



C2.2 Price List

Item no.	Description	Unit of Measure	Quantity	Rate per unit (ZAR)	Price excl. VAT (ZAR)
MILLSITE DEPOT TANK 2					
1.	Tank 2 modification and alteration.	Sum	1.00		
Total Price Excluding VAT					
VAT @ 15% (If applicable)					
Total Price Including VAT					

PART C3: SERVICE INFORMATION

Document reference	Title	No of pages
C3.1	This cover page	1
	<i>Service Information</i>	3
	Total number of pages	4

C3.1 Service Information

1 Description of the service.

1.1 Executive overview.

Tank 2 modification and alterations scope of service at Transnet Freight Rail Millsite depot includes,

1.1.1 Tank foundation:

- i. clean all tell-tale and supply and install denso sealant at water proofing membrane of the tank shell interface to prevent water ingress,
- ii. supply and install four (4) new grounding lugs as per API 575,
- iii. reinstall the tank bottom lining, and
- iv. appoint a storage engineer to examine the out-of-plane settlement (differential settlement) using more rigorous engineering assessments and provide Transnet with a report.
- v. Appoint a storage tank inspector to examine the (differential settlement) using more rigorous engineering assessments, to perform NDT (Ultrasonic Tests for Welds), to perform MFL (Floor Scans) for the Bottom lining repairs work. Inspector to perform API 653 and certify the tank.

1.1.2 Tank roof:

- i. supply and install anti-slip strip on the roof, to cover all service points,
- ii. supply and install atmospheric normal vent that is equipped with a screen mesh that complies with API 650 section 5.8.5,
- iii. supply and install an emergency venting system, and
- iv. prepare and wire brush and paint tank roof including all nozzles. Using an approved primer and Transnet aluminium zinc metal paint (apply 2 coats).

1.1.3 Roof nozzles:

- i. prepare and wire brush where corroded and paint the entire roof nozzle. Using an approved primer and Transnet aluminium zinc metal paint (apply 2 coats) where shows bare steel.

1.1.4 Shell external:

- i. prepare and wire brush where corroded and paint the entire tank shell. Using an approved primer and Transnet aluminium zinc metal paint (apply 2 coats).
- ii. Sandblast the entire tank before painting (371.45 m²).
- iii. Apply one (1) coat priming for the entire tank, with an approved primer (371.45 m²).
- iv. Apply two (2) coat painting on the entire external tank shell (371.45 m²).

1.1.5 Shell internal:

- i. Internal sandblasting on the first two (2) strakes from the bottom end (61,698 m²).
- ii. Apply two (2) coating for painting (internal on the first two (2) strakes from the bottom (61,698 m²).
- iii. Apply two (2) coating for painting (internal on the first two (2) strakes from the bottom (61,698 m²).

1.1.6 Shell nozzles:

- i. prepare and wire brush where corroded. Using an approved primer and Transnet aluminium zinc metal paint (apply 2 coats).
- ii. Install welded thermal relief system with isolation valves around tank inlet and outlet valves. Supply, calibrate and Install a PRV set at 350 KPa, refer to the attached drawing for the installation.
- iii. Isolate the tank inlet/outlet lines and drain the lines to prepare for welding of pressure relief system. Supply drip trays during draining to prevent ground pollution and container to collect drain product.
- iv. supply and replace all tank valves (Ball) with the new ones including bolts. Supply and fit spiral wound gaskets on flanges.
- v. boxing up the tank, supply and install a graphite gasket on the tank manhole including bolts.
- vi. supply and install a nameplate that complies with section 13.1.2.2 or 13.1.2.3 of API 653.

1.1.7 Technical requirements:

- i. The tank repairer must make provision to appoint their own Approved Inspection Authority (AIA).
- ii. At the time of inspection, the shell and the bottom material of construction were unknown, therefore, prior to any commencement of any repair work involving welding, Positive Material Identification (PMI) test shall be conducted.
- iii. All welding procedures prepared for this repair work must consider the PMI test results.
- iv. Personnel involved in the repair work shall be vetted and shall meet requirements set out in the API 653 latest edition.
- v. All Non-Destructive Testing (NDT) done during the repair/alteration/modification work shall meet the requirements outlined in API 650 section 8 and API 653 Annexure F.
- vi. Provide welders qualifications.
- vii. Provide NDT qualifications.
- viii. Provide gas tester.
- ix. For all new welds a non-destructive testing must be performed, and report must be issued to the client prior commissioning of the tank.
- x. Quality data must be submitted to the Project Manager, signed by the relevant parties including AIA pack prior commencement of the work with all the necessary required information i.e., Welding procedure, welders' qualifications etc.
- xi. Safety files with all the necessary required information i.e., Method statement, risk assessment, medicals, legal appointments etc.
- xii. Transnet Safety compliance and full PPE.
- xiii. All Modification and alterations must be done as per the API 653 code.

2. Employers Objective.

The *Employer's* current objective is to acquire the services of a petrochemical contractor/s, with working knowledge of American Petroleum Institute (API) 650 standard and South African National Standards, to cover the modification and alteration of a diesel storage tank, at Transnet Freight Rail Millsite depot.

3. SERVICE

3.1 Temporary service, Affected Property & constraints on how the *Contractor* Provides the Service.

3.1.1 Affected Property entry and security control, permits, and Affected Property regulations.

The *Contractor* complies with the *Employer's* Affected Property entry and security control, permits and Affected Property regulations.

3.1.2 Restrictions to access on Affected Property, roads, walkways and barricades:

3.1.2.1 The *Contractor* is specifically excluded from entering the *Employer's* Operational Areas which are adjacent to the Affected Property. The *Contractor* plans and organises his work in such a manner so as to cause the least possible disruption to the *Employer's* operations.

3.1.2.2 The *Contractor* ensures safe passage of his team, to traffic and around the Affected Property working areas at all times which includes providing flagmen.

3.1.2.3 The *Contractor* ensures that any of his staff, labour and Equipment moving outside of his allocated Affected Property and Service Areas, does not obstruct the operations of the *Employer*. To this end, access routes are allocated and coordinated by the *Service Manager*.

3.1.2.4 The *Contractor* ensures that all his Service staff, labour, and Equipment remains within his allocated and fenced off working Area.

3.1.2.5 All *Contractor's* staff and labour working within Affected Property complies with Transnet Freight Rail (TFR) operational safety requirements and are equipped with all necessary personnel protective equipment (PPE).

3.1.3 People restrictions on Affected Property; hours of work, conduct and records:

The *Contractor* keeps daily records of his people engaged on the Affected Property with access to such daily records available for inspection by the *Service Manager* at all reasonable times.

4 LIST OF REFERENCE SPECIFICATIONS.

The above stipulation is for information and reference purposes only.

Drawing number	Revision	Title
n/a	n/a	Appendix A: Thermal relief system.

5 PROCUREMENT.

5.1 The *Contractor's* Invoices

5.1.1 The invoice states the following:



-
- Invoice addressed to Transnet SOC Limited.
 - Transnet Limited's VAT No: 4720103177.
 - Invoice number.
 - The *Contractor's* VAT Number; and

5.1.2 The invoice contains the supporting detail:

A bill format as per the tender document indicating previously paid, paid to date and amount due for the month.

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

The invoice is presented as an original.

PART 4: AFFECTED PROPERTY

Core clause 11.2(2) states.

"Affected Property is property which

- Is affected by the work of the *Contractor* or used by the *Contractor* in Providing the Service
- is in the documents which the Contract Data states it is in."

In Contract Data, reference has been made to this Part 4 of the contract for the location of the Affected Property.

1. Description of the Affected Property and its surroundings.

1.1. General description.

- Millsite Depot is located at 01 Station Road, Millsite, Krugersdorp, Gauteng at the following location -26.128028, 27.738516

MILLSITE DEPOT TANK 2 INFORMATION

The below is the scope of work for Tank 2 modification and alterations.

Tank diameter : 10.02 m
Height : 11.825 m
Tank capacity : 930 m³
Product : Diesel
Roof type : Fixed

Visual inspection photos

Foundation



Minor separation of water proofing membrane at tank shell

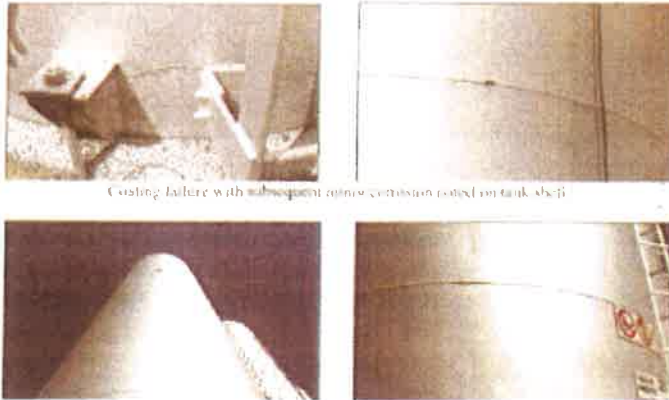


Foundation in good condition



Description of the service: The modification and alteration of diesel storage tank, at Transnet Freight Rail Millsite depot, for a service period of 6 months.

Shell External

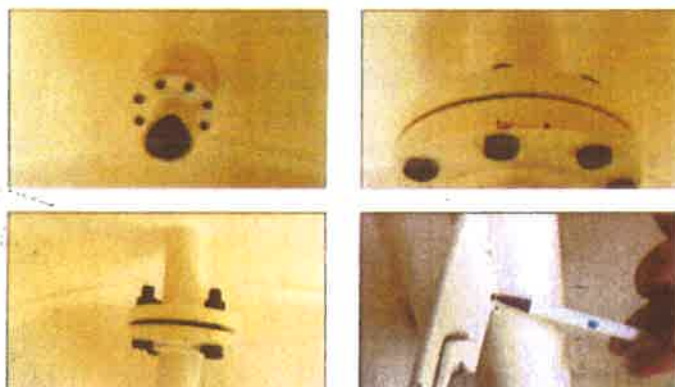


Coating failure with subsequent minor corrosion noted on tank shell

Tank Floor Internal



Inadequate spacing of water draw-off pipe to tank bottom



Description of the service: The modification and alteration of diesel storage tank, at Transnet Freight Rail Millsite depot, for a service period of 6 months.



Supports welded directly to tank floor



Shell Nozzles

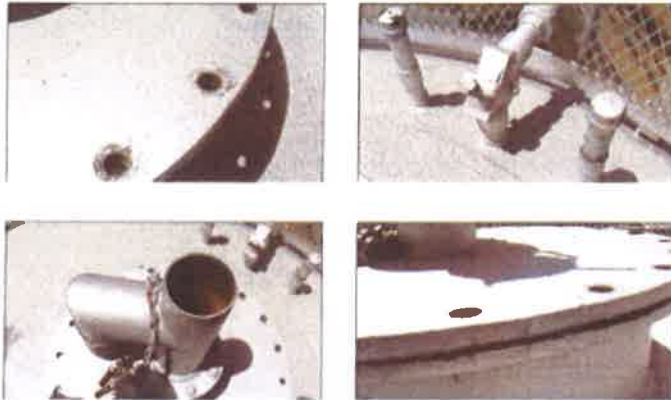


Description of the service: The modification and alteration of diesel storage tank, at Transnet Freight Rail Millsite depot, for a service period of 6 months.

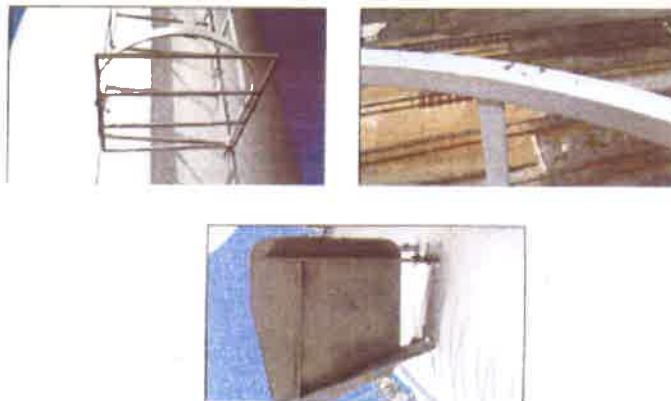
Roof External



Roof plates coated with non-slip



Access Stairway, Platform and Handrails



APPENDIX A

1. THERMAL RELIEF SYSTEM

