company's services/products in order that he/she should complete and Internal Transnet Departmental Questionnaire before referring the matter to the appropriate Transnet Vendor Master Office.

Regards,

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



Supplier Declaration Form

Company Trading Name						
Company Registered Name						
Company Registration Number Or ID Number If A Sole Proprietor						
Form of entity	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor
VAT number (if registered)						
Company Telephone Number						
Company Fax Number						
Company E-Mail Address						
Company Website Address						
Bank Name			Bank Account Number			
Postal Address					Code	
Physical Address					Code	
Contact Person						
Designation						
Telephone						
Email						
Annual Turnover Range (Last Financial Year)		< R5 Million	R5-35 million	> R35 million		
Does Your Company Provide		Products	Services	Both		
Area Of Delivery		National	Provincial	Local		
Is Your Company A Public Or Private Entity				Public		Private
Does Your Company Have A Tax Directive Or IRP30 Certificate				Yes		No
Main Product Or Service Supplied (E.G.: Stationery/Consulting)						

BEE Ownership Details

% Black Ownership		% Black women ownership		% Disabled person/s ownership	
Does your company have a BEE certificate		Yes	No		
What is your broad based BEE status (Level 1 to 9 / Unknown)					
How many personnel does the firm employ		Permanent	Part time		

Transnet Contact Person	
Contact number	
Transnet operating division	

Duly Authorised To Sign For And On Behalf Of Firm / Organisation

Name		Designation	
Signature		Date	

Stamp And Signature Of Commissioner Of Oath

Name		Date	
Signature		Telephone No.	

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

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

Section 4

STANDARD TERMS AND CONDITIONS FOR THE SUPPLY OF GOODS OR SERVICES TO TRANSNET

A Supplier/Service Provider shall be obliged to adhere to the Standard Terms and Conditions for the Supply of Goods and Services to Transnet as expressed hereunder. Should the Respondent find any condition(s) unacceptable, it should indicate which condition(s) is/are unacceptable and offer an alternative(s). A Quotation submitted by a Respondent will be subjected to review and acceptance or rejection of its proposed contractual terms and conditions by Transnet's Legal Counsel, prior to consideration for an award of business.

1 SOLE AGREEMENT

Unless otherwise agreed in writing, these terms [**Terms** and each **Term**] and Transnet's purchase order(s) [**Order** or **Orders**] represent the only conditions upon which Transnet SOC Ltd [**Transnet**] procures goods or services specified in the Order [collectively, the **Products**] from the person to whom the Order is addressed [**the Supplier/Service Provider**]. Transnet does not accept any other conditions which the Supplier/Service Provider may specify, unless otherwise agreed to by Transnet in writing. In the event of any inconsistency between these Terms and any Order, these Terms shall take precedence.

19 CONFORMITY WITH ORDER

Products/Services shall conform strictly with the Order. The Supplier/Service Provider shall not vary the quantities specified and/or the specification, if any, stipulated in the Order, without the prior written consent of Transnet. The Supplier/Service Provider warrants that the Products/Services shall be fit for their purpose and of satisfactory quality.

20 DELIVERY AND TITLE

- 20.1 The delivery dates and addresses are those in the Order. Time shall be of the essence in respect of the Supplier's/Service Provider's obligations under the Order.
- 20.2 The Supplier/Service Provider will not be excused for delay in delivery or performance except due to circumstances outside its control and then only subject to the Supplier/Service Provider having notified Transnet in writing on becoming aware of such circumstances. Transnet may terminate an Order, in whole or in part, without incurring any liability to the Supplier/Service Provider if such a delay becomes, in Transnet's absolute opinion, significant.
- 20.3 If on delivery, the Products/Services do not conform to the Order, Transnet may reject the Products/Services and the Supplier/Service Provider shall promptly rectify any defects or in Transnet's opinion, supply appropriate replacement Products/Services at the Supplier's/Service Provider's expense within the specified delivery times, without any liability due by Transnet.

21 PRICE AND PAYMENT

- 21.1 Prices specified in an Order cannot be increased. Payment for the Products/Services shall be made by Transnet against an original undisputed invoice(s) [**a Tax Invoice**], supporting documentation and month-end statement from the Supplier/Service Provider. Tax Invoices plus supporting documentation shall be posted to the address shown in the Order.

21.2 Payment of the Supplier's/Service Provider's valid Tax Invoice(s) will be made by Transnet in the South African currency and on the terms stated in the Order, the standard payment terms being 30 [thirty] days from date of receipt by Transnet of a month-end statement, unless otherwise agreed to in writing. Transnet shall arrange for payment of such Tax Invoices and any pre-authorised additional expenses incurred, provided that the authorised expenses are supported by acceptable documentary proof of expenditure incurred [where this is available]. Any amounts due in terms of these Terms shall be paid to the Supplier/Service Provider, taking into account any deduction or set-off and bank charges.

22 PROPRIETARY RIGHTS LIABILITY

If any allegations should be made or any claim asserted against Transnet that ownership of, or any act or omission by Transnet in relation to Products/Services or any written material provided to Transnet relating to any Products/Services or pursuant to an Order being a violation or infringement of any third party's contractual, industrial, commercial or intellectual property rights including but not limited to any patent, registered design, design right, trade mark, copyright or service mark on any application thereof, the Supplier/Service Provider hereby indemnifies Transnet against and hold it harmless from any and all losses, liabilities, costs, claims, damages and expenses [including any legal fees] arising directly or indirectly from such allegation or claim provided that this indemnity shall not apply where the allegation or claim arises solely as a result of the Supplier/Service Provider following a design or process originated and furnished by Transnet. The Supplier/Service Provider shall either

- a) procure for Transnet the right to continue using the infringing Products; or
- b) modify or replace the Products/Services so that they become non-infringing,

provided that in both cases the Products/Services shall continue to meet Transnet's requirements and any specifications stipulated in the Order. Should neither option be possible, the Supplier/Service Provider may remove, with Transnet's prior written consent, such Products/Services and will pay to Transnet a sum equivalent to the purchase price. If Transnet refuses to give such consent, the Supplier/Service Provider shall have no liability in respect of any continued use of the infringing Products/Services after Supplier's/Service Provider's prior written request to remove the same.

23 PROPRIETARY INFORMATION

All information which Transnet has divulged or may divulge to the Supplier/Service Provider and any information relating to Transnet's business which may have come into the Supplier's/Service Provider's possession whilst carrying out an Order, and the existence of the Order, shall be treated by the Supplier/Service Provider as confidential information and shall not, without Transnet's prior written consent, be disclosed to any third party, or be used or copied for any purposes other than to perform the Order. This clause does not apply to information which is public knowledge or available from other sources other than by breach of this Term. Upon request by Transnet, the Supplier/Service Provider shall return all materials issued pursuant to the Order and, pending this, shall protect Transnet's rights in any such materials. Such confidential information shall at all material times be the property of Transnet.

24 PUBLICITY

The Supplier/Service Provider shall not name Transnet or use its trademarks, service marks [whether registered or not] or Products in connection with any publicity without Transnet's prior written consent.

25 TERMINATION OF ORDER

- 25.1 Transnet may cancel an Order in whole or in part at any time upon at least 7 [seven] days' written notice to the Supplier/Service Provider, or when there is a change in control of the Supplier/Service Provider or the Supplier/Service Provider commits any serious breach or any repeated or continued material breach of its obligations under these Terms and/or Order or shall have been guilty of conduct tending to bring itself into disrepute, on written notice to the Supplier/Service Provider when such work on the Order shall stop.
- 25.2 Transnet shall pay the Supplier/Service Provider a fair and reasonable price for justified work in progress, where such price reflects only those costs not otherwise recoverable by the Supplier/Service Provider, at the time of termination, and the Supplier/Service Provider shall give Transnet full assistance to check the extent of such work in progress. Payment of such price shall be in full and final satisfaction of any claims arising out of such termination and upon such payment the Supplier/Service Provider shall deliver to Transnet all work, including any materials, completed or in progress. The sum payable to the Supplier/Service Provider under this clause will not in any event exceed the total amount that would have been payable to the Supplier/Service Provider had the Order not been terminated.
- 25.3 In the event of termination the Supplier/Service Provider must submit all claims within 2 [two] months of termination after which time claims will only be met in what Transnet considers exceptional circumstances.
- 25.4 If the Products are not provided in accordance with an Order, the Order shall be deemed terminated and the Supplier/Service Provider shall compensate Transnet for any costs incurred in obtaining substitute Products or any damage caused due to the failure or delay in the delivery.

26 ACCESS

The Supplier/Service Provider shall be liable for the acts, omissions and defaults of its personnel or agents who, for the purposes of the Order, shall be treated as if they are the Supplier's/Service Provider's employees. The Supplier/Service Provider shall ensure that any such personnel or agents, whilst on Transnet's premises, shall comply with Transnet's health and safety, security and system security rules and procedures as and where required.

27 WARRANTY

The Supplier/Service Provider warrants that it is competent to supply the Products/Services in accordance with these Terms to the reasonable satisfaction of Transnet and that all Products/Services delivered under the Order: (a) conform and comply in all relevant legislation, standards, directives and orders related to *[inter alia]* the Services In force at the time of delivery, and to any specifications referred to in the Order; (b) will not cause any deterioration in the functionality of any Transnet equipment; and (c) do not infringe any third party rights of any kind. The Supplier/Service Provider hereby indemnifies Transnet against all losses, liabilities, costs, claims, damages, expenses and awards of any kinds incurred or made against Transnet in connection with any breach of this warranty.

28 INSOLVENCY

If the Supplier/Service Provider shall have a receiver, manager, administrator, liquidator or like person appointed over all or any part of its assets or if the Supplier/Service Provider compounds with its creditors or passes a resolution for the winding up or administration of the Supplier/Service Provider, Transnet is at liberty to terminate the Order or Orders forthwith, or at its option, to seek performance by any such appointed person.

29 ASSIGNMENT

The Supplier/Service Provider shall not assign its obligations under an Order without Transnet's prior written consent, which consent shall not be unreasonably withheld or delayed.

30 NOTICES

Notices under these Terms shall be delivered by hand to the relevant addresses of the parties in the Order or may be served by facsimile or by email, in which event notice shall be deemed served on acknowledgement of receipt by the recipient.

31 LAW

Orders shall be governed by and interpreted in accordance with South African law and any disputes arising herein shall be subject to South African arbitration under the rules of the Arbitration Foundation of South Africa, which rules are deemed incorporated by reference in this clause. The reference to arbitration shall not prevent Transnet referring the matter to any South African courts, having jurisdiction, to which the Supplier/Service Provider hereby irrevocably submits but without prejudice to Transnet's right to take proceedings against the Supplier/Service Provider in other jurisdictions and/or obtaining interim relief on an urgent basis from a court of competent jurisdiction pending the decision in other courts or from instituting in any court of competent jurisdiction any proceedings for an interdict or any other injunctive relief. If the Supplier/Service Provider does not have a registered office in the South Africa it will at all times maintain an agent for service of process in South Africa and shall give Transnet the name and address of such agent as such may be amended, in writing, from time to time.

32 GENERAL

Completion or termination of an Order shall be without prejudice to any Term herein which by its nature would be deemed to continue after completion or termination, including but not limited to clauses 22, 23, **Error! Reference source not found.**, 24 and 27. Headings are included herein for convenience only. If any Term herein be held illegal or unenforceable, the validity or enforceability of the remaining Terms shall not be affected. No failure or delay by Transnet to enforce any rights under these Terms will operate as a waiver thereof by Transnet. All rights and remedies available to either party under these Terms shall be in addition to, not to the exclusion of, rights otherwise available at law.

33 COUNTERPARTS

These Terms and conditions may be signed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Any party may enter into this agreement by signing any such counterpart.

Section 5

General Bid Conditions - Appendix (i)

The Appendix (i) is not attached, this document is available on request.

"Preview Copy Only"

Section 6

Standard term and conditions of contract (services) – Appendix (ii)

The Appendix (ii) is not attached, this document is available on request.

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Respondent's Signature

Date & Company Stamp

TRANSNET LIMITED

(Registration no. 1990/000900/30)

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

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

2. Definitions

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

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

3. Procedural Compliance

3.1 The Contractor who intends to carry out any construction work shall, before carrying out such work, notify the Provincial Director in writing if the construction work:-

- (a) includes the demolition of a structure exceeding a height of 3 metres; or
- (b) includes the use of explosives to perform construction work; or
- (c) includes the dismantling of fixed plant at a height greater than 3m,

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

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

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

4. Special Permits

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

5. Health and Safety Programme

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

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

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

6. Fall Protection Plan

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

6.2 The Contractor shall implement, maintain and monitor the fall protection plan for the duration of Contract. The Contractor shall also take such steps to ensure the continued adherence to the fall protection plan.

6.3 The fall protection plan shall include:-

- (a) A Risk Assessment of all work carried out from an elevated position;
- (b) the procedures and methods to address all the identified risks per location;
- (c) the evaluation of the employees physical and psychological fitness necessary to work at elevated positions;
- (d) the training of employees working from elevated positions; and
- (e) the procedure addressing the inspection, testing and maintenance of all fall protection equipment.

7. Hazards and Potential Hazardous Situations

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

8. Health and Safety File

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

ANNEXURE 1**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993****Regulation 3(1) of the Construction Regulations****NOTIFICATION OF CONSTRUCTION WORK**

-
-
- 1(a) Name and postal address of principal contractor:

- (b) Name and tel. no of principal contractor's contact person:

2. Principal contractor's compensation registration number: _____
- 3.(a) Name and postal address of client:

- (b) Name and tel no of client's contact person or agent:

- 4.(a) Name and postal address of designer(s) for the project:

- (b) Name and tel. no of designer(s) contact person:

5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 6(1).

6. Name/s of principal contractor's construction sub-ordinate supervisors on site appointed in terms of regulation 6(2).

7. Exact physical address of the construction site or site office:

8. Nature of the construction work:

9. Expected commencement date: _____
10. Expected completion date: _____

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

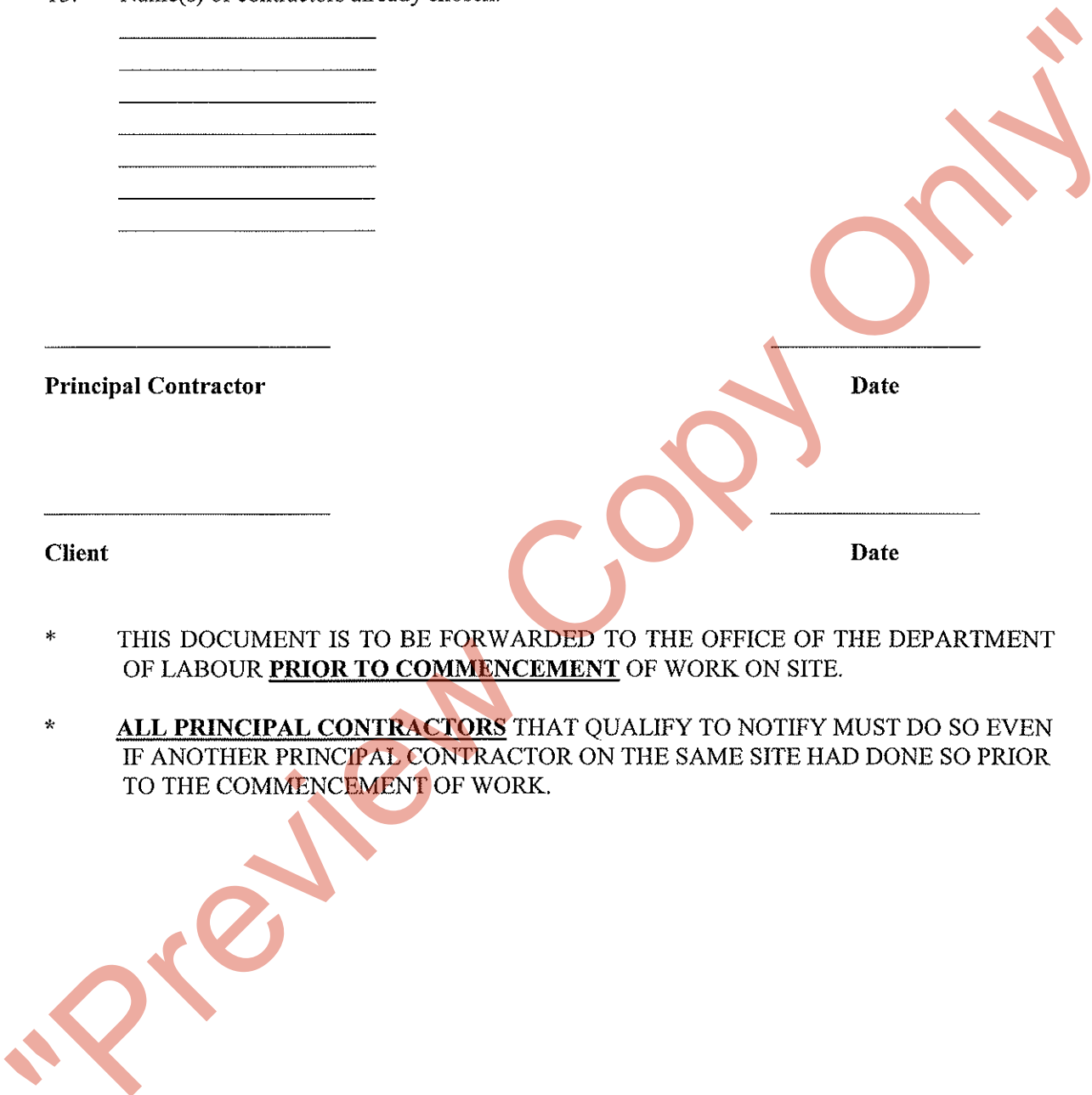
Date

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 : _____

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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 : _____

ANNEXURE A

ASSET DESCRIPTION: WORKSHOP, OFFICE AND MESS & ABLUTION BUILDINGS

ASSET LOCATION: INFRA DEPOT

CITY / TOWN: LAINGSBURG

WORK DESCRIPTION: REMOVE ASBESTOS ROOFS AND REPLACE WITH IBR ROOF SHEE

TENDER NO: 52113

ASSET NO: VARIOUS ASSETS

ITEM NO. SPECIFICATIONS PER ITEM.

ROOF

585 Laingsburg: Workshop 18m; Office 14m; Mess/Ablution A 7m; Mess/Ablution B 11m:
Work description: Remove for scrap AC ridging complete from Big6 AC roof

595 Laingsburg: Workshop 120m²; Office 89m²; Mess/Ablution A 52m²; Mess/Ablution B 81m²:
Work description: Fit new 0.8mm thick roof sheeting and Ridging to wood structure;(Chromodeck from Clotan Steel; Colour Sand Stone Beige)
All fixing holes shall be drilled and not punched. Roof sheets shall be fixed by means of No.8 x 80mm roof screws with rubber washers to wood purlins. Contractor to measure the required lenth before placing order for the IBR roof sheets.

Every precaution shall be taken to prevent damage to roof sheets during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, shall be replaced.

The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity.

The contractor shall ensure that all materials used on site for cladding, etc are transported, handled and stored in accordance with the manufacturer's recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction.

Respondent's signature: _____ **Date:** ____/____/____

ITEM NO. SPECIFICATIONS PER ITEM.

611 Laingsburg: Workshop 240m²; Office 178m²; Mess/Ablution A 104m²; Mess/Ablution B 117m²

Work description: Apply TSW Anti-Fungal to both sides of AC sheets

Staff to be fully kitted with PPE as specified in attached Government gazette and attached asbestos regulations of the department of labour at all times.

Area does not include roof sheet profile.

ALL WORK ON ASBESTOS ROOF TO BE DONE IN ACCORDANCE WITH ASBESTOS REGULATIONS

Special precaution as per asbestos regulation shall be taken to safe guard workers from falling through roof sheet and to prevent breaking sheets when walking on roof any sheets that is broken by contractor shall be replace by contractor on his cost.

Description: A water soluble, hypochlorite based powder with active detergent compounds, water conditioning agents and sequestrates.

Packaging: 30g Sachet

Directions For Use:

1. Pre-wet roofing surface with water.
2. Apply TSW Anti-Fungal via a back-pack sprayer or via a suitably sized bucket, at the following ratios:
 - a. Medium to light soiling(2 x 30g sachet per 10L water)
 - b. Gloss soiling (4 x 30g sachet per 10L water)
3. Allow a minimum of 30 minutes contact time.
4. Toxic wash the surface by means of agitation (i.e. brushing,) as required.
5. Rinse surface of any residues.

Supplied by PINELAND ENVIRONMENTAL TECHNOLOGY (PTY) LTD

Respondent's signature: _____ Date: ____/____/____

ITEM NO. SPECIFICATIONS PER ITEM.

623 Laingsburg: Workshop 120m²; Office 89m²; Mess/Ablution A 52m²; Mess/Ablution B 81m².
Work description: Remove asbestos roof sheets from roof complete.

Staff to be fully kitted with PPE as specified in attached Government gazette and attached asbestos regulations of the department of labour at all times.

Special precaution as per asbestos regulation shall be taken to safe guard workers from falling through roof sheet and to prevent breaking sheets when walking on roof any sheets that is broken by contractor shall be replace by contractor on his cost.

Area does not include roof sheet profile

Remove asbestos big six roof sheets in terms of the attached Government gazette and asbestos regulations from the Department of labour.

Item include the spray of the top and bottom of the sheets before removing the roof sheets, Item also include spraying the overlap sections with TSW after the sheets had been removed before packing the sheets in container for disposal. All work to be done in accordance with the attached TSW specification.

All necessary scaffolding and use of ladders to remove sheets is included in the item and scaffolding and ladders will be erect, used and dismantle in accordance with the approved fall arrest and safety plan.

Before the removing of the asbestos sheets the contractor shall have the container of the registered asbestos removal company on site.

The following procedures shall be followed to prevent the release of asbestos dust into the environment.

- 1: Have container to pack the roof sheets in on site.
- 2: Have safety talk with staff about dangers of asbestos
- 3: Set up 10.0m wide exlution zone around building.
- 4: Issue all staf with all necessary PPE clothing and equipment.
- 5: Set up ladders and scaffolding as necessary and inspect by compitend persone before it is used by staff.
- 6: Spray both sides of sheets with TSW or simmlar aproved product.
- 7: Remove sheets in control manner with care and with out cutting or breaking sheets.
- 8: lay on ground and spray section that was cover by ovelap of sheets with TSW or simmlar aproved product.
- 9: Pack sheets in to container to be sent to aproved disposal site.

Respondent's signature: _____ Date: ____/____/____

ITEM NO. SPECIFICATIONS PER ITEM.

624 Laingsburg: Workshop 120Mm²; Office 89m²; Mess/Ablution A 52 ²; Mess/Ablution B 81m²:

Work description: Dispose of asbestos sheet and waste.

Staff to be fully kitted with PPE as specified in attached Government gazette and attached asbestos regulations of the department of labour at all times.

Area does not include roof sheet profile.

Pack all asbestos sheets in container as it is removed from roof, container shall be kept lock to prevent the removing of the sheets by un-authorized persons. Seal container and send to approved asbestos waste site in terms of the Environmental management Act. (Act No. 107 of 1998) and the Environmental Conservation Act (Act No 73. Of 1989) All work to be done in accordance with the attached specification and attached asbestos regulation.

Item include all cost to pack, load, transport, off load and the dumping cost.

Handling Of Asbestos Containing Material

The handling and removal of asbestos-containing materials and articles, such as asbestos cement sheets, present particular health problems as they often involve dismantling or breaking large quantities of friable materials. Such work, if any, shall be performed in accordance with the provisions of the OHS Act Asbestos Regulations, 2002 (in particular, but not limited to, Section 13 and 15) and any other international, national and local legislation, regulations as deemed applicable.

The Principal Contractor shall ensure that workers are thoroughly instructed about the precautions that need to be taken to protect health, ensure continued compliance with the OHS Act, take steps to eliminate or minimize the risks and provide adequate and correct PPE equipment.

The Principal Contractor shall ensure that asbestos cement sheets are kept intact as far as is practicable. Whole asbestos sheets shall be Sprayed with TSW prior removal and transportation. All small fragments/asbestos chips shall be wetted prior to collection, be placed into heavy duty bags and be sealed and labelled as asbestos waste.

If the roof is fitted with gutters all run off water shall be passed through a fine sieve at each down pipe outlet. The filtered run off water may be channelled into the drainage system. The residue collected in the sieves shall be placed whilst still moist into heavy duty bags (at least 150 micron (1,5mm)) thickness and be sealed and labelled as asbestos waste.

All asbestos Waste (in sheet form, chips or residue) shall be disposed of at a licensed disposal and the Principal Contractor shall obtain the necessary asbestos waste permit to dispose of such waste. The Contractor shall be required to contact hand over to Transnet freight rail project manager the original certificate for the total quantity of asbestos received by the registered dumping site, before any payment on the contract will be approved.

FACIA/BARGE BOARDS

650 Laingsburg: Workshop, Office, Mess/Ablution A, Mess/Ablution B

Work description: Fix loose facia/barge boards

GUTTERS/DOWNSPIPES

664 Laingsburg: Workshop 36m; Office 28m; Mess/Ablution A 14m; Mess/Ablution B 11m

Work description: Remove gutter and down pipe complete, including brackets, Remove gutters brackets with care as not to damage wood sprockets

Respondent's signature: _____ Date: ____/____/____

TENDER NO: 52113

ASSET NO: VARIOUS ASSETS

ITEM NO. SPECIFICATIONS PER ITEM.

669 Laingsburg: Workshop 36m; Office 28m; Mess/Ablution A 14m; Mess/Ablution B 22m
Work description: Fit Chromadek seamless aluminium gutters complete (100mm x 75mm
Box, Colour : Sand Stone Beige)

678 Laingsburg: Workshop 4/3,2m; Office 4/3,2m; Mess/Ablution A 2/3,2m; Mess/Ablution B
2/3,2m
Work description: Fit Chromadeck rectangular aluminium down pipes complete with
brackets; (75mm x 50mm Rectangular, Colour: Sand Stone Beige)

"Preview Copy Only"

Respondent's signature: _____ Date: ____/____/____

ANNEXURE B

TENDER PRICE LIST PER ITEM

ASSET DESCRIPTION: WORKSHOP, OFFICE AND MESS & ABLUTION BUILDINGS

CITY / TOWN: LAINGSBURG

TENDER NO: 52113

ASSET NO: VARIOUS ASSETS

WORK DESCRIPTION REMOVE ASBESTOS ROOFS AND REPLACE WITH IBR ROOF SHEETS

TENDER PRICE LIST TO INTERIOR AND EXTERIOR WORK TO BUILDINGS

Measurements and or quantities do not include off cuts or waste all measurements of material is measure as nett fixed. Contractor to add his own % for off cuts and waste.

The contractor is responsible to check all the measurements and quantities before ordering any material. The measurement and quantities are only a guide for tender purposes.

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

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

GENERAL: The Building will be occupied during renovations, The Project manager, contractor and manager of the TFR staff using the building will discuss and agree on site the maintenance plan for the building. The necessary move of furniture in the same room if necessary is included in all the items. All normal cleaning, preparations include sanding, stopping and washing of items to be painted as specified by the paint manufacturer is included in all the paint items. Where abnormal cleaning is required it will be specified as an additional item. All scaffolding and use of ladders up to 4.50m high interior and exterior if and as necessary is part of all the items. All work shall be done according to the attached specifications and shall comply with the National building regulations. Unless otherwise specified all materials must comply with SANS specifications.

Where no applicable SANS Specification exists the materials must be approved by the Transnet Freight Rail project manager.

All material shall be fitted, install or applied as specified by the manufacture.

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

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

Page 1 of 3

SUB TOTAL PAGE 1

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TENDER NO: 52113

ASSET NO: VARIOUS ASSETS

ITEM NO	FAULT DISCRPTION	ITEM TOTAL	MEASURE UNIT	UNIT RATE	ITEM AMOUNT
	ROOF				
585	Laingsburg: Workshop 18m; Office 14m; Mess/Ablution A 7m; Mess/Ablution B 11m; Work description: Remove for scrap AC ridging complete from roof	50	M		

Respondent's signature: _____ Date: ____/____/____

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TENDER NO: 52113

ASSET NO: VARIOUS ASSETS

ITEM NO	FAULT DISCRPTION	ITEM TOTAL	MEASURE UNIT	UNIT RATE	ITEM AMOUNT
595	Laingsburg: Workshop 120m ² ; Office 89m ² ; Mess/Ablution A 52m ² ; Mess/Ablution B 81m ² : Fit 0.8mm thick IBR profile roof sheet to roof structure up to 2,25m high, fitting as per attached specification and as per manufacture specification. (Chromadek from Clotan Steel; Colour Sand Stone Beige) Work done as per approved safety plan.	342	M ²		
611	Laingsburg: Workshop 240m ² ; Office 178m ² ; Mess/Ablution A 104m ² ; Mess/Ablution B 117m ² : Apply TSW both sides of AC sheets Anti-Fungal water soluble, hypochlorite based powder with active detergent compounds, water conditioning agents and sequestrates or similar approved product from other supplier as per attached specifications	639	M ²		
623	Laingsburg: Workshop 120m ² ; Office 89m ² ; Mess/Ablution A 52m ² ; Mess/Ablution B 81m ² : Remove asbestos roof sheets from roof in terms of the attached spec and asbestos regulations. Before removing sheets spray both sides with TSW. Scaffolding and ladders to remove sheets is included in item. Item exclude removal of the roof construction.	342	M ²		
624	Laingsburg: Workshop 120m ² ; Office 89m ² ; Mess/Ablution A 52m ² ; Mess/Ablution B 81m ² : Dispose of asbestos sheets. Pack all asbestos sheets in lockable container. Send asbestos sheets to approved asbestos waste site in terms of the Environmental management Act.(Act No.107 of 1998) and the Environmental Conservation Act(Act No 73. of 1989)	342	M ²		
FACIA/BARGE BOARDS					
650	Laingsburg: Workshop, Office, Mess/Ablution A, Mess/Ablution B Fix loose facia/barge board (each = fixing point)	73	EA		
GUTTERS/DOWNPINES					
664	Laingsburg: Workshop 36m; Office 28m; Mess/Ablution A 14m; Mess/Ablution B 22m: Remove gutters complete with brackets, down pipes and down pipe holder bats, item include the fill of down pipe holder bat holes in wall with cement	100	M		
669	Laingsburg: Workshop 36m; Office 28m; Mess/Ablution A 14m; Mess/Ablution B 22m: Fit Chromadek seamless aluminium gutters. (100mm x 75mm Box, Colour: Sand Stone Beige)	100	M		
678	Laingsburg: Workshop 4/3,2m; Office 4/3,2m; Mess/Ablution A 2/3,2m; Mess/Ablution B 2/3,2m Fit Chromadek rectangular aluminium down pipes 75mm x 50mm. (Colour: Sand Stone Beige)	12	EA		

Respondent's signature: _____ Date: ____/____/____

TENDER NO: 52113

ASSET NO: VARIOUS ASSETS

ITEM NO	FAULT DISCIPTION	ITEM TOTAL	MEASURE UNIT	UNIT RATE	ITEM AMOUNT
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TOTAL PAGE 1 TO PAGE 3 R

PRELIMINARY AND GENERAL

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

P + G

R

RISK AND SAFETY

Cost for the risk and safety must include the risk assessment. The risk assesment is a full identification of the risks before the work starts and the necessary equipment, appropriate precautions and systems of work that must be provided and implemented.

RISK AND SAFETY R

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

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

TOTAL PRICE CIVIL WORK EXLUDE VAT R

The total price (excluding VAT) must be forwarded to the Section 2 , page 11 .

Respondent's signature: _____ Date: ____/____/____

**Annexure C****BLE52113****SPECIAL CONDITIONS****1 Scope of work**

The work consists of Remove AC Roofs and fit new Chromodeck IBR sheets Workshop / Mess & Ablution and Office at Goods Area.

2. Site location

The site is situated at Laingsburg Invra Depot Area.

3. Time to complete the work

The completion time for this project shall not exceed **50** days. This period shall be exclusive of weekends, public holidays and statutory holiday periods.

Failing completion of the work within the period as stipulated above or with any shorter period offered by the contenders and accepted by Transnet, the contractor shall pay to Transnet the sum of **R200-00** for every day or part thereof during which the works remain incomplete.

4. Guarantee

All workmanship and material shall be guaranteed for a period of 6 months, from the date of completion of work.

5. Inspection of works

5.1 No work shall be covered up or put out of view without the approval of the Project Manager. The Contractor shall afford full opportunity for the Project Manager to examine and measure any work, which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon.

5.2 The Contractor shall give due notice to the Project Manager whenever any such work of formations is or are ready or about to be ready for examination. The Project Manager shall, without unreasonable

Respondent's Signature

1

Date and Company Stamp



delay, unless he considers it necessary and advises the Contractor accordingly, examine and or measuring such work as required.

- 5.3 The Contractor shall uncover any part or parts of the work or make openings in or through the same as the Project Manager may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of the Project Manager and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating and making good the same shall be done by the Contractor.

6. Site records

6.1 Site Instruction Book

The Contractor shall provide a **site instruction book, in triplicate for the Project Manager to place all instructions** that are needed to compliment the specifications and drawings and any other instruction that may affect the cost of the work.

No work will be recognized for additional payment unless it has been recorded and signed by the Project Manager in the aforesaid book.

6.2 Site Diary

The contractor shall provide a diary, in triplicate to record all day to day incidents that could occur during the contract period. This includes weather, names & numbers of workers on site, material that has been delivered, material that has been loaded and disposed off, incidents that have occurred, nature of work to be done on that day, etc.

6.3. Programming & Planning of the work

The contractor shall provide to the Project Manager a detail plan of how he intends to do the work and this plan must be to the requirements of the operation of Transnet Freight Rail workshop with minor disruptions as no delays must be allowed in this regard.

The program must be agreed to (in the site instruction book) before any work will be allowed to commence on the workshops, per se. The programme can be in a form of a pert (bar) chart and will be used as a guide to measure progress of the work.

7. Water supply. (At Station area)

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



8. Electricity supply. (At Station area)

Electricity will be made available to the Contractor. The contractor must adhere to the safety standards as per the General Safety Regulations, Electrical Machine Regulations, Electrical Installation Regulations of the **Health and Safety Act**, (Act 85 of 1993) and SANS 10142. The Contractor must supply all leads and plugs as necessary and to provide power to the working site

9. Access to site

The areas are restricted and the contractor must ensure he complies with the regulations of Transnet Freight Rail in every way. The Contractor and/or any sub-contractors shall be required to apply for permission to enter the restricted area in writing. A list of workmen shall be given to the Project Manager to arrange for the necessary permits. 48 Hours minimum notice is necessary for the processing these permits. This includes changes to staff during the contract period.

10. Materials found on site

No material that is lying on the site (other than that as specified in this document) or any Transnet Freight Rail's properties may be removed or used (even if deemed as scrap) by the contractor.

11. Clearing of site

The Contractor shall provide for cleaning up and sorting all rubbish and debris of whatever kind, generated by this work only, throughout the duration of the contract. Upon completion the Contractor shall clear away and remove all rubbish, unused material, plant and debris caused by the works and leaves the site and the whole of the works clean and tidy to the satisfaction of the Project Manager.

12. Working outside normal working hours

The normal working hours are between 07:30 and 16:00 Mondays to Fridays. If it is required to work outside the stated normal working hours the Contractor must obtain written permission at least 24 hours before such work needs to be undertaken. Transnet Freight Rail will not unreasonably withhold permission; however the Contractor may have to pay for Transnet Freight Rail's supervisory personnel.

13. Escalation

This contract does not make provision for compensation in respect of increased costs. The contenders must allow in his fixed price for any increased costs, which he may encounter during the contract period or such extended period as agreed upon by both parties.



14. Retention

Transnet Freight Rail reserves the right to retain up to ten (10) percent of the value of the contract, for a period of six months, (the maintenance period) or such further period beyond the maintenance period if defects have not yet been made good to the satisfaction of the Project Manager.

15. Safety Precautions and Insurance

15.1. Act 85

The contractor shall comply with the Occupational Health & Safety Act, 1993 (Act 85 of 1993). The form E.4E as placed in this Specification must be adhered to.

15.2 Environment

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

- 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.

16. Health and Safety Requirements.

As per the E4E (Health and Safety requirements) no work can commence before the certificate of Good Standing by the Compensation Commissioner, or proof of payment, has been delivered to this office, for this project.

17. Note:

17.1 For further descriptions of materials to be used and methods to be adopted, the Contractor is referred to the various Codes and Standards, where relevant, and this shall be deemed to form part of the descriptions of any items in the following Specification. Except where any specification provision in a description in this specification is at variance with the above, in which case the specific provision in this Specification description shall apply.

17.2 Where trade names and catalogue references have been used in these Specifications to specify a product, Tenderers must tender on that particular or similar product. In addition, Tenderers must tender on the design specified. The accepted tenderer (i.e. Contractor) may, after obtaining written authority from the Project Manager, use an alternative product or design.



17.3 Where such written authority is given by the Project Manager at the request of the Contractor, for the contractor's convenience, all additional costs involved will be done for the Contractor's account. In the event of a less expensive product or design being used, a variation order reflecting the saving in cost will be issued.

18. GENERAL

18.1 Standard Specification

In so far as they can be applied and where they are not inconsistent with the terms of this specification, the following specifications shall be regarded as being embodied in this specification.

SANS Specifications (To be obtained by the contenders)

National Building Regulations	SANS 10400 – 11990
General Structural	SANS 11200AH- 11982
Electrical Code of Practice	SANS 10142

18.2 To be supplied by the Contractor

The Contractor shall provide all labour, transport, consumable stores, plant, equipment, tools, services, materials and ingredients of every description required for the carrying out and completion of the WORKS as per this specification and as may be ordered by the Manager.

18.3 Site meetings

The Contractor shall be called upon to attend meetings on the site to discuss the progress of WORKS with the Transnet Freight Rail representatives.

19.4 Setting out of the works

The setting out of the work shall be the sole responsibility of the Contractor and shall be done in accordance with this Specification, the drawings and the design.

19.5 Keep site tidy

The Contractor shall keep the site tidy at all times and remove all old material and such as rubble, off-cuts, demolished material, surplus material and carry away and dump or store onto or at an approved site.

A permit must be obtained from the Municipalities to transport material on their roads, when required.



20. **Preliminary and General (P & G)**

The P & G shall be as per General & Special Conditions and will include all costs not directly related to the execution of the work as stated. All items not specifically mentioned in the Annexure B must form part of P & G's

Annexure C -BLE52113

"Preview Copy Only"

Respondent's Signature

Date and Company Stamp

ANNEXURE D

POLICY ON THE HANDLING AND DISPOSAL OF ASBESTOS AND ASBESTOS CONTAINING WASTE IN TERMS OF SECTION 20 OF THE ENVIRONMENT CONSERVATION ACT, 1989 (ACT 73 OF 1989)

1. Purpose of Policy

The purpose of this policy is to provide clarity regarding the handling and disposal of asbestos containing waste (ACW), both when disposing in a mono-disposal site, i.e. a site specifically design for asbestos, or a co-disposal site.

2. Introduction

Asbestos is an indigenous fibrous mineral that has been mined in a number of sites in Southern Africa and, because of its excellent resistance to heat, has been used for the manufacture of various products since the 1900's (see section 4). Many studies have described a link between occupational exposure to various types of asbestos and lung cancer and associated diseases and has therefore been designated as a *known human carcinogen*. This carcinogenic activity is directly linked to the air pathway and ingestion of the fibres when swallowed in water does not carry any associated cancer risks. Asbestos shows a slight solubility in water and the natural fibres tend to become blunted on a molecular scale thus greatly reducing the associated cancer risk. Water therefore serves as a natural route for the removal of fibres from the air and as a mechanism to suppress the emission of fibres into the air environment.

3. Legislative Framework

The disposal of asbestos is controlled under section 20 of the Environmental Conservation Act, 1989. This section states that waste may only be disposed on a site that is permitted by the Department of Water Affairs and Forestry. Other applicable legislation includes the:

- * Occupational Health and Safety Act (OHSA) (Act 85 of 1993)
- * The Asbestos Regulations (R773 of 10 April 1987) promulgated under the OHSA
- * Mine Health and Safety Act (Act of 1993)
- * National Environmental Management Act (Act 107 of 1998)

The Department of Water Affairs and Forestry (DWAF) is committed to the principles of co-operative governance, therefore the handling and disposal of asbestos must take into account other applicable legislative requirements.

4. Sources and Classification of Asbestos Containing Waste

Asbestos containing waste (ACW) is divided into four hazard classes, A to D, table 1. The major types and are given in table 1:

Table 1: Classes of ACW and examples of waste falling each class:

ACW Hazard Call	Examples of ACW
<p>Class A: Any friable ACW</p>	<p>Raw asbestos (e.g. asbestos damaged in transit or no longer required).</p> <p>Bags previously used to transport raw asbestos (that have not been melted into a solid mass).</p> <p>Asbestos insulation, limpet spray of pipe lagging removed from power stations, buildings, boilers or pipe works.</p> <p>Pure asbestos rope or textiles</p>
<p>Class B: Any non-friable ACW that has become crumbled, pulverised or reduced to powder during manufacturing, installation, renovation or demolition operations, such that it is likely to release fibres into the air.</p>	<p>Dry swarf or cutting dust from the asbestos cement or friction material production process.</p> <p>Used filter bags from dust extraction units at the workplace.</p> <p>Asbestos cement that has unavoidably been crumbled, pulverised, or reduced to powder during demolition operations.</p> <p>Disposal equipment and clothing contaminated with asbestos.</p>
<p>Class C: Any Class B ACW that has been adequately wetted or otherwise encapsulated such that it will not release fibres into the air</p>	<p>Wet swarf or cutting dust from the asbestos-cement or friction material production process.</p> <p>Sludge, slurry or wet waste from the production process.</p> <p>Bags previously used to transport asbestos that have been melted into a solid mass in an autoclave.</p>
<p>Class D: Any non-friable ACW that is essentially in the same condition as when manufactured and is unlikely to release respirable fibres after being declared a waste product.</p>	<p>Asbestos cement sheets or pipes.</p> <p>Off cuts of asbestos-cement sheets or pipes.</p> <p>Disused friction products such as gaskets, brake pads or clutch plates</p>

In table 1, the potential hazard or risk associated with the release of fibres, see section 5, is highest in class A and decreases to class D, where the risk posed by the waste is extremely small.

A similar approach is used by the US EPA which has published a document in terms of their National Emissions Standards for Hazardous Air Pollutants (NESHAP) [1], in which they define a number of important terms and conditions for asbestos products, i.e.

Friable Asbestos Material: is any material containing more than 1 % asbestos as determined using Polarised Light Microscopy (PLM), that when dry, can be crumbled, pulverised, or reduced to powder by hand pressure.

Asbestos Containing Waste Material: includes mill tailings or any waste that contains commercial asbestos. The term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial

asbestos.

Non-friable asbestos Containing Material: is any material containing more than 1 % asbestos as determined by Polarised Light Microscopy (PLM), that when dry, cannot be crumbled, pulverised, or reduced to powder by hand pressure.

Note that in the US EPA definition a material must contain more than 1 % asbestos before it falls into the hazard category, which is similar to the proposed class A, ACW. However, due to the problems associated with this analysis, it is proposed that waste is even suspected of containing asbestos that is friable, be considered for class A.

5. Toxicity and Hazard Rating

Asbestos is classified as HG1, an extreme hazard, in terms of the Minimum Requirements for the Classification, Handling and Disposal of Hazardous Waste because it is a Group A carcinogen, i.e. it has definitely been shown to cause cancer in humans [2-3]. The fibres, which may not be present in all forms of asbestos, can cause lung and other forms of cancer. Six groups of asbestos fibres are recognised and these are further divided into two main groups, i.e. amphibole-asbestos and serpentine-asbestos. The latter, which is commonly known as white asbestos, is chrysotile, whereas the blue or amphibole asbestos group includes crocidolite, amosite, tremolite, actinolite and anthophyllite. Blue asbestos is classified as class 9(II) in terms of SABS 0228 and white asbestos as class 9(III) [3].

All forms of asbestos are assumed, in terms of the precautionary principle, to be extremely hazardous, HGI, i.e. to be a class A ACW, until proven otherwise. However, in the Minimum Requirements [2], it is a fundamental principle that a waste can be downgraded or "delisted", if it can be shown that the concentration or availability of the hazardous component is below an acceptable risk limit. Provided the ACE is probably hazardous only because of its potential to release fibres and there are no other hazardous components, e.g. leachable heavy metals, then if no fibres are released above the accepted action level, it can be considered non-hazardous and delist.

The accepted action level for determining whether an ACW is hazardous is that defined in the Occupational Health and Safety Act (Act 85 of 1993) as the ability to release "0.5 regulated asbestos fibres per millilitre". A regulated asbestos fibre means "a particle of asbestos with a length to diameter ratio greater than 3 to 1, a length greater than five micrometers (μm) and a diameter less than 3 μm ." The four classes of ACW are further defined below.

A Class A, ACW is that which has been shown to or because of its origin or form (table 1) is suspected to give off regulated fibres above 0.5 per millilitre and is classified as extremely hazardous, HGI.

A Class B, ACE is one that because of its origin may be not hazardous due to the release of regulated fibres but tests for fibres have not been conducted. Therefore, it is classified as an extreme hazard, HGI in terms of the precautionary principle.

A Class C, ACW is one that, because of its origin or form (table1), or because of treatment, e.g. by cementation, by containment in sealed drums or bags and/or is adequately wetted (section 6.2.1) cannot give off regulated fibres or the numbers of regulated fibres have been shown to be below the legal action level of 0.5 per millilitre. A Class C, ACW is not hazardous due to the production of regulated fibres and therefore delists in terms of the

Minimum Requirements [2].

A Class D, ACW is one that, because of its origin or form (table 1), i.e. one that is manufactured and has been adequately demonstrated to not give off regulated fibres above 0.5 fibres/ millilitre. As a precaution, treatment, e.g. by wetting prior to disposal, must be done. A Class D, ACW is not hazardous due to the production of regulated fibres and therefore delists in terms of the Minimum Requirements [2].

Asbestos is normally inert to the leaching of heavy metals and other hazardous species, but a TCLP or Acid Rain leaching test must be done, if contamination with other hazardous species is suspected due to its prior use or subsequent contamination.

6. Approved Treatment and Disposal Methods

All operational procedures must be in accordance with the Asbestos Regulations

6.1 Waste Minimisation

In accordance with the National Environmental Act (Act 107 of 1998), the Department of Water Affairs and Forestry will encourage any procedures that result in the avoidance and/or recycling of asbestos waste. Recycling of waste produced within the production process is preferred and only unavoidable waste should be disposed. The utilisation and destruction of asbestos, when used as part of the feedstock into cement kilns or incineration processes, may be acceptable, but application for a permit must be made to the Department of Water Affairs and Forestry and the Department of Environmental Affairs and Tourism.

6.2 Treatment Technologies

6.2.1 Wetting

The major technology used to minimise the formation of asbestos fibres is to wet it normally with water. The US EPA has defined the term "Adequately Wetted", when water is used to control the emissions of particulate asbestos [1] and this terminology has been accepted for use in South Africa.

"Adequately wetted means to sufficiently mix or penetrate the ACW with liquid to prevent the release of airborne fibres. Suitable liquids include a wetting agent, amended water (water to which surfactant chemicals have been added, such as a 50:50 mixture of polyoxyethylene ester and polyoxyethylene ether in a 0,16 % solution of water) or plain water."

The ACW should be visibly wet and, if bagged, droplets of moisture should be evident. Control procedures, see section 6.3, must be in place to ensure that the ACW is adequately wetted and does not dry out during handling, transport or disposal.

6.2.2 Solidification

Solidification of asbestos wastes can be accomplished utilising cement and

other fixation agents such as water based silicates. Cementation by the addition of Ordinary Portland Cement or other Department of Water Affairs and Forestry approved poliozanic material can be cost effective, particularly Class A and B ACW. Note that cementation into a massive form would result in a Class D ACW. Any procedure must be approved by the Department and include test data on the final product showing that the fibre levels have been reduced to the accepted level.

6.3 Landfilling

Application must be made to the Department of Water Affairs and Forestry for permission to dispose asbestos at any site. Information required for full permitting include:

- The design plan for the proposed disposal area;
- A operational plan approved by the Department of Labour that the proposed operating procedures comply with the Asbestos Regulations;
- A rehabilitation plan; and
- Proof of Land Zoning

Asbestos can be disposed to a mono-disposal site or a co-disposal site.

6.3.1 Mono-disposal Sites

A mono-disposal site is one *solely for the purpose of accepting asbestos* and, because asbestos does not pose a pollution risk to water resources, the normal lining requirements for waste disposal facilities, as outlined in the Minimum Requirements for the Disposal of Waste to Landfill [4] do not apply. The liner must be an impregnable layer of at least 500mm, consisting of material such as cement or solidified ash. A mono-disposal site for asbestos must be closed by covering with a 500mm layer of ash followed by an ashcrete or concrete dome. An ashcrete dome must consist of at least 10 % by mass of cementitious material, be compacted to ~2 % above optimum moisture content and must be 1 metre wider and longer than the trench width and length.

6.3.2 Co-disposal Sites

The Department requires all waste to be treated in order to minimise the risk to human health and the environment. All classes of ACW can be so treated before disposal.

Because Class A, ACW is a known human carcinogen with a hazard rating of 1, and Class B, ACW are potentially hazardous, the Department requires direct disposal of these categories to HH co-disposal sites.

However, all classes of wastes, A to D can be treated before disposal, section 3.2, and

Hh or G Landfills can apply for a permit amendment to accept other forms of asbestos provided that the correct treatment and control procedures are in place or/and the practice of disposal does not constitute a hazard and is fully compatible with the Minimum Requirements.

All sites must be specifically permitted for the acceptance of ACW and application must be made to the Department for an amendment.

The requirements should be discussed with the Regional office of the Department, but permission will not be granted where informal recycling is taking place or where there is any potential for risk to the public or workers. Note that a demarcated area and surveyed area must be set aside for asbestos disposal (see section 6.3.3).

6.3.3 Landfilling Practice. The following practices must be observed:

□ All fibrous material falling into classes A to C (see table 1) must be double bagged in plastic bags with a minimum thickness of 75 microns before the waste is brought to the landfill. Transparent bags are referred, since they allow inspection of the waste to see if it is “adequately etted” without having to undo the bag. This avoids having the operator, auditor or inspector potentially exposed to fibres. Droplets of moisture should be visible on the inside of the bag.

□ Class D wastes (see table 1) that includes larger items such as pipes and boards should be kept wet as a precautionary measure at all times before disposal at the site. Class D wastes should be transported in vehicles or stored should be covered with a tarpaulin and wetted immediately prior to disposal.

□ All asbestos waste (classes A to D) that has been treated and packaged as required in these regulations, must be deposited into trenches and immediately covered. Options include:

On a mono-disposal site, the waste must be deposited in a trench ash and immediately covered with, at least, a metre of ash.

On a co-disposal site, the waste must be immediately covered with domestic waste and carefully compacted. Otherwise it can be deposited in a deep trench, the waste must be completely covered with layer of ash, at least 25cm in depth. This will provide sufficient protection to the waste before a second layer is deposited on top. The trench should be closed, by adding a final layer of ash and/or general waste of at least 50cm in depth and compacting.

□ During disposal, care must be taken to minimise the potential breaking of bags.

□ *Only essential personnel* should be allowed to be close to the waste and should, as far as is possible, stand up wind, while the waste is being disposed. Personal protective equipment required in terms of the Occupational Health and Safety Act and the Asbestos Regulations must be worn at all times.

□ No scavenging or other reclamation activities are allowed on or near the ACW disposal area within a waste disposal site, although the general

presence of scavengers does not automatically disqualify a site.

- On a co-disposal site, a surveyed area with the coordinates must be designated as the ACW disposal area. Other waste can be disposed in this area, but records must be maintained in order to prevent trenching or other operations taking place that could lead to the release of asbestos fibres.
- The ACW disposal area must be demarcated with hazard tape and signs erected to indicate that it is an asbestos area in terms of the asbestos regulations and that the appropriate protective clothing and equipment must be worn.
- No further trenching will be allowed on top of an area previously used for ACW unless it is cover with a layer of compacted waste that it at least 3 metres in depth.
- A monitoring programme for staff required by the Occupational Health and Safety Act should be implemented. This requires and initial analysis followed by regular monitoring at intervals of between 6 months and 2 years depending on the initial level.
- The procedures for disposal of ACW must be maintained at all times and must be specifically included in the internal auditing programme and annual external auditing programmes.

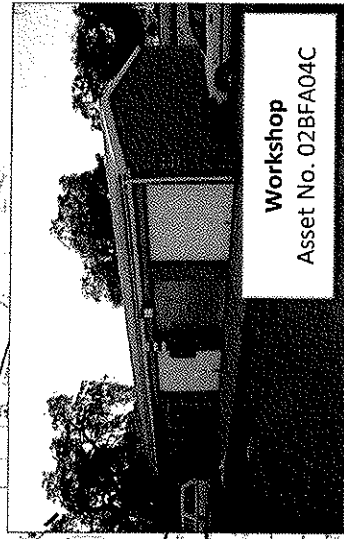
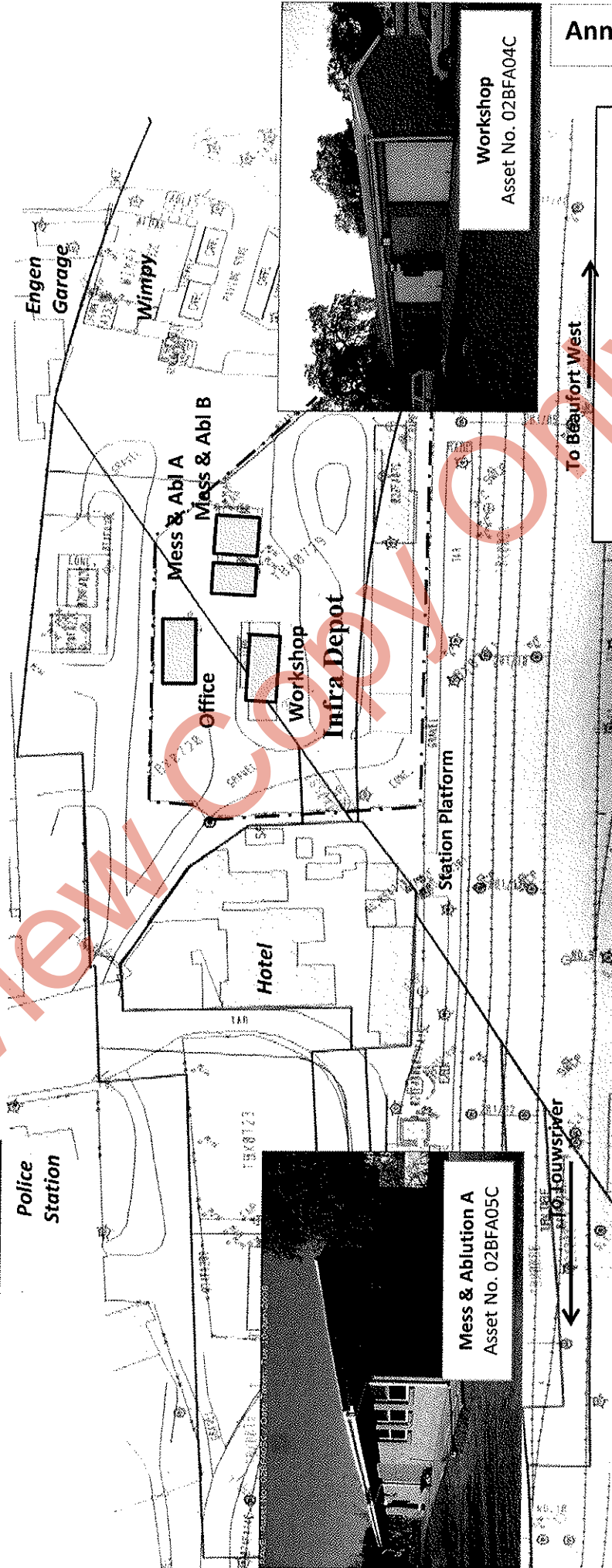
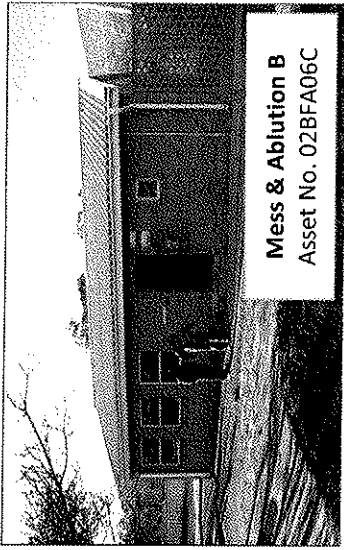
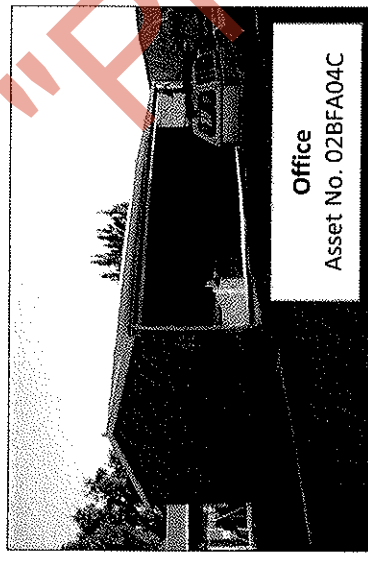
7. Permit Requirements for Landfilling

The Department requires any site that wishes to dispose of ACW to apply for an amendment to its permit. The requirements are those listed in these regulations but before formal application, it is recommended that the applicant discuss the requirements with the Regional office of the Department.

8. References

- [1] US EPA: Asbestos NESHAP Adequately Wet Guidance; EPA340/1-90-019, December 1990
- [2] Department of Water Affairs and Forestry, "Minimum Requirements for the Classification, Handling and Disposal of Hazardous Waste". 2nd edition, Pretoria, 1998
- [3] SABS, "Code of Practice for the Identification and Classification of Dangerous Substances and Goods, 0228 – 1990, Pretoria, 1990
- [4] Department of Water Affairs and Forestry, "Minimum Requirements for Waste Disposal by Landfill", 2nd edition, Pretoria, 1998

Replace Asbestos Roof sheets with
Cromodeck IBR Roof Sheets



LAINGSBURG
Infra Depot