

## **SPECIFICATION:**

-Design, Supply, Install, Test and Commission of Hydraulic System.
-Install, Test and Commission Cantilevers, Test and Commission Single
Tier Platform for Transnet Engineering Germiston Region

Specification and Document Compiled	by:	
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Acknowledgment by Contractor by 1	means of signing:	
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**Date:26 June 2024** 



### 1. SCOPE OF WORK INSTRUCTION

### Germiston Wagons:

- Single Tier Platform: Testing and commissioning of a single tier platform, 1 off.
- Cantilevers: Design, supply, install and commission of hydraulic system, 2 off. Load Test and Commission of Cantilevers, 2 off.

### Germiston Diesel Depot:

Cantilevers: Design, supply, install and commission of hydraulic system, 5 off.
 Install cantilever, 1 off.
 Load Test and Commission of Cantilevers, 5 off.

### Sentrarand ELD:

Cantilevers: Design, supply, install and commission of hydraulic system, 6 off.
 Install cantilever, 1 off.
 Load Test and Commission of Cantilevers, 6 off.

### Kroonstad:

Cantilevers: Design, supply, install and commission of hydraulic system, 3 off.
 Install cantilevers, 2 off.
 Load Test and Commission of Cantilevers, 3 off.

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### 2. TECHNICAL INFORMATION REQUIRED:

- 2.1 All offers shall be in duplicate and will not be considered unless full particulars and sufficient literature is provided at the tendering stage to enable the Transnet Technical Officers the opportunity to assess each offer properly.
- 2.2 Tenderers shall complete the relevant questionnaire in full and must indicate whether their offer complies with each item of the specification.
- 2.3 Should there be insufficient space for furnishing full details; bidders shall provide the additional details in their covering letter. The additional details shall be numbered in accordance with the applicable clause specified in the specification.
- 2.4 Tenderers shall submit offers to this specification but may also submit alternative or additional offers for consideration. Each offer shall, however, be quoted for separately. Departures from the specification or alternative offers shall be clearly indicated and a clear indication shall be furnished in each case as to why the alternative offer submitted by the bidder is considered superior and / or more beneficial to Transnet than that specified.
- 3 MINIMUM REQUIREMENTS: (to be specified for Civil / Electrical or any other work to be carried out)

This specification does not absolve the supplier of sound engineering practices

No work can commence until the Supplier/Contractor has done SAFETY INDUCTION

And the Safety File has been approved.

All material used to be SABS approved and first grade

Height of cantilever beams must be as per Design Drawings:

GMX0077E0000, GMX0077E0300, GMX0077E0310

Acknowledgment by Contractor by means of signing	ng:
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## This specification is for:

No	Task	Supply, Install, required (Yes/No)
3.	Hydraulic System (16 off)	
3.1	Design a double acting hydraulic system, solenoid operated with 2-way direction control valve, column mounted(top) with operating controls installed +-1m above floor level	
3. 2	Operation control to be installed in a lockable enclosure and all buttons on the control to be marked	
3.4	Hydraulic limit/pressure switch to be installed to prevent the cylinder from opening beyond 90-degree angle (extended position)	
3.5	Both the hydraulic tank and the pump to be secured inside the ventilated cage that is 0.5m above the ground	
3. 6	The cage to be installed should be fully accessible and lockable on top to allow maintenance of the pump	
3.7	Steel pipes to be used in conjunction with hydraulic elastic hose	
3.8	Steel pipes to be secured with relevant/proper clamps on the existing steel structure	
3.9	All pipes, hoses installed to suit the hydraulic pressure of more than 700kpa	
3.10	The hydraulic tank to be installed should be fitted with level gauge (oil gauge)	
3.11	No Welding and Drilling to be done on the workshop column pillars	
3.12	Installation, testing and commissioning of the Hydraulic System	
4	Cantilevers	
4.1	Supply the material not free issued by Transnet to complete the installation of the cantilever as per design drawings	
4. 2	Cantilevers installed must not interfere with moving cranes above	
4.3	Safety working load (SWL) marking should be visible on the cantilever	
4.4	No Welding and Drilling to be done on the workshop column pillars.	
5	Single Tier Platform	
5.1	- Supply the material not free issued by Transnet to complete the installation of the Single tier platform -Secure electrical cable and mount the pendant	

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	-Load testing and commissioning -Mark the safety working load (SWL) -Transnet team (LML) to be on side during the commissioning and testing -Test report to be handed over to project office	
5.2	Safety working load (SWL) marking should be visible on the beam of the Platform	
6	Germiston Wagon Manufacturing (2 off)	
6.1	Cantilever A-Block (Wreckage line) -Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage -Load test and commission	
	Cantilever B-Block (New Build Line)  - Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage  -Load test and commission	
7	Diesel Depot Loco (5 off)	
7.1	Line 2 - Line 5 -Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage -Load test and commission	
	<ul> <li>Line 6 -Install cantilever</li> <li>Supply the material not free issued by Transnet to complete the installation of the cantilever</li> <li>Wall to be cut out only where cantilever is to be installed</li> <li>Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage</li> <li>Load Test and Commission</li> </ul>	
8	ELD Sentrarand (6 off)	
8.1	<ul> <li>Line 1 (office side)</li> <li>-Install cantilever</li> <li>Supply the material not free issued by Transnet to complete the installation of the cantilever</li> <li>- Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage</li> <li>-Load Test and Commission</li> </ul>	

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	Line 2 – Line 6 -Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage -Load Test and Commission	
9	ELD Kroonstad (3 off)	
9.1	Line 1 -Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage -Load Test and Commission	
	<ul> <li>Line 2 – Line 3</li> <li>Install cantilevers</li> <li>Supply the material not free issued by Transnet to complete the installation of the cantilever</li> <li>Design, Supply and install hydraulic system with mounting brackets and ventilated secure cage</li> <li>Load Test and Commission</li> </ul>	
10	Applicable to Hydraulic System, Cantilevers and Single Tier Platform	
10.1	Hand over file with all quality documentation (load test certificates for cantilever and single Tier Platform), MPI report where welding was done, documentation SANAS/Calibration certificates (Applicable to all 3), Drawings – Hydraulic System, SOP Hydraulic System, Service /maintenance Manuals - Hydraulic System etc.	
10.2	Compliance to the contractor TE SHE contracts management specification requirement.	
10.3	Should there be a need to amend any point in the specification, the bidders are urged to notify the Project Manager in charge	
10.4	Documentation -Valid manufacture test certificate to be submitted -Provide all approved drawings and calculations -All load test certificates or report to be handed over to project office	
10.5	Training -Training must be carried out by suppliers approved and accredited Trainer, who is authorized to issue Training certificate.	

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	-After the installation, the contractor to take full responsibility of providing onsite training and certification for Transnet operators	
10.6	GENERAL	
	-Companies to undertake or perform any work or supply lifting equipment must	
	be registered as Lifting Machines Entities (LME) and LMI to inspect and do	
	testing of lifting equipment	
	-The supplier to provide load test certificate for all cantilevers	

#### 11. GUARANTEE

- 11.1 Make good any defects due to inferior design, material and or workmanship which may arise during that period
- 11.2 Should failure to, or stoppage of any part of the installation be so frequent as to become objectionable or should the tar road prove otherwise unsatisfactory during the first 12 (twelve) months, the Contractor shall, 0at his expense, if called- upon by Transnet, replace the whole or such part thereof as Transnet may deem necessary with equipment to be specified by Transnet Engineering's general specification must be always adhered-to

The Contractor shall guarantee the civil for a period of twelve (12) months.

### 12. SAFETY COMPLIANCE:

- 12.1 All construction shall comply with the Occupational Health and Safety Act (Act 85 of 1993)
- 12.2 The Contractor shall be solely responsible for the safety of his staff and for providing security to safeguard his works and material on site, until such time as the plant has been taken over by Transnet.
- 12.3 The Contractor's personnel will have to attend a compulsory safety induction course at the Transnet plant before they commence work within the plant, which will be for the expense of Transnet. Arrangements will have to be made with the Technical Officer in charge beforehand'
- 12.4 The employees of the contractor shall at all-times adhere to Transnet Engineering's security and safety procedure.

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12.5 The appropriate PPE, Safety harnesses, SABS approved scaffolding to be always used

#### 13. BIDDERS SHALL NOTE THAT:

- 13.1 The Contractor shall be solely responsible for the safety of his staff and for providing security to safeguard his works and material on site, until such time as the plant has been taken over by Transnet
- 13.2 Should any of the items called for be standard equipment, then the words "Standard Equipment" shall appear against the item
- 13.3 Any further items of equipment and accessories, not listed above which bidders can offer, shall be detailed and quoted for separately under the heading "Additional Equipment"
- 13.4 Any spares recommended as being necessary to cover the first year's operation shall be detailed and quoted for separately under the heading "recommended spares"
- 13.5 Full detail of recommended lubricants shall be furnished

### 14. BIDDERS SHALL STATE:

- 14.1 Whether all essential renewable parts for the machines / equipment will be readily available in the Republic of South Africa
- 14.2 What after-sales service for the machines / equipment can be offered?
- 14.3 Where similar civil work has been constructed in the Republic of South Africa

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## 15 **SITE BRIEFING**

Attendance to the site briefing is compulsory, and it shall be at various Transnet

Engineering Depot based on the schedule.

## **END OF SPECIFICATION**

Accepted by Contractor:				
Name & Surname:				
Company Name:				
Signature:	Date:			
	to the requirements and regulati	nat he understands the content of the cons specified in the specification. He company's behalf.		
Acknowledgment by Contractor by	means of signing:			
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