

**REQUEST FOR PROPOSAL: APPOINTMENT OF A TURNKEY  
CONTRACTOR FOR CONSTRUCTION OF BENROSE ROLLING STOCK  
DEPOT AND YARD**

**TENDER NUMBER: HO/PT/DMP/212/07/2022**



**BID NUMBER: HO/PT/DMP/212/07/2022**

**REQUEST FOR PROPOSAL: APPOINTMENT OF A TURNKEY CONTRACTOR FOR  
CONSTRUCTION OF BENROSE ROLLING STOCK DEPOT AND YARD**

<b>CLOSING DATE</b>	<b>29 September 2022</b>
<b>CLOSING TIME</b>	<b>12H00</b>
<b>BID DOCUMENTS DELIVERY ADDRESS</b>	<b>PASSENGER RAIL AGENCY OF SOUTH AFRICA</b>  <b>UMJANTSHI HOUSE</b> <b>30 WOLMARANS STREET, BRAAMFONTEIN IN</b> <b>JOHANNESBURG</b>
<b>BIDDER NAME</b>	<div></div>
<b>BID RETURN ADDRESS (BIDDING ENTITY RETURN ADDRESS)</b>	<b>Contact Number</b> <div></div> <b>Company Name</b> <div></div> <div></div> <div></div>

## **Disclaimer**

This document is provided solely for the purpose set out in this RFP and is not intended to form any part or basis of any investment decision by Bidders. The recipient should not consider the document as an investment recommendation by PRASA or any of its advisers.

Each person to whom this document (and other later documents) is made available must make his own independent assessment of the Project after making such investigation and taking such professional advice as he/she or it deems necessary. Neither the receipt of this document or any related document by any person, nor any information contained in the documents or distributed with them or previously or subsequently communicated to any Bidder or its advisers, is to be taken as constituting the giving of an investment advice by PRASA or its advisers.

Whilst reasonable care has been taken in preparing this RFP and other documents, they do not purport to be comprehensive or true and correct. Neither PRASA nor any of its advisers accept any liability or responsibility for the adequacy, accuracy or completeness of any of the information or opinions stated in any document.

They acquaint themselves with this RFP and take note that no representation or warranty, express or implied, is or will be given by PRASA, or any of its officers, employees, servants, agents or advisers with respect to the information or opinions contained in any document or on which any document is based. Any liability in respect of such representations or warranties, howsoever arising is hereby expressly disclaimed.

If any recipient, or its employees, advisers or agents make or offers to make any gift to any of the employees of PRASA or consultant to PRASA on the RFP either directly

or through an intermediary then such recipient, Bidder will be disqualified forthwith from participating in the RFP.

Each recipient of this RFP agrees to keep confidential any information of a confidential nature which may be contained in the information provided (the “Confidential Information Provided”). The Confidential Information provided may be made available to Bidder’s subcontractors, employees and professional advisers who are directly involved in the appraisal of such information (who must be made aware of the obligation of confidentiality) but shall not, either in the whole or in part, be copied, reproduced, distributed or otherwise made available to any other party in any circumstances without the prior written consent of PRASA, nor may it be used for any other purpose than that for which it is intended.

These requirements do not apply to any information, which is or becomes publicly available or is shown to have been made available (otherwise than through a breach of a confidentiality obligation). Bidders, Key Contractors and their constituent members, agents and advisers, may be required to sign confidentiality Contracts/undertakings (in such form as PRASA may require from time to time).

All Confidential Information Provided (including all copies thereof) remains the property of PRASA and must be delivered to PRASA on demand. Further, by receiving this RFP each Bidder and each of its members agrees to maintain its submission in Bid to this RFP confidential from third parties other than PRASA and its officials, officers and advisers who are required to review the same for the purpose of procurement of the RFP.

Any recipient residing outside the Republic of South Africa is urged to familiarise themselves with and to observe any regulatory requirements relevant to the proposed transaction (whether these derive from a regulatory authority within or outside the Republic of South Africa).

Any requirement set out in this RFP regarding the content of a response to the RFP is stipulated for the sole benefit of PRASA, and serves as expressly stated to the contrary, may be waived at its discretion at any stage in the procurement process.

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

- Modify the RFP's goods / service(s) / works and request Respondents to re-bid on any changes;
- Withdraw, amend the RFP at any time without prior notice and liability to compensate or reimburse any respondent;
- Reject any Proposal which does not conform to instructions and specifications which are detailed herein
- Disqualify Proposals submitted after the stated submission deadline;
- Call a respondent to provide additional documents which PRASA may require which have not been submitted to PRASA.
- Not necessarily accept the lowest priced Proposal or alternative bid;
- Not accept any response to the RFP or appoint a final bidder;
- Reject all proposals if it so decides;
- Withdraw the RFP on good cause shown;
- Award a contract in connection with this Proposal at any time after the RFP's closing date;
- Award a contract for only a portion of the proposed goods/ service/s/ works which are reflected in the scope of this RFP;
- Split the award of the contract between more than one Service Provider, should it at PRASA's discretion be more advantageous in terms of, amongst others, cost or development considerations;
- Make no award at all;
- Validate any information submitted by Respondents in response to this bid. This would include, but is not limited to, requesting the Respondents to provide

supporting evidence. By submitting a bid, Respondents hereby irrevocably grant the necessary consent to PRASA to do so;

- Request annual financial statements prepared and signed off by a professional accountant or other documentation for the purposes of a due diligence exercise; and/or
- Not accept any changes or purported changes by the Respondent to the bid rates after the closing date and/or after the award of the business, unless the contract specifically provided for it.

To adopt any proposal made by any bidder at any time and to include such proposal in any procurement document which may or may not be made available to other bidders.

All costs and expenses incurred by Bidders in submitting responses to this RFP shall be borne by the Bidders and PRASA shall not be liable for any costs or expenses whatsoever or any claim for reimbursement of such costs or expenses.

Should a contract be awarded on the strength of information furnished by the Respondent, which after conclusion of the contract, is proved to have been incorrect, PRASA reserves the right to cancel the contract and/or place the Respondent on PRASA's list of Restricted Suppliers.

PRASA reserves the right to negotiate market-related price with the bidder scoring the highest points or cancel the bid; if the bidder does not agree to a market related price, negotiate a market related price with the bidder scoring the second highest points or cancel the bid; if the bidder scoring the second highest points does not agree to a market related price, negotiate a market related price with the bidder scoring the third highest points or cancel the bid. If the market related price is not agreed as envisaged in this paragraph, PRASA will cancel the bid.

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PRASA reserves the right to negotiations Best and Final Offer (BAFO) with selected Respondents where none of the Proposals meet RFP requirement, are affordable and demonstrate value for money and there is no clear preferred response to the RFP

PRASA will not reimburse any Respondent for any preparatory costs or other work performed in connection with its Proposal, whether or not the Respondent is awarded a contract.

**SCHEDULE OF BID DOCUMENTS**

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**INVITATION TO BID PART A – (SBD 1) Form A**

**TERMS AND CONDITIONS FOR BIDDING PART B Form B**

**TENDER FORM (PRICING SCHEDULE)- VOLUME 2 Form C**

**SITE INSPECTION CERTIFICATE /PRE-TENDER BRIEFING SESSION Form D**

**STATEMENT OF WORK SUCCESSFULLY  
CARRIED OUT BY BIDDER Form E**

**SECURITY SCREENING FORM Form F**

**ACKNOWLEDGEMENT Form G**

**SBD 4 DECLARATION OF INTERESTS**

**SBD 5 THE NATIONAL INDUSTRIAL PARTICIPATION PROGRAMME**

**SBD 6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE  
PREFERENTIAL PROCUREMENT REGULATIONS 2017**

**SBD 6.2 DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT  
FOR DESIGNATED SECTORS**

**SBD 8 DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT  
PRACTICES**

**SBD 9 CERTIFICATE OF INDEPENDENT BID DETERMINATION**

## **2 LIST OF ANNEXURES**

RFP Clarification Form	Annexure 1
Particular conditions – Contract data	Annexure 2
E4E	Annexure 3
SPK7/1	Annexure 4
Performance Bond	Annexure 5
SHE Specification	Annexure 6

### **3 ACRONYMS**

BBBEE	Broad Based-Black Economic Empowerment
CIDB	Construction Industries Development Board
DTiC	The Department of Trade and Industry and Competition
PPPFA	Preferential Procurement Policy Framework Act 5 of 2000 (as amended from time to time)
PFMA	Public Finance Management Act No.1 of 1999 (as amended from time to time)
PRASA	Passenger Rail Agency of South Africa
RFP	Request for Proposal
SANAS	South African National Accreditation System

#### **4 INTERPRETATION**

In this RFP, unless inconsistent with or otherwise indicated by the context –

- 4.1 headings have been inserted for convenience only and should not be taken into account in interpreting the RFP;
- 4.2 any reference to one gender shall include the other gender;
- 4.3 words in the singular shall include the plural and vice versa;
- 4.4 any reference to natural persons shall include legal persons and vice versa;
- 4.5 words defined in a specific clause have the same meaning in all other clauses of the RFP, unless the contrary is specifically indicated;
- 4.6 any reference to the RFP, schedule or appendix, shall be construed as including a reference to any RFP, schedule or appendix amending or substituting that RFP, schedule or appendix;
- 4.7 the schedules, appendices and Briefing Notes issued pursuant to this RFP, form an indivisible part of the RFP and together with further clarifying and amending information provided by PRASA, constitute the body of RFP documentation which must be complied with by Bidders;
- 4.8 in the event of any inconsistency between this RFP or other earlier information published with regard to the Project, the information in this RFP shall prevail; and
- 4.9 this RFP shall be governed by and applied in accordance with South African law.

## **5 DEFINITIONS**

In this RFP and in any other project documents (as defined below) which so provides, the following words and expressions shall have the meaning assigned to them below and cognate expressions shall have a corresponding meaning, unless inconsistent with the context:

- 5.1 “Accounting Authority” means the Board of PRASA;
- 5.2 “Contract” means the Contract to be entered between PRASA and the successful Bidder for the provision of the *services* procured in this RFP.
- 5.3 “Bid” means the Bid to the RFP submitted by Bidders;
- 5.4 “Bidders Briefing Session” means a compulsory briefing session to be held at the offices of PRASA, in order to brief the Bidders about this tender;
- 5.5 “Black Enterprise” means an enterprise that is at least 51% beneficially owned by Black People and in which Black People have substantial Management Control. Such beneficial ownership may be held directly or through other Black Enterprises;
- 5.6 “Black Equity” means the voting equity held by Black People from time to time;
- 5.7 “Black People” means African, Coloured and Indian South African citizens, and “Black Person” means any such citizen ;
- 5.8 “Black Woman” means African, Coloured and Indian South Africa Female citizen;
- 5.9 “Briefing Note” means any correspondence to Bidders issued by the PRASA;
- 5.10 “Business Day” means any day except a Saturday, Sunday or public holiday in South Africa;
- 5.11 “Bidders” means individuals, organisations or consortia that have been submitted responses to the RFP in respect of the tender;
- 5.12 “Consortium” means any group of persons or firms jointly submitting a Bid as Bid to this RFP and “Consortia” means more than one Consortium;
- 5.13 “Contractor” the successful Bidders who has signed a Contract with PRASA in terms of this RFP.
- 5.14 “Closing Date” means the closing date for submission of bids/ Proposals by Bidders which is **29 September 2022**
- 5.15 “Project” means this project for a Turnkey Contractor for the Upgrading and Modernisation of the Benrose Rolling Stock Depot and Yard.
- 5.16 “RFP” means the Request for Proposals issued by PRASA for this bid; and“
- 5.17 “Scope of Work” means the scope of work for this project as detailed out in the RFP technical specifications


## SECTION 1

## NOTICE TO BIDDERS

## 1. INVITATION TO BID

You are hereby invited to submit a bid to meet the requirements of the Passenger Rail Agency of South Africa. Responses to this RFP [hereinafter referred to as a **Bid** or a **Proposal**] are requested from persons, companies, close corporations, or enterprises [hereinafter referred to as an **entity, Bidder**].

<b>BID DESCRIPTION</b>	<b>Appointment of a turnkey contractor for construction of Benrose rolling stock depot and yard</b>
<b>BID ADVERT</b>	This RFT will be advertised on National Treasury's e-Tender Publication Portal at <a href="http://www.etenders.gov.za">www.etenders.gov.za</a> and CIDB website with effect from <b>29 July 2022</b>
<b>ISSUE DATE</b>	<b>29 July 2022</b>
<b>COLLECTION DATE DEADLINE (if applicable)</b>	Not Applicable
<b>COMPUSORY BRIEFING SESSION</b>	DATE: <b>12 August 2022 @ 11h00</b>
<b>CLOSING DATE</b>	<b>29 September 2022 @ 12h00</b> Bidders must ensure that bids are delivered timeously to the correct address. As a general rule, if a bid is late or delivered to the incorrect address, it will not be accepted for consideration.
<b>VALIDITY PERIOD</b>	<b>90 Business Days from Closing Date</b> Bidders are to note that they may be requested to extend the validity period of their bid, at the same terms and conditions, if the internal evaluation process has not been finalised within the validity period.
<b>CLOSING DATE FOR QUESTIONS</b>	<b>23 August 2022</b>

<b>REQUEST FOR PROPOSAL: APPOINTMENT OF A TURNKEY CONTRACTOR FOR CONSTRUCTION OF BENROSE ROLLING STOCK DEPOT AND YARD</b>	 <b>prasa</b> <small>PASSENGER RAIL AGENCY OF SOUTH AFRICA</small>
<b>TENDER NUMBER: HO/PT/DMP/212/07/2022</b>	

<b>CLOSING DATE FOR RESPONSES</b>	<b>30 August 2022</b>
<b>CONTACT PERSON</b>	<b>Agnes Sekhuthe</b> – asekhuthe@prasa.com and copy <b>Rosemary Moagi</b> at rmoagi@prasa.com

Any additional information or clarification will be emailed to all Respondents, if necessary.

## 2. FORMAL BRIEFING

A compulsory briefing session will be held at Benrose depot Site Benrose Rolling Stock Depot Site (-26.216340, 28.081186/ <https://goo.gl/maps/jCGVTLw1o8DstAFYA>) on 12 August 2022 @ 11h00, but should Respondents have specific queries they should email these to the PRASA employee(s) indicated in paragraph 8 *[Communication]* below:

The briefing session will start punctually, and information will not be repeated for the benefit of Respondents arriving late.

## 3. BRIEFING SESSION MINUTES AND NOTES

3.2. PRASA will issue briefing session minutes.

3.3. Bidders / Respondents are requested to promptly submit any clarifications on or before the deadline date stated.

3.4. Responses to clarifications / questions will be provided on or before the deadline date stated.

## 4. PROPOSAL SUBMISSION OF RFP RESPONSE

Proposal Responses must be submitted to PRASA in a sealed envelope addressed as follows:

RFP No: **HO/PT/DMP/212/07/2022**

Description of Bid **APPOINTMENT OF A TURNKEY CONTRACTOR FOR CONSTRUCTION OF BENROSE ROLLING STOCK DEPOT AND YARD**

Closing date and time: **29 September 2022 @ 12h00**

Closing address: *[Refer to options in 5 below]*

## **5. DELIVERY INSTRUCTION FOR RFP**

### **Delivery of Bid**

The Bid envelopes/packages must be submitted at PRASA, **Umjantshi House, at 30 Wolmarans Street, Braamfontein – (There will be a tender proposal submission register which has to be completed by all the bidders submitting the tenders).**

There will be a tender proposal submission register which has to be completed by all the bidders depositing the tenders.

Extension of the above closing date and time will only be granted where PRASA deems such extension to be appropriate in its sole discretion and PRASA is able to timeously inform all Bidders of such amended closing date.

No Responses to RFP received by facsimile, telegram, telex, e-mail or other similar format will be accepted as a validly submitted Response to RFP.

## **6. BROAD-BASED BLACK ECONOMIC EMPOWERMENT AND SOCIO-ECONOMIC OBLIGATIONS**

As explained in more detail in the attached SBD 6.1 (BBBEE Preference Points Claim Form) in and as prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations, Respondents are to note that PRASA will award “preference points” to companies who provide valid proof of their B-BBEE status using either the latest version of the generic Codes of Good Practice or Sector Specific codes )if applicable).

**Note: Failure to submit valid and original (or a certified copy of) proof of the Respondent’s compliance with the B-BBEE requirements stipulated in this RFP (the B-BBEE Preference Points Claim Form) at the Closing Date of this RFP, will result in a score of zero being allocated for B-BBEE.**

### **6.1 B-BBEE Joint Ventures or Consortiums**

Respondents who would wish to respond to this RFP as a Joint Venture [**JV**] or consortium with B-BBEE entities, must state their intention to do so in their RFP submission. Such Respondents must also submit a signed JV or consortium agreement between the parties clearly stating the percentage [%] split of business and the associated responsibilities of each party. If such a JV or consortium agreement is unavailable, the partners must submit confirmation in writing of their intention to enter



into a JV or consortium agreement should they be awarded business by PRASA through this RFP process. This written confirmation must clearly indicate the percentage [%] split of business and the responsibilities of each party. In such cases, award of business will only take place once a signed copy of a JV or consortium agreement is submitted to PRASA.

Respondents are to note the requirements for B-BBEE compliance of JVs or consortiums as required by SBD 6.1 [the B-BBEE Preference Point Claim Form] and submit it together with proof of their B-BBEE Status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status.

**Note: Failure to submit a valid and original B-BBEE certificate for the JV or a certified copy thereof at the Closing Date of this RFP will result in a score of zero being allocated for B-BBEE.**

## 6.2 Subcontracting

As an organ of state, PRASA fully endorses Government's transformation and empowerment objectives and when contemplating subcontracting Respondents are requested to give preference to companies which are Black Owned, Black Women Owned, Black Youth Owned, owned by Black People with Disabilities, EMEs and QSEs including any companies designated as B-BBEE Facilitators<sup>1</sup>.

Respondents are required to submit proof of the subcontracting arrangement between themselves and the subcontractor. Proof of the subcontracting arrangement must include a subcontracting agreement.

Respondents are to note that it is their responsibility to select competent subcontractors that meet all requirements of the bid so that their bid is not jeopardised by the subcontractor when evaluated. Respondents are responsible for all due diligence on their subcontractors.

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<sup>1</sup> The Minister of the Department of Trade and Industry has the power to designate certain Organs of State or Public Entities as B-BBEE Facilitators. For example, the South African National Military Veterans' Association (SANMVA) has been designated as a B-BBEE Facilitator. As such they will be treated as having rights of ownership held 100% by Black People, 40% by Black Women and 20% by Black designated groups.

Respondent/s are discouraged from subcontracting with their subsidiary companies as this may be interpreted as subcontracting with themselves and / or using their subsidiaries for fronting. Where a Respondent intends to subcontract with their subsidiary this must be declared in their bid response.

The successful Respondent awarded the contract may only enter into a subcontracting arrangement with PRASA's prior approval. The contract will be concluded between the successful Respondent and PRASA, therefore, the successful Respondent and not the sub-contractor will be held liable for performance in terms of its contractual obligations.

In terms of SBD 6.1 of this RFP [the B-BBEE Preference Point Claim Form] Respondents are required to indicate the percentage of the contract that will be sub-contracted as well as the B-BBEE status of the sub-contractor/s.

## **7. COMMUNICATION**

- 7.2. For specific queries relating to this RFP during the RFP process, bidders are required to adhere strictly to the communication structure requirements. An RFP Clarification Form should be submitted to [asekhuthe@prasa.com](mailto:asekhuthe@prasa.com) and copy Rosemary Moagi at [rmoagi@prasa.com](mailto:rmoagi@prasa.com) before 16h00 on 23 August 2022, substantially in the form set out in Annexure 1 hereto.
- 7.3. In the interest of fairness and transparency PRASA's response to such a query will be made available to all Respondents who have attended compulsory briefing session, including those who could not attend briefing session. For this purpose, PRASA will communicate with Respondents using the contact details provided at the compulsory briefing session and in accordance with this communication structure requirements.
- 7.4. After the closing date of the RFP, a Respondent may only communicate in writing with the Bid Secretariat, at telephone number [011 013 1594, email: [asekhuthe@prasa.com](mailto:asekhuthe@prasa.com) on any matter relating to its RFP Proposal.

- 7.5. Respondents are to note that changes to its submission will not be considered after the closing date.
- 7.6. 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 PRASA in respect of this RFP between the closing date and the date of the award of the business. Furthermore, Respondents found to be in collusion with one another will automatically be disqualified and restricted from doing business with PRASA in future.

## **8. CONFIDENTIALITY**

- 8.2. PRASA shall ensure all information related to this RFP is to be treated with strict confidence. In this regard Respondents / Bidders are required to certify that they have acquainted themselves with the Non-Disclosure Agreement. All information related to a subsequent contract, both during and after completion thereof, will be treated with strict confidence. Should the need however arise to divulge any information gleaned from provision of the Services, which is either directly or indirectly related to PRASA's business, written approval to divulge such information must be obtained from PRASA.
- 8.3. Respondents must clearly indicate whether any information submitted or requested from PRASA is confidential or should be treated confidentially by PRASA. In the absence of any such clear indication in writing, PRASA shall deem the response to the RFP to have waived any right to confidentiality and treat such information as public in nature.

## **9. INSTRUCTIONS FOR COMPLETING THE RFP**

- 9.2. All responses to the RFP must be submitted in two sealed envelopes/boxes; the first envelop/box shall have the technical, compliance and BBBEE response and the second envelop/box shall only have the financial response. Bidders must ensure that they do not indicate any financial information in the first envelop/box. PRASA may disqualify Bidders who fail to adhere to this requirement.

- 9.3. Bidders are required to package their response/Bid as follows to avoid disqualification:

### **Volume 1 (Envelope 1/Package 1)**

Part A: Compliance Response and B-BBEE Response

Part B: Technical or Functional Response (response to scope of work)

**Volume 2 (Envelope 2/ Package 2)**

Part C: Financial Proposal

- 9.4. Volume 2 Has to be submitted in a separate sealed envelope. Bidders must make their pricing offer in envelope 2/package 2, no pricing and pricing related information should be included in the Volume 1 envelope 1.
- 9.5. Bidders must submit 1 original response, 1 copy and (2) two electronic version marked Volume 1 and volume 2 which must be contained in CDs or Memory Cards clearly marked in the Bidders name.
- 9.6. Bidders must ensure that their response to the RFP is in accordance with the structure of this document.
- 9.7. Where Bidders are required to sign forms they are required to do so using a black ink pen.
- 9.8. Any documents forming part of the original responses to RFP but which are not original in nature, must be certified as a true copy by a Commissioner of Oaths.
- 9.9. Each response to RFP must be in English and submitted in A4 format, except other graphic illustrations, which may not exceed A3 format, unless the contrary is specifically allowed for in this RFP. Responses to RFP must be neatly and functionally bound, preferably according to their different sections.
- 9.10. The original responses to RFP must be signed by a person duly authorized by each consortium member and Subcontractor to sign on their behalf, which authorization must form part of the responses to RFP as proof of authorization. By signing the responses to RFP the signatory warrants that all information supplied by it in its responses to RFP is true and correct and that the responses to RFP and each party whom the responses to RFP signatory represents, considers themselves subject to and bound by the terms and conditions of this RFP.
- 9.11. The responses to RFP formulation must be clear and concise and follow a clear methodology which responses to RFP must explain upfront in a concise Executive Summary and follow throughout the responses to RFP.

- 9.12. Responses to RFP must provide sufficient information and detail in order to enable PRASA to evaluate the responses to RFP, but should not provide unnecessary detail which does not add value and detracts from the ability of PRASA to effectively evaluate and understand the responses to RFP. The use of numbered headings, bullet points, sections, appendices and schedules are encouraged.
- 9.13. Information submitted as part of a responses to RFP must as far as possible, be ordered according to the order of the required information requested by PRASA. All pages must be consecutively numbered.
- 9.14. Responses to RFP must ensure that each requirement contained in the RFP is succinctly addressed. Responses to RFP should as far as possible use the terms and definitions applied in this RFP and should clearly indicate its interpretation of any differing terminology applied.
- 9.15. Response to RFP documents are to be submitted to the address specified in item 5 above, and Bidders must ensure that the original and copies (where applicable) are identical in all respects as PRASA will not accept any liability for having disqualified a bidder for failing to provide a mandatory returnable document
- 9.16. Unless otherwise expressly stated, all Proposals furnished pursuant to this RFP shall be deemed to be offers. Any exceptions to this statement must be clearly and specifically indicated.
- 9.17. Any additional conditions must be embodied in an accompanying letter. Subject only to clause 16 [Alterations made by the Respondent to Bid Prices] of the General Bid Conditions, alterations, additions or deletions must not be made by the Respondent to the actual RFP documents.
- 9.18. Bidders are required to review the Contract. Bidders may further amend and or delete any part of the Draft Contract where they deem fit to do so. Where Bidders have amended and or deleted any part of the Contract, it must be clearly visible by using track changes and must ensure that the disc copy of their bid submission for the Draft Contract is in word version and not password protected. It must be noted that the marked up Contract will form part of the evaluation.

## 10. RFP TIMETABLE

PRASA may at its sole discretion amend any of the milestone dates indicated in the table below. Bidders will be informed of any amendments to the timeline through the issue of the Addendum.

RFP PROCESS	MILESTONE DATES
Bid issue date	29 July 2022
Briefing Session for Bidders at the Benrose Depot Site	<b>12 August 2022 @ 11h00</b>
Closing date for Questions	23 August 2022
Closing date for Responses	30 August 2022
Closing Date for Submission of final Bid	29 September 2022
Evaluation of Proposals	TBA
Appointment of the successful Bidder	TBA
Contract Negotiations	TBA
Signing of Contract	TBA
Contract Commencement	TBA

## 11. CONTRACT DURATION

### Contract period:

The planned time frame for the implementation of this proposed project is thirty (30) months with a programme that consists of providing professional services and completing the construction work on site. Thirty (30) months includes (12) twelve months for obtaining environmental, water use license authorization and rezoning.

The execution timelines shall include any statutory holiday falling within the contract period.

## 12. LEGAL COMPLIANCE

Bidders must ensure that they comply with all the requirements of the RFP and if Bidders fail to submit any of the required documents, such Bids shall, at the sole discretion of PRASA, be disqualified the Bidder. PRASA reserves the right to call a Bidder to provide additional documents which PRASA may require from a Bidder which have not been submitted to PRASA.

Respondents must ensure that they comply with all the requirements of the RFP and if Bidders fail to submit any of the required documents, such Bids shall, at the sole discretion of PRASA, be disqualified.

The successful Bidder [hereinafter referred to as the **Service Provider**] shall be in full and complete compliance with any and all applicable laws and regulations.

### **13. NATIONAL TREASURY'S CENTRAL SUPPLIER DATABASE**

Respondents are required to self-register on National Treasury's Central Supplier Database (CSD) which has been established to centrally administer supplier information for all organs of state and facilitate the verification of certain key supplier information. Only foreign suppliers with no local registered entity need not register on the CSD. The CSD can be accessed at <https://secure.csd.gov.za>. Respondents are required to provide the following to PRASA in order to enable it to verify information on the CSD:

**Supplier Number:** \_\_\_\_\_

**Unique registration reference number:** \_\_\_\_\_.

### **14. TAX COMPLIANCE**

Respondents must be compliant when submitting a proposal to PRASA and remain compliant for the entire contract term with all applicable tax legislation, including but not limited to the Income Tax Act, 1962 (Act No. 58 of 1962) and Value Added Tax Act, 1991 (Act No. 89 of 1991).

It is a condition of this RFP that the tax matters of the successful bidder be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

The Tax Compliance status requirements are also applicable to foreign Respondents/ individuals who wish to submit bids.

Respondents are required to be registered on the Central Supplier Database (CSD) as indicated in item 12 above and the National Treasury shall verify the Respondent's tax compliance status through the Central Supplier Database (CSD).



**Where Consortia / Joint Ventures / Sub-contractors are involved, each party must be registered on the Central Supplier Database (CSD) and their tax compliance status will be verified through the Central Supplier Database (CSD).**

**For this purpose, the attached SBD 1 marked FORM A and B must be completed and submitted as an essential returnable document by the closing date and time of the bid.**

#### **New Tax Compliance Status (TCS) System**

SARS has implemented a new Tax Compliance Status (TCS) system in terms of which a taxpayer is now able to authorise any 3rd party to verify its compliance status in one of two ways: either through the use of an electronic access PIN, or through the use of a Tax Clearance Certificate obtained from the new TCS system.

Respondents are required to provide the following to PRASA in order to enable it to verify their tax compliance status:

**Tax Compliance Status (TCS) Pin:**\_\_\_\_\_.

#### **15. PROTECTION OF PERSONAL DATA**

In responding to this bid, PRASA acknowledges that it may obtain and have access to personal data of the Respondents. PRASA agrees that it shall only process the information disclosed by Respondents in their response to this bid for the purpose of evaluating and subsequent award of business and in accordance with any applicable law. Furthermore, PRASA will not otherwise modify, amend or alter any personal data submitted by Respondents or disclose or permit the disclosure of any personal data to any Third Party without the prior written consent from the Respondents. Similarly, PRASA requires Respondents to process any personal information disclosed by PRASA in the bidding process in the same manner.



## **SECTION 2**

### **BACKGROUND OVERVIEW AND SCOPE REQUIREMENTS**

#### **1 INTRODUCTION AND BACKGROUND**

PRASA has embarked on a major rolling stock fleet renewal programme in order to replace all its existing metro trains over the next 20 years. The new technology and improved maintenance practices envisaged for the new rolling stock fleet will require new or refurbished maintenance depots and facilities.

The local factory at Dunnotar has begun producing train sets for distribution to the rest of the PRASA regions, with the first sets delivered in Wolmerton in Gauteng North. New train sets were scheduled for delivery in Gauteng South region in 2022/2023. The intention of this project is to construct facilities required to maintain and stage both the old and new rolling stock in Benrose.

This document serves as a request for proposals for the appointment of a turnkey contractor to design and construct maintenance and staging facilities in Benrose Rolling Stock Depot and Yard over a period of thirty (30) months.

The Benrose Rolling Stock Depot has been vandalised to the extent that all remaining buildings and rail infrastructure need to be demolished. This implies that all the required new facilities, namely buildings and rail infrastructure at the depot, must be built.

#### **2 PROBLEM STATMENT**

Benrose Depot needs to cater for, (i) Depot Facility Agreement (DFA) requirements for accepting new rolling stock in the Gauteng South Region, (ii) the depot construction will provide for lost capacity for maintaining and lifting old fleet to assist Braamfontein Depot during construction (iii) as well as lifting of new rolling stock. The depot will also be used for staging new and old rolling stock fleet.

## 2.1 PICTORIALS PRIOR TO VANDALISM

The asset base installed at Benrose Depot is depicted in the pictorial format below:



Figure 2.3.1: Depot Entrance Road



Figure 2.3.2: Lifting Shed



Figure 2.3.3: Staging Yard



Figure 2.3.4: Laydown Area next to entrance

## 2.2 PICTORIAL AFTER VANDALISM



Figure 2.3.5- staging yard



Figure 2.3.6- maintenance facility

### **3 PURPOSE OF THE RFP**

This RFP has been prepared for the following purposes:

- 3.1.1. To set out the rules of participation in the Bid process referred to in this RFP.
- 3.1.2. To disseminate information on the Project contemplated in this RFP.
- 3.1.3. To give guidance to Bidders on the preparation of their RFP Bids.
- 3.1.4. To gather information from Bidders that is verifiable and can be evaluated for the purposes of appointing a successful Bidder.
- 3.1.5. To enable PRASA to select a successful bidder that is:
  - 3.1.5.1 technically and financially qualified and meet the empowerment criteria described in this RFP;
  - 3.1.5.2 has sufficient experience in similar work,
  - 3.1.5.3 has commitment and resources to provide the services required in this tender; and
  - 3.1.5.4 carry all the obligations of the Contract.

## **4 SCOPE OF WORK**

### **4.1 SCOPE OF THE DESIRED SOLUTION**

This document serves as a bid specification for the appointment of a Turnkey contractor with a multi-disciplinary Professional Team for the Professional Services to design, construct and manage the construction delivery of Benrose Rolling Stock Maintenance Depot and yard over a period of thirty (30) months, this includes one year for Environmental Authorization and Rezoning<sup>1</sup>.

The appointed Turnkey contractor is expected to offer services for the following Project Life Cycle stages:

- Stages 1 & 2 – Do site assessment and compile concept design reports and drawings.
- Stage 3 - Compile the preliminary/detailed design report and drawings.
- Stage 4 - Compile the BOQ and technical specifications.
- Stage 5 – Execute the construction and do monitoring and quality assurance.
- Stage 6 - Compile a close-out report.
- The turnkey contractor will conduct rezoning and consolidation of Benrose depot

<sup>1</sup>NB- A separate tender will appoint a specialist to implement the environmental authorization process. As part of this turnkey tender, the contractor will do the rezoning and erf consolidation.

#### **4.1.1 Studies and Surveys**

The appointed turnkey contractor shall submit all surveys, studies and assessment reports to the relevant authorities for approval and or review. The required studies and surveys include:

- 4.1.1.1 Cadastral Surveys;
- 4.1.1.2 Topographical Surveys & Drawing Model;
- 4.1.1.3 Traffic Impact assessment;
- 4.1.1.4 Town planning studies;
- 4.1.1.5 Geotechnical Studies;
- 4.1.1.6 Geohydrological studies;
- 4.1.1.7 Ergonomics Study;
- 4.1.1.8 Services identification;
- 4.1.1.9 Depot electrical loading/ capacity assessment; and
- 4.1.1.10 Integrated waste management plan.

Make provision for other specialist services that will be required to deliver the proposed solution in compliance with any regulatory and SANS/NBR requirements;

All reports of surveys, assessments and studies performed by the contractor to be handed over to PRASA (3 hard copies and 3 soft copies (pdf format)).

#### **4.1.2 Operational and Readiness Plan**

4.1.2.1 Provide Operational and readiness plan for the completed project context (The operational plan will include support requirements for all new equipment, facilities and systems. It should detail how each facility and equipment function as part of an integrated depot. For instance, if PRASA hires a new staff in the security department, they should be able to understand the functionality of all security related matters within the depot through this document. The readiness plan provides the details of people preparedness for operations and maintenance and integration of all new technology into the PRASA business environment. This should be done by analysis of available work force versus what is required in relation to the facilities and equipment installed.

#### **4.1.3 Capacity Simulation Studies**

4.1.3.1 Provide simulated capacity analysis for the designs to indicate what capacity would be created at end state. Simulations must include train movements, maintenance facilities and equipment. These simulations should indicate installed capacity and scenarios on how it could be optimised. Depots are planned to be operational 24 hours a day.

#### **4.1.4 Photography and Videography**

4.1.4.1 Take professional photographs and videos to show the transformation of the depot. Deliverables will include a ten (10) minute video and five (5) captioned colour coffee table books as well as **all** photographs taken **clearly labelled**. The photographs should cover the current facilities and layouts, the construction undertaken (the transformation of the depot) and the completed end state.



#### **4.1.5 Required Professionals / Services**

In order to achieve the proposed solution, the appointed contractor is to provide the following services/professionals:

- 4.1.5.1 Project Manager;
- 4.1.5.2 Electrical Engineer (OHTE);
- 4.1.5.3 Electrical Engineer (Domestic Supply);
- 4.1.5.4 Mechanical Design Engineer;
- 4.1.5.5 Civil Engineer (Civils & Structural);
- 4.1.5.6 Civil Engineer (Permanent Way);
- 4.1.5.7 Electronic Engineer (Signalling);
- 4.1.5.8 Electronic engineer (Telecommunications / ICT);
- 4.1.5.9 Industrial Engineer;
- 4.1.5.10 Quantity Surveyor;
- 4.1.5.11 Architect;
- 4.1.5.12 Town Planner;
- 4.1.5.13 Construction Health and Safety Officer;
- 4.1.5.14 Environmental Control Officer; and
- 4.1.5.15 Community Liaison officer.

#### **4.1.6 Pre-construction phase (stage 1-4)**

The appointed turnkey company professional team shall perform the following activities during this stage:

- 4.1.6.1 Perform all studies and surveys listed.
- 4.1.6.2 Issue of the Inception Report as one of the first key deliverables for PRASA's approval, including but not limited to a methodology, work plan, timelines (updated schedule) and monthly cashflow projections linked to a milestone list.
- 4.1.6.3 Issue a detailed concept report with drawings and different proposed concept design options available for implementation. A solution should be recommended accompanied by a clear motivation. Since a concept is already required at tender stage, the appointed supplier can provide those options that were considered at tender stage and the chosen option with reasons why the option was chosen.

- 4.1.6.4 Upon approval of the recommended concept by PRASA, prepare preliminary technical designs (report and drawings and equipment specifications) based on the scope of works and on the recommended solution and submit to PRASA end user teams including Engineering, Operations, Maintenance, Infrastructure, Security and ICT for perusal, input and approval. The preliminary designs should be informed by latest available information from PRASA, PRASA's train supplier, latest available technology and operational efficiencies.
- 4.1.6.5 Existing/reference drawings and specifications are provided as guidance only and the Bidders are to confirm all measurements on site and complete relevant designs.
- 4.1.6.6 Prepare detailed technical designs (reports and drawings and equipment specifications) for final review and approval by PRASA in accordance with all applicable laws, regulations and standards. PRASA end user teams including Engineering, Operations, Maintenance, Infrastructure, Security, PRASA CRES and ICT will review and approve the detailed designs to ensure that end user requirements have been provided for in the detailed designs.
- 4.1.6.7 All detailed design reports, specifications and drawings to be provided to PRASA in pdf and editable/native versions (Word, Excel, CAD, etc). Two (2) hard copies and two (2) soft copy (pdf and native/editable files) must be submitted to PRASA.
- 4.1.6.8 Any other specialist services that will be required to deliver the proposed solution in compliance with any regulatory and SANS/NBR requirements.
- 4.1.6.9 The contractor will be responsible for the compilation of all required design and construction drawings, technical specifications, bills of quantities and the implementation of the scope of work required in the Benrose Rolling Stock maintenance depot.
- 4.1.6.10 Where necessary, prepare technical specifications for the appointment of all sub-contractors to implement the approved detailed designs;
- 4.1.6.11 Make recommendations about work packages, work that can be sub-contracted to provide the 30% sub-contracting requirement and the type of contracts that could be used contract amendments to suit PRASA's contract administration capacity;

- 4.1.6.12 Prepare and submit submissions of all design reports, drawings and specifications to the relevant authorities (including RSR) for approval;
- 4.1.6.13 The bidder is to make provision for all regulatory submissions for approvals i.e. building plans, service connections, wayleaves etc. that may be required for and during construction and upon occupation by PRASA.
- 4.1.6.14 Obtain all town planning approvals required for the recommended solutions to be implemented;
- 4.1.6.15 Should notarial ties be required, the appointed team should prepare all documentation required in conjunction with PRASA teams and submit to the relevant authorities for approval and finalisation.
- 4.1.6.16 Prepare a testing and commissioning plan clearly stating pass/no pass criteria for all construction works, equipment, equipment installation and facility/equipment commissioning;
- 4.1.6.17 Prepare documentation for PRASA capitalisation process including lists of all equipment, facilities and services to be installed/constructed with breakdowns of all equipment, facilities and services to be installed/constructed into asset groups as identified by the PRASA asset controller with quantities and respective values for each asset breakdown/asset group;
- 4.1.6.18 Provide warranty and maintenance requirements for all new equipment and system installations; and
- 4.1.6.19 Prepare recommended maintenance plans including a list of all spares and maintenance tools that will be provided for all facilities and equipment to be installed/constructed including responsible parties for each type of maintenance.

#### **4.1.7 Construction Stage**

The appointed team shall perform the following activities during the stage:

- 4.1.7.1 Construct the depot as per approved detailed designs and in accordance with all applicable laws, regulations and standards;



- 4.1.7.2 Provide project management services, technical support and address all design related queries during the construction;
- 4.1.7.3 Provide Level 3 construction monitoring services for the project (as described in the latest ECSA guidelines) to ensure that construction is undertaken in accordance with designs or revised designs as may be required by professionals listed;
- 4.1.7.4 Provide quality assurance process for the project and implement the testing and commissioning plan compiled during design stage and provide signed off reports/certificates of all tests performed and results thereof;
- 4.1.7.5 Provide periodic cash flow forecasts;
- 4.1.7.6 Provide regular project reports to PRASA at agreed intervals with the information listed in the contract and any additional information as may be required by the PRASA Project Manager;
- 4.1.7.7 Provide construction documentation;
- 4.1.7.8 Provide schedule and financial control reports;
- 4.1.7.9 Provide various certificates of Compliance as work is completed;
- 4.1.7.10 Facilitate and administer technical meetings and stakeholder meetings;
- 4.1.7.11 Facilitate and administer document management and archiving;
- 4.1.7.12 Attend practical completion and snagging meetings and assist in compiling defects list as identified by PRASA Project Manager and PRASA end user departments at practical completion stage;
- 4.1.7.13 Construction will not commence until designs are approved by PRASA; and
- 4.1.7.14 It must be noted that there may be a delay between completion of designs and start of construction on new facilities and infrastructure at Benrose depot depending on the outcome of the Environmental Authorisation process. PRASA is estimating a six-month period (6) for environmental authorization process to be completed.

#### **4.1.8 Close Out Stage**

The appointed turnkey contractor team shall perform the following activities during the construction stage:

- 4.1.8.1 Inspect and verify the rectification of the identified defects on site;
- 4.1.8.2 Ensure that the operations and maintenance manuals and guarantees are issued for the installed assets in editable soft and hard copies (3 hard and 3 soft copies (pdf format and editable format);

- 4.1.8.3 Provide certificated training for operators of all equipment installed (wheel lathe, lifting jacks, motorized bogie turntables, fire protection and suppression systems, forklifts, quad bikes, security systems, signalling/yard automation, OHTE equipment, transformers, PA systems, ICT hardware and systems, etc;
- 4.1.8.4 Prepare and submit signed off (with PR Eng No.) as-built drawings (in CAD and pdf formats, 3 hard and 3 soft copies). If other packages are being used, PRASA still requires that the contractor convert the as built drawings to CAD drawings for submission to PRASA;
- 4.1.8.5 Contractor to provide all as built drawings, operations, maintenance and training manuals for the deliverables as follows:
  - 4.1.8.5.1 As built drawings: As per timing in FIDIC contract;
  - 4.1.8.5.2 Maintenance, operations and training manuals: As per timing in FIDIC contract;
  - 4.1.8.5.3 Training materials/manuals for all installed equipment will be provided with certificates and copyrights to allow PRASA to continue offering training on their own. The training to be completed such that the PRASA Trainers have authority to certify and provide refresher training to others. PRASA to be provided with a letter stating it is an accredited training service provider for the equipment installed at the depot;
  - 4.1.8.5.4 Functional training and certification where necessary should be provided with all supporting material in hard copy and editable format;
  - 4.1.8.5.5 Training material should be provided to PRASA in Video format, Editable soft copies and pdf; and
  - 4.1.8.5.6 Train the Trainers should be provided for and assessment tools should be provided to the trainers post training.
- 4.1.8.6 Review and submit documentation for PRASA capitalisation process including lists of all equipment, facilities and services installed/constructed with breakdowns of all equipment, facilities and services installed/constructed into asset groups as identified by the PRASA asset controller with quantities and respective values for each asset breakdown/asset group;
- 4.1.8.7 Provide all signed off handover and warranty documentation including but not limited to compliance certificates, operations and maintenance manuals, training manuals, guarantees and warranties and spares holding requirements;

- 4.1.8.8 Provide Professional verification and signoff that the construction/installation is in compliance with the developed designs, the OSH Act, relevant SANS standards and applicable laws and regulations;
- 4.1.8.9 Provide all signed quality assurance documentation in accordance with the testing and commissioning plan;
- 4.1.8.10 Provide all spares and maintenance tools as identified during design stage;
- 4.1.8.11 Conclude the final accounts;
- 4.1.8.12 Prepare and submit a close out report to PRASA (1 hard copy, 1 pdf format and 1 editable soft copy); and
- 4.1.8.13 Submit a copy of the safety file for the project to PRASA (2 hard copies and 1 scanned electronic copy).

## **4.2 THE CONSTRUCTION OF THE BENROSE ROLLING STOCK MAINTENANCE DEPOT WILL INCLUDE THE FOLLOWING MINIMUM USER REQUIREMENTS: (NOT LIMITED TO)**

The following user requirements have been developed to guide bidders and highlight minimum user requirements rather than being too prescriptive/limiting by providing full scope of works since the appointment is a turnkey appointment.

### **4.2.1 NEW ROLLING STOCK MAINTENANCE RUNNING SHED:**

#### **Definition**

- **Workstation:** *New Fleet- a workstation is a six (6) car module on both the lifting and running shed*

*Old fleet – in the lifting shed, a workstation is one coach.*

*-- In the running shed, a workstation is a 12-car train set.*

**Build the running maintenance shed to cater for the maintenance of new and old rolling stock . The work below indicates the work required to achieve this objective.**

**Eight (8) new rail lines -**

**Five (5) rail lines (ten (10) working stations) for new train fleet – six (6) car train sets**

**-**

**Three (3) rail lines (three (3) work stations) for old train fleet – twelve (12) car train set**

**4.2.1.1 RUNNING MAINTENANCE LINES FOR NEW FLEET (5 Lines, 10 workstations)**

- 4.2.1.1.1 Design and construct a new maintenance running shed – approx. 300 m long to accommodate five (5) new rail lines. The width and height of the shed is to be determined from detailed designs;
- 4.2.1.1.2 Forklift (5 ton) access is required on both sides of each rail line and from the ends of each workstation;
- 4.2.1.1.3 The first half (150m) of the 300m line in the shed must provide for a maintenance bay with controlled platform access to the train roof, train doors and train underframe;
- 4.2.1.1.4 The second half (last 150m) of the 300m line in the shed must provide for a maintenance bay with raised rail levels and with a pit. (Swimming pool configuration)
- 4.2.1.1.5 Provision of access platforms for each rail line in the swimming pool and lifting sheds. (Two (2) x door access platforms and two (2) x roof-controlled access platforms for each of the five (5) lines;
- 4.2.1.1.6 Forklift access is required in the middle of the shed between the platform- and swimming pool for the delivering of material to either side of the shed;
- 4.2.1.1.7 Door and roof fixed platforms should have removable handrail sections according to train configuration to allow protection while train is not in position and allow for maintenance to be done when train is in position;
- 4.2.1.1.8 Install fixed staircases per rail line in the swimming pool area for the train drivers to access/entering the train drivers' cab;
- 4.2.1.1.9 Install the OHTE line off centre inside the shed for the easy removal/installation of train roof components;
- 4.2.1.1.10 Each of the ten (10) workstations in the running shed must have its own independent OHTE supply, i.e. one line can be live while the other line is dead. Electrically operate and earth the switching independently;
- 4.2.1.1.11 There should be 10 x 2.5 ton hoists in each workstation operating through a monorail. The shed roof structure must be strong enough to accommodate these mono cranes; and
- 4.2.1.1.12 Provide Lifelines on each maintenance bay capable of carrying four people per workstation. Design the lifeline system to work in conjunction with the OHTE and hoists. Access to the lifeline system should not have to cross over live OHTE.

**4.2.1.1 RUNNING MAINTENANCE LINES FOR OLD FLEET (3 lines, 3 workstations)**

- 4.2.1.2 The shed should be able to accommodate a 12-coach train in each line. Make provision for future use of these lines for maintaining the new fleet such that the three (3) workstations can be separated into six (6) workstations;
- 4.2.1.3 Each of the three (3) workstations in the running shed must have its own independent OHTE supply, i.e. one line can be live while the other line is dead. Electrically operate and earth the switching independently;
- 4.2.1.4 All lines should have lifelines that are able to carry twelve (12) people each;
- 4.2.1.5 All the three (3) lines should be pitted across the length of the lines. Provide a ramp at each end of the lines;
- 4.2.1.6 This section should have protection grids / handrails across all the lines;
- 4.2.1.7 Provide a four (4)-shore supply outlet system with an output of 110VDC. This must be supplied from 380VAC three phase. The outlets must be equally spaced along the length of each line. Applicable to the three (3) shedding lines for the old fleet;
- 4.2.1.8 Provide a public announcement system (PA system). The PA system must be one integrated system for the whole depot but must allow for announcements to and from various sheds/offices; in addition install a microphone at the OHTE switching panel. The PA system must be in a central control room. The PA system should cater for intercommunication between sections including production offices. Power supplies outlets needed in all the lines (220V AC, 380AC); and
- 4.2.1.9 Vehicle roads (for truck access) must be constructed at both ends of the new maintenance running shed. This could be in the form of an extended concrete apron.

**4.2.2 NEW ROLLING STOCK MAINTENANCE LIFTING SHED:**

**4.2.1.10 Three (3) new rail lines:**

- 4.2.1.10.1 New fleet: One (1) rail line to accommodate two (2) new six (6) car train sets train sets with lifting jacks.
- 4.2.1.10.2 New fleet: One (1) rail line to accommodate spare bogies, and wheels; and
- 4.2.1.10.3 Old fleet: One (1) rail line for six (6) workstations with six (6) sets comprising 4 x 25-ton coach lifting jacks;
- 4.2.1.10.4 Design and construct a new maintenance lifting shed – approximately 300m long to accommodate three (3) new rail lines. The width and height of the shed is to be

determined from the detailed design that needs to be done. This shed must be constructed adjacent to the maintenance shed; and

- 4.2.1.10.5 Provide a two (2) 10-ton overhead crane with cat ladders to run across the new lifting shed.

**4.2.1.11 New rail line 1 (Lifting line):**

- 4.2.1.11.1 Provide two (2) mobile synchronised floor lifting jack sets to lift one six (6)-car train set all at once on the rail line. (Specification attached);
- 4.2.1.11.2 Provide four (4) spare lifting jacks;
- 4.2.1.11.3 This rail line to be pitted for the entire length of the shed;
- 4.2.1.11.4 Forklift access is required on one side of the rail line; and
- 4.2.1.11.5 Design lifelines capable of carrying four people.

**4.2.1.12 New rail line 2:**

- 4.2.1.12.1 Rail line two (2) will be used to store spare bogies.
- 4.2.1.12.2 Pit on bogie storage line and old train fleet lifting area to be covered with removable grids allowing a five (5) ton forklift to drive over.

**4.2.1.13 New rail line 3:**

- 4.2.1.13.1 Provide six (6) set comprising four (4) x 25-ton coach lifting jacks next to the pits.
- 4.2.1.13.2 Provide an additional four (4) spare 25-ton lifting jack;
- 4.2.1.13.3 This rail line to be pitted for the entire length of the shed;
- 4.2.1.13.4 Provide lifeline capable of carrying twelve people;
- 4.2.1.13.5 Forklift access is required on one side of the rail line;
- 4.2.1.13.6 Road access must be provided for the loading and off-loading of bogies/ wheel sets inside the shed;
- 4.2.1.13.7 Provide nine (9) bogie turntables. Three on the bogie storage and three on each of the lifting lines with rail links from the lines to the bogie storage line. Bogie turntable must be motorized with the option of being operated manually by one (1) person when fully loaded;
- 4.2.1.13.8 Build the bogie storage line closest to the wall of the shed and close to the warehouse;
- 4.2.1.13.9 Forklift access is required on one side of each rail line;

- 4.2.1.13.10 Pit on bogie storage line and old train fleet lifting area to be covered with removable grids allowing a five (5) ton forklift to drive over;
- 4.2.1.13.11 Provide a six (6) -shore supply outlet system with an output of 110VDC. This must be supplied from 380VAC three phase next to the pits;
- 4.2.1.13.12 Design lifeline capable of carrying twelve people;
- 4.2.1.13.13 Provide two (2) ten (10) ton overhead cranes to run across the entire shed over the three lines in the lifting shed;
- 4.2.1.13.14 All lifting workstations should have pit access for working on the train under-frame equipment. Provide adequate lighting in the pits for night working with a train covering the pit; and
- 4.2.1.13.15 Power supplies outlets needed in all the lines (220V AC, 380AC).

#### **4.2.2 OTHER MINIMUM USER REQUIREMENTS FOR ALL NEW MAINTENANCE SHEDS (RUNNING/LIFTING):**

- 4.2.2.1.1 Install lifelines on each operational line capable of carrying four (4) people;
- 4.2.2.1.2 Provide not less than minimum required distance/clearance between the rail lines;
- 4.2.2.1.3 Install electrical mechanised roller doors at all train entrances of the running/lifting sheds;
- 4.2.2.1.4 Provide shore supply to all rail lines. Install 400VAC (minimum 2x35KVA per six (6) car train) three phase earthed and 230VAC earthed with four (4) connections each along each line in the new lifting/running shed line. (Both sides of the train);
- 4.2.2.1.5 The contractor is to interact with GIBELA (Train supplier) personnel through PRASA DMP PM to ascertain the detailed requirements of the shore supply system and to address these requirements through the proposed design;
- 4.2.2.1.6 Compressed air supply to all lines (To be consolidated with existing systems).
- 4.2.2.1.7 Provide eight (8) mobile cab/vehicle end access platforms for accessing the noses of the train for maintenance;
- 4.2.2.1.8 Handrails/open door protection grids to all access platforms;
- 4.2.2.1.9 Install new security cameras (static and PTZ cameras) at the entrances, maintenance pits and other strategic positions as may be required outside and inside the sheds to monitor the pit, door and roof accesses;
- 4.2.2.1.10 Supply all electrical and lighting connections and supply;



- 4.2.2.1.11 Supply 500-lux of efficient and low maintenance lighting across the entire new sheds. The works is to include provision and installation of all required material that will be required to ensure the provision of adequate power to support the 500-lux requirement;
- 4.2.2.1.12 Lighting to allow for day and night work (both inside and outside the shed). Ergonomics study/ Occupational Hygiene survey should inform the final luminance.
- 4.2.2.1.13 Provide a storm water management system;
- 4.2.2.1.14 Design Water installations, reticulation and connection for all buildings including warehouse and chemical storage;
- 4.2.2.1.15 Provide a fire detection and protection for entire new sheds and ensure safety with OHTE installations;
- 4.2.2.1.16 Provide Wi-Fi coverage for the whole depot. Ensure the shed is connected with ICT and Telecoms equipment as proposed;
- 4.2.2.1.17 Paintwork to all new surfaces to manufacturer's requirements. The surface paintwork should be designed such that it complies to the nature of activities per location;
- 4.2.2.1.18 Provide roof extractor fans where required;
- 4.2.2.1.19 Adequate storage space for all mobile access platforms while still providing for forklift movements;
- 4.2.2.1.20 Each maintenance bay in the running shed to have its own independent OHTE supply, i.e. one line can be live while the other line is dead. The switching must be electrically operated and earthed (as per the high voltage RS safety instruction);
- 4.2.2.1.21 Voltage indicators or volt meters for each line to be installed. This should be through numerical LED displays of the voltage reading in the OHTE that is visible from the OHTE switching panel. A visual indication at both ends of each line is also required (either green or red light) to indicate presence of power in the OHTE system. Provide six (6) pairs of lights per line;
- 4.2.2.1.22 All sheds to have 30-meter concrete aprons and canopies over shed openings to prevent wind driven rainwater entering the sheds;
- 4.2.2.1.23 Design drainage system from the pits such that it links with the effluent plant;
- 4.2.2.1.24 Design motorised roller doors at all entrances of the lifting and running shed;
- 4.2.2.1.25 All new maintenance sheds to have level rails and floors. A quality control methodology must be in place to monitor and evaluate if the floors and rails are level.
- 4.2.2.1.26 All pits to allow for water drainage linked to the effluent plants;



- 4.2.2.1.27 The shed must be bird proofed. Maintenance free nets need to be installed inside the roof structures of the shed. This net must be installed just above the roof light fittings to prevent birds from sitting on the roof structures. The design team can propose alternative bird proofing systems to ensure that birds do not nest or stay in the sheds (if the alternatives are more cost effective including maintenance costs than the netting and can provide the guarantee of keeping the birds away);
- 4.2.2.1.28 Provide a fire/emergency alarm (visual and audible) system linked to the PA system.
- 4.2.2.1.29 The design of the shed should follow green design principles. Optimise energy usage and natural light usage. Furthermore, put measures in place for water harvesting; and
- 4.2.2.1.30 The maintenance shed should make office provision for six (6) technical supervisors and green area/production meeting areas. The green area meeting areas should have notice boards and information boards.

#### **4.2.3 CONSTRUCT A NEW OFFICE BLOCK NEXT TO THE MAINTENANCE AND LIFTING SHED FOR THE MAINTENANCE STAFF:**

- 4.2.3.1 Design and construct a new office block building including all required services (HVAC, power, water reticulation, ICT infrastructure, Wi-Fi, telecoms, sewer, all required service connections and access roads) next to the maintenance/lifting sheds;
- 4.2.3.2 Provide six (6) offices for managers;
- 4.2.3.3 Provide six (6) open plan offices that can accommodate ten (10) employees each;
- 4.2.3.4 Provide two (2) meeting rooms that can accommodate thirty (30) employees each and adequate electrical plug points for laptops;
- 4.2.3.5 Internet connectivity (High speed i.e. 100MByte);
- 4.2.3.6 The meeting rooms must have a roof mounted data projector, wall mounted screen and wall mounted white board;
- 4.2.3.7 Provide separate ablution facilities for thirty (30) men and thirty (30) women with shower facilities;
- 4.2.3.8 Provide separate changing rooms with lockers for these men and women;
- 4.2.3.9 Provide a mess facility with a kitchenette to accommodate sixty (60) employees with a washbasin, water hydro boil, microwave oven, fridge, chairs and tables;
- 4.2.3.10 Install security cameras at all entrances and passages of the new office block;
- 4.2.3.11 Use dry walling for inner walls;

- 4.2.3.12 All proposed furniture for all new offices to be provided in compliance with PRASA furniture specifications and in compliance with the PRASA Policy on Human Factors Management and SANS 3000-4: Human Factors Management. Furniture and space layout to be approved by PRASA before procurement;
- 4.2.3.13 Provide a paved outdoor area next to the mess facility with concrete furniture, trash bins, water fountain and trees where employees can sit and relax. This area must be big enough to accommodate sixty (60) employees;
- 4.2.3.14 Install biometric access control system (palm readers) at all entrance doors of the building. Palm readers should also be installed at all accesses to offices; and
- 4.2.3.15 The design of the shed should follow green design principles. Optimise energy usage and natural light usage. Furthermore, put measures in place for water harvesting.

#### **4.2.4 NEW ROLLING STOCK MATERIAL WAREHOUSE:**

Design and construct a new warehouse building including all required services (HVAC, power supply, water reticulation and connections, sewer reticulation and connections, ICT infrastructure, Wi-Fi, telecoms, all required service connections and access roads) and has the following features:

- 4.2.4.1 Indoor Secured Spares Storage (3000sqm);
- 4.2.4.2 Must be located close to maintenance sheds;
- 4.2.4.3 Road access to be provided to the warehouse;
- 4.2.4.4 Forklift access to be provided from the warehouse to the maintenance sheds;
- 4.2.4.5 Area to include loading / offloading platform;
- 4.2.4.6 Entire area to make provision for forklift movement;
- 4.2.4.7 Area to have secure parking for all forklifts in the warehouse;
- 4.2.4.8 Access must be controlled by biometric access control system (palm readers) with only limited access to stores personnel and management;
- 4.2.4.9 Provision to be made for separate dispatch and separate receiving area;
- 4.2.4.10 Floor surface must be flat, sealed, dry and non-slippery;
- 4.2.4.11 Fire detection, protection and suppression for entire new warehouse as per required legislation;
- 4.2.4.12 Provide a fire/emergency alarm system linked to the PA system;

- 4.2.4.13 Minimum 10-ton overhead crane with warning beacon and audible alarm when moving and provide for transfer of large items including bogies between trucks in the loading bay and their storage area, including stacking with suitable packers;
- 4.2.4.14 Suitable heavy-duty racking and shelving will be detailed further during design in line with PRASA and train supplier requirements;
- 4.2.4.15 Storage height for racking and shelving should be designed such that it allows for overhead crane movements;
- 4.2.4.16 Floor load at least 10 tonnes/m<sup>2</sup>;
- 4.2.4.17 Adequate lighting for day and night working informed by the Occupational Hygiene survey;
- 4.2.4.18 Interior fencing/barriers for demarcation of separate areas within the warehouse will be required with access control measures to each demarcated area;
- 4.2.4.19 Building Height to accommodate overhead mezzanine area and associated access for storage of small parts of minimum area of 200 m<sup>2</sup>;
- 4.2.4.20 Install security cameras (static- and PTZ cameras) that cover all entrances, all open and work areas and in all passages between racking/shelves of the new warehouse. An alarm system should be installed linked to the control room;
- 4.2.4.21 Provision must be made for a quality inspection area and area for non-conforming products;
- 4.2.4.22 Provision must be made for a designated separate area for storage of rubber products.
- 4.2.4.23 Three (3) Metal topped tables (min 2m x 1m) for examination of parts;
- 4.2.4.24 One (1) Table of 2m x 1m;
- 4.2.4.25 General Office Space (30sqm);
- 4.2.4.26 Two open plan offices each accommodating five (5) people with desks, chairs and lockable cabinets per workstation as per PRASA guidelines/specification;
- 4.2.4.27 Two (2) power outlets per desk plus 2 wall mounted power outlets, all of 230VAC 50Hz with UPS and lightning protection (dimensioned for 2 outlet multiple connections);
- 4.2.4.28 Two (2) Internet connections (High Speed >100 Mbytes/Second with Wi-fi access in the warehouse);
- 4.2.4.29 Telephone lines to be provided; and
- 4.2.4.30 Separate male and female ablutions to be provided for the warehouse personnel as well as kitchenette with hydroboil, microwave, fridge, paper towel dispenser, water cooler and wash basin with two tables and ten chairs.

**4.2.4.31 Segregated Air Conditioned and Dust Free Area (30sqm)**

4.2.4.31.1 This may be located at the mezzanine level;

4.2.4.31.2 Provide two (2) wall mounted power outlets, all of 230VAC 50Hz with UPS and lightning protection (dimensioned for two (2) outlets multiple connections) and 110VDC power supply socket; and

4.2.4.31.3 CCTV coverage of this area required.

**4.2.4.32 Other Segregated Storage Areas**

Design and build a waste classification area where all waste will be separated according to its classification:

4.2.4.32.1 Hazardous Waste;

4.2.4.32.2 Chemical Waste;

4.2.4.32.3 General Waste;

4.2.4.32.4 Valuable Scrap Metal;

4.2.4.32.5 Segregated space for scrap and other waste material to be quarantined or removed;

4.2.4.32.6 Vehicle (truck) access to be provided to this area;

4.2.4.32.7 Install security cameras (static- and PTZ cameras) that cover all scrap and waste areas and ensure there are no blind spots when trucks are being off loaded/loaded.

4.2.4.32.8 Segregated space for storage of chemicals and paints and appropriate environmental protection equipment such as grid covered basins, etc. with access control by biometric access control system (palm readers). The chemical store must be compliant with all relevant legislation;

4.2.4.32.9 Segregated space for storage of cleaning chemicals and equipment that must be compliant with all relevant legislation with access control by palm readers; and

4.2.4.32.10 Segregated space for storing and servicing of fire extinguishers with access control by palm readers. This area to have vehicle access and be covered by security cameras with no blind spots when loading/ off loading/ servicing.

#### **4.2.4.33 Special Tools Storage (200sqm)**

- 4.2.4.33.1 Consideration should be given on locating the Special Tool Store closer to the Shedding Area in the new maintenance shed;
- 4.2.4.33.2 Design and build a special storage facility that has forklift access to and inside the storage area;
- 4.2.4.33.3 Supply and install all racks to accommodate the tools;
- 4.2.4.33.4 Supply and install air-conditioning system;
- 4.2.4.33.5 Access to be controlled by palm reader and area outside and inside this area to be covered by static and PTZ cameras;
- 4.2.4.33.6 Supply and install appropriate shelving and cages; and
- 4.2.4.33.7 Appropriate fire suppression and protection to be provided.

#### **4.2.5 EXISTING ELECTRICAL SUB-STATIONS:**

- 4.2.5.1.1 A detailed assessment must first be done to determine the electrical loading and capacity required at the depot for the planned scope at the depot. The electrical capacity assessment must be for high voltage or traction supply and low/medium voltage or domestic supply. The size of the transformers required to be determined from this capacity assessment. Any upgrade, repairs or replacements of equipment and cables and associated infrastructure are to be included in the priced offer and implemented;
- 4.2.5.1.2 Dry type transformers to be considered;
- 4.2.5.1.3 Install back up power supply system for the low/medium voltage power supply that is built into the designs for the Benrose Depot precinct and should come on automatically in case of a power interruption. A generator is being proposed as the backup system but should there be other systems with lower life cycle costs, these will be considered;
- 4.2.5.1.4 The nearby traction transformers at George goch are being upgraded through another project which is already at detailed design stage;
- 4.2.5.1.5 Install security cameras in and around the substation/s;
- 4.2.5.1.6 Install a fire detection, protection and suppression system in the transformer room and provide a fire and burglar alarm system inside the substations that are linked to the control room;
- 4.2.5.1.7 Allow vehicle access to the substation/s;

- 4.2.5.1.8 Access to be controlled by palm reader;
- 4.2.5.1.9 If the current location of the current low/medium voltage substation is problematic, the current facility can be demolished and rebuilt. Any assets that can be salvaged from any demolitions remain the property of PRASA and should be transported by the contractor to the PRASA stores in Braamfontein Depot; and
- 4.2.5.1.10 The City of Johannesburg Municipality provides the electrical supply to the existing electrical sub-stations in the depot. For a backup system, a switchgear must be installed between the OHTE electric system and the mentioned electrical substation.
- 4.2.5.1.11 Demand simulation should inform the design and installation of electrical works.

### **Traction**

- 4.2.5.1.12 The 500mm<sup>2</sup> Aluminium Feeder between George Goch and the yard to be upgraded to 800mm<sup>2</sup> Aluminium for both lines. The distance is an estimated 2km each. Replace suspension points at each point and install track switches for each line.
- 4.2.5.1.13 The following work is required at Traction sub/ tie stations:

### **Karsene West Tie Station**

- 4.2.5.1.14 Install High Speed Circuit Breaker (HSCB) to modular cells and Feeder Protection Relay (FPR);
- 4.2.5.1.15 Install two (2) additional HSCB's to feed the yard;
- 4.2.5.1.16 Install 250AH batteries and charger;
- 4.2.5.1.17 Install AC/ DC panel;
- 4.2.5.1.18 Install new earthing (indoor);
- 4.2.5.1.19 Install two (2) feeder cables from the HSCB's (approximately 300 meters);
- 4.2.5.1.20 Refurbish the building (Painting and sealing roof);
- 4.2.5.1.21 Replacement of lighting inside and outside the building;
- 4.2.5.1.22 Install two (2) track switches; and
- 4.2.5.1.23 Replace the tele-control panel.

### **George Goch**

- 4.2.5.1.24 Install two (2) new transformers 6MW and matching rectifiers;
- 4.2.5.1.25 All track breakers should be modular cells and FPR's;
- 4.2.5.1.26 Install 250 AH batteries and charger;

- 4.2.5.1.27 Install AC/DC panel and two (2) control panels;
- 4.2.5.1.28 Install new earthing (indoor and outdoor);
- 4.2.5.1.29 Install surge arrestors; and
- 4.2.5.1.30 Replace the tele-control panel.

#### **New Tie Station**

- 4.2.5.1.31 A new building is required at the George Goch end of the yard and this shall contain:
- 4.2.5.1.32 Two (2) HSCB's, modular cells and FPR's;
- 4.2.5.1.33 AC/DC distribution panel;
- 4.2.5.1.34 100AH battery and charger; and
- 4.2.5.1.35 Connect 500mm<sup>2</sup> single core copper cable feeders to track switches. The building must have adequate lighting both on the inside and outside.

#### **Distribution**

- 4.2.5.1.36 The current distribution network consists of the 6,6kV feed from George Goch substation as well the supply from Transnet through the Vickers's Road substation;
- 4.2.5.1.37 The existing transformer at George Goch has a capacity of 3MVA, this will need to be upgraded to 5MVA to accommodate the new requirements;
- 4.2.5.1.38 A building (with restricted access) is required to accommodate the following equipment at Benrose yard:
  - 4.2.5.1.38.1 1MW indoor step-down transformer 6,6kV/380V fed through a cable terminating at the transmission line;
  - 4.2.5.1.38.2 SF6 or Vacuum Circuit Breaker with the protection required for the transformer (Buchholtz, Overload, Oil and winding temperature);
  - 4.2.5.1.38.3 Low Voltage panel, the yard operations will determine the required circuits;
  - 4.2.5.1.38.4 Self-contained battery and charger unit;
  - 4.2.5.1.38.5 A wall mounted distribution board to provide lighting and power 220V sockets;
  - 4.2.5.1.38.6 The building should have adequate indoor/ outdoor lighting;
  - 4.2.5.1.38.7 Trenches for cables covered with vandal proof covering that allows easier access for maintenance; and
  - 4.2.5.1.38.8 A cabinet to store the logbooks and drawings.



#### **4.2.6 DEPOT STORM WATER SYSTEM:**

- 4.2.6.1 Design and construct the storm water system for the depot;
- 4.2.6.2 All problem areas in and around the depot must be assessed to ensure easy and quick drainage of storm water; and
- 4.2.6.3 Construct concrete v-drains inside the depot where water streams occur to expedite drainage.

#### **4.2.7 NEW EFFLUENT PLANT:**

- 4.2.7.1 The new fit for purpose effluent plant needs to be designed and constructed;
- 4.2.7.2 Water and electricity need to be provide for the new effluent plant;
- 4.2.7.3 Provide a paved walkway to the effluent plant; and
- 4.2.7.4 Provide a three (3) meter wide paved area around the effluent plant.

#### **4.2.8 NEW EXTERNAL TRAIN WASH PLANT:**

- 4.2.8.1 Design and construct a new external train wash plant that is fit for purpose;
- 4.2.8.2 An overhead OHE line must be installed in the train wash plant. Ensure all installations comply with PRASA standards and safety regulations. This will allow train sets to drive through the wash plant on their own power;
- 4.2.8.3 Provide a kitchenette inside the control room;
- 4.2.8.4 A telephone must be installed in the building that is linked to the train operational/control room;
- 4.2.8.5 The vehicle road leading to the wash plant needs to be surfaced to accommodate delivery vehicles;
- 4.2.8.6 The area around the train wash plant needs to be paved/ surfaced;
- 4.2.8.7 Provide adequate lighting for night work; and
- 4.2.8.8 Install security cameras (static- and PTZ cameras) at the train wash plant.

#### **4.2.9 NEW TWO (2) LEVEL ADMINISTRATION BUILDING:**

- 4.2.9.1 Design and construct new fit for purpose two (2) level administration building including all required services (HVAC, power, water reticulation, ICT infrastructure, Wi-Fi, telecoms, sewer, all required service connections). This building must accommodate the following personnel:



4.2.9.2 The building must accommodate the following departments:

4.2.9.2.1 Rolling Stock Maintenance Management – 20 Employees;

4.2.9.2.2 Train Operations, Yard Masters, Yard Foremen and Yard Officials - 20 Employees;

4.2.9.2.3 Safety and Security Department Employees – 10 Employees;

4.2.9.2.4 Perway Department – 6 Employees;

4.2.9.2.5 Electrical Department – 6 Employees; and

4.2.9.2.6 Signalling Department – 6 Employees.

4.2.9.3 The building must accommodate the following facilities:

4.2.9.4 Separate ablution facilities for men and women per floor;

4.2.9.4.1 Kitchen and mess facility per floor. Provide washbasin, water hydro boil, microwave oven and a fridge;

4.2.9.4.2 A storeroom for cleaning material;

4.2.9.5 Provide ten (10) offices for managers with respective furniture as per PRASA guidelines/specification;

4.2.9.6 Six (6) open plan offices. Each open plan office must accommodate ten (10) employees with respective furniture as per PRASA guidelines/specification;

4.2.9.7 Five (5) open plan offices. Each open plan office must accommodate five (5) employees with respective furniture as per PRASA guidelines/specification;

4.2.9.8 A walk-in safe per floor for documents and equipment;

4.2.9.9 A general store-room;

4.2.9.10 Printer room per floor;

4.2.9.11 IT server room;

4.2.9.12 Internet connectivity (High speed i.e. 100MByte);

4.2.9.13 A meeting room that can accommodate sixty (60) employees and adequate electrical plug points for laptops;

4.2.9.14 A meeting room that can accommodate twenty (20) employees and adequate electrical plug points for laptops;

4.2.9.15 Two (2) meeting rooms that can accommodate ten (10) people and adequate electrical plug points for laptops;

4.2.9.16 The meeting rooms must have telephone conference facilities;

4.2.9.17 The meeting room must have a roof mounted data projector, wall mounted screen and wall mounted white board;

4.2.9.18 The ground floor must have the following additional facilities:

- 4.2.9.18.1 A reception area and waiting facilities for ten (10) visitors;
- 4.2.9.18.2 Install a water dispenser in waiting facility;
- 4.2.9.18.3 A medical sick bay room;
- 4.2.9.18.4 The building must be universal access friendly;
- 4.2.9.18.5 Install security doors at all entrance doors of the building;
- 4.2.9.18.6 Install burglar proofing on all ground floor windows;
- 4.2.9.18.7 Install a universal access friendly lift. (Two persons);
- 4.2.9.18.8 Install a fire alarm system;
- 4.2.9.18.9 Dry walling for inner walls;
- 4.2.9.18.10 All proposed furniture for all new offices to be provided in compliance with PRASA furniture specifications. Furniture and space layout to be approved by PRASA before procurement;
- 4.2.9.18.11 Install security cameras at the entrance and all passages of the new administration building;
- 4.2.9.18.12 Various existing buildings and parking facilities need to be demolished. All recyclable material must be stored at the PRASA scrap yard on the east/south side of the depot.
- 4.2.9.18.13 Install a public announced (PA) microphone linked to central PA system;
- 4.2.9.18.14 Provide a paved outdoor area next to the mess facility with concrete furniture, trash bins, water fountain and trees where employees can sit and relax. This area must be big enough to accommodate fifty (50) employees;
- 4.2.9.18.15 Provide a room or facility with equipment to conduct substance abuse testing; and
- 4.2.9.18.16 Install palm readers at all entrance doors of the building. Palm readers should also be installed at all accesses to offices.

#### **4.2.10 General**

- 4.2.10.1 Provide a Public Announced (PA) microphone linked to central PA system;
- 4.2.10.2 All proposed furniture for all new offices must comply with PRASA furniture specifications. PRASA must approve all furniture and space layout before procurement;
- 4.2.10.3 All the buildings must be universal access compliant;
- 4.2.10.4 Design should include a universal access friendly lift. (Two persons);
- 4.2.10.5 Fire detection, protection and suppression system for building as per required legislation;

- 4.2.10.6 Equipped with a fire alarm system that will be audible in the offices and maintenance sheds;
- 4.2.10.7 All entrances to buildings should have good quality metal sheeting roller shutter doors;
- 4.2.10.8 All external doors must be fitted with good quality security gates;
- 4.2.10.9 Provide Heavy-duty steel mesh panels in front of all windows but should not prevent windows from opening;
- 4.2.10.10 All windows should have laminated safety glazing;
- 4.2.10.11 Provide a paved outdoor area next to the mess facility with concrete furniture, trash bins, water fountain and trees where employees can sit and relax. This area must be big enough to accommodate fifty-(50) employees;
- 4.2.10.12 Outdoor gym equipment in an open area closer to an administration building;
- 4.2.10.13 Security cameras at all entrances and passages of the new office block;
- 4.2.10.14 Use dry walling for inner walls;
- 4.2.10.15 Make provision for a printer room in each floor;
- 4.2.10.16 The first and second floor must have a foyer with couches to accommodate six (6) people. There should be controlled access from the foyer into the office spaces; and
- 4.2.10.17 Make provision for a walk-in document archiving room

**4.2.11 NEW TWO (2) LEVEL PARKING FACILITY FOR EMPLOYEES AND VISITORS:**

Design and construct a new two (2) level parking facility for the employees/visitors on the northern side of the depot. The following is required:

- 4.2.11.1 The parking facility must be closed off with a fence and must have its own secure entry/exit gates for security purposes. (The existing clear view perimeter fence at the depot will be replaced with a concrete wall, and the clear view fence can be used here);
- 4.2.11.2 The parking facility must be universal access friendly;
- 4.2.11.3 The parking facilities must make provision for two hundred and fifty (130) covered parking bays;
- 4.2.11.4 Each parking bay needs to be numbered;
- 4.2.11.5 Four parking bays must be earmarked for disabled parking bays on the ground floor;
- 4.2.11.6 Twenty (20) parking bays must be earmarked for visitor parking bays on the ground floor;

4.2.11.7 A new security building for employees/visitors must be built at the entrance/exit of the two (2) level parking facility where everyone must gain access to the depot/parking facilities; and

4.2.11.8 Install security cameras at the entrances and inside the parking facility.

#### **4.2.12 NEW ENTRANCE SECURITY BUILDING FOR EMPLOYEES/VISITORS:**

Design and construct a new entrance security building for employees/visitors including all required services (power, water reticulation, ICT infrastructure, sewer, and all required service connections).

4.2.12.1 A new security building will manage employee/visitor movements at the depot. This security building must accommodate the following facilities:

4.2.12.2 An ablution facility – one (1) toilet and washbasin;

4.2.12.3 A kitchenette with a washbasin, water hydro boil, microwave oven and mini-fridge;

4.2.12.4 A cabinet with a countertop and three (3) chairs for employees;

4.2.12.5 A waiting facility to accommodate eight (8) chairs for visitors;

4.2.12.6 A water dispenser in waiting facility;

4.2.12.7 A turnstile whereby employees/visitors will enter or exit the depot/parking facility;

4.2.12.8 Biometric palm readers will be installed on both sides of the turnstile;

4.2.12.9 A telephone must be installed in the security building that is linked to the control room.

4.2.12.10 A luggage scanner needs to be installed next to the turnstile.

4.2.12.11 All proposed furniture for all new offices to be provided in compliance with PRASA furniture specifications. Furniture and space layout to be approved by PRASA before procurement.

4.2.12.12 Undercover paved walkways leading to the training and administration buildings must be provided.

4.2.12.13 Install security cameras inside the security building and at the entrances.

**4.2.13 CONSTRUCT A NEW DEPOT VEHICLE ENTRANCE ROAD AND SECURITY BUILDING FOR THE DEPOT:**

Design and construct a new road and entrance security building for the depot for employees/visitors including all required services (power, water reticulation, ICT, Wi-Fi, infrastructure, sewer, and all required service connections).

4.2.13.1 The security building at the entrance must accommodate the following facilities:

4.2.13.2 A cabinet with a countertop and two chairs for employees.

4.2.13.3 An ablution facility – one toilet and washbasin.

4.2.13.4 A kitchenette facility with a washbasin, water hydro boil, mini-fridge and microwave oven.

4.2.13.5 A waiting facility to accommodate four (4) chairs for visitors.

4.2.13.6 A turnstile whereby visitors/employees will enter or exit the depot/parking facility.

4.2.13.7 Biometric palm readers must be installed on both sides of the turnstile.

4.2.13.8 A baggage scanner needs to be installed next to the turnstile.

4.2.13.9 Telephone must be installed in the security building that are linked to the control room.

4.2.13.10 The roof structure of the security building must be extended to accommodate both the entrance- and exit roads and must be high enough to accommodate delivery vehicles. The roof structure must be wide enough for security people to search vehicles without getting wet when it rains.

4.2.13.11 Vehicle boom gates and spikes need to be installed.

4.2.13.12 Biometric palm readers next to the boom gates need to be installed.

4.2.13.13 Sliding gates and electrical gate motors need to be installed. The sliding gates must be cladded on the outside with a blue chromo deck sheet.

4.2.13.14 Lighting needs to be installed on both sides of the security facility.

4.2.13.15 All windows must be bullet proof with one-way see-through glass.

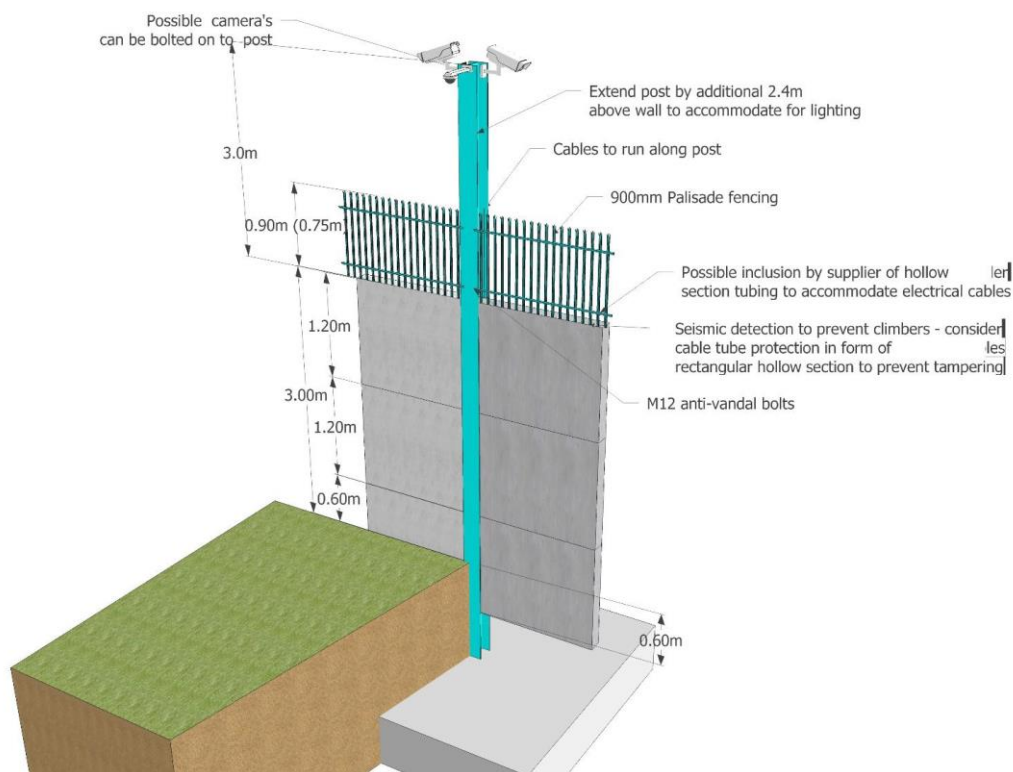
4.2.13.16 Cameras must be installed at the entrance and access roads.

4.2.13.17 Install depot name board at entrances according to PRASA standards.

4.2.13.18 All proposed furniture for all new offices to be provided in compliance with PRASA furniture specifications. Furniture and space layout to be approved by PRASA before procurement.

#### **4.2.14 INSTALL NEW DEPOT SECURITY FENCE:**

- 4.2.14.1 Install a new precast concrete panel that is three (3) meters high. (See figure 4.2.14).
- 4.2.14.2 Where storm water needs to be accommodated, culverts must be installed as part of the wall to accommodate the natural flow of water. These culverts must have a proper security grid to prevent any access to the depot.
- 4.2.14.3 A three (3) meter paved road must be constructed next to the concrete wall inside the depot to allow for vehicle patrolling.
- 4.2.14.4 Install a 900mm high galvanised steel palisade fence on top of the concrete wall.
- 4.2.14.5 Install seismic detection inside the square tubing of the palisade fence as well as in the ground.
- 4.2.14.6 Security lights with day/night switches must be installed at the fence. Ensure that the light lux levels at the fence will be acceptable for the proposed camera system to be effective.



**Figure 4.2.14 – New wall specification**

**4.2.15 INSTALL NEW FIT FOR PURPOSE CCTV SECURITY SYSTEM AND CONTROL ROOM:**

- 4.2.15.1 The new CCTV Security system must use the Babylon system as a platform/backbone.
- 4.2.15.2 The security cameras installed next to the depot perimeter fence must make use of black screen technology.
- 4.2.15.3 All the cameras installed next to the perimeter wall must be equipped with analytics for the identification of any movement. The following cameras need to be installed at Benrose Depot:
  - 4.2.15.3.1 License Plate Recognition (LPR);
  - 4.2.15.3.2 High-Definition Static cameras;
  - 4.2.15.3.3 Perimeter PTZ cameras; and
  - 4.2.15.3.4 Depot thermal PTZ cameras.
- 4.2.15.4 Camera recorders must also be installed with enough capacity and back-up of recordings must be made. An electronic archive system is needed.
- 4.2.15.5 Operational- and maintenance manuals need to be compiled for training purposes.
- 4.2.15.6 An access system for the depot must be implemented by using palm biometric readers that are connected to the Babylon system.
- 4.2.15.7 A public announcement system and alarm system must be installed where necessary.
- 4.2.15.8 A standby UPS and diesel generator must be installed for the system as a standby facility when there is a power failure at the depot (Size of generator to be determined).
- 4.2.15.9 All new and existing cameras in workshop to be linked/merged to central control room system;
- 4.2.15.10 Install a telephone in the control room;
- 4.2.15.11 Install palm readers at all entrance doors of the building. Palm readers should also be installed at all accesses to the control room;
- 4.2.15.12 Install alarm systems where necessary;
- 4.2.15.13 Install a public announcement (PA) system all around the depot's perimeter fence;
- 4.2.15.14 Install a guard monitoring system in the depot (bloodhound).



#### **4.2.16 NEW SWING GATES AT THE DEPOT RAIL ENTRANCES:**

Design and construct two (2) new swing gates at each rail line entrance to the depot. The following is required:

- 4.2.16.1 The security guards must be able to operate the gates (open or close) from inside the new guard/shunters house;
- 4.2.16.2 The swing gates must be three (3) meters high and steel palisade fencing must be fitted on top of the gates. When the gates are closed no one must be able to enter/exit the depot underneath the gates. The gates must be cladded on the outside with a blue chromo deck sheet;
- 4.2.16.3 Light masts must be installed at these rail entrances to ensure good visibility at night for the security guards and camera system;
- 4.2.16.4 Security cameras must be installed at these train entry gates to display any movement within a thirty (30) meter radius inside and outside these gates; and
- 4.2.16.5 A camera monitor must be installed inside the new security guardhouse where the security personnel can view any movement at the gates.

#### **4.2.17 NEW GUARDS/SHUNTERS HOUSES AT THE TWO (2) DEPOT RAIL ENTRANCES:**

Design and construct a new guards/shunters house (maximum 3m x 3m) on the eastern and western rail entrances including all required services (power, water reticulation, ICT infrastructure, sewer, and all required service connections).

- 4.2.17.1 Each new guardhouse must be constructed inside the depot and must be a double story building. The ground level of the building must accommodate the following:
  - 4.2.17.1.1 An ablution facility – one toilet and washbasin; and
  - 4.2.17.1.2 A kitchenette facility consisting of a washbasin, water hydro boil, mini-fridge, and a microwave oven.
- 4.2.17.2 The upper level must accommodate the following:
  - 4.2.17.2.1 Glass windows all around to allow for 360-degree visibility. All windows must be bullet proof with one-way see-through glass. Window openings must be installed on the top side of the window;
  - 4.2.17.2.2 A telephone must be installed that is linked to the control room;
  - 4.2.17.2.3 A countertop must be installed on the inside walls and provide four (4) chairs;



- 4.2.17.2.4 The roof structure overhang must be extended to ward off the sun; and
- 4.2.17.2.5 All proposed furniture for all new offices to be provided in compliance with PRASA furniture specifications. Furniture and space layout to be approved by PRASA before procurement.
- 4.2.17.3 Walkways leading to the new security guards' houses must be paved.
- 4.2.17.4 Install security cameras inside the control room and at the entrance of each guard's house.

**4.2.18 ALL ROADS WITHIN THE DEPOT PRECINCT MUST BE TARRED:**

The following is required:

- 4.2.18.1 All roads inside the depot shall be tarred. The road must be strong enough to cater for 20-ton heavy duty vehicles;
- 4.2.18.2 All roads to have speed humps to break speed of vehicles; and
- 4.2.18.3 Road signage (speed boards, warning signs for humps and level crossings) and directional signage is required.

**4.2.19 NEW ROLLING STOCK STAGING YARD:**

- 4.2.19.1 The final design for the staging yard in depot must make provision for one hundred and twenty (120) train sets, each train set consisting of six (6) coaches;
- 4.2.19.2 The designs and construction of the new staging yard must make provision for the installation of an automatic signalling system that will be installed in future. The signalling new control room must be constructed at the depot for future use. The future new signalling system must be able to accommodate 120 (6-coach) train sets 60 (12-coach) train sets as well inside the staging yards;
- 4.2.19.3 The new rolling stock staging yard must have fire protection, lighting, storm water system and OHTE infrastructure;
- 4.2.19.4 Forty-eight-kilogram (48 kg) rail and turnouts to be used;
- 4.2.19.5 Install water points between the rail lines for the use of the train cleaning personnel;
- 4.2.19.6 Install paved walkways between the rail lines for the use of train cleaning personnel, shunters and train drivers;
- 4.2.19.7 Install brick staircases between train sets for train drivers/train cleaning personnel to use for entering the train cab;

- 4.2.19.8 Install security cameras (static- and PTZ cameras) between each rail line covering the length of each line;
- 4.2.19.9 Install high light masts in the staging yards to allow for work in the day and at night as well as for camera visibility at night; and
- 4.2.19.10 Design and deploy a Wi-Fi MESH System covering all areas of the staging yards to provide connectivity for trains as well as personnel. The Wi-Fi solution must also cover rail lines outside the various running and lifting sheds for up to 250m.

**4.2.20 NEW SHED FOR INTENSIVE TRAIN CLEANING:**

- 4.2.20.1 Two (2) rail lines in the train-staging yard must be identified where trains can easily be scheduled for intensive cleaning under one roof structure. Each rail line must accommodate one (1) trainset (12 car) and the two (2) rail lines must have three (3) platforms at train floor height. Forty-eight (48) cleaning personnel (2 x 24 per shift) will clean the train sets per day. Provision must be made for the following:
  - 4.2.20.1.1 Four (4) water points on the length of each platform;
  - 4.2.20.1.2 Four (4) manholes on the length of each platform where dirty water can be discarded. These manholes must be linked to the effluent plant;
  - 4.2.20.1.3 Four (4) movable platforms for personnel to stand on and to wash the window screens and noses of the train;
  - 4.2.20.1.4 Lockable storage facility nearby for storing washing and cleaning materials;
  - 4.2.20.1.5 Separate changing rooms, lockers forty-eight (48), toilets and shower facilities for men and women;
  - 4.2.20.1.6 Kitchenette facility equipped with a washbasin, water hydro boil, microwave oven and fridge; and
  - 4.2.20.1.7 Security cameras inside and outside the shed to cover entire length of the train and platforms.
- 4.2.20.2 Enough lighting inside the shed for work during the day and at night.
- 4.2.20.3 OHTE lines so that the trains can move with their own power.

**4.2.21 AUTOMATIC VEHICLE INSPECTION (AVI) BUILDING:**

- 4.2.21.1 Design and construct a new automatic vehicle inspection (AVI) building including all required services (power, ICT infrastructure, and all required services connections). Automatic inspection is usually done via an instrumented tunnel with trains usually passing at depot speed (5-10 km/h) without stopping;
- 4.2.21.2 The new AVI building must be constructed and equipped with all the measuring equipment necessary for the new train sets. All the new trainsets will be scheduled to go through this building for measurements on a weekly basis;
- 4.2.21.3 This measuring system must also be linked to the offices of the engineering department in the administration building;
- 4.2.21.4 Automated measurements are provided to a target measurement accuracy +/- mm associated with a measurement confidence level, Vehicle ID, asset-ID, component identification, component position in vehicle. Multiple measurements are usually acceptable to achieve the required accuracy;
- 4.2.21.5 Typical functions are automated measurement of pantograph strips, wheels, brake pads as well as fleet integrity check monitoring; and
- 4.2.21.6 Install security cameras in- and outside the building.

**4.2.22 DEPOT SERVICES:**

- 4.2.22.1 All services inside Benrose Depot (e.g. electrical, mechanical, power, water, sewer, drainage, access roads and earthworks, ICT, telecoms, etc.) must be aligned to the capacity requirements to ensure the smooth operation of the depot; and
- 4.2.22.2 Install a weigh scale under a roof structure in the scrap yard/store area. (Max 2 ton)  
The back-up water system at the depot must be connected to all the facilities at the depot.

**4.2.23 INSTALL A DEPOT COMPRESSED AIR SYSTEM:**

- 4.2.23.1 Install a compressed air system at the depot.
- 4.2.23.2 Design, manufacture, supply, deliver, install, test, commission and complete handover of all new plant, equipment and all materials necessary for compressed air system to deliver a constant air pressure of 10 BAR. Contractor to make provision for servicing of existing air compressors and compressor tanks. The price must include connection of

the new system to the existing system and all necessary tests and re-commissioning.  
Compressed air system is required in the running maintenance and lifting sheds

- 4.2.23.3 The compressed air should be dry, oil free and filtered supply, with multiple outlets on each road. The outlets shall be spaced to provide a minimum of one outlet aligned with the nominal positions of each end of a new train, plus one at each inter-vehicle connection. (I.e. gangway).

**4.2.24 NEW MOBILE ACCESS PLATFORMS AND TRAIN NOSE ACCESS PLATFORM:**

- 4.2.24.1 Nine (9) Nose-end platforms. Three (3) in the middle of the workshop, three (3) on the western side of the shed and three (3) of the eastern side of the shed;
- 4.2.24.2 This mobile platform is for windscreen and train nose maintenance. The platform is to comply with requirements as stipulated in the attached technical requirements (Mobile Nose End Working Platform).
- 4.2.24.3 Although the technical requirements provided were intended for other PRASA depots, it is to be noted that the contractor is to design, manufacture and supply nine (9) mobile train nose access platforms at Benrose Depot that meet the requirements stipulated, if new designs are proposed, they are presented to PRASA for approval.
- 4.2.24.4 Nine (9) Train-Door-Level Access. The lifting shed will have two (2) platforms, and seven (7) across the running shed in the section that has a swimming pool configuration; and
- 4.2.24.5 Nine (9) Train Roof-Level Access. The lifting shed will have two (2) platforms and the running shed will have seven (7) across the running shed in the section that has a swimming pool configuration.

**4.2.25 NEW HANDRAILS:**

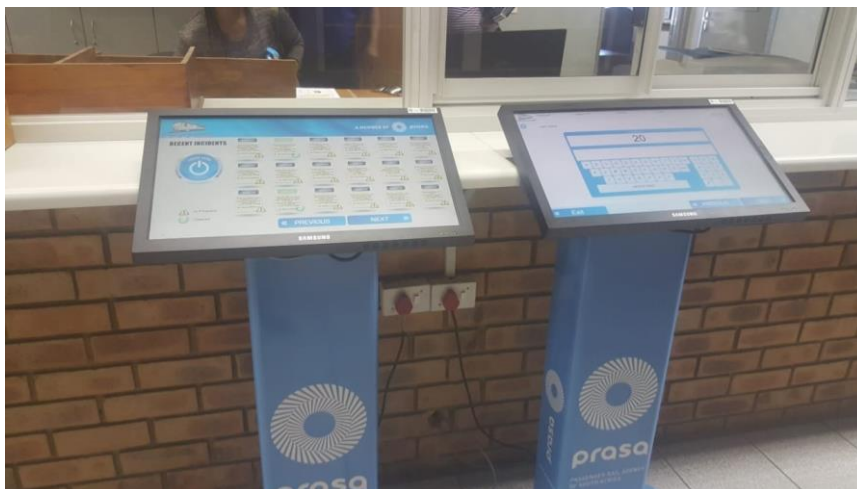
- 4.2.25.1 The handrails must conform to National Building Regulations.
- 4.2.25.2 The contractor is to install galvanized and painted handrails on each side of all fixed access platforms. The handrails are to span the entire length of the platforms concerned.
- 4.2.25.3 The handrails shall be easily and quickly removed and easily and quickly re-installable.
- 4.2.25.4 The handrails shall be installed in sections that can be easily lifted by one person.

- 4.2.25.5 The anchors are to be designed such that there is no allowance for swaying or any deviation from upright position of any section of handrail.
- 4.2.25.6 In some locations longer open sections (with no uprights) are required to provide access to the train equipment and the handrail system needs to provide for these longer open areas. These longer handrails may need to be removed and reinstalled by more than one person but not more than two people.
- 4.2.25.7 In sheds that must accommodate both types of fleet, the design team is to note the different configurations of the trains to determine where these longer open sections need to be installed.
- 4.2.25.8 The hooks onto which the removed handrail sections are stored should not create a potential for injuring employees.
- 4.2.25.9 Door platforms should have removable handrail sections according to train configuration to allow protection while train is not in position and allow maintenance to be done when train is in position.
- 4.2.25.10 See attached for a design that was prototyped and implemented at Wolmerton depot.

#### **4.2.26 SECURITY AND ACCESS SYSTEMS REQUIREMENTS:**

- 4.2.26.1 The available metal see-through fence panels and posts stored at Braamfontein Rolling Stock Depot, must be installed inside the Benrose Depot, to ensure that all persons can only enter the depot facilities through the security office after they have parked inside the parking facility;
- 4.2.26.2 Design and build covered walkways inside the depot precinct;
- 4.2.26.3 Adequate lighting at the vehicle and pedestrian access approaches to be installed.
- 4.2.26.4 Large truck movement simulations to be done to ensure that large trucks can enter, deliver and leave the depot safely;
- 4.2.26.5 Where possible, level crossings should be avoided. Where level crossings are the only economical solution, these should be fitted with signage (road markings and pole mounted), height gauges and appropriate protection as per SANS standards;
- 4.2.26.6 All roads to have speed humps to break speed of vehicles. Max speed allowed inside the depot to be 20km/h;
- 4.2.26.7 Road signage (speed boards, warning signs for humps and level crossings) and directional signage is required;

- 4.2.26.8 More detail is provided under the Security requirements for vehicle and rail depot entrance facilities;
- 4.2.26.9 The CCTV security system and access control systems must be integrated with the depot's and PRASA's current security and CCTV system/s at Benrose;
- 4.2.26.10 The professional team must ensure that all equipment specified can be linked to other external PRASA control rooms. Make sure that the Benrose depot control room is linkable with the Gauteng Nerve Centre centralized in Kaalfontein when PRASA is ready to do so. CCTV Cameras should be able to integrate with Babylon System;
- 4.2.26.11 The turnkey contractor is to ensure that the CCTV cameras will operate during day and night and ensure that the lighting supplied and installed supports the CCTV monitoring.
- 4.2.26.12 Biometric palm readers must be installed in various rooms, i.e. security control room, material storerooms, CCTV room, etc.;
- 4.2.26.13 A signing on and off system must be installed for Section Managers, Train Drivers and Metro Guards as well as Yard Personnel (i.e. Yard Masters, Yard Foremen and Yard Officials) in the train drivers personnel office. (See picture 4.2.25.13)



**Picture 4.2.25.13**

**4.2.27 NEW ELECTRICITY/POWER SUPPLY AND WATER METERS:**

4.2.27.1 The contractor is required to install separate water and electricity sub - meters to the following buildings:

- 4.2.27.1.1 New running/lifting sheds;
- 4.2.27.1.2 New office block for rolling stock maintenance staff;
- 4.2.27.1.3 New external train wash plant;
- 4.2.27.1.4 New two-level administration building;
- 4.2.27.1.5 New entrance/exit security building for employees/visitors;
- 4.2.27.1.6 New depot vehicle entrance facility;
- 4.2.27.1.7 New entrance/exit security building for employees/visitors; and
- 4.2.27.1.8 New intensive cleaning shed.

**4.2.28 FIRE DETECTION AND SUPPRESSION SYSTEMS:**

- 4.2.28.1 The contractor must ensure the new buildings are according to applicable SANS standards and make provision for adequate and safe fire detection and suppression/ protection (green type) systems including connections to the main fire detection system; and
- 4.2.28.2 The fire suppression/protection must conform to the latest “green type” and ASIB standards.

**4.2.29 SPECIAL TOOLS:**

- 4.2.29.1 Procure the following special tools for Benrose depot:
  - 4.2.29.1.1 One (1) forklift (10 Ton);
  - 4.2.29.1.2 Two (2) forklifts (5 Ton);
  - 4.2.29.1.3 Three (3) T3 or 3 wheeled bikes for security to patrol the depot/react to incidents.
  - 4.2.29.1.4 Two (2) cherry pickers to maintain lights and CCTV cameras;
  - 4.2.29.1.5 One (1) x Degreasing plant/Steam Jenny for large components (exhausters, motors, etc.) linked to an oil/water separator;
  - 4.2.29.1.6 Two (2) Road Rail Vehicles; and
  - 4.2.29.1.7 Two-year maintenance contracts to be included with all new equipment provided. The two years start after final handover.



**4.2.30 MATERIAL AND COMPONENTS:**

- 4.2.30.1 The contractor is to provide all material and components required for enablement and permanent works.
- 4.2.30.2 Scrap metal and wooden sleepers removed from the works is to be disposed to a suitable and compliant disposal site and any income generated from such to be paid to PRASA. This will be done in liaison with PRASA Project Manager and Local Asset Controller.

**4.2.31 PROVISION OF TWO (2) CONTAINERS FOR OFFICE ACCOMMODATION FOR PRASA.**

- 4.2.31.1 One container to have four desks and four chairs with four lockable cabinets with air-conditioning and adequate electrical plug points and lights and windows.
- 4.2.31.2 The second container to be provided must contain a boardroom table and chairs for eight people with adequate plug points, lights, windows and air conditioner.

**4.2.32 DEPOT LIGHTING**

- 4.2.32.1 Floodlights or high mast lights must be designed and installed throughout the entire Benrose Depot to ensure that lighting to a minimum level of 200-lux is provided for night time working and to ensure that all CCTV cameras operate optimally.

**4.2.33 DEPOT SIGNAGE**

- 4.2.33.1 Designs must include directional, safety and hazards, disclaimer, depot and building name boards and universal access signage including emergency assembly points. All signage to be as per the PRASA Norms, Guidelines and Standards provided to all Bidders.
- 4.2.33.2 All signage to be installed as per designs.
- 4.2.33.3 The depot name boards at the depot entrances must be D1.1 pylon sign, naming double sided and illuminated.

**4.2.34 ELECTRONIC CARD REPAIR ROOM**

- 4.2.34.1 In the maintenance precinct redesign, provision must be made for an electronic card repair room which should be dust free, equipped with a workbench, appropriate cooling systems and ventilation and have 2 wall mounted power outlets, 230VAC 50Hz with



UPS and lightning protection (dimensioned for 2 outlets multiple connections) and 110V DC power supply socket.

#### **4.2.35 PROTECTION OF WORKS**

4.2.35.1 Benrose is surrounded by a squatter camp. It is important for the contractor to provide enough security to guard and protect material and works.

#### **4.3 ASSESSMENTS AND STUDIES:**

4.3.1 The contractor is required to do Depot electrical loading/capacity assessment considering scope planned on this tender to be implemented and included on the price offer. All assessment reports and studies to be provided to PRASA at design review.

4.3.2 The bidder is to make provision for all required studies to be done for the proposed improvements i.e. Geotech studies, services identification, all surveys required to accommodate any new structures to be erected/modified. All assessment reports and studies to be provided to PRASA.

4.3.3 All reports of additional assessments and studies performed by the contractor to be provided to PRASA.

#### **4.4 GENERAL REQUIREMENTS:**

4.4.1 LOTO (Logout Tagout) system to be installed for each isolation switch;

4.4.2 The bidder is to make provision for all Regulatory submissions for approvals i.e. building plans, service connections etc. that may be required during execution;

4.4.3 Existing/reference drawings are provided as guidance only and the Bidders are to confirm all measurements on site and complete relevant designs;

4.4.4 The contractor is to interact with PRASA personnel and the train supplier to ascertain the detailed requirements to be met and address these requirements through the proposed design;

4.4.5 The contractor shall provide a one year guarantee for the works effective from final handover date;

4.4.6 The contractor is to include the provision of technical support for the installed systems for a period of 1 year after final handover;

4.4.7 Implementation of Sustainable Building Principle – Green Building - Regardless of whether the building is to be certified or not, care has been taken on the technical specifications

- referenced to address the environmental and climatic conditions prevalent in Republic of South Africa, in order to reduce the energy use and reduce the long-term running costs;
- 4.4.8 New equipment and systems installations should have a 2 year maintenance period included in the price offer effective from final handover;
- 4.4.9 The contractor and consultants are to participate in project review meetings every second week;
- 4.4.10 The contractor and consultants are to participate in design reviews that may be scheduled to facilitate the design of the facilities to be delivered;
- 4.4.11 The contractor is to develop and maintain (i.e. keep up to date) a schedule for the design, installation and commissioning of all deliverables;
- 4.4.12 Should the contractor elect to subcontract the construction or supply of certain parts of the deliverables, the tendered price will be inclusive of all required procurement costs regardless of whether repeat procurement processes are required;
- 4.4.13 The scope of supply will include the verification and signoff by the contractor and consultants after the installation has been completed in compliance with the developed designs, the OSH Act and the relevant SANS standards and applicable laws and regulations;
- 4.4.14 The contractor is to provide PRASA with design and construction progress reports on a monthly basis;
- 4.4.15 Copies of all assessment reports and studies done by the contractor to be provided to PRASA during design reviews (1 hard copy and 1 soft copy);
- 4.4.16 The contractor is to provide PRASA with signed as built drawings in hard copy (2 copies) and soft copy (1 set – DWG and PDF formats);
- 4.4.17 Contractor to supply and install 3m high Temporary hoarding to protect all planned works, the hoarding is to consist of 0.4mm thick IBR sheeting fixed to 3600 x 50mm untreated bearers connected to 76-100mm untreated gum poles at 3m centres using "Altoro" drive screws including all necessary temporary bases, connections, overlaps, etc.; and
- 4.4.18 Contractor to take down and cart away off site temporary hoarding on completion of works and site disestablishment including making good all pavements where temporary hoarding was installed;
- 4.4.19 Contractor to provide all as built drawings and operations and maintenance manuals for the deliverables as follows:
- 4.4.20 As built drawings: 2 weeks before commissioning.

- 4.4.20.1 Maintenance and operations manuals: 2 weeks after commissioning; and
- 4.4.20.2 All details and requirements stated in the technical specifications are minimum requirements and it is the contractor's responsibility to ensure all proposed designs must meet the requirements of a fully functional and compliant depot.
- 4.4.21 When working at night, the contractor should be mindful of the residential properties neighboring the depot and make provision for equipment and machinery that is not too noisy.
- 4.4.22 The proposed designs are to minimise the number of level crossings required. Where level crossings are inevitable, these should be protected as per the relevant SANS regulation for level crossings.

#### **4.5 OTHER RELATED PROJECTS**

The following projects have been identified as related to this proposed project:

- 4.5.1 OHE and Substation Recovery Programme;
- 4.5.2 Station Recovery Programme;
- 4.5.3 Rolling Stock Fleet Renewal Programme; and
- 4.5.4 Re-signaling project by PRASA Corporate.

#### **4.6 TO BE PROVIDED BY PRASA**

- 4.6.1 PRASA is to provide access to all facilities, with reasonable notice from the appointed turnkey contractor;
- 4.6.2 PRASA is to coordinate interaction between the turnkey contractor and operational PRASA departments, where applicable;
- 4.6.3 PRASA is to provide safety induction for all turnkey contractors' personnel who will be on site; and
- 4.6.4 Site establishment and lay down (refer to attached existing Site Plan). If any other area identified, this to be agreed with Depot Management.

#### **4.7 TO BE PROVIDED BY THE CONTRACTOR**

- 4.7.1 All PPE for staff as required by PRASA (reflective vest to have space for identification or with name of company embossed); and

- 4.7.2 All other requirement and consumables that the contractor will require for the delivery of the scope of works of his appointment.

#### **4.8 WARRANTY, MAINTENANCE AND SPARES**

- 4.8.1 New equipment and systems installations should have a minimum one (1) year warranty effective from final handover.
- 4.8.2 New equipment and systems installations should have a two (2) year preventive and corrective maintenance period (with all spares) included in the price offer effective from final handover.
- 4.8.3 Spares for year three's maintenance should be provided with PRASA performing the maintenance.
- 4.8.4 The warranty and maintenance requirements for all new equipment and system installations must be part of the information provided to PRASA at design stage.

#### **4.9 PROFESSIONAL TECHNICAL STAFF REQUIREMENTS**

The appointed company will be required to provide a qualified professional team and experienced professional staff with the following key expertise:

- 4.9.1 Project Manager;
- 4.9.2 Electrical Engineer (OHE);
- 4.9.3 Electrical Engineer (Domestic Supply));
- 4.9.4 Mechanical Design Engineer (domestic services, lifting equipment / fire);
- 4.9.5 Civil Engineer (Civil & Structural);
- 4.9.6 Civil Engineer (Permanent Way);
- 4.9.7 Electronic Engineer (Signalling);
- 4.9.8 Electronic engineer (Telecommunications / ICT);
- 4.9.9 Industrial Engineer;
- 4.9.10 Quantity Surveyor;
- 4.9.11 Architect;
- 4.9.12 Town Planner;
- 4.9.13 Construction Health and Safety Officer;
- 4.9.14 Environmental Control Officer; and
- 4.9.15 Community Liaison officer

**4.9.16 TRAINING AND DEVELOPMENT**

- 4.9.16.1 Interns/Learnerships/Provision of training opportunities to be provided for the duration of the project design and construction period for thirty (30) months;
- 4.9.16.2 PRASA requires that the Multi-Disciplinary Consulting Engineering company/consultants hires at least twelve (12) Interns/Learnerships for the duration of the contract in the following fields: Project Management, Quantity Surveying, Civil (Structural/ Perway), Mechanical (Lifting/ Domestic services), Electrical (low voltage/ domestic), Electrical (OHTE/ high voltage) and health and safety. Eighty percent (80%) of the interns/learners/students should be from previously disadvantaged groups and at least 50% should be female. The interns/trainees should be South African citizens, either qualified or requiring experiential training to fulfil their qualification requirements (e.g. P1, P2 or vacation work);
- 4.9.16.3 The contractor must produce a training plan for each graduate;
- 4.9.16.4 The contractor will be required to submit a quarterly status update report on the training programme; and
- 4.9.16.5 The contractor must provide proof of certified artisans to meet the quality workmanship standards since the wheelsets are safety critical components.

**Details of the minimum qualifications for the key professional staff listed above are outlined below. These minimum requirements will be used for tender evaluation purposes. The turnkey contractor is required to provide all services as listed in 4.10.1-4.10.18 above for the duration of the contract. The professional registration and qualification certificates submitted by the bidders should have been certified not more than three (3) months prior to the closing date.**

**IMPORTANT!! DUPLICATION OF PROFESSIONAL TECHNICAL STAFF WILL LEAD TO DISQUALIFICATION**

**4.9.17 TEAM LEADER/PROJECT MANAGER**

The desired minimum qualifications for the Team Leader / Project Manager are as follows:

- BSc/B-Tech Degree in Civil Engineering;
- ECSA registration as a Professional Engineer (Pr. Eng.)/ Technologist (Pr. Tech Eng.);
- Five (5) years post professional registration experience; and
- Experience should be in the Project Management environment in similar project disciplines.

- Professional registration with the South African Council for the Project and Construction Management Professions (SACPCMP).

#### **4.9.18 ELECTRICAL ENGINEER (DOMESTIC SUPPLY/LOW VOLTAGE)**

The desired minimum qualifications for the Electrical Engineer are as follows:

- BSc/B-Tech Degree in Electrical Engineering;
- ECSA registration as a Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng.); and
- Five (5) years post professional registration experience in domestic/low voltage design experience including Construction Management.

#### **4.9.19 ELECTRICAL ENGINEER (OHTE/ HEAVY VOLTAGE)**

The desired minimum qualifications for the Electrical Engineer are as follows:

- BSc/B-Tech Degree in Electrical Engineering;
- ECSA registration as a Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng.); and
- Five (5) years post professional registration experience in Substation and Transmission Line design experience including Construction Management.

#### **4.9.20 MECHANICAL ENGINEER (BOTH DOMESTIC SERVICES AND LIFTING EQUIPMENT)**

The desired minimum qualifications for the Mechanical Engineer are as follows:

- BSc/B-Tech Degree in Mechanical Engineering;.
- ECSA registration as a Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng.); and
- Five (5) years post professional registration experience in mechanical design experience including Construction Management.

#### **4.9.21 CIVIL ENGINEER (CIVIL & STRUCTURAL)**

The desired minimum qualifications for the Civil Engineer (Civil & Structural) are as follows:

- BSc/B-Tech Degree in Civil Engineering;
- ECSA registration as a Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng.);
- Five (5) years post professional registration experience in civil, structural and industrial/office building design including Construction Management experience.

#### **4.9.22 CIVIL ENGINEER (PERMANENT WAY)**

The desired minimum qualifications for the Civil Engineer (Perway) are as follows:

- BSc/B-Tech Degree in Civil Engineering;
- ECSA registration as a Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng.);
- Five (5) years post professional registration experience in permanent way design including construction management experience.

#### **4.9.23 ELECTRONIC ENGINEER (SIGNALLING)**

The desired minimum qualifications for the Signal Engineer are as follows:

- BSc/B-Tech Degree in Electrical/Electronic Engineering (specialising in rail signalling).
- ECSA registration as a Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng).
- Five (5) years post professional registration experience in rail signalling design and Implementation Management experience.

#### **4.9.24 ELECTRONIC ENGINEER (TELECOMMUNICATIONS AND/OR ICT)**

The desired minimum qualifications for the Telecommunication/ICT Engineer/s are as follows:

- BSc/B-Tech Degree in Electrical/ Electronic Engineering (specialising in Telecommunications and ICT);
- ECSA registration as a Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng.); and
- Five (5) years post professional registration experience in Telecommunications and ICT Design and implementation experience.

#### **4.9.25 INDUSTRIAL ENGINEER**

The desired minimum qualifications for the Industrial Engineer are as follows:

- BSc/B-Tech Degree in Industrial Engineering;
- Professional Engineer (Pr. Eng)/ Technologist (Pr. Tech Eng.); and
- Five (5) years post professional registration experience in planning and implementing production environment layouts experience.

#### **4.9.26 ARCHITECTURAL SERVICES**

The desired minimum qualifications for the Architect are as follows:

- Bachelor's Degree in architectural services;



- The South African Council for the Architectural Profession (SACAP) registration as a Professional Architect (Pr. Arch) or a Professional Senior Architectural Technologist (PSAT); and
- Five (5) years post professional registration experience in Architectural Design and Construction Management experience.

**4.9.27 QUANTITY SURVEYOR**

The desired minimum qualifications for the Quantity Surveyor are as follows:

- Bachelor Degree in Quantity Surveyor;
- SACQSP registration as a Quantity Surveying Professional; and
- Five (5) years post professional registration experience in planning and monitoring construction projects.

**4.9.28 TOWN PLANNER**

The desired minimum qualifications for the Town Planning Manager are as follows:

- Bachelor's Degree (B-Tech, BSC, B Eng) in Town Planning;
- Five (5) years post professional registration experience as a Town Planning Manager in similar or related projects; and
- Professional registration with respective professional body.

**4.9.29 COMMUNITY LIAISON MANAGER**

The desired minimum experience for the Community Liaison Manager is as follows:

- Matric certificate; and
- Minimum five (5) years' experience as a Liaison Manager in similar or related projects.

**Experience key staff (assigned site personnel) in relation to the scope of work - Construction Works:****4.9.30 CONSTRUCTION HEALTH AND SAFETY OFFICER (Pr. CHSO)**

The desired minimum qualifications for the Construction Health and Safety Officer are as follows:

- BSc/ B-Tech in Engineering and Professional Construction Health and Safety Officer (CHSO);



- Registration with the SACPCMP as professional construction health and safety officer; and Competent Safety Officer with a minimum of five (5) years industry experience, post Professional Construction Health and Safety Officer (CHSO) registration.

#### **4.9.31 ENVIRONMENTAL CONTROL OFFICER (ECO)**

The desired minimum qualifications for the Environmental Control Officer are as outlined below:

- Diploma in Environmental Management or a related discipline; and
- 5 years or more relevant work experience in managing environmental control for similar or related projects

#### **4.10 TECHNICAL INFORMATION TO BE PROVIDED WITH TENDER**

The Bidders shall submit a detailed priced proposal with the following information at the time of tendering:

- 4.10.1 Detailed Design & Construction Method Statement clearly identifying all activities that the contractor will undertake and the method that the contractor will use to undertake the activities;
- 4.10.2 Detailed health, safety and environmental plan that is customized for working in a railway environment;
- 4.10.3 Detailed quality management plan clearly stating all the quality management processes and procedures that the contractor will follow in delivering the scope of work to PRASA including tests to be completed on completion/commissioning and pass/fail parameters; and
- 4.10.4 A conceptual design and brief report showing the following (including but not limited to):
  - 4.10.4.1 New running/lifting shed with approximate measurements;
  - 4.10.4.2 Proposed location of train wash plant with approximate measurements;
  - 4.10.4.3 Location of new office and mess & ablution buildings with approximate measurements;
  - 4.10.4.4 Location of new warehouse/s with approximate measurements;
  - 4.10.4.5 Location of new parking with approximate measurements;
  - 4.10.4.6 Proposed security buildings with approximate measurements;
  - 4.10.4.7 Proposed access roads and walkways;
  - 4.10.4.8 Proposed track layouts (existing and new staging yards included); and
  - 4.10.4.9 Rail entrance watchtowers with approximate measurements

#### **4.11 TECHNICAL SPECIFICATIONS RELATED TO THIS PROJECT**

The design for this project shall meet technical capabilities & performance requirements for all specifications and standards approved and adopted by PRASA. Each discipline is to ensure that the latest specifications are used in completing designs and in construction works. A detailed list of the technical specifications is as follows (not limited to):

##### **4.11.1 SANS 3000 - Railway Safety Management including the following normative standards:**

- 4.11.1.1 *SANS 3000-2-1:2017 - Railway safety management Part 2-1: Requirements for systemic engineering and operational safety standards – Electrical distribution and overhead traction systems;*
- 4.11.1.2 *SANS 3000-2-2:2016 - Railway safety management Part 2-2: Requirements for systemic engineering and operational safety standards - Track and associated civil infrastructure and installations;*
- 4.11.1.3 *SANS 3000-2-2-1:2012 - Railway safety management Part 2-2-1: Technical requirements for engineering and operational standards - Track, civil and electrical infrastructure - Level crossings;*
- 4.11.1.4 *SANS 3000-2-3:2017 - Railway safety management Part 2-3: Requirements for systemic engineering and operational safety standards - Rolling stock;*
- 4.11.1.5 *SANS 3000-2-4:2013 - Railway safety management Part 2-4: Technical requirements for engineering and operational standards - Train authorization and control, and telecommunication;*
- 4.11.1.6 *SANS 3000-2-5:2013 - Railway safety management Part 2-5: Technical requirements for engineering and operational standards - Operational principles for safe movement on rail;*
- 4.11.1.7 *SANS 3000-2-6:2013 - Railway safety management Part 2-6: Technical requirements for engineering and operational standards - Interface and intraface management, and interoperability;*
- 4.11.1.8 *SANS 3000-4:2011 - Railway safety management Part 4: Human factors management;*
- 4.11.2 *ARP 084-1:2009 - Railway stations - Passenger platforms Part 1: Clearances on ballastless track (1 065 mm track gauge).*
- 4.11.3 *SANS 0400 - Application of the National Building Regulations;*

- 4.11.4 SANS 10142-1 - Code of Practice for the Wiring of Premises – Part 1;
- 4.11.5 SANS 1200A - Standardised Specification for Civil Engineering Construction, Section A: General;
- 4.11.6 SANS 2100C - Standardised Specification for Civil Engineering Construction, Section C: Site Clearance;
- 4.11.7 SANS 2100D - Standardised Specification for Civil Engineering Construction, Section D: Earthworks;
- 4.11.8 BBB.8205 - High Voltage Supply Transformers in Accordance with IEC 60076 and BS 171;
- 4.11.9 BBC.0198 - Requirements for the Supply of Cables;
- 4.11.10 BBB.1616 - 450 Volt Gas Arrester Type Spark Gap for Traction Supplies;
- 4.11.11 CEE.0023 - Specification for the Installation of Cables;
- 4.11.12 CEE.0088 - Specification for the Installation of Electrical Equipment in Indoor Substation;
- 4.11.13 CEE.0045 - Painting of Steel Components of Electrical Equipment;
- 4.11.14 CEE.0224 - Drawings, Catalogues, Instruction Manuals and Spares Lists for Electrical Equipment Supplied under Contract;
- 4.11.15 CEE-T-T6E-006 - Specification for 3 kV DC Electrification Overhead Track Equipment;
- 4.11.16 CEE.0128 - Maintenance of 3 kV DC Electrification;
- 4.11.17 CEE.0183 - Specification for Hot Dip Galvanising and Painting of Electrification Steelwork;
- 4.11.18 CEE.0200 - 11 kV, Outdoor, Three Phase, Air Break Isolating Switch;
- 4.11.19 CEE.0017 - Provision of Foundations for Electrification Masts;
- 4.11.20 CEE-PA-0019 - Symbols for Electrical Installations;
- 4.11.21 SPK7/1 - Specification for Works On, Over, Under, or Adjacent to Railway Lines and Near High Voltage Equipment;
- 4.11.22 E4E - Safety Arrangements and Procedural Compliance with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) including applicable regulations;
- 4.11.23 CEE-GL-018 Version 2 – Inspection and handing over of Electrical Equipment;
- 4.11.24 CEE-GI-065 Version 3 – Procedure for Energizing / De-energising of High Voltage Electrical Equipment;
- 4.11.25 D224EB – Standard Specification for the cabling of High Voltage Substation;
- 4.11.26 BBB0937 Version 4 - Requirements for outdoor post type current transformers for traction and distribution substations;

- 4.11.27 CEE.0045 Version 2002/1 - Painting of steel components of electrical equipment;
- 4.11.28 CEE.0183 Version 2 - Hot dip galvanizing and painting of electrification steelwork;
- 4.11.29 D220EB - General standard specifications applicable to high voltage substations;
- 4.11.30 NRS 029 - Current transformers;
- 4.11.31 NRS 030 - Voltage transformers;
- 4.11.32 IEC 61545 - Connecting devices - Devices for the connection of aluminium conductors in clamping units of any material and copper conductors in aluminium bodied clamping units;
- 4.11.33 SANS 32 – Version Internal and/or external protective coatings for steel tubes - Specification for hot dip galvanized coatings applied in automatic plants;
- 4.11.34 SANS 1019 - Standard voltages, currents and insulation levels for electricity supply;
- 4.11.35 SANS 1186-1 - Symbolic safety signs – Part 1: Standard signs and general requirements;
- 4.11.36 SANS 1195 – Busbars;
- 4.11.37 SANS 10139 – Fire detection and alarm systems for buildings – System design, installation and servicing
- 4.11.38 SANS 10142 - The wiring of premises (all Parts);
- 4.11.39 SANS 10162 - The structural use of steel;
- 4.11.40 SANS 10199 - The design and installation of earth electrodes;
- 4.11.41 SANS 10280 - Overhead power lines for conditions prevailing in South Africa;
- 4.11.42 SANS 10280-1 - Overhead power lines for conditions prevailing in South Africa – Part 1: Safety;
- 4.11.43 SANS 50025 - Hot rolled products of structural steels;
- 4.11.44 SANS 51706 - Aluminium and aluminium alloys - Castings - Chemical composition and mechanical properties;
- 4.11.45 SANS / IEC 60044-1 - Instrument transformers – Part 1: Current transformers;
- 4.11.46 SANS / IEC 60044-2 - Instrument transformers – Part 2: Voltage transformers;
- 4.11.47 SANS / IEC 60137 - Insulated bushings for alternating voltages above 1 000 V
- 4.11.48 SANS / IEC 60273 - Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1 000 V;
- 4.11.49 SANS / IEC 60383 - Insulators for overhead lines with a nominal voltage above 1000 V;
- 4.11.50 SANS / IEC 60720 - Characteristics of line post insulators;
- 4.11.51 SANS / IEC 60815 - Selection and dimensioning of high-voltage insulators intended for use in polluted conditions (all Parts);

- 4.11.52 SANS / IEC 62271-1 - High-voltage switchgear and control gear – Part 1: Common specifications;
- 4.11.53 SANS / IEC 62271-100 - High-voltage switchgear and control gear – Part 101: Alternating current circuit breakers;
- 4.11.54 SANS / IEC 62271-1:102 - High-voltage switchgear and control gear – Part 102: Alternating current disconnectors and earthing switches;
- 4.11.55 SANS / IEC 62271-1:103 - High-voltage switchgear and control gear – Part 103: Switches for rated voltages above 1 kV up to and including 52 kV;
- 4.11.56 SANS / IEC 62273 - Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1 000 V;
- 4.11.57 SANS / IEEE 725 / 80 - IEEE guide for safety in AC substation grounding;
- 4.11.58 SANS 474 – South African Code of Practice for Electricity Metering.
- 4.11.59 Perway Design / Construction Standards
- 4.11.60 Station Norms, Guidelines and Standards

#### **4.12 MEASUREMENTS AND PAYMENT**

- 4.12.1 Payments will only be made against completed physical milestones as per the appointed turnkey contractor's schedule of works, payment schedule and proposal.
- 4.12.2 The PRASA Project Manager/Owners Engineer will certify payments to the appointed turnkey contractor.
- 4.12.3 Where variations may become applicable, the contractor must demonstrate market related rates and full breakdowns of all costs that will be incurred and time extensions required must be priced.

#### **4.13 FORM OF CONTRACT**

- 4.13.1 FIDIC Silver Book will be used as form of contract; and
- 4.13.2 Contract amendments proposed by PRASA to the FIDIC Silver Book are included as part of the RFP.

## 5 EVALUATION METHODOLOGY

The evaluation of Bids will be based on the information contained in Bids received in RFP and, which may be further supplemented by presentations and clarification information provided, if required. All Bids shall be equally evaluated by various committees involved in the evaluation process in accordance with stated Evaluation Criteria. Procurement integrity and fairness, transparency, competitiveness and full accountability will at all times be paramount.

### 5.2 EVALUATION AND SCORING METHODOLOGY

The evaluation of the Bids by the evaluation committees will be conducted at various levels. The following levels will be applied in the evaluation:

LEVEL	DESCRIPTION
Verify completeness	The Bid is checked for completeness and whether all required documentation, certificates; verify completeness warranties and other Bid requirements and formalities have been complied with. Incomplete Bids will be disqualified.
Verify compliance	The Bids are checked to verify that the essential RFP requirements have been met. Non-compliant Bids will be disqualified.
Detailed Evaluation of Technical	Detailed analysis of Bids to determine whether the Bidder is capable of delivering the Project in terms of business and technical requirements. <b>The minimum threshold for technical evaluation is [80%], any bidder who fails to meet the minimum requirement will be disqualified and not proceed with the evaluation of Price and B-BBEE.</b>
B-BBEE	Evaluate B-BBEE
Price Evaluation	Bidders will be evaluated on price offered.
Scoring	Scoring of Bids using the Evaluation Criteria.
Recommendation	Report formulation and recommendation of Preferred and Reserved Bidders



LEVEL	DESCRIPTION
Best and Final Offer	PRASA may go into the Best and Final Offer process in the instance where no bid meets the requirements of the RFP and/or the Bids are to close in terms of points awarded.
Approval	Approval and notification of the final Bidder.

Table 5.1: evaluation levels

### 5.3 EVALUATION CRITERIA

Interested bidders for this project shall be evaluated in terms of their business credentials, financial standing, empowerment, technical capacity and experience. The evaluation committee shall use the following Evaluation Criteria depicted in Table 5.2 below for the selection of the preferred bidder that shall render professional services and construction management work for the project.

EVALUATION CRITERIA	WEIGHTING
<b>Stage 1</b>	<b>Compliance</b>
Stage 1A - Mandatory Compliance	
Stage 1B – Technical Mandatory Compliance	
Stage 1C – Basic Compliance	
<b>Stage 2 - Technical Mandatory Requirements</b>	<b>Technical/Functionality</b>
Technical/Functional Requirements	Threshold of 80%
<b>Stage 3</b>	<b>Price and BBBEE</b>
Price	90
BBBEE	10
<b>TOTAL</b>	<b>100</b>

Table 5.2: Evaluation criteria for the selection of a potential bidder

The details of the stages outlined in Table 5.2 above are presented in following sections below.



**5.3.1 STAGE 1: COMPLIANCE REQUIREMENTS**

Bidders must comply with the following requirements and failure to comply will lead to immediate disqualification.

**5.3.1.1 Stage 1A- Mandatory Requirements**

If you do not submit the following documents your Proposal will be disqualified automatically:

No.	Description of requirement	
a)	Completion of ALL RFP documentation (includes ALL declarations and Commissioner of Oath signatures required)	
b)	Signed Joint Venture, Consortium Agreement or Partnering Agreement (whichever is applicable)	
c)	The National Industrial Participation Programme Form (SBD5) must be completed and duly signed.	
d)	The Declaration Certificate for Local Content (SBD 6.2) must be completed and duly signed.	
e)	In compliance with the Preferential Procurement Regulation requirement of subcontracting 30% of the Works, PRASA requires a Memorandum/da Of Understanding from the Bidders to reflect the names of companies that it intends subcontracting to, the nature of the works to be subcontracted and contract % that will be subcontracted to the respective companies and the terms and conditions of the relationship between the Bidder and subcontracting companies.	

Table 5.3: Mandatory Requirements

NB: The report containing the list of potential sub-contractors has been drawn and maybe accessed through the following link: [www.csd.gov.za](http://www.csd.gov.za) using the project number for this bid and relevant Professionals / Services and Construction Works are as follows:

**a) Required Professionals / Services**

1. Team Leader/Project Manager;
2. Architectural Services;
3. Quantity Surveying Services;

4. Civil Services;
5. Structural Services;
6. Mechanical Services (Both domestic services and lifting equipment);
7. Electrical (Low voltage/Light current);
8. Electronic Services;
9. Perway Services;
10. OHTE Services;
11. Signaling Services;
12. Fire services;
13. ICT Services;
14. Industrial engineering services;
15. Telecoms Services;
16. Town Planning services;
17. Environmental services;
18. Health and safety services; and
19. Community liaison services.

**b) Required Construction Works**

- Civil Engineering (CE);
- Electrical Engineering Works – Building (EB);
- Electrical Engineering Works – Infrastructure (EP);
- General Building Works (GB);
- Mechanical Engineering Works (ME); and
- Specialist Works - Fencing (SQ).

“Should bidders identify sub-contractors that meet the requirements as set in (a) and (b) above who are not registered in any of the commodity categories listed above and/or are not registered on the CSD, bidders must ensure that these sub-contractors are registered in one of the listed commodity categories and registered on the CSD prior to the closing date and time. Bidders who do not meet this requirement will be disqualified and will not be evaluated further”.

### 5.3.1.2 Stage 1B – Technical Mandatory Requirements

Details of the technical/functional requirements are presented in the Table 5.4 below.


No.	Description of requirement	
a)	Proof of valid registration with CIDB (minimum 9CE Grading)	
b)	<p>Proof of Compliance with qualification and registration requirements contained in Item 4.9, Section 2 of this RFP. Proof of qualifications and proof of registration with appropriate professional bodies (if applicable) must be provided. The professional registration and qualification certificates submitted by the bidders should have been certified not more than three (3) months prior to the closing date.</p> <p><b>IMPORTANT!! DUPLICATION OF PROFESSIONAL TECHNICAL STAFF WILL LEAD TO DISQUALIFICATION</b></p> <ol style="list-style-type: none"> <li>1. Project Manager with SACPCMP (Pr. CPM) and ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>2. Electrical Engineer (OHE) with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>3. Electrical Engineer (Domestic Supply) with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>4. Mechanical Design Engineer(domestic/lifting equipment/fire) with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>5. Civil Engineer (Civil &amp; Structural) Engineer with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>6. Civil Engineer (Permanent Way) with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>7. Electronic engineer (Signalling) with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>8. Electronic engineer (Telecommunications / ICT)with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>9. Industrial Engineer with ECSA (Pr. Eng/ Pr. Tech Eng);</li> <li>10. Quantity Surveyor with SACQSP (Pr. QS);</li> <li>11. Architect with SACAP (Pr. Arch/ PSAT); and</li> <li>12. Town Planning Manager with SACPLAN (Professional Planner).</li> </ol>	

No.	Description of requirement	
	<p><b>Construction Works Team:</b></p> <p>13. Construction Health and Safety Officer (CHSO) with SACPCMP;</p> <p>The recognition of foreign qualifications not issued in English must be done in terms of the South African Qualification Authority (SAQA). The statutory bodies in South Africa are as follows:</p> <ol style="list-style-type: none"> <li>1. The Engineering Council of South Africa (ECSA) is the statutory body for engineering profession in South Africa;</li> <li>2. The South African Council for the Project and Construction Management Professions (SACPCMP) is a juristic person established by Section 2 of the Project and Construction Management Professions Act (Act No.48 of 2000);</li> <li>3. The South African Council for the Architectural Profession (SACAP) is a professional organisation for the architectural community in South Africa;</li> <li>4. The South African Council for the Quantity Survey Profession (SACQSP) Act 2000 (Act No.49 of 2000);</li> <li>5. Association of Professional Planners (SAACPP) is a professional organization for the Planners in South Africa in terms of the Planning Profession Act, 2002; and</li> <li>6. The South African National Biodiversity Institute (SANBI) was established on 1 September 2004 in terms of the National Environmental Management: Biodiversity Act (Act No 10 of 2004).</li> </ol>	

Table 5.4: Technical Mandatory Requirements

#### 5.3.1.3 Stage 1C – Basic Compliance Requirements

If you do not submit the following **basic compliance** documents and should an award be made, these basic compliance documents must be made available within seven (7) days, failing of which the award will be recalled.

<b>REQUEST FOR PROPOSAL: APPOINTMENT OF A TURNKEY CONTRACTOR FOR CONSTRUCTION OF BENROSE ROLLING STOCK DEPOT AND YARD</b>	
<b>TENDER NUMBER: HO/PT/DMP/212/07/2022</b>	

No.	Description of requirement	
a)	Valid Letter of Good Standing: COID - relevant to the project	
b)	Supply SARS Pin	
c)	Company registration documents	
d)	Certified Copies of Directors' ID documents not older than three (3) months from closing date	
e)	CSD supplier registration number	

Table 5.5: Basic Compliance Requirements

Bidders must submit proof of their B-BBEE status level, bidders failing to submit proof of their B-BBEE status level or are non-compliant may not be disqualified and will score 0 points on Stage 3: Pricing + BBBEE Evaluation

### 5.3.2 STAGE 2: TECHNICAL / FUNCTIONALITY REQUIREMENTS

Qualifying bidders shall then be evaluated on functionality after meeting all compliance requirements outlined above. The minimum threshold for the technical/functionality requirements is 80% as per the standard Evaluation Criteria presented in Table 5.2 above. Bidders who score below this minimum requirement shall not be considered for further evaluation in stage 3.

Details of the technical/functional requirements are presented in the 5.6 below.

ITEM	CRITERIA	WEIGHT
1	Organisational Experience Projects – Professionals Services	10
2	Experience of key staff – Professionals Services	15
3	Organisational Experience Projects <sup>3</sup> - Construction Works	30
5	Experience key staff (assigned site personnel) - Construction Works	10
6	Concept Design	10
7	Project Methodology	10
8	Project Schedule	10
9	Health and Safety	5
	<b>TOTAL</b>	<b>100</b>

Table 5.6: Technical Evaluation Criteria

### 5.3.2.1 Functional Evaluation Criteria

Details of the scoring methodology presented above are outlined below:

#### Functionality evaluation matrix & Criteria:

Details of the detailed scoring methodology are presented in the **Table 5.7** below.

Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
Organisational Experience Projects – <b>Professionals Services</b>	<p>Full points are allocated for track record of 5 projects of similar type and scale executed by tenderer in the following disciplines:</p> <ol style="list-style-type: none"> <li><b>Civil Projects</b> (Geotechnical, Structural, Industrial and Commercial Infrastructure)</li> <li><b>Electrical Projects</b> (Electrical Building Services &amp; Reticulation, Electronic Building Services, Transmission and Distribution and Industrial)</li> <li><b>General Building Projects</b> (Offices, Parking and Mess and Ablution);</li> <li><b>Mechanical Projects</b> (Mechanical Building Services, Fire protection and Industrial); and</li> <li><b>Rail Infrastructure Projects</b> (Perway, OHTE, Signalling).</li> </ol>	<p>Score will be based on the similar successfully completed / similar designed projects over the last fifteen (15) years from the presented details in the tender document (attach the Certificate of Completion):</p> <ol style="list-style-type: none"> <li>0. Not submitted information/ no response;</li> <li>1. Unrelated references of projects provided without Certificate of Completion;</li> <li>2. Project Experience of Similar Type consisting of Four (4) disciplines;</li> <li>3. Project Experience of Similar Type consisting of All Five (5) Listed Disciplines totalling less than R 100 million (R100m) with Certificate of Completion;</li> <li>4. Project Experience of Similar Type consisting of All Five (5) Listed</li> </ol>	10%

Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
	<p>Documents to be submitted:</p> <p>6. <b>The Certificate of Completion</b> indicating the value and the type of work performed on a letterhead of the client, signed and dated by an official from the client.</p>	<p>Disciplines totalling between R100m and R200m with Certificate of Completion; and</p> <p>5. Project Experience of Similar Type consisting of All Five (5) Listed Disciplines with a combined value totalling more than R200m with Certificates of Completion.</p>	
<p><b>DO NOT DUPLICATE STAFF MEMBERS</b></p> <p>Experience of key staff –</p> <p><b>Professionals Services</b></p> <p>1. Project Manager;</p> <p>2. Electrical Engineer (OHTE);</p> <p>3. Electrical Engineer (Domestic Supply);</p> <p>4. Mechanical Design Engineer;</p> <p>5. Civil Engineer (Civil &amp; Structural)</p> <p>6. Civil Engineer (Permanent Way)</p>	<p>Qualifications and Professional Registration were compliance requirements.</p> <p>No of years of experience of key professional team members are now evaluated.</p>	<p>Score will be allocated based on more than five (5) years' related experience post Professional Certification:</p> <p>Score will be allocated based on more than five (5) years' related experience post Professional Certification:</p> <p>0- No response/ Not submitted CV's or Unrelated CV's provided;</p> <p>1- Six (6) or more out of the Twelve (12) listed key staff team members have more than 5-years' related experience post professional registration;</p> <p>2- Eight (8) or more out of the Twelve (12) listed key staff team members have more</p>	15%



Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
7. Electronic engineer- (Signalling); 8. electronic engineer (Telecommunications / ICT); 9. Industrial Engineer; 10 Quantity Surveyor; 11. Architect; 12. Town Planning Manager.		than 5-years' related experience post professional registration; 3- Ten (10) or less of the Twelve (12) listed key staff team members have more than 5 years related experience post professional registration; 4- All Twelve (12) listed key staff team members have 5 years' related experience post professional registration; and 5- All Twelve (12) listed key staff team members have more than 5 years' related experience post professional registration.	
Organisational Experience Projects) - <b>Construction Works</b>	Full points are allocated for track record of 5 projects of similar type and scale executed by tenderer in consideration.  <b>1. Civil Projects</b> (Geotechnical, Structural, Industrial and Commercial Infrastructure)  <b>2. Electrical Projects</b> (Electrical Building Services & Reticulation, Electronic Building Services,	Score will be based on the similar successfully completed / similar designed projects over the last fifteen (15) years from the presented details in the tender document (attach the Certificate of Completion):  0. Not submitted information/ no response; 1. Unrelated references of projects provided without Certificate of Completion;	30%

Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
	<p>Transmission and Distribution and Industrial)</p> <p>3. <b>General Building Projects</b> (Offices, Parking and Mess and Ablution);</p> <p>4. <b>Mechanical Projects</b> (Mechanical Building Services, Fire protection and Industrial); and</p> <p>5. <b>Rail Infrastructure Projects</b> (Perway, OHTE, Signalling).</p> <p>Documents to be submitted:</p> <ul style="list-style-type: none"> <li>• <b>The Certificate of Completion</b> indicating the value and the type of work performed on a letterhead of the client, signed and dated by an official from the client.</li> </ul>	<p>2. Project Experience of Similar Type consisting of Four (4) disciplines;</p> <p>3. Project Experience of Similar Type consisting of All Five (5) Listed Disciplines totalling less than R 200 million (R200m) with Certificate of Completion;</p> <p>4. Project Experience of Similar Type consisting of All Five (5) Listed Disciplines totalling between R200m and R500m with Certificate of Completion; and</p> <p>5. Project Experience of Similar Type consisting of All Five (5) Listed Disciplines with a combined value totalling more than R500m with Certificates of Completion.</p>	
<p>Experience of key staff – -</p> <p><b>Construction Works:</b></p> <p>1. Construction Health and Safety Officer (CHSO); and</p>	<p>Qualifications and Professional Registration were compliance requirements.</p> <p>Points allocated for experience based on submitted CVs.</p>	<p>Score will be allocated based on more minimum five (5) years' related experience:</p> <p>0. No response/ Not submitted CV's;</p> <p>1. Unrelated CV's provided;</p> <p>2. Two (2) Listed key staff team members have three (3) years' or less experience.</p>	10%

Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
2.Environmental Control Officer (ECO).		3. Two (2) listed key staff team members have four (4) years' or less experience each. 4. Two (2) Listed key staff team members have five (5) years' experience 5. Two (2) Listed key staff team members have more than five (5) years' experience.	
Concept Design	Concept site Master plan and brief report covering the following areas: 1.Existing buildings; 2.New running/ lifting shed with approximate measurements; 3.Proposed location of external train wash plant with approximate measurements; 4.Location of new office and mess & ablution buildings with approximate measurements; 5.Location of new warehouse/s with approximate measurements; 6.Location of new parking with approximate measurements; 7.Proposed security buildings with approximate measurements; 8.Proposed access roads and walkways; 9.Proposed track layouts (existing and new staging yards included); and 10. Rail entrance watchtowers with	0.No Information submitted/ no response 1. Inadequate / unrelated submission; 2. Only concept master plan or brief report submitted or both covering seven (7) or less of the areas listed; 3. Concept site master plan and brief report submitted covering eight (8) of areas listed; 4. Concept site master plan and brief report submitted covering nine (9) of areas listed; and 5. Concept site master plan and brief report submitted covering all ten (10) areas listed.	10%

Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
	approximate measurements.		
Approach and Methodology	<p>Provide detailed technical approach / methodology that is aligned to the scope of work/ highlighting the risk/s and mitigation measures associated with working within the Rail environment in accordance with the following <b>Stages:</b></p> <ol style="list-style-type: none"> <li>1. Stage 1 – Inception;</li> <li>2. Stage 2 - Concept and Viability (also termed Preliminary Design);</li> <li>3. Stage 3 - Design Development (also termed Detail Design);</li> <li>4. Stage 4 - Documentation and Procurement;</li> <li>5. Stage 5 - Contract Administration and Inspection; and</li> <li>6. Stage 6 - Close- Out.</li> </ol>	<p>0.No Information submitted/ no response;</p> <ol style="list-style-type: none"> <li>1. Inadequate / unrelated methodology provided;</li> <li>2. Provided a generic technical approach project methodology that is not aligned to scope;</li> <li>3. Provided a detailed technical approach and methodology that is aligned to the scope of work;</li> <li>4. Provided a detailed technical approach and methodology that is aligned to the scope of work/ highlighting the risk/s of the work and mitigation measures; and</li> <li>5. Provided a detailed technical approach and methodology that is aligned to the scope of work highlighting the risks and mitigation measures associated with working within the Rail Environment showing how quality will be monitored.</li> </ol>	10%

Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
Project Schedule	<p>Provide a project schedule in MS Project/similar format that meets the client's timeline requirements and the schedule to cover the following key Milestones:</p> <ol style="list-style-type: none"> <li>1. Studies to be completed</li> <li>2. Design timelines including reviews</li> <li>3. Submission to Municipality and obtain Approval of Site Development Plan and Building Plans</li> <li>4. Site establishment</li> <li>5. Works commencement</li> <li>6. Ordering of equipment/materials</li> <li>7. Equipment installations</li> <li>8. Works completion</li> <li>9. Snag close out</li> <li>10. Practical completion</li> <li>11. Provision of close out documentation</li> <li>12. Final Works Completion</li> <li>13. The overall schedule should clearly indicate sequencing of activities with clear understanding of scope.</li> </ol>	<ol style="list-style-type: none"> <li>0. No response/ Inadequate / unrelated project schedule provided;</li> <li>1. Project schedule provided but no detailed activities indicated or not on required format;</li> <li>2. MS Project/similar schedule with less than Six (6) of the twelve (12) listed key milestones on required format;</li> <li>3. MS Project/similar schedule with Six to Twelve (6-11) of the 12 listed key milestones on required format;</li> <li>4. MS Project/similar schedule with all twelve (12) listed key milestones clearly indicating sequencing of activities and commitment to practical and final works completion.</li> <li>5. MS Project/similar schedule with all twelve (12) listed key milestones clearly indicating sequencing of activities and commitment to practical and final works completion and also provide <b>critical path</b>.</li> </ol>	10%

Multi-Disciplinary Design Team Evaluation			
CRITERIA	SUB-CRITERIA	SCORING	MAXIMUM POINTS
Health and Safety	<u>Health and Safety Plan:</u> 1. Legal Appointments: Construction Health and Safety Officer (CHSO) and Environmental Control Officer (ECO). 2. Provide a project specific and comprehensive baseline risk assessment aligned to scope and specifically tailored to the project. 3. Provide Risk Mitigation plan to address identified Risks. 4. Provide a Safety Plan based on PRASA's Health and Safety specification.	0. Not submitted information/ no response; 1. Generic Health and Safety Plan is provided, not related to the project; 2. Met the requirements of only one (1) item of the sub-criteria; 3. Met the requirements of two (2) items of the sub-criteria; 4. Met the requirements of three (3) items of the sub-criteria; and 5. Met the requirements of all four (4) sub-criteria. <b>"Kindly note that you are required to submit a comprehensive safety file for approval on appointment as the preferred bidder."</b>	5%
<b>TOTAL</b>			<b>100%</b>

Table 5.7: Detailed scoring methodology

### 5.3.3 STAGE 3: PRICING AND B-BBEE

The following formula, stipulated in the approved PRASA Conditions of Contract, shall be used by the Bid Evaluation Committee to score interested bidders on pricing:

$$P_s = 90 \left[ 1 - \frac{P_t - P_{\min}}{P_{\min}} \right]$$

Where:

$P_s$  = Points scored for the price of tender under consideration;

$P_t$  = Rand value of the tender under consideration;

$P_{\min}$  = Rand value of the lowest acceptable tender.

The minimum qualifying criteria for pricing is 90 points as per the standard Evaluation Criteria presented in Table 5.2 above.

The B-BBEE component of the evaluation process is weighted at 10 points in Table 5.2 of the standard Evaluation Criteria outlined above. Bidders will be awarded points based on the level of the B-BBEE status presented in the B-BBEE Certificate issued by an approved agency certified by SANAS. Details of the allocation of points by the Evaluation Committee are presented in Table 5.8 below.

B-BBEE STATUS LEVEL OF CONTRIBUTOR	NUMBER OF POINTS (90/10 SYSTEM) ABOVE R50 MILLION
1	10
2	9
3	6
4	5
5	4
6	3
7	2
8	1
Non-Compliant Contributor	0

Table 5.8: BBEE Evaluation Criteria



#### 5.3.4 RECOMMENDATION FOR APPOINTMENT OF OWNERS ENGINEER FOR TURNKEY CONTRACTOR PROJECT

PRASA requires that amongst other functions as listed under the scope of works, the turnkey contractor will be appointed to design and implement the project until closeout. A clear conflict of interest will therefore arise if the preferred Turnkey Contractor team are part of the team that is preferred for the “multi-disciplinary consulting engineering company to render owner’s engineering (OE) services in support of the turnkey contractor for construction of Benrose rolling stock depot and yard” tender.

Owners engineer’s role is to assist in reviewing designs produced by the Turnkey Contractor, monitor installations and construction undertaken by the Turnkey contractor and assist PRASA in monitoring construction close out by the Turnkey Contractor.

Therefore, should the recommended Bidder or any part of the recommended Bidder for this Turnkey contractor Request for Proposal be part of the recommended Bidder for the “multi-disciplinary consulting engineering company to render “owner’s engineering (OE) services” in support of the turnkey contractor for construction of Benrose rolling stock depot and yard” Request for Proposal Tender. The “multi-disciplinary consulting engineering company to render “owner’s engineering (OE) services” in support of the turnkey contractor for construction of Benrose rolling stock depot and yard” **will not** be awarded to the Turnkey Contractor team due to the conflict of interest. The **next suitable Bidder** will be recommended for award of the “multi-disciplinary consulting engineering company to render “owner’s engineering (OE) services” in support of the turnkey contractor for construction of Benrose rolling stock depot and yard” **Request for Proposal**.

#### 5.3.5 VALIDITY PERIOD

This RFP shall be valid for [90 days] calculated from Bid closing date.

#### 5.3.6 B-BBEE REQUIREMENTS

A Bidder must submit proof of its B-BBEE status level contributor, a Bidder failing to submit proof of B-BBEE status level of contributor or is a non-compliant contributor to B-BBEE may not be disqualified and will score 0 points out of 10 for B-BBEE.

### **5.3.7 THE NATIONAL INDUSTRIAL PARTICIPATION PROGRAMME**

#### **5.3.7.1 National Industrial Participation Programme (NIPP) Requirements:**

The National Industrial Participation (NIP) Programme, which is applicable to all government procurement contracts that have an imported content, became effective on the 1 September 1996. The NIP policy and guidelines were fully endorsed by Cabinet on 30 April 1997. In terms of the Cabinet decision, all state and parastatal purchases / lease contracts (for goods, works and services) entered into after this date, are subject to the NIP requirements. NIP is obligatory and therefore must be complied with. The Industrial Participation Secretariat (IPS) of the Department of Trade and Industry (DTI) is charged with the responsibility of administering the programme.

Bidders are therefore required to complete SBD 5 to give effect to the above. Bidders who do not complete this form will be automatically disqualified.

### **5.3.8 LOCAL CONTENT**

5.3.8.1 Bids will be subject to local content requirements in terms of Regulation 8(1) of the Preferential Procurement Regulations, 2017.

5.3.8.2 Only locally produced or manufactured goods with a stipulated minimum threshold as set by DTI for local production and content will be considered. Bidders who do not meet the stipulated minimum threshold will be automatically disqualified and not be considered further for evaluation.

5.3.8.3 Bidders may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold

5.3.8.4 The exchange rate to be used for the calculation of local content (local content and local production are used interchangeably) must be the exchange rate published by the SARB on the date of the advertisement of the tender.

5.3.8.5 The Declaration Certificate for Local Content (SBD 6.2) must be completed and duly signed. Bidders who do not complete this form will be automatically disqualified.

5.3.8.6 For further guidance with the above requirements, bidders may refer to **DTI website**  
**[www.thedti.gov.za](http://www.thedti.gov.za)**

5.3.8.7 Possibly affected instruction note based on the Turnkey Scope of Work for the Depot:

**REQUEST FOR PROPOSAL: APPOINTMENT OF A TURNKEY CONTRACTOR FOR CONSTRUCTION OF BENROSE ROLLING STOCK DEPOT AND YARD****TENDER NUMBER: HO/PT/DMP/212/07/2022**

NO	SOME EQUIPMENT AGAINST WHICH THE LOCAL CONTENT MUST BE DISCHARGED	
	DESCRIPTION OF SERVICES, WORKS OR GOODS	Stipulated Minimum Threshold local content
1.	National Treasury Designated Sectors Circular No 3 of 2019-2020-Steel Conveyance Pipes	80%
2.	National Treasury Designated Sectors Circular No 4 of 2019-2020- Air Insulated MV Switchgear	50%
3.	National Treasury Designated Sectors Circular No 10 of 2019-2020- Electrical Cable Products	90%
4.	National Treasury Designated Sectors Instruction Number 10 Of 2016-2017 - Rail Signalling System and Associated Components	65%
5.	National Treasury Designated Sectors Instruction Number 9 Of 2016-2017 - Steel Power Pylons	100%
6.	National Treasury Designated Sectors Instruction Number 12 Of 2016 - 2017- Transformers, Shunt Reactors and Associated Equipment	80%
7.	National Treasury Designated Sectors Instruction Number 15 of 2016-2017- Steel Products and Components for Construction	100%
8.	National Treasury Designated Sectors Circular Number 3 of 2017/2018 –Pumps, Medium Voltage (Mv) Motors and Associated Accessories	80%
9.	National Treasury Circular No 1 of 2019/2020 - Invitation and evaluation of bids based on a stipulated minimum threshold for local production and content for Plastic Pipes	100%
10.	National Treasury Instruction on: Invitation and evaluation of bids based on a stipulated minimum threshold for local production and content for Residential Electricity Meters	80%
11.	National Treasury Designated Sectors Circular Number 2 of 2017/2018 – Invitation and evaluation of bids based on a stipulated minimum threshold for local production and content for rail permanent way sector	90%
12.	Designated Sectors Circular No 2 of 2019-2020-Bulk Material Handling Material (Conveyor System Equipment) for local production	85%

NO	SOME EQUIPMENT AGAINST WHICH THE LOCAL CONTENT MUST BE DISCHARGED	
	DESCRIPTION OF SERVICES, WORKS OR GOODS	Stipulated Minimum Threshold local content
13	National Treasury Designated Sectors Circular No 7 of 2019-2020- Furniture Products	85%
14	National Treasury Designated Sectors Circular No 5 of 2019-2020- Industrial Lead Acid Batteries	50%
15	National Treasury Designated Sectors Circular No 1 of 2021-2022 - Cement	100%
16	National Treasury Designated Sectors Instruction No. 02 of 2016/17 - Solar Photovoltaic System And Components	70%
17	National Treasury Designated Sectors Instruction No. 04 of 2016/17 - Rail Rolling Stock Sector	65%

### 5.3.9 Exemption Requests

If the quantity of components to be used for this work cannot be wholly sourced from South African (SA) based manufacturers at the designated local content threshold as set by **the DTI**, bidders should obtain written exemption from **the DTI** to supply the remaining portion of the components at a lower local content threshold. **the DTI**, in consultation with the procuring organ of state, will grant exemption on a case-by-case basis and will consider the following:

- required volumes in the particular tender;
- available collective SA industry manufacturing capacity at that time;
- delivery times;
- availability of input materials and components;
- security of supply and emergencies
- materials of construction
- technical considerations including operating conditions;
- localisation plans aimed at establishing and/or increasing local manufacturing capacity through ramping-up of capital investments in the initial phase; and

- i) replacement of components on the existing infrastructure in order to honour the warranties and guarantees.

### **5.3.10 The process to be followed in requesting exemptions**

Tender information must be provided on the bidder's letterhead when requesting an exemption letter:

- a) Procuring entity
- b) Tender description
- c) Bid reference number
- d) Closing date of bid
- e) Detailed specifications of items for which the exemption is requested for (kindly attach specifications)
- f) Products/ inputs/components to be imported
- g) Reasons for the request
- h) Supporting letters from local bidders' suppliers and manufacturers

The turn-around time for processing of exemption requests is **10 working days** from the date of receipt.

## **6 POST TENDER NEGOTIATION (IF APPLICABLE)**

PRASA reserves the right to conduct post tender negotiations with a shortlist of Respondent(s). The shortlist could comprise of one or more Respondents. Should PRASA conduct post tender negotiations, Respondents will be requested to provide their best and final offers to PRASA based on such negotiations. A final evaluation will be conducted in terms of 90/10.

## **7 BEST AND FINAL OFFER**

PRASA reserves the right to embark on the Best and Final Offer (BAFO) Process where:

- a) None of the proposals meet the RFP requirements;
- b) None of the responses to RFP are affordable and demonstrate value for money; and
- c) There is no clear preferred Response to this RFP.

Upon the decision by PRASA to embark on a BAFO process it shall notify the response to RFP.

## **8 FINAL CONTRACT AWARD**

PRASA will negotiate the final terms and condition the contract with the successful Respondent(s). This may include aspects such as Supplier Development, the B-BBEE Improvement Plan, price and delivery. Thereafter the final contract will be awarded to the successful Respondent(s).

## **9 FAIRNESS AND TRANSPARENCY**

PRASA views fairness and transparency during the RFP Process as an absolute on which PRASA will not compromise. PRASA will ensure that all members of evaluation committees declare any conflicting or undue interest in the process and provide confidentiality undertakings to PRASA.

The evaluation process will be tightly monitored and controlled by PRASA to assure integrity and transparency throughout, with all processes and decisions taken being approved and auditable.

## **SECTION 3**

### **PRICING AND DELIVERY SCHEDULE**

Respondents are required to complete the Pricing Schedule/ BOQ **Form C:** (Volume 2 /Envelop 2)

#### **1 PRICING**

- 1.1 Prices must be quoted in South African Rand, inclusive of VAT.
- 1.2 Price offer is firm and clearly indicate the basis thereof.
- 1.3 Pricing Bill of Quantity is completed in line with schedule if applicable.
- 1.4 Cost breakdown must be indicated.
- 1.5 Price escalation basis and formula must be indicated.
- 1.6 To facilitate like-for like comparison bidders must submit pricing strictly in accordance with this price schedule and not utilise a different format. Deviation from this pricing schedule could result in a bid being declared non-responsive.
- 1.7 Please note that should you have offered a discounted price(s), PRASA will only consider such price discount(s) in the final evaluation stage on an unconditional basis.
- 1.8 Respondents are to note that if price offered by the highest scoring bidder is not market related, PRASA may not award the contract to the Respondent. PRASA may:
  - 1.8.1 negotiate a market-related price with the Respondent scoring the highest points or cancel the RFP;
  - 1.8.2 if that Respondent does not agree to a market-related price, negotiate a market-related price with the Respondent scoring the second highest points or cancel the RFP; and
  - 1.8.3 if the Respondent scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the Respondent scoring the third highest points or cancel the RFP.
- 1.8.4 If a market-related price is not agreed with the Respondent scoring the third highest points, PRASA must cancel the RFP.
- 1.8.5 The professional costs quoted should be in compliance with the latest version of the ECSA Guideline Scope of Services and Tariff of Fees for Registered Persons, where applicable.
- 1.8.6 The appointment of an Occupational Health, Safety & Environmental (OHSE) Consultant is going to be executed by Owners engineer and it will be in line with the time frames for



this project. An independent PRASA OHSE Consultant is required and therefore a separate appointment will be made.

- 1.8.7 There will be no price adjustments for escalation allowed. This will be a fixed price turnkey award.
- 1.8.8 Where variations may become applicable, the contractor must demonstrate market related rates and full breakdowns of all costs that will be incurred and time extensions required must be priced.

## **2 DISCLOSURE OF PRICES QUOTED**

Respondents are to note that, on award of business, PRASA is required to publish the tendered prices and preferences claimed of the successful and unsuccessful Respondents inter alia on the National Treasury e-Tender Publication Portal, ([www.etenders.gov.za](http://www.etenders.gov.za)), as required per National Treasury Instruction Note 01 of 2015/2016.

## **3 PERFROMANCE BOND**

The Preferred Bidder shall where applicable provide PRASA with a performance bond which shall be 10% of the value of the entire Project price offered by the Preferred Bidder and it shall be issued within 30 days of receipt of notice of appointment as Preferred Bidder. The Performance Bond shall be valid for the Contract period. The format of the Performance Bond is attached as Annexure 5.

## **4 OWNERSHIP OF DESIGN**

The plans and designs (pdf and dwg formats) developed and to be provided to PRASA shall at all times remain the property of PRASA.

## **5 SERVICE LEVELS**

- 5.1 An experienced national account representative(s) is required to work with PRASA's procurement department. [No sales representatives are needed for individual department or locations]. Additionally, there shall be a minimal number of people, fully informed and accountable for this agreement.
- 5.2 PRASA will have quarterly reviews with the Service provider's account representative on an on-going basis.

- 5.3 PRASA reserves the right to request that any member of the Service provider's team involved on the PRASA account be replaced if deemed not to be adding value for PRASA.
- 5.4 The Service provider guarantees that it will achieve a 100% [hundred per cent] service level on the following measures:
- 5.5 Random checks on compliance with quality/quantity/specifications
- 5.6 On time delivery.
- 5.7 The Service provider must provide a telephone number for customer service calls.
- 5.8 Failure of the Service provider to comply with stated service level requirements will give PRASA the right to cancel the contract in whole, without penalty to PRASA, giving 30 [thirty] calendar days' notice to the Service provider of its intention to do so.
- 5.9 Acceptance of Service Levels:

YES	
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## **6 TOTAL COST OF OWNERSHIP AND CONTINUOUS IMPROVEMENT INITIATIVES**

- 6.1 PRASA will strive to procure goods, services and works which contribute to its mission. In order to achieve this, PRASA must be committed to working with suppliers who share its goals of continuous improvement in service, quality and reduction of Total Cost of Ownership (TCO).
- 6.2 Respondents shall indicate whether they would be committed, for the duration of any contract which may be awarded through this RFP process, to participate with PRASA in its continuous improvement initiatives to reduce the total cost of ownership [TCO], which will **reduce the overall cost of transportation services and related logistics provided by PRASA's operating divisions within South Africa to the ultimate benefit of all end-users.**

## **7 FINANCIAL STABILITY**

Respondents are required to submit their latest financial statements prepared and signed off by a professional accountant for the past three years with their Proposal in order to enable PRASA to establish financial stability.

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20.....

**SIGNATURE OF WITNESSES**

**ADDRESS OF WITNESSES**

1 Name \_\_\_\_\_

\_\_\_\_\_

2 Name \_\_\_\_\_

\_\_\_\_\_

**SIGNATURE OF RESPONDENT'S AUTHORISED REPRESENTATIVE:** \_\_\_\_\_

**NAME:** \_\_\_\_\_

**DESIGNATION:** \_\_\_\_\_

## **8 VALIDITY OF RETURNABLE DOCUMENTS**

The successful Respondent will be required to ensure the validity of all returnable documents, including but not limited to its Tax Clearance Certificate and valid B-BBEE Verification Certificate, for the duration of any contract emanating from this RFP. Should the Respondent be awarded the contract [the Agreement] and fail to present PRASA with such renewals as and when they become due, PRASA shall be entitled, in addition to any other rights and remedies that it may have in terms of the eventual Agreement, to terminate such Agreement forthwith without any liability and without prejudice to any claims which PRASA may have for damages against the Respondent.

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20.....

SIGNATURE OF WITNESSES

ADDRESS OF WITNESSES

1 Name \_\_\_\_\_

2 Name \_\_\_\_\_

SIGNATURE OF RESPONDENT'S AUTHORISED REPRESENTATIVE: \_\_\_\_\_

NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

**9 CERTIFICATE OF ACQUAINTANCE WITH RFP TERMS & CONDITIONS &  
APPLICABLE DOCUMENTS**

By signing this certificate the Respondent is deemed to acknowledge that he/she has made himself/herself thoroughly familiar with, and agrees with all the conditions governing this RFP, including those contained in any printed form stated to form part hereof, including but not limited to the documents stated below and PRASA will recognise no claim for relief based on an allegation that the Respondent overlooked any such condition or failed properly to take it into account for the purpose of calculating tendered prices or any other purpose:

1. PRASA's General Bid Conditions\*

2. Standard RFP Terms and Conditions for the supply of Goods or Services or Works to PRASA

Should the Bidder find any terms or conditions stipulated in any of the relevant documents quoted in the RFP unacceptable, it should indicate which conditions are unacceptable and offer alternatives by written submission on its company letterhead, attached to its submitted Bid. Any such submission shall be subject to review by PRASA's Legal Counsel who shall determine whether the proposed alternative(s) are acceptable or otherwise, as the case may be. A material deviation from the Standard terms or conditions could result in disqualification.

Bidders accept that an obligation rests on them to clarify any uncertainties regarding any bid to which they intend to respond, before submitting the bid. The Bidder agrees that he/she will have no claim based on an allegation that any aspect of this RFP was unclear but in respect of which he/she failed to obtain clarity.

The bidder understands that his/her Bid will be disqualified if this Certificate of Acquaintance with RFP documents included in the RFP as a returnable document, is found not to be true and complete in every respect.

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20....

**REQUEST FOR PROPOSAL: APPOINTMENT OF A TURNKEY  
CONTRACTOR FOR CONSTRUCTION OF BENROSE ROLLING STOCK  
DEPOT AND YARD**

**TENDER NUMBER: HO/PT/DMP/212/07/2022**



SIGNATURE OF WITNESSES

ADDRESS OF WITNESSES

1 \_\_\_\_\_

Name \_\_\_\_\_

SIGNATURE OF RESPONDENT'S AUTHORISED REPRESENTATIVE: \_\_\_\_\_

NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

## **10 GENERAL CONDITIONS**

### **10.1 Alternative Bids**

Not applicable to this bid.

### **10.2 Prasa's Tender Forms**

Bidders must sign and complete the PRASA's Bid Forms and attach all the required documents. Failure by Bidders to adhere to this requirement may lead to their disqualification.

### **10.3 Precedent**

In case of any conflict with this RFP and Bidders response, this RFP and its briefing notes shall take precedence.

### **10.4 Response to RFP-Confidentiality**

Response to RFPs must clearly indicate whether any information conveyed to or requested from PRASA is confidential or should be treated confidentially by PRASA. In the absence of any such clear indication in writing from a response to RFP, PRASA shall deem the response to RFP to have waived any right to confidentiality and treat such information as public in nature.

Where a Bidder at any stage during the RFP Process indicates to PRASA that information or any response to RFP requested from PRASA is or should be treated confidentially, PRASA shall treat such information or response to RFP confidentially, unless PRASA believes that to ensure the transparency and competitiveness of the RFP Process the content of the information or response to RFP should be conveyed to all Bidders, in which event it shall apply the following process:

- PRASA shall confirm with the Bidder whether the raising of confidentiality applies to the entire response to the RFP or only specific elements or sections of the response;
- Where confidentiality is maintained by the Bidder and PRASA is of the opinion that the information or response to RFP if made publicly available would affect the commercial interests of the Bidder or is commercially sensitive information, PRASA shall not release such



information to other Bidders if providing such information or response to the RFP would prejudice the competitiveness and transparency of the RFP Process;

- Where PRASA is of the opinion that information provided is not commercially sensitive or would have no impact on the commercial interests of the relevant Bidder if released and fairness and transparency requires that such information be released to all Bidders, PRASA may:
  - i. inform the relevant Bidder of the necessity to release such information and/or response to RFP and request the Bidder to consent to the release thereof by PRASA; or
  - ii. obtain legal advice regarding the confidentiality of the relevant information and/or response to RFP and the legal ability of PRASA to release such information; or
  - iii. refrain from releasing the information and/or response to RFP, in which event PRASA shall not take account of the contents of such information in the evaluation of the relevant response to RFP.

The above procedures regarding confidentiality shall not apply to any information which is already public knowledge or available in the public domain or in the hands of PRASA or is required to be disclosed by any legal or regulatory requirements or order of any competent court, tribunal or forum.

## **10.5 Response to the RFP – RFP Disqualification**

Responses to RFP which do not comply with the RFP requirements, formalities, terms and conditions may be disqualified by PRASA from further participation in the RFP Process.

In particular (but without prejudice to the generality of the foregoing) PRASA may disqualify, at its sole discretion and without prejudice to any other remedy it may have, a Bidder where the Bidder, or any of its consortium members, subcontractors or advisors have committed any act of misrepresentation, bad faith or dishonest conduct in any of its dealings with or information provided to PRASA.

## **10.6 Corruption, Gifts and Payments**

Neither the Bidders to RFPs, its equity members, the sub-contractors, consortium members nor any of their agents, lenders or advisors shall directly or indirectly offer or give to any person in the employment of PRASA or any other Government official or any of the Advisory Team any gift or consideration of any kind as an inducement or reward for appointing a particular Bidder, or for showing or omitting to show favour or disfavour to any of the Bidders, its equity members or the sub-contractors in relation to the Project.

In the event that any of the prohibited practices contemplated under the above paragraph is committed, PRASA shall be entitled to terminate any Response to RFP's status and to prohibit such Response to RFP, its equity members, its SPV members, its Sub Contractors and their agents, lenders and advisors from participating in any further part of the procurement of the Project.

## **10.7 Insurance**

Unless specifically provided for in this RFP or draft contracts, Bidders will be required to submit with their Bid for services professional indemnity insurance and works insurance to an extent (if any) if insurance provided by PRASA may not be for the full cover required in terms of the relevant category listed in this RFP. The Bidder is advised to seek qualified advice regarding insurance.

PRASA, as the Employer/Principle, can take out the following insurances:

- Contract Works – insured at full value of the contract including free issue material (for the period of the contract followed by the defects liability period)
- SASRIA
- Removal of Lateral Support – if there is lateral support risk exposure
- Third Party Liability
- Professional Indemnity cover – If additional required
- Marine cover – should there be marine exposures

The Contractor should take out his own insurance to cover the following:

- Contractors Plant & Equipment
- Workman's Compensation
- Professional Indemnity Cover
- And any other insurance they deem necessary but not insured by the Employer

## **10.8 No Contact Policy**

Bidders may only contact **Agnes Sekhuthu** at (011) 013 1594 or email [asekhuthu@PRASA.com](mailto:asekhuthu@PRASA.com) and copy **Rosemary Moagi** email [rmoagi@PRASA.com](mailto:rmoagi@PRASA.com) of PRASA as per the terms of the Communication Structure established by this RFP, except in the case of pre-existing commercial relationships, in which case contact may be maintained only with respect thereto and, in making such contact, no party may make reference to the Project or this RFP.

## **10.9 Conflict of Interest**

No Bidder member, subcontractor or advisor of the response to RFP may be a member of or in any other way participate or be involved, either directly or indirectly in more than one response to RFP or response to RFP during any stage of the Project procurement process, but excluding specialist suppliers of systems and equipment, non-core service providers or financial or commercial institutions whose role is limited purely to lending money or advancing credit to the response to RFP. Bidders are to sign the declaration of interest form. In order to prevent the conflict or potential conflict of interest between Lenders and Bidders to RFP, no advisors or the Contractor/s or Consortium/s to any response to RFP, consortium member or subcontractor may fulfil the role of arranger, underwriter and/or lead bank to the response to RFP. PRASA may disqualify the response to RFP from further participation in the event of a failure to comply with this provision. PRASA views the potential conflict of interest so great as to warrant the reduction of competition for advisory services.

## **10.10 Collusion and Corruption**

Any Bidder shall, without prejudice to any other remedy available to PRASA, be disqualified, where the response to RFP –

- communicates to a person other than persons nominated by PRASA a material part of its response to RFP; or
- Enters into any Contract or arrangement with any other person or entity that it shall refrain from submitting a response to RFP to this RFP or as to any material part of its Response to RFP to this RFP (refer the prohibition contained in Section 4(1)(b)(iii) of the Competition Act 89 of 1998). . The Bidders represents that the Bidder has not, directly or indirectly, entered

into any agreement, arrangement or understanding or any such like for the purpose of, with the intention to, enter into collusive Bidding or with reasonable appreciation that, collusive any agreement, arrangement or understanding or any such like may result in or have the effect of collusive Bidding. The Bidder undertakes that in the process of the Bid but prior to PRASA awarding the Bid to a preferred bidder become involved in or be aware of or do or caused to be done any agreement, arrangement or understanding or any such like for the purpose of or which may result in or have the effect of a collusive Bid, the Bidder will notify PRASA of such any agreement, arrangement or understanding or any such like.; or

- offers or agrees to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person for doing or having done, or causing, or having caused to be done any act or omission in relation to the RFP Process or any proposed response to RFP (provided nothing contained in this paragraph shall prevent a response to RFP from paying any market-related commission or bonus to its employees or contractors within the agreed terms of their employment or contract).

#### **10.11 Consortium Changes**

If exceptional circumstances should arise in which a after the submission to the bid and after closing date of submission of bids, there is change in the composition of the Bidder, either through substitution or omission of any member of the Bidder:

- The Response to RFP must notify PRASA in writing of the proposed changes supported by complete details of the material reasons for the changes, the parties impacted by the changes and the impact on the response to RFP.
- PRASA shall evaluate the reasons advanced by the Bidder for the requested changes to the Bidder structure and where PRASA is not satisfied that the reasons advanced are reasonable or material, refuse to accept the change and disqualify the response to RFP, or notify the Bidder in writing of its non-acceptance of the changes and require the Bidder to propose a suitable alternative to PRASA within 10 (TEN) days of its receipt of the decision of PRASA, upon receipt of which PRASA shall -
  - i. Evaluate the alternative proposed for suitability to PRASA, and where the alternative is accepted by PRASA, inform the Bidder in writing of such acceptance and PRASA shall reassess the response to RFP against the RFP requirements and criteria; or

- ii. Where the alternative is not accepted by PRASA, inform the Bidder in writing of such non-acceptance as well as its disqualification from the RFP Process.
- iii. Where PRASA is satisfied that the changes requested under (i) above are reasonable and material, the response to RFP, shall be allowed to effect the required changes and PRASA shall reassess the response to RFP against the RFP requirements and criteria.

#### **10.12 Costs of Response to the RFP Submission**

All costs and expenses associated with or incurred by the Bidder in relation to any stage of the Project, shall be borne by the Bidder. PRASA shall not be liable for any such costs or expenses or any claim for reimbursement of such costs or expenses.

To avoid doubt, PRASA shall not be liable for any samples submitted by the Bidder in support of their Responses to RFP and reserves the right not to return to them such samples and to dispose of them at its discretion.

#### **10.13 Response to the RFP Warranty**

Bidders must provide a warranty as part of their Responses to RFP that their Responses to RFP are true and correct in all respects, that it does not contain a misrepresentation of any kind and that the taxes of all members of the Bidder company, consortium members and or subcontractors are in order and none of the members are undergoing corruption or any criminal-related investigations or have any past convictions for fraud or corruption.

#### **10.14 Subcontracting as a Condition of Bid for Procurement Above R30 Million (Regulation 9)**

10.14.1 “The regulation states that if feasible to contract above R 30 million, an organ of state must apply subcontracting to advance designated groups”.

10.14.2 The term “feasible” is used in recognition of the fact that it may not always be possible to subcontract in all Bids due to the nature of some Bids. (For instance, it may not be possible to sub-contract one piece of machinery that is above R 30 million)

10.14.3 Institutions must therefore identify procurement opportunities for designated groups where compulsory sub-contracting must be applied to all contracts/ projects above R30 million.

- 10.14.4 The responsibility to determine whether it is feasible or not rests with the institution preparing the Bid. Institutions must ensure participation of EMEs and QSEs in contracts or projects and not just dismiss this provision on the basis that it is not feasible without providing facts and objective analysis to substantiate their decision.
- 10.14.5 Notwithstanding the minimum 30% compulsory sub-contracting provision, institutions may identify procurement opportunities for participation of designated groups in contracts or projects below R30 million.
- 10.14.6 Bids must be advertised with a condition that Bidders who fail to comply with this requirement would be disqualified.
- 10.14.7 Institutions must conduct market or industry research to identify level of transformation in the sector or commodity, role players and their B-BBEE status level and availability of EMEs or QSEs who may be eligible for subcontracting.
- 10.14.8 The Central Supplier Database (CSD) has been upgraded to allow bidders/ contractors/ suppliers access to CSD for identification of potential sub-contractors from the pool of EMEs or QSEs to advance designated groups.
- 10.14.9 In the case of construction and built environment sectors, nothing prevents bidders/contractors/suppliers to select sub-contractors from the CIDB database who are registered on the CSD for the purpose of compliance with the minimum 30% compulsory sub-contracting provisions.
- 10.14.10 Bidders or contractors must submit proof of subcontracting arrangement between the main Bidder and the subcontractor. Proof of subcontracting arrangement may include a subcontracting agreement between main Bidder and the subcontractor.
- 10.14.11 The responsibility for inclusion of compulsory subcontracting clause in the Bid rests with the institution.
- 10.14.12 The responsibility to sub-contract with competent and capable subcontractors rests with the main contractor/ supplier.
- 10.14.13 The contract will be concluded between the main contractor and the institution, therefore, the main contractor and not the sub-contractor would be held liable for performance in terms of its contractual obligations.
- 10.14.14 Main contractors/ suppliers are discouraged from subcontracting with their subsidiary companies as this may be interpreted as subcontracting with themselves and / or using their subsidiaries for fronting. Where primary contractor subcontracts with a subsidiary this must be declared in Bid documents.

- 10.14.15 Bids that do not meet subcontracting requirements are considered as being not acceptable Bids and must be disqualified and may not be considered for further evaluation or award.
- 10.14.16 The report containing the list of potential subcontractors may be drawn by accessing the following link: [www.csd.gov.za](http://www.csd.gov.za)
- 10.14.17 The Central Supplier Database (CSD) was enhanced to enable to search for suppliers based on the criteria as per Preferential Procurement Regulations, 2017.
- 10.14.18 In compliance with the new regulation, this project will require that a minimum of 30% be subcontracted to one of the following types of enterprises:
- a) *an EME or QSE*
  - b) *an EME or QSE which is at least 51% owned by black people;*
  - c) *an EME or QSE which is at least 51% owned by black people who are youth;*
  - d) *an EME or QSE which is at least 51% owned by black people who are women;*
  - e) *an EME or QSE which is at least 51% owned by black people with disabilities;*
  - f) *an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;*
  - g) *a cooperative which is at least 51% owned by black people;*
  - h) *an EME or QSE which is at least 51% owned by black people who are military veterans; or*
  - i) *more than one of the categories referred to in paragraphs (a) to (h).*
- 10.14.19 Before contracting with the successful Bidder, PRASA will insist on being provided with copies of formal signed subcontracting agreements that make up the legislated 30% of the contract value. All agreements to state that PRASA will not be held responsible or liable should the successful Bidder breach contract with the subcontracted companies.



## 11 CONDITIONS OF TENDER

### General

- |  |   |  |
|--|---|--|
| <b>Actions</b>                                       | 1 | PRASA's <i>Representative</i> and each <i>tenderer</i> submitting a tender shall act as stated in these Conditions of Tender and in a manner which is fair, equitable, transparent, competitive and cost-effective.  |
| <b>Interpretation</b>                                | 2 | Terms shown in <i>italics</i> vary for each tender. The details of each term for this tender are identified in the Request for Tender / Scope of work/ specification. Terms shown in capital initials are defined terms in the appropriate conditions of contract.   |
|  | 3 | Any additional or amended requirements in the Scope of work/ specification, and additional requirements given in the Schedules in the <i>tender returnables</i> are deemed to be part of these Conditions of Tender.   |
|  | 4 | The Conditions of Tender and the Scope of work/ specification shall form part of any contract arising from this invitation to tender.  |
| <b>Communication</b>                                 | 5 | Each communication between PRASA and a <i>tenderer</i> shall be to or from PRASA's <i>Representative</i> only, and in a form that can be read, copied and recorded. Communication shall be in the English language. PRASA takes no responsibility for non-receipt of communications from or by a <i>tenderer</i> .                                   |
| <b>PRASA's rights to accept or reject any tender</b> | 6 | PRASA may accept or reject any variation, deviation, tender, or alternative tender, and may cancel the tender process and reject all tenders at any time prior to the formation of a contract. PRASA or PRASA's <i>Representative</i> will not accept or incur any liability to a <i>tenderer</i> for such cancellation and rejection, but will give |

reasons for the action. PRASA reserves the right to accept the whole or any part of any tender.

- 7 After the cancellation of the tender process or the rejection of all tenders PRASA may abandon the proposed work and services, have it performed in any other manner, or re-issue a similar invitation to tender at any time.

**Tenderer's obligations**

The *tenderer* shall comply with the following obligations when submitting a tender and shall:

- |   |   |   |
|---|---|---|
| <b>Eligibility</b>  | 1 | Submit a tender only if the <i>tenderer</i> complies with the criteria stated in the Scope of work/ specification.  |
| <b>Cost of tendering</b>                                  | 2 | Accept that PRASA will not compensate the <i>tenderer</i> for any costs incurred in the preparation and submission of a tender.   |
| <b>Check documents</b>                                    | 3 | Check the <i>tender documents</i> on receipt, including pages within them, and notify PRASA's <i>Representative</i> of any discrepancy or omissions in writing.   |
| <b>Copyright of documents</b>                             | 4 | Use and copy the documents provided by PRASA only for the purpose of preparing and submitting a tender in response to this invitation.  |
| <b>Standardised specifications and other publications</b> | 5 | Obtain, as necessary for submitting a tender, copies of the latest revision of standardised specifications and other publications, which are not attached but which are incorporated into the <i>tender documents</i> by reference. |

<b>Acknowledg e receipt</b>	6	Preferably complete the Receipt of invitation to submit a tender form attached to the Letter of Invitation and return it within five days of receipt of the invitation.
	7	Acknowledge receipt of Addenda / Tender Briefing Notes to the <i>tender documents</i> , which PRASA's <i>Representative</i> may issue, and if necessary apply for an extension to the <i>deadline for tender submission</i> , in order to take the Addenda into account.
<b>Site visit and / or clarification meeting</b>	8	Attend a site visit and/or clarification meeting at which <i>tenderers</i> may familiarise themselves with the proposed work, services or supply, location, etc. and raise questions, if provided for in the Scope of work/ specification. Details of the meeting are stated in the RFP document, <i>i-tender</i> website and CIDB website.
<b>Seek clarification</b>	9	Request clarification of the <i>tender documents</i> , if necessary, by notifying PRASA's <i>Representative</i> earlier than the <i>closing time for clarification of queries</i> .
<b>Insurance</b>	10	Be informed of the risk that needs to be covered by insurance policy. The <i>tenderer</i> is advised to seek qualified advice regarding insurance.
<b>Pricing the tender</b>	11	Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except VAT), and other levies payable by the successful <i>tenderer</i> . Such duties, taxes and levies are those applicable 14 days prior to the <i>deadline for tender submission</i> .
	12	Show Value Added Tax (VAT) payable by PRASA separately as an addition to the tendered total of the prices.

- |                                 |    |  |
|---------------------------------|----|--|
|                                 | 13 | Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the <i>conditions of contract</i> .   |
|                                 | 14 | State the rates and Prices in South African Rand unless instructed otherwise as an additional condition in the Scope of work/ specification. The selected <i>conditions of contract</i> may provide for part payment in other currencies.  |
| <b>Alterations to documents</b> | 15 | Not make any alterations or an addition to the tender documents, except to comply with instructions issued by PRASA's <i>Representative</i> or if necessary to correct errors made by the <i>tenderer</i> . All such alterations shall be initialled by all signatories to the tender. Corrections may not be made using correction fluid, correction tape or the like.                              |
| <b>Alternative tenders</b>      | 16 | Submit alternative tenders only if a main tender, strictly in accordance with all the requirements of the <i>tender documents</i> is also submitted. The alternative tender is submitted with the main tender together with a schedule that compares the requirements of the <i>tender documents</i> with the alternative requirements the <i>tenderer</i> proposes.<br><b>(N/A for this tender)</b> |
|                                 | 17 | Accept that an alternative tender may be based only on the criteria stated in the Scope of work/ specification and as acceptable to PRASA.<br><b>(N/A for this tender)</b>   |
| <b>Submitting a tender</b>      | 18 | Submit a tender for providing the whole of the works, services or supply identified in the Contract Data unless stated otherwise as an additional condition in the Scope of work/ specification.   |

- NOTE:**
- 19 Return the completed and signed *PRASA Tender Forms and SBD forms provided with the tender. Failure to submit all the required documentation will lead to disqualification*
  - 20 Submit the tender as an original plus 1 copy and (2)two electronic version which must be contained in CDs or Memory Cards clearly marked volume 1 and volume 2 in the Bidders name as stated in the RFP and provide an English translation for documentation submitted in a language other than English. Tenders may not be written in pencil but must be completed in ink.
  - 21 Sign and initial the original and all copies of the tender where indicated. PRASA will hold the signatory duly authorised and liable on behalf of the *tenderer*.
  - 22 Seal the original and each copy of the tender as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside PRASA's address and invitation to tender number stated in the Scope of work/ specification, **as well as the tenderer's name and contact address**. Where the tender is based on a two envelop system tenderers must further indicate in the package whether the document is **envelope / box 1 or 2**.
  - 23 Seal original and copies together in an outer package that states on the outside only PRASA's address and invitation to tender number as stated in the Scope of work/ specification. The outer package must be marked "CONFIDENTIAL"

- 24 Accept that PRASA will not assume any responsibility for the misplacement or premature opening of the tender if the outer package is not sealed and marked as stated.

Note:

PRASA prefers not to receive tenders by post, and takes no responsibility for delays in the postal system or in transit within or between PRASA offices.

PRASA prefers not to receive tenders by fax, PRASA takes no responsibility for difficulties in transmission caused by line or equipment faults.

Where tenders are sent via courier, PRASA takes no responsibility for tenders delivered to any other site than the tender office.

PRASA employees are not permitted to deposit a tender into the PRASA tender box on behalf of a tenderer, except those lodged by post or courier.

- Closing time**
- 25 Ensure that PRASA has received the tender at the stated address with the Scope of work / specification no later than the *deadline for tender submission*. Proof of posting will not be taken by PRASA as proof of delivery. PRASA will not accept a tender submitted telephonically, by Fax, E-mail or by telegraph unless stated otherwise in the Scope of work/ specification.
- 26 Accept that, if PRASA extends the *deadline for tender submission* for any reason, the requirements of these Conditions of Tender apply equally to the extended deadline.

<b>Tender validity</b>	27	Hold the tender(s) valid for acceptance by PRASA at any time within the <i>validity period</i> after the <i>deadline for tender submission</i> .
	28	Extend the <i>validity period</i> for a specified additional period if PRASA requests the <i>tenderer</i> to extend it. A <i>tenderer</i> agreeing to the request will not be required or permitted to modify a tender, except to the extent PRASA may allow for the effects of inflation over the additional period.
<b>Clarification of tender after submission</b>	29	Provide clarification of a tender in response to a request to do so from PRASA's <i>Representative</i> during the evaluation of tenders. This may include providing a breakdown of rates or Prices. No change in the total of the Prices or substance of the tender is sought, offered, or permitted except as required by PRASA's <i>Representative</i> to confirm the correction of arithmetical errors discovered in the evaluation of tenders. The total of the Prices stated by the <i>tenderer</i> as corrected by PRASA's <i>Representative</i> with the concurrence of the <i>tenderer</i> , shall be binding upon the <i>tenderer</i> .
<b>Submit bonds, policies etc.</b>	30	If instructed by PRASA's <i>Representative</i> (before the formation of a contract), submit for PRASA's acceptance, the bonds, guarantees, policies and certificates of insurance required to be provided by the successful <i>tenderer</i> in terms of the <i>conditions of contract</i> .
	31	Undertake to check the final draft of the contract provided by PRASA's <i>Representative</i> , and sign the Form of Agreement all within the time required.



- 32 Where an agent on behalf of a principal submits a tender, an authenticated copy of the authority to act as an agent must be submitted with the tender.

**Fulfil BEE requirements** 33 Comply with PRASA's requirements regarding BBEE Suppliers.

#### PRASA'S UNDERTAKINGS

PRASA, and PRASA's *Representative*, shall:

- Respond to clarification** 1 Respond to a request for clarification received earlier than the *closing time for clarification of queries*. The response is notified to all *tenderers*.
- Issue Addenda** 2 If necessary, issue to each *tenderer* from time to time during the period from the date of the Letter of Invitation until the *closing time for clarification of queries*, Addenda that may amend, amplify, or add to the *tender documents*. If a *tenderer* applies for an extension to the *deadline for tender submission*, in order to take Addenda into account in preparing a tender, PRASA may grant such an extension and PRASA's *Representative* shall notify the extension to all *tenderers*.
- Return late tenders** 3 Return tenders received after the *deadline for tender submission* unopened to the *tenderer* submitting a late tender. Tenders will be deemed late if they are not in the designated tender box at the date and time stipulated as the deadline for tender submission.
- Non-disclosure** 4 Not disclose to *tenderers*, or to any other person not officially concerned with such processes, information relating to the

evaluation and comparison of tenders and recommendations for the award of a contract.

<b>Grounds for rejection</b>	5	Consider rejecting a tender if there is any effort by a <i>tenderer</i> to influence the processing of tenders or contract award.
<b>Disqualification</b>	6	Instantly disqualify a <i>tenderer</i> (and his tender) if it is established that the <i>tenderer</i> offered an inducement to any person with a view to influencing the placing of a contract arising from this invitation to tender.
<b>Test for responsiveness</b>	7	Determine before detailed evaluation, whether each tender properly received <ul style="list-style-type: none"> <li>• meets the requirements of these Conditions of Tender,</li> <li>• has been properly signed, and</li> <li>• is responsive to the requirements of the <i>tender documents</i>.</li> </ul>
	8	Judge a responsive tender as one which conforms to all the terms, conditions, and specifications of the <i>tender documents</i> without material deviation or qualification. A material deviation or qualification is one which, in PRASA 's opinion would <ul style="list-style-type: none"> <li>• detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Contract Data,</li> <li>• change PRASA's or the <i>tenderer's</i> risks and responsibilities under the contract, or</li> <li>• affect the competitive position of other <i>tenderers</i> presenting responsive tenders, if it were to be rectified.</li> </ul>
<b>Non-responsive tenders</b>	10	Reject a non-responsive tender, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

<b>Arithmetical errors</b>	11	<p>Check responsive tenders for arithmetical errors, correcting them as follows:</p> <ul style="list-style-type: none"> <li>Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.</li> <li>If a bill of quantities applies and there is a discrepancy between the rate and the line item total, resulting from multiplying the rate by the quantity, the rate as quoted shall govern. Where there is an obviously gross misplacement of the decimal point in the rate, the line item total as quoted shall govern, and the rate will be corrected.</li> <li>Where there is an error in the total of the Prices, either as a result of other corrections required by this checking process or in the <i>tenderer's</i> addition of prices, the total of the Prices, if any, will be corrected.</li> </ul>
	12	<p>Reject a tender if the <i>tenderer</i> does not accept the corrected total of the Prices (if any).</p>
<b>Evaluating the tender</b>	13	<p>Evaluate responsive tenders in accordance with the procedure stated in the RFP / Scope of work/ specification. The evaluated tender price will be disclosed only to the relevant PRASA tender committee and will not be disclosed to <i>tenderers</i> or any other person.</p>
<b>Clarification of tender</b>	14	<p>Obtain from a <i>tenderer</i> clarification of any matter in the tender which may not be clear or could give rise to ambiguity in a contract arising from this tender if the matter were not to be clarified.</p>
<b>Acceptance of tender</b>	15	<p>Notify PRASA's acceptance to the successful <i>tenderer</i> before the expiry of the <i>validity period</i>, or agreed additional period. Providing the notice of acceptance does not contain any qualifying</p>

statements, it will constitute the formation of a contract between PRASA and the successful *tenderer*.

<b>Notice to unsuccessful tenderers</b>	16	After the successful <i>tenderer</i> has acknowledged PRASA's notice of acceptance, notify other <i>tenderers</i> that their tenders have not been accepted, following PRASA's current procedures.
<b>Prepare contract documents</b>	17	Revise the contract documents issued by PRASA as part of the <i>tender documents</i> to take account of <ul style="list-style-type: none"> <li>• Addenda issued during the tender period,</li> <li>• inclusion of some of the <i>tender returnables</i>, and</li> <li>• other revisions agreed between PRASA and the successful <i>tenderer</i>, before the issue of PRASA's notice of acceptance (of the tender).</li> </ul>
<b>Issue final contract</b>	18	Issue the final contract documents to the successful <i>tenderer</i> for acceptance within one week of the date of PRASA's notice of acceptance.
<b>Sign Form of Agreement</b>	19	Arrange for authorised signatories of both parties to complete and sign the original and one copy of the Form of Agreement within two weeks of the date of PRASA's notice of acceptance of the tender. If either party requires the signatories to initial every page of the contract documents, the signatories for the other party shall comply with the request.
<b>Provide copies of the contracts</b>	20	Provide to the successful tenderer the number of copies stated in the Scope of work/ specification of the signed copy of the contracts within three weeks of the date of PRASA's acceptance of the tender.

**REQUEST FOR PROPOSAL: APPOINTMENT OF A TURNKEY  
CONTRACTOR FOR CONSTRUCTION OF BENROSE ROLLING STOCK  
DEPOT AND YARD**

**TENDER NUMBER: HO/PT/DMP/212/07/2022**



#### **SECTION 4: PRICING SCHEDULE**

REFER TO FORM C