



public works
& infrastructure
Department
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS.

TENDER NO: **NST23/005**

TENDER DOCUMENT

MARCH 2023

NATIONAL DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

Nelspruit Regional Office

30 Brown Street

NEDBANK BUILDING 9TH Floor

NELSPRUIT

1200

NAME OF TENDERER.....

BID AMOUNT.....

PA 32: INVITATION TO BID PART A

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	NST23/005	CLOSING DATE:	03/04/2023	CLOSING TIME:	11:00
DESCRIPTION	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS.				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (DPW04.1 GS or DPW04.2 GS).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
Nedbank Building, 9th floor. 30 Brown Street					
Mbombela, 120					
OR POSTED TO:					
Private Bag X1180					
Mbombela 120					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
		TCS PIN:		OR	CSD No:
SIGNATURE OF BIDDER				DATE	
CAPACITY UNDER WHICH THIS BID IS SIGNED (Attach proof of authority to sign this bid; e.g. resolution of directors, etc.)					

TOTAL NUMBER OF ITEMS OFFERED		TOTAL BID PRICE (1 ALL APPLICABLE TAXES)	R
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		TECHNICAL INFORMATION MAY BE DIRECTED TO:	
DEPARTMENT/ PUBLIC ENTITY		CONTACT PERSON	
CONTACT PERSON		TELEPHONE NUMBER	
TELEPHONE NUMBER		FACSIMILE NUMBER	
FACSIMILE NUMBER		E-MAIL ADDRESS	
E-MAIL ADDRESS			

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR ONLINE
1.3. BIDDERS MUST REGISTER ON THE CENTRAL SUPPLIER DATABASE (CSD) TO UPLOAD MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS; AND BANKING INFORMATION FOR VERIFICATION PURPOSES).
1.4. WHERE A BIDDER IS NOT REGISTERED ON THE CSD, MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS MAY NOT BE SUBMITTED WITH THE BID

PA-32: Invitation to Bid

DOCUMENTATION.

- 1.5. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT 2000 AND THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER LEGISLATION OR SPECIAL CONDITIONS OF CONTRACT.

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE PROOF OF TCS / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

- 3.1. IS THE BIDDER A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? ☐ YES ☐ NO
- 3.2. DOES THE BIDDER HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO
- 3.3. DOES THE BIDDER HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO
- 3.4. DOES THE BIDDER HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN, IT IS NOT A REQUIREMENT TO OBTAIN A TAX COMPLIANCE STATUS / TAX COMPLIANCE SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.

NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

Note Well:

- a) In respect of non VAT vendors the bidders may not increase the bid price under Section 67(1) of the Value Added Tax Act of 1991 where the relevant transaction would become subject to VAT by reason of the turnover threshold being exceeded and the bidder becomes liable for VAT.
- b) **All delivery costs must be included in the bid price, for delivery at the prescribed destination.**
- c) The price that appears on this form is the one that will be considered for acceptance as **a firm and final offer**.
- d) The grand total in the pricing schedule(s), inclusive of VAT, attached to the bid offer must correlate and be transferred to this form (PA32).
- e) Where there are inconsistencies between the grand total price offer in the pricing schedule(s) and the PA32 price offer, the price offer on the PA32 shall prevail and deemed to be firm and final. No further correspondence shall be entered into in this regard.

¹ All applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies

PA-04 (EC): NOTICE AND INVITATION TO TENDER

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES TENDERS FOR:

Project title:	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS.
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Tender no:	NST23/005	Reference no:	
Advertising date:	10/03/2023	Closing date:	03/04/2023
Closing time:	11:00	Validity period:	84 Calendar days

1. REQUIRED CIDB GRADING

It is estimated that tenderers should have a CIDB contractor grading designation of **3 ME** or **select tender value range select class of construction works*** or higher.

** Delete "or select tender value range select class of construction works" where only one class of construction works is applicable*

It is estimated that potentially emerging enterprises should have a CIDB contractor grading designation of **2 ME PE** or **select tender value range select class of construction works PE*** or higher.

** Delete "or select tender value range select class of construction works PE" where only one class of construction works is applicable*

2. RESPONSIVENESS CRITERIA

2.1 Substantive responsiveness criteria

Only tenderers who are responsive to the following substantive responsiveness criteria are eligible to submit tenders. Failure to comply with the criteria stated hereunder shall result in the tender offer being disqualified from further consideration:

1	☒	Only those tenderers who satisfy the eligibility criteria stated in the Tender Data may submit tenders.
2	☒	Tender offer must be properly received on the tender closing date and time specified on the invitation, fully completed either electronically (if issued in electronic format), or by writing legibly in non-erasable ink. (All as per Standard Conditions of Tender).
3	☒	Use of correction fluid is prohibited.
4	☒	Submission of (DPW-07 EC): Form of Offer and Acceptance.
5	☐	Submission of (PA – 36 and Annexure/s C): Declaration Certificate for Local Production and Content for designated sectors.
6	☒	Submission of DPW-09 (EC): Particulars of Tenderer's Projects.
7	☐	Submission of DPW-16 (EC): Site Inspection Meeting Certificate
8	☐	Submission of record of attending compulsory virtual bid clarification / site inspection meeting.
9	☒	Submission of DPW-21 (EC): Record of Addenda to tender documents
10	☐	The tenderer shall submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts) together with his tender.

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11	☐	The tenderer shall submit his fully priced and completed sectional summary- and final summary pages with the tender.
12	☐	Submission of (PA-16): Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022
13	☐	All parts of tender documents submitted must be fully completed in ink and signed where required
14	☒	Contractor to submit an originally certified certificate of Boiler Operators x3 and Boiler Supervision x1. The certificates should be on the company name, or one of the directors of the company or employee of the company. Attach CV should the certificates be registered under the employee
15	☐	

2.2 Administrative responsiveness criteria

The Employer reserves the right to request further information regarding the undermentioned criteria. Failing to submit further clarification and/or documentation within seven (7) calendar days from request or as specifically indicated, will disqualify the tender offer from further consideration.

1	☒	Any correction to be initialled by the person authorised to sign the tender documentation as per PA 15.1 or PA 15.2 resolution of board/s of directors / or PA15.3 Special Resolution of Consortia or JV's .
2	☒	Submission of applicable (PA-15.1, PA-15.2, PA-15.3): Resolution by the legal entity, or consortium / joint venture, authorising a dedicated person(s) to sign documents on behalf of the firm / consortium / joint venture.
3	☒	Submission of (PA-09 (EC)): List of Returnable Documents
3	☒	Submission of (PA-11): Bidder's disclosure.
4	☒	Submission of (PA 40): Declaration of Designated Groups for Preferential Procurement.
5	☒	Submission of proof of Registration on National Treasury's Central Supplier Database (CSD).
6	☐	Submission of DPW-15 (EC): Schedule of proposed sub-contractors
7	☐	The tenderer shall submit his fully priced Bills of Quantities (complete document inclusive of all parts) within 14 days from request.
8	☒	Upon request, submission of fingerprints obtainable from local SAPS including any other additional documentation and information required for vetting purposes.
9	☐	Upon request, submission of a fully completed security clearance application form with supporting documentation and information as required. The security clearance form will be provided by the Employer for projects requiring a security clearance.
10	☒	Bidder to submit company safety file. Contractor to submit letter of good standing (COIDA) for Mechanical, from Department of Labour
11	☒	Submission of (PA-16): Preference Points Claim Form in terms of Preferential Procurements Regulations 2022

3. Method to be used to calculate points for specific goals

<u>For procurement transaction with rand value greater than R2 000, 00 and up to R1 Million (Inclusive of all applicable taxes) the specific goals listed below are applicable.</u>		
☒	An EME or QSE which is at least 51% owned by black people	10 Points
	An EME or QSE which is at least 51% owned by women	4 Points
	An EME or QSE which is at least 51% owned by people with disabilities	2 Points
	An EME or QSE which is at least 51% owned by youth	2 Points

Any reference to words "Bid" or Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Tender" or "Tenderer".

	Located in a specific Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2 Points
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	<u>For procurement transaction with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals listed below are applicable.</u> ☐ An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI) 10 Points ☐ An EME or QSE which is at least 51% owned by women 4 Points ☐ An EME or QSE which is at least 51% owned by people with disabilities 2 Points ☐ An EME or QSE which is at least 51% owned by youth 2 Points ☐ Located in a specific Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area 2 Points
	<u>For procurement transaction with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals listed below are applicable.</u> ☐ An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI) 4 Points ☐ An EME or QSE which is at least 51% owned by women 2 Points ☐ An EME or QSE which is at least 51% owned by people with disabilities 2 Points ☐ Located in a specific Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area 2 Points ☐ An EME or QSE which is at least 51% owned by youth Or ☐ An EME or QSE which is at least 51% owned by people with disabilities (The use of this goal is mandatory however the BSC must select either one of the two and not both)

4. Functionality criteria:

Note: All bids involving the acquisition of engineering and construction works from cidb Grade 4 and above are subjected to functionality.

Note: Functionality will be applied as a prequalification criterion. Such criteria are used to establish minimum requirements where after bids will be evaluated solely on the basis of price and preference.

Functionality criteria:	Weighting factor:
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1. QUALIFICATION- The contractor must provide trade test original certified copies certificates for 1xMillwright, 1x Electrician and 1x Fitter and Turner 3 trades(1x millwright, 1xelectrician and 1x Fitter) or more=5 2 trades (any of 1xmillwright, 1xelectrician, 1xfitter)= 3 1 certificates (any of 1xmillwright, 1x electrician, 1x fitter) =1 0 trade=0	25
2. EXPERIENCE Current Projects Contractor to provide appointment letters/orders of Steam Generation related projects. Completed Projects Contractor to provide appointment and completion certificate of Steam Generation related projects. Ensure completion of the project on DPW 09(EC) in the Tender Document. 5 Projects and above=5 4 Projects=4 3 Projects=3 2 Projects= 2 1 Project =1 0 Project =0	20
3. FINANCIAL CREDIBILITY-Contractor must provide bank rating letter from the banking institution to justify credit risk in the company's name: Grade A=5 Grade B=4 Grade C=3 Grade D=2 Grade E/bank confirmation=1	20
LOCALITY The bidder to submit proof of residence, it can be lease agreement between the company and landlord, utility bill of the company or one of the directors, letter from local/tribal authority Ehlanzeni District=5 Gert Sibande and Nkangala district=3 Outside Mpumalanga Province=1 No proof=0	35
Total	100 Points

(Weights for functionality must add up to 100. Weightings will be multiplied by the scores allocated during the evaluation process to arrive at the total functionality points)

Minimum functionality score to qualify for further evaluation:	70
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(Total minimum qualifying score for functionality is 50 Percent, any deviation below or above the 50 Percent, provide motivation below)

5. BID EVALUATION METHOD

This bid will be evaluated according to the preferential procurement model in the PPPFA: (Tick applicable preference point scoring system)

☒ 80/20 Preference points scoring system	☐ 90/10 Preference points scoring system	☐ Either 80/20 or 90/10 Preference points scoring system
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In case where below/above R 50 000 000 is selected, the lowest acceptable tender will be used to determine the applicable preference point system.

6. ELIGIBILITY IN RESPECT OF RISK TO THE EMPLOYER:

Standard risk management assessment criteria in respect of tenders received for routine projects in the engineering and construction works environments:

Tender offers will be evaluated by an Evaluation Committee based on the technical and commercial risk criteria listed hereunder. Each criterion carries the same weight / importance and will be evaluated individually based on reports presented to the Bid Evaluation Committee by the Professional Team appointed on the project. A tender offer will be declared non-responsive and removed from any further evaluation if any one criterion is found to present an unacceptable risk to the Employer.

In order for the evaluation reports to be prepared by the Professional Team, the Tenderer is obliged to provide comprehensive information on form DPW-09 (EC). Failure to complete the said form will cause the tender to be declared non-responsive and removed from any further consideration. The Employer reserves the right to request additional information over and above that which is provided by the Tenderer on said form. The information must be provided by the Tenderer within the stipulated time as determined by the Bid Evaluation Committee, failing which the tender offer will *mutatis mutandis* be declared non-responsive.

6.1 Technical risks:

Criterion 1: Experience on comparable projects during the past specify period between 5 and 10 years.

The tendering Service Provider's experience on comparable projects during the past specify period between 5 and 10 years. The number of current and previous comparable projects performed by the Tenderer as per the evaluation report prepared by the Consultant Team, based on its research and inspection of a representative sample of the Tenderer's current and previous work as reflected on form DPW-09 (EC), as well as, if necessary, of any additional work executed by the Tenderer, not reflected on form DPW-09 (EC). Failing to provide contactable references will result in the tender offer will be *mutatis mutandis* declared non-responsive.

Aspects to be regarded as "comparable" includes (but may be extended according to circumstances): size of projects (measured against monetary value or other project quantifying parameters), nature of projects (building, engineering, high/low rise, etc.), locality/area of execution (site-specific influences, knowledge of local conditions, etc.), complexity of project, projects for similar client department irrespective of end purpose of buildings/facilities created or in progress of being created and time scales of projects (normal, fast track, etc.) and stage of its/their development.

Criterion 2: Contractual commitment and quality of performance on comparable projects during the past specify period between 5 and 10 years.

Adherence to contractual commitments and quality of performance of comparable current and previous projects performed by the Tenderer during the past specify period between 5 and 10 years as per the evaluation report prepared by the Consultant Team, based on its research and inspection of a representative sample of the Tenderer's current and previous work as reflected on form DPW-09 (EC), as well as, if necessary, of any additional work executed by the Tenderer, not reflected on form DPW-09 (EC). Failing to provide contactable references will result in the tender offer be *mutatis mutandis* declared non-responsive.

Aspects to be considered include, but are not limited to the following:

1. The level of progress on current projects in relation to the project programme or, if such is not available/applicable, to the contractual construction period in general;
2. The degree to which previous projects have been completed within the contractual completion periods and/or extensions thereto, and the extend of penalties imposed;
3. Project performance: time management & programming of works, timeous ordering of materials and appointment of subcontractors;
4. Financial management: payment to suppliers and cash flow problems;
5. Quality of workmanship: extent of reworks and timeous attention to remedial works;
6. Personnel resources: suitably qualified and experienced, turnover in site staff and labour force, specifically site manager and foreman;
7. Personnel management: extent of labour disputes and ability to resolving labour disputes amicably;
8. Sub-contractors: extent of turnover in subcontractors, general liaison and payment problems experienced;
9. Contract administration: contractual aspects such as complying to laws and regulations, insurances, security, submission of required documentation timeously, reaction to written contract instructions, appointments of subcontractors, etc. as can generally be expected in standard/normal conditions of contract.
10. Health & Safety: adherence to regulations and compliance, and number of transgressions & serious incidents.
11. Plant & equipment: sufficient resources on site and in time.
12. Delays: extent of causing delays, submission of claims timeously, and abuse of or exaggerated delay claims.
13. Final account: extent to which the contractor assisted in finalising the final account.

Criterion 3: Suitably qualified and appropriately experienced human resources

Allocation of suitably qualified and appropriately experienced human resources, both in respect of principals and/or other staff (contract manager, site agent, site foreman including other professional, technical and/or administrative) of the tendering Service Provider to the project, as proof that the tendering Service Provider will be able to react/respond appropriately to the Services required herein. The Company Organogram with CV's and certified ID's of all principals and employed workforce as well as proof of Professional Registration will be verified. Current and future workload of the tenderer in relation to capacity and capability will also be considered. The tenderer should demonstrate that he or she possesses the necessary professional and technical qualifications and -competence in relation to the scope of work and work to be undertaken.

Criterion 4: Attendance of compulsory bid clarification meeting, if applicable

If applicable, submission of confirmation of DPW-16.1 (PSB) attendance of compulsory bid clarification meeting or proof of attending the compulsory virtual meeting by a suitably qualified and experienced representative of the tenderer in terms of PA-04 (EC): Notice and Invitation to Tender.

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6.2 Commercial risks:

The financial viability assessment evaluates the risk over the life of the construction period, as to whether the tenderer will be able to deliver the goods and services which are specified in the contract and / or be able to fulfil guarantees or warranties provided for in the contract in order to complete the project successfully for the amount tendered.

Aspects to be considered include but are not limited to, the respective rates tendered, bank rating, financial capability and capacity whether the tenderer has or has access to sufficient financial resources to deliver the goods or services described in the tender documentation (including fulfilling any guarantees or warranty claims), whether the tenderer is not subject to any current or impending legal action (either formal proceedings or notification of legal action) which could impact on the financial standing of the tenderer or the delivery of the goods or services, financial report from auditors as proof of current liquidity, and company or any parent company or investor guarantee/s and financial statements.

7. CONTRACT PARTICIPATION GOAL TARGETS AND CIDB B.U.I.L.D. PROGRAMME

The contractor shall achieve in the performance of the contract the following Contract Participation Goals (CPGs) as described in PG-01.2 (EC): Scope of Work and PG-02.2 (EC): Pricing Assumptions and in accordance with the feasibility study, which forms part of the specifications in the CPG Section of the Specification of this contract.

(a)	Minimum Targeted Local Manufacturers of Material Contract Participation Goal, in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Select
(b)	Minimum Targeted Local Building Material Suppliers Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Select
(c)	Minimum Targeted Local Labour Skills Development Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Select
(d)	cidb BUILD Programme: Minimum Targeted Enterprise Development Contract Participation Goal in accordance with the cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Select
(e)	cidb BUILD Programme: Minimum Targeted Contract Skills Development Goal in accordance with the cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 43495 of 3 July 2020, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Select

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(f)	DPWI National Youth Service training and development programme (NYS) – Condition of Contract.	Select
(g)	Labour Intensive Works – Condition of Contract.	Select
(h)		Select
(i)		Select

8. COLLECTION OF TENDER DOCUMENTS

- ☒ Bid documents are available for free download on e-Tender portal www.etenders.gov.za
- ☒ Alternatively; Bid documents may be collected during working hours at the following address 30 Brown Street. A non-refundable bid deposit of R 200 is payable (cash only) on collection of the bid documents.

9. SITE INSPECTION MEETING

A pre-tender site inspection meeting will **be** held in respect of this tender.
 Attendance of said pre- tender site inspection meeting is **compulsory**

The particulars for said pre- tender site inspection meeting or virtual bid clarification / site inspection meeting. are:

Venue:	ZOOM		
Virtual meeting link:	TO BE PROVIDED		
Date:	20/03/2023	Starting time:	10:00

10. ENQUIRIES

Enquiries related to tender documents may be addressed to:

DPWI Project Manager:	SIYABONGA KHUMALO	Telephone no:	0131010130
Cellular phone no:	082 085 0697	Fax no:	n/a
E-mail:	Siyabonga.Khumalo@dpw.gov.za		

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11. DEPOSIT / RETURN OF TENDER DOCUMENTS

Telegraphic, telephonic, telex, facsimile, electronic and / or late tenders will not be accepted.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

All tenders must be completed in non-erasable ink and submitted on the official forms – (forms not to be re-typed).

Tender documents may be posted to: The Director-General Department of Public Works and Infrastructure Private Bag X 11280 Mbombela 1200 Attention: Procurement section: Room 9th Floor	OR	Deposited in the tender box at: 30 Brown Street Mbombela Nedbank Building 9th Floor Security Foyer
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12. COMPILED BY:

Name of Project Manager	Signature	Date

PA-09 (EC): LIST OF RETURNABLE DOCUMENTS

Project title:	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS.		
Tender / Quote no:	NST23/005	Reference no:	
Receipt Number:			

1. RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: Failure to submit the applicable documents will result in the tender offer being disqualified from further consideration.

Tender document name	Number of pages issued	Returnable document
Form of Offer and Acceptance (DPW-07 EC)	4 Pages	Yes
Declaration of Interest and Tenderer's Past Supply Chain Management Practices (PA-11)	4 Pages	Yes
Resolution of Board of Directors (PA-15.1) <i>(if applicable)</i>	1 Page	Yes
Resolution of Board of Directors to enter into Consortia or JV's (PA-15.2) <i>(if applicable)</i>	2 Pages	Yes
Special Resolution of Consortia or JV's (PA-15.3) <i>(if applicable)</i>	3 Pages	Yes
Preference points claim form in terms of the Preferential Procurement Regulations 2017 (PA – 16)	5 Pages	Yes
Certificate of independent Bid Determination (PA - 29)	4 Pages	Yes
Declaration Certificate for Local Production and Content for designated sectors (PA – 36 and Annexure/s C)		Yes
Fully completed Declaration of Designated Groups for Preferential Procurement (PA 40)	2 Pages	Yes
Registration on National Treasury's Central Supplier Database (CSD).	-	Yes
Particulars of Tenderer's Projects (DPW-09 EC)	2 Pages	Yes
Site Inspection Meeting Certificate (DPW-16 EC) <i>(if applicable)</i> .	1 Page	
Record of attending compulsory virtual bid clarification / site inspection meeting <i>(if applicable)</i> .	1 Page	
Record of Addenda to tender documents (DPW-21 EC)	1 Page	Yes
Site Inspection Meeting Certificate (DPW-16 EC) <i>(if applicable)</i>	1 Page	
Proof of 30% Subcontracting participation and related documents in terms of the Preferential Procurement Regulations 2017 <i>(if applicable)</i> .		

* In compliance with the requirements of the CIDB SFU Annexure G

Tender no: **NST23/005**

2. ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: Failure to submit the applicable documents will result in the Tenderer having to submit same upon request within a stipulated time and if not complied with, will result in the tender offer being disqualified from further consideration. [See also C.2.18 of the Standard Conditions of Tender]

Tender document name	Number of pages issued	Returnable document
Any <u>additional</u> information required to complete a risk assessment (<i>if applicable</i>)	-	Yes

3. RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

Note: Failure to submit the applicable documents will result in the Tenderer having to submit same upon request within a stipulated time and if not complied with, will result in the tender offer being disqualified from further consideration. [See also C.2.18 of the Standard Conditions of Tender]

Tender document name	Number of pages issued	Returnable document
Schedule of proposed sub-contractors (DPW-15 EC) (<i>if applicable</i>)	1 Page	Yes
Particulars of Electrical Contractor (DPW-22 EC) (<i>if applicable</i>)	1 Page	Yes
Mechanical / Electrical / Security Work material and equipment schedules (<i>if applicable</i>)	Pages	Yes
Schedule for Imported Materials and Equipment (DPW-23 EC) (<i>if applicable</i>)	1 Page	Yes

4. OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

(Insert a tick in the "Returnable document" column to indicate which documents must be returned with the tender)

Note: Failure to submit the applicable documents will result in the tender offer being disqualified from further consideration.

Tender document name	Number of pages issued	Returnable document
Priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts)	Pages	☐ Yes ☐ No
Fully priced and completed sectional summary- and final summary pages with the tender.	Pages	☐ Yes ☐ No
<i>insert document name</i>	Pages	☐ Yes ☐ No
<i>insert document name</i>	Pages	☐ Yes ☐ No
<i>insert document name</i>	Pages	☐ Yes ☐ No

Tender no: NST23/005

5. ADDITIONAL INFORMATION THAT MAY BE REQUIRED FOR TENDER EVALUATION PURPOSES

Legal Status of Tendering Entity: If the Tendering Entity is:	Documentation to be submitted with the tender, or which may be required during the tender evaluation:
a. A close corporation, incorporated prior to 1 May 2011 under the Close Corporations Act, 1984 (Act 69 of 1984, as amended)	Copies of the Founding Statement – CK1
b. A profit company duly registered as a private company. [including a profit company that meets the criteria for a private company, whose Memorandum of Incorporation states that the company is a personal liability company in terms of Section 8(2)(c) of the Companies Act, 2008 (Act 71 of 2008, as amended)].	Copies of: i. Certificate of Incorporation – CM1; ii. Shareholding Certificates of all Shareholders of the company, plus a signed statement of the company's Auditor, certifying each Shareholder's ownership / shareholding percentage relative to the total; and/or iii. Memorandum of Incorporation in the case of a personal liability company.
c. A profit company duly registered as a private company in which any, or all, shares are held by one or more other close corporation(s) or company(ies) duly registered as profit or non-profit company(ies).	Copies of documents referred to in a. and/or b. above in respect of all such close corporation(s) and/or company(ies).
d. A profit company duly registered as a public company.	Copy of Certificate of Incorporation – CM1, and a signed statement of the company's Secretary or Auditor confirming that the company is a public company.
e. A non-profit company, incorporated in terms of Section 10 and Schedule 1 of the Companies Act, 2008 (Act 71 of 2008, as amended).	Copies of: i the Founding Statement – CK1; and ii the Memorandum of Incorporation setting out the object of the company, indicating the public benefit, cultural or social activity, or communal or group interest.
f. A natural person, sole proprietor or a Partnership	Copy(ies) of the Identity Document(s) of: i. such natural person/ sole proprietor, or each of the Partners to the Partnership.
g. A Trust	Deed of Trust duly indicating names of the Trustee(s) and Beneficiary (ies) as well as the purpose of the Trust and the mandate of the Trustees.

Signed by the Tenderer:

Name of representative	Signature	Date

DPW-09 (EC): PARTICULARS OF TENDERER'S PROJECTS

Project title:	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS			
Tender / quotation no:	NST23/005	Closing date:	30/03/2023	
Advertising date:	10/03/2023	Validity period:	84 days	

1. PARTICULARS OF THE TENDERER'S CURRENT AND PREVIOUS COMMITMENTS

1.1. Current projects

Projects currently engaged in	Name of Employer or Representative of Employer	Contact tel. no.	Contract sum	Contractual commence-ment date	Contractual completion date	Current percentage progress
1						
2						
3						
4						
5						
6						
7						
8						

Tender no: **NST23/005**

1.2. Completed projects

Projects completed in the previous 5 (five) years	Name of Employer or Representative of Employer	Contact tel. no.	Contract sum	Contractual commencement date	Contractual completion date	Date of Certificate of Practical Completion
1						
2						
3						
4						
5						
6						
7						
8						
9						

Name of Tenderer	Signature
	Date

PA-11: DECLARATION OF INTEREST AND BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

Failure to complete this form in full and signed by the duly authorized person, as indicated on PA-15.1 or PA-15.3, shall render the tender non-responsive and will be removed from any and all further contention.

Project title:	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS		
Bid no:	NST23/005	Reference no:	

The following particulars must be furnished. In the case of a joint venture, separate declarations in respect of each partner must be completed and submitted.

1. CIDB REGISTRATION NUMBER (if applicable)

--

2. Any legal person, including persons employed by the State¹; or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest, where:

- The bidder is employed by the state; and/or
- The legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Full Name of bidder or his or her representative:

3.2 Identity number:.....

3.3 Position occupied in the Company (director, trustees, shareholder² ect

3.4 Company Registration Number:

3.5 Tax Reference umber:.....

3.6 VAT Registration Number:

3.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below.

Declaration of interest and bidder's past Supply Chain Management practices: PA-11

¹ "State" means –

- (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

² "Shareholder" means –

- (a) a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercise control over the enterprise

3.7 Are you or any person connected with the bidder presently employed by the state?

☐ YES ☐ NO

3.7.1 If so, furnish the following particulars:

Name of person / director /trustees/shareholder/ member:.....

Name of state institution at which you or the person is connected to the bidder is employed

Position occupied in the state institution:.....

Any other particulars:

.....
.....

3.8 Did you or your spouse, or any of the company's directors / trustees/shareholders / members or their spouses conduct business with the state in the previous twelve months?

☐ YES ☐ NO

3.8.1 If so, furnish particulars:.....
.....

3.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid?

☐ YES ☐ NO

3.9.1 If so, furnish particulars.

.....
.....

3.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between the bidder and any person employed by the state who may be involved with the

Declaration of interest and bidder's past Supply Chain Management practices: PA-11

evaluation and or adjudication of this bid?

☐ YES ☐ NO

3.10.1 If so, furnish particulars.

.....
.....

3.11 Do you or any of the directors /trustees/shareholders/ members of the company have any interest in any other related companies whether or not they are bidding for this contract?

☐ YES ☐ NO

3.11.1 If so, furnish particulars:

.....
.....

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	Personal Tax Reference Number	State Employee Number / Persal Number

5. DECLARATION OF TENDERER / BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

5.1	Is the tenderer / bidder or any of its directors listed on the National Treasury's database as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the audi alteram partem rule was applied).	☐ Yes	☐ No
5.2	If so, furnish particulars:		

5.3	Is the tenderer / bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445.	☐ Yes	☐ No
5.4	If so, furnish particulars:		
5.5	Was the tenderer / bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	☐ Yes	☐ No
5.6	If so, furnish particulars:		
5.7	Was any contract between the tenderer / bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	☐ Yes	☐ No
5.8	If so, furnish particulars:		

6. CERTIFICATION

I the undersigned (full name) _____ certify that the information furnished on this declaration form is true and correct.

I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

Name of Tenderer / bidder	Signature	Date	Position

This form has been aligned with SBD4 and SBD 8

PA- 29: CERTIFICATION OF INDEPENDENT BID DETERMINATION

Project title:	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS.		
Bid no:	NST23/005	Reference no:	

INTRODUCTION

1. This PA-29 [Certificate of Independent Bid Determination] must form part of all bids¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
3. Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
4. This form (PA-29) serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (PA-29) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate.
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect.
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder.
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder.
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.

PA-29: Certification of Independent Bid Determination

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Name of Bidder	Signature	Date	Position

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

DPW-07 (EC): FORM OF OFFER AND ACCEPTANCE

Project title:	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS.		
Tender no:	NST23/005	Reference no:	

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **Operation and Maintenance of Boilers for 12 Months.**

The Tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE TOTAL OFFER INCLUSIVE OF ALL APPLICABLE TAXES (All applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies) **IS:**

Rand (in words):	
Rand in figures:	R

The award of the tender may be subjected to further price negotiation with the preferred tenderer(s). The negotiated and agreed price will be considered for acceptance as **a firm and final offer**.

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the tender data, whereupon the Tenderer becomes the party named as the Contractor in the conditions of contract identified in the contract data.

THIS OFFER IS MADE BY THE FOLLOWING LEGAL ENTITY: (cross out block which is not applicable)

Company or Close Corporation: And: Whose Registration Number is: And: Whose Income Tax Reference Number is: CSD supplier number:.....	OR	Natural Person or Partnership: Whose Identity Number(s) is/are: Whose Income Tax Reference Number is/are: CSD supplier number:.....
--	----	--

AND WHO IS (if applicable):

Trading under the name and style of:
--

*Any reference to words "Bid" or "Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Tender" or "Tenderer".

**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"

Tender no: **NST23/005**

AND WHO IS:

Represented herein, and who is duly authorised to do so, by: Mr/Mrs/Ms: In his/her capacity as:	Note: A Resolution / Power of Attorney, signed by all the Directors / Members / Partners of the Legal Entity must accompany this Offer, authorising the Representative to make this offer.
---	---

SIGNED FOR THE TENDERER:

Name of representative	Signature	Date

WITNESSED BY:

Name of witness	Signature	Date

This Offer is in respect of: (Please indicate with an "X" in the appropriate block)

- The official documents ☐
 The official alternative ☐
 Own alternative (only if documentation makes provision therefore) ☐

(N.B.: Separate Offer and Acceptance forms are to be completed for the main and for each alternative offer)

SECURITY OFFERED:

- (a) the Tenderer accepts that in respect of contracts up to R1 million, a payment reduction** of 5% of the contract value (excluding VAT) will be applicable and will be deducted by the Employer in terms of the applicable conditions of contract
- (b) in respect of contracts above R1 million, the Tenderer offers to provide security as indicated below:
- | | |
|--|--|
| (1) cash deposit of 10 % of the Contract Sum (excluding VAT) | Yes ☐ No ☐ |
| (2) variable construction guarantee of 10 % of the Contract Sum (excluding VAT) | Yes ☐ No ☐ |
| (3) payment reduction of 10% of the value certified in the payment certificate (excluding VAT) | Yes ☐ No ☐ |
| (4) cash deposit of 5% of the Contract Sum (excluding VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding VAT) | Yes ☐ No ☐ |
| (5) fixed construction guarantee of 5% of the Contract Sum (excluding VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding VAT) | Yes ☐ No ☐ |

NB. Guarantees submitted must be issued by either an insurance company duly registered in terms of the Insurance Act [Long-Term Insurance Act, 1998 (Act 52 of 1998) or Short-Term Insurance Act, 1998 (Act 35 of 1998)] or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the pro-forma referred to above. No alterations or amendments of the wording of the pro-forma will be accepted.

The Tenderer elects as its *domicilium citandi et executandi* in the Republic of South Africa, where any and all legal notices may be served, as (physical address):

.....

*Any reference to words "Bid" or "Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Tender" or "Tenderer".

**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"

Tender no: NST23/005

Other Contact Details of the Tenderer are:

Telephone No. Cellular Phone No.

Fax No.

Postal address

Banker Branch.....

Registration No of Tenderer at Department of Labour

CIDB Registration Number:

ACCEPTANCE

By signing this part of this form of offer and acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the Tenderer's offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract are contained in:

Part C1 Agreement and contract data, (which includes this agreement)

Part C2 Pricing data

Part C3 Scope of work

Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The Tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Employer's agent (whose details are given in the contract data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor) within five (5) working days of the date of such receipt notifies the employer in writing of any reason why he/she cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

For the Employer:

Name of signatory	Signature	Date

Name of Organisation:	Department of Public Works and Infrastructure
Address of Organization:	

WITNESSED BY:

Name of witness	Signature	Date

*Any reference to words "Bid" or "Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Tender" or "Tenderer".

**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"

Tender no: **NST23/005**

Schedule of Deviations

1.1.1. Subject:
Detail:
1.1.2. Subject:
Detail:
1.1.3. Subject:
Detail:
1.1.4. Subject:
Detail:
1.1.5. Subject:
Detail:
1.1.6. Subject:
Detail:

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

Notes:

1. The extent of deviations from the tender documents issued by the employer before the tender closing date is limited to those permitted in terms of the conditions of tender.
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract. (Note: This note must be deleted by the Project Manager/Consultant(s) when compiling the tender document)

*Any reference to words "Bid" or "Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Tender" or "Tenderer".

**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"

DPW-21 (EC): RECORD OF ADDENDA TO TENDER DOCUMENTS

Project title:	NELSPRUIT PRISON: OPERATION AND MAINTENANCE OF BOILERS FOR 12 MONTHS.		
Tender no:	NST23/005	Reference no:	

1. I / We confirm that the following communications received from the Department of Public Works and Infrastructure before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer: *(Attach additional pages if more space is required)*

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		

Name of Tenderer	Signature	Date

2. I / We confirm that no communications were received from the Department of Public Works and Infrastructure before the submission of this tender offer, amending the tender documents.

Name of Tenderer	Signature	Date

PA-15.1: RESOLUTION OF BOARD OF DIRECTORS

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(Legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ (place)

on _____ (date)

RESOLVED that:

1. The Enterprise submits a Bid / Tender to the Department of Public Works in respect of the following project:

(Project description as per Bid / Tender Document)

Bid / Tender Number: _____ (Bid / Tender Number as per Bid / Tender Document)

2. *Mr/Mrs/Ms: _____

in *his/her Capacity as: _____ (Position in the Enterprise)

and who will sign as follows: _____

be, and is hereby, authorised to sign the Bid / Tender, and any and all other documents and/or correspondence in connection with and relating to the Bid / Tender, as well as to sign any Contract, and any and all documentation, resulting from the award of the Bid / Tender to the Enterprise mentioned above.

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

PA-15.1: Resolution of Board of Directors

17			
18			
19			
20			

The bidding enterprise hereby absolves the Department of Public Works from any liability whatsoever that may arise as a result of this document being signed.

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must, where possible, be signed by *all* the Directors / Members / Partners of the Bidding Enterprise.
3. In the event that paragraph 2 cannot be complied with, the resolution must be signed by Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (attach proof of shareholding / ownership hereto).
4. Directors / Members / Partners of the Bidding Enterprise may alternatively appoint a person to sign this document on behalf of the Bidding Enterprise, which person must be so authorized by way of a duly completed power of attorney, signed by the Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (proof of shareholding / ownership and power of attorney are to be attached hereto).
5. Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

ENTERPRISE STAMP

PA-15.2: RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(Legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ (place)

on _____ (date)

RESOLVED that:

1. The Enterprise submits a Bid /Tender, in consortium/Joint Venture with the following Enterprises:

(List all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the Consortium/Joint Venture)

to the Department of Public Works in respect of the following project:

(Project description as per Bid /Tender Document)

Bid / Tender Number: _____ (Bid / Tender Number as per Bid / Tender Document)

2. *Mr/Mrs/Ms: _____
in *his/her Capacity as: _____ (Position in the Enterprise)
and who will sign as follows: _____

be, and is hereby, authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the project described under item 1 above.

3. The Enterprise accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the Department in respect of the project described under item 1 above.
4. The Enterprise chooses as its *domicilium citandi et executandi* for all purposes arising from this joint venture agreement and the Contract with the Department in respect of the project under item 1 above:

Physical address: _____

_____ (code)

PA-15.2: Resolution of Board of Directors to enter into Consortia or Joint Ventures

Postal Address: _____

_____ (code)

Telephone number: _____

Fax number: _____

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

The bidding enterprise hereby absolves the Department of Public Works from any liability whatsoever that may arise as a result of this document being signed

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must, where possible, be signed by all the Directors / Members / Partners of the Bidding Enterprise.
3. In the event that paragraph 2 cannot be complied with, the resolution must be signed by Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (attach proof of shareholding / ownership hereto).
4. Directors / Members / Partners of the Bidding Enterprise may alternatively appoint a person to sign this document on behalf of the Bidding Enterprise, which person must be so authorized by way of a duly completed power of attorney, signed by the Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (proof of shareholding / ownership and power of attorney are to be attached hereto).
5. Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

ENTERPRISE STAMP

PA-15.3: SPECIAL RESOLUTION OF CONSORTIA OR JOINT VENTURES

RESOLUTION of a meeting of the duly authorised representatives of the following legal entities who have entered into a consortium/joint venture to jointly bid for the project mentioned below: *(legally correct full names and registration numbers, if applicable, of the Enterprises forming a Consortium/Joint Venture)*

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

Held at _____ (place)

on _____ (date)

RESOLVED that:

RESOLVED that:

- A. The above-mentioned Enterprises submit a Bid in Consortium/Joint Venture to the Department of Public Works in respect of the following project:

(Project description as per Bid /Tender Document)

Bid / Tender Number: _____ *(Bid / Tender Number as per Bid /Tender Document)*

PA-15.3: Special Resolution of Consortia or Joint Ventures

B. *Mr/Mrs/Ms: _____
in *his/her Capacity as: _____ (Position in the Enterprise)
and who will sign as follows: _____

be, and is hereby, authorised to sign the Bid, and any and all other documents and/or correspondence in connection with and relating to the Bid, as well as to sign any Contract, and any and all documentation, resulting from the award of the Bid to the Enterprises in Consortium/Joint Venture mentioned above.

C. The Enterprises constituting the Consortium/Joint Venture, notwithstanding its composition, shall conduct all business under the name and style of:

D. The Enterprises to the Consortium/Joint Venture accept joint and several liability for the due fulfilment of the obligations of the Consortium/Joint Venture deriving from, and in any way connected with, the Contract entered into with the Department in respect of the project described under item A above.

E. Any of the Enterprises to the Consortium/Joint Venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the Enterprises shall remain jointly and severally liable to the Department for the due fulfilment of the obligations of the Consortium/Joint Venture as mentioned under item D above.

F. No Enterprise to the Consortium/Joint Venture shall, without the prior written consent of the other Enterprises to the Consortium/Joint Venture and of the Department, cede any of its rights or assign any of its obligations under the consortium/joint venture agreement in relation to the Contract with the Department referred to herein.

G. The Enterprises choose as the *domicilium citandi et executandi* of the Consortium/Joint Venture for all purposes arising from the consortium/joint venture agreement and the Contract with the Department in respect of the project under item A above:

Physical address: _____

_____ (Postal code) _____

Postal Address: _____

_____ (Postal code) _____

Telephone number: _____

Fax number: _____

PA-15.3: Special Resolution of Consortia or Joint Ventures

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

The bidding enterprise hereby absolves the Department of Public Works & Infrastructure from any liability whatsoever that may arise as a result of this document being signed.

Note:

- * Delete which is not applicable.
- NB:** This resolution must be signed by all the Duly Authorised Representatives of the Legal Entities to the consortium/joint venture submitting this tender, as named in item 2 of Resolution PA-15.2.
- Should the number of the Duly Authorised Representatives of the Legal Entities joining forces in this tender exceed the space available above, additional names, capacity and signatures must be supplied on a separate page.
- Resolution PA-15.2, duly completed and signed, from the separate Enterprises who participate in this consortium/joint venture, must be attached to this Special Resolution (PA-15.3).

PA-10: General Conditions of Contract (GCC)

PA-10: GENERAL CONDITIONS OF CONTRACT (GCC)

NOTES:

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

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PA-10: General Conditions of Contract (GCC)

General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:

- 1.1. **"Closing time"** means the date and hour specified in the bidding documents for the receipt of bids.
- 1.2. **"Contract"** means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.3. **"Contract price"** means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
- 1.4. **"Corrupt practice"** means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- 1.5. **"Countervailing duties"** are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- 1.6. **"Country of origin"** means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.7. **"Day"** means calendar day.
- 1.8. **"Delivery"** means delivery in compliance of the conditions of the contract or order.
- 1.9. **"Delivery ex stock"** means immediate delivery directly from stock actually on hand.
- 1.10. **"Delivery into consignees store or to his site"** means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
- 1.11. **"Dumping"** occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
- 1.12. **"Force majeure"** means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13. **"Fraudulent practice"** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14. **"GCC"** means the General Conditions of Contract.
- 1.15. **"Goods"** means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.

PA-10: General Conditions of Contract (GCC)

- 1.16. **“Imported content”** means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17. **“Local content”** means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18. **“Manufacture”** means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19. **“Order”** means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20. **“Project site”** where applicable, means the place indicated in bidding documents.
- 1.21. **“Purchaser”** means the organization purchasing the goods.
- 1.22. **“Republic”** means the Republic of South Africa.
- 1.23. **“SCC”** means the Special Conditions of Contract.
- 1.24. **“Services”** means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
- 1.25. **“Written” or “in writing”** means handwritten in ink or any form of electronic or mechanical writing.

2. Application

- 2.1. These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2. Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3. Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1. Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2. With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

- 4.1. The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

- 5.1. The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be

PA-10: General Conditions of Contract (GCC)

made in confidence and shall extend only so far as may be necessary for purposes of such performance.

- 5.2. The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3. Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4. The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights

- 6.1. The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1. Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2. The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3. The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
 - (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4. The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1. All pre-bidding testing will be for the account of the bidder.
- 8.2. If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3. If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4. If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5. Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.

PA-10: General Conditions of Contract (GCC)

- 8.6. Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7. Any contract supplies may on or after delivery be inspected, tested or analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
- 8.8. The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1. The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2. The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1. Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2. Documents to be submitted by the supplier are specified in SCC.

11. Insurance

- 11.1. The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

- 12.1. Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1. The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and

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- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

- 13.2. Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

- 14.1. As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- 15.1. The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- 15.2. This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3. The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4. Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5. If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- 16.1. The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2. The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.
- 16.3. Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4. Payment will be made in Rand unless otherwise stipulated in SCC.

17. Prices

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- 17.1. Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract amendments

- 18.1. No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

19. Assignment

- 19.1. The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

- 20.1. The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1. Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2. If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3. No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4. The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5. Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- 21.6. Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

- 22.1. Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1. The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

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- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
 - (b) if the Supplier fails to perform any other obligation(s) under the contract; or
 - (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2. In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period of not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any person with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
- 23.5 Any restriction on any person by the Accounting Officer/ Authority will, at the discretion of the Accounting Officer/ Authority, also be applicable to any enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which the first-mentioned person, is or was in the opinion of the Accounting Officer/ Authority actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish The National Treasury, with the following information:
- i) The name and address of the supplier and/or person restricted by the purchaser;
 - ii) The date of commencement of the restriction
 - iii) The period of the restriction; and
 - iv) The reasons for the restriction.
- These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.
- 23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than ten years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

- 24.1. When, after the date of bid, provisional payments are required, or antidumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

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25. Force Majeure

- 25.1. Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2. If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

- 26.1. The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1. If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in Connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2. If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3. Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4. Mediation proceedings shall be conducted in accordance with the rules of the procedure specified in the SCC.
- 27.5. Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under contract unless they Otherwise agree; and
- (b) the purchaser shall pay the supplier any monies due the supplier.

28. Limitation of Liability

- 28.1. Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss 12 or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
- (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

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29. Governing language

- 29.1. The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

30. Applicable law

- 30.1. The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.

31. Notices

- 31.1. Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice
- 31.2. The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

- 32.1. A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2. A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3. No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African

33. National Industrial Participation Programme (NIPP)

- 33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.

34. Prohibition of Restrictive Practices

- 34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
- 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.
- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

Name of Bidder	Signature	Date

PA-16: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 Preference Points System to be applied

(tick whichever is applicable).

- ☒ The applicable preference point system for this tender is the **80/20** preference point system.
- ☐ The applicable preference point system for this tender is the **90/10** preference point system.
- ☐ Either the **90/10 or 80/20** preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender shall be awarded for:

1.3.1 Price; and

1.3.2 Specific Goals

1.4 The maximum points for this tender are allocated as follows:

	80/20
PRICE	80
SPECIFIC GOALS	20
Total points for Price and Specific Goals	100

1.5 Breakdown Allocation of Specific Goals Points

1.5.1 For Procurement transactions with rand value greater than R2 000.00 and up to R1 Million (Inclusive of all applicable taxes), the specific goals as listed in table 1 below are applicable.

All Acquisitions

Table 1

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE which is at least 51% owned by black people (Mandatory)	10	• ID Copy • SANAS Accredited BBBEE Certificate or sworn affidavit where applicable • CSD Report • CIPC (company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area (Mandatory)	2	• Office Municipal Rates Statement • Permission To Occupy from local chief in case of rural areas (PTO) • Lease Agreement
3.	An EME or QSE which is at least 51% owned by women (Mandatory)	4	• ID Copy • CSD Report • CIPC (company registration)

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
4.	An EME or QSE which is at least 51% owned by people with disability (Mandatory)	2	• ID Copy (Mandatory) • Medical Certificate • South African Social Security Agency (SASSA) registration • National Council for Persons with Physical Disability in South Africa registration (NCPPDSA) • CSD Report • CIPC (company registration)
5.	An EME or QSE which is at least 51% owned by youth. (Mandatory)	2	• ID Copy • CSD Report • CIPC (company registration)

1.5.2 For procurement transactions with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 2 below are applicable:

All Acquisitions

Table 2

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI) (Mandatory)	10	• ID Copy • SANAS Accredited BBBEE Certificate or sworn affidavit where applicable • CSD Report • CIPC (company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area (Mandatory)	2	• Office Municipal Rates Statement • Permission To Occupy from local chief in case of rural areas (PTO) • Lease Agreement
3.	An EME or QSE or any entity which is at least 51% owned by women (Mandatory)	4	• ID Copy • CSD Report • CIPC (company registration)
4.	An EME or QSE or any entity which is at least 51% owned by people with disability (Mandatory)	2	• ID Copy (Mandatory) • Medical Certificate • South African Social Security Agency (SASSA) registration

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
			• National Council for Persons with Physical Disability in South Africa registration (NCPDPSA) • CSD Report • CIPC (company registration)
5.	An EME or QSE or any entity which is at least 51% owned by youth . (Mandatory)	2	• ID Copy • CSD Report • CIPC (company registration)

1.5.3 For procurement transactions with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 3 below are applicable

All Acquisitions

Table 3

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI) (Mandatory)	4	• ID Copy • SANAS Accredited BBBEE Certificate or sworn affidavit where applicable • CSD Report

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
			CIPC (company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area (Mandatory)	2	- Office Municipal Rates Statement - Permission To Occupy from local chief in case of rural areas (PTO) - Lease Agreement
3.	An EME or QSE or any entity which is at least 51% owned by women (Mandatory)	2	- ID Copy - CSD Report - CIPC (company registration)
4.	An EME or QSE or any entity which is at least 51% owned by people with disability (Mandatory) OR An EME or QSE or any entity which is at least 51% owned by youth.	2	- ID Copy (Mandatory) - Medical Certificate - South African Social Security Agency (SASSA) registration - National Council for Persons with Physical Disability in South Africa registration (NCPDSA) - ID Copy

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
			• CSD Report • CIPC (company registration)

- 1.6 Failure on the part of the tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals, if the service provider/ tenderer did not submit proof or documentation required to claim for specific goals will be interpreted to mean that preference points for specific goals are not claimed.
- 1.7 The organ of state reserves the right to require of a service provider/tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1. THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \\ \mathbf{Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)} & \mathbf{or} & \mathbf{Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)} \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \\ \mathbf{Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)} & \mathbf{or} & \mathbf{Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)} \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1,2 and 3 above as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
1. An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI)	4	10		
2. Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	2		
3. An EME or QSE or any entity which is at least 51% owned by women	2	4		
4. An EME or QSE or any entity which is at least 51% owned by people with disability or	2	2		

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
5. An EME or QSE or any entity which is at least 51% owned by youth.* (Note: only one specific goal is applicable between specific goal number 4 and specific goal number 5 under 90/10 Preference Point System)	2	2		

Note: *in respect of the 90/10 point system a selection of either disability or youth may be made with an allocation of 2 points for either of them.

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
 - ☐ One-person business/sole propriety
 - ☐ Close corporation
 - ☐ Public Company
 - ☐ Personal Liability Company
 - ☐ (Pty) Limited
 - ☐ Non-Profit Company
 - ☐ State Owned Company
- [TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

..... SIGNATURE(S) OF TENDERER(S)	
SURNAME AND NAME:	
DATE:	
ADDRESS:	
	
	
	

PA- 40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

Tender no: NST23/005

Name of Tenderer

☐ EME¹ ☐ QSE² ☐ Non EME/QSE (tick applicable box)

1. LIST ALL PROPRIETORS, MEMBERS OR SHAREHOLDERS BY NAME, IDENTITY NUMBER, CITIZENSHIP AND DESIGNATED GROUPS.

Name and Surname #	Identity/ Passport number and Citizenship##	Percentage owned	Black	Indicate if youth	Indicate if woman	Indicate if person with disability	Indicate if living in Rural (R) / Under Developed Area (UD) / Township (T) / Urban (U).	Indicate if military veteran
1.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
2.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
3.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
4.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
5.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
6.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
7.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
8.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
9.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
10.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
11.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
12.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No

Where Owners are themselves a Company, Close Corporation, Partnership etc, identify the ownership of the Holding Company, together with Registration number
State date of South African citizenship obtained (not applicable to persons born in South Africa)

¹ EME: Exempted Micro Enterprise

² QSE: Qualifying Small Business Enterprise

PA- 40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

Tender no:

2. DECLARATION:

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the Tenderer, hereby confirms that:

- 1
- The information and particulars contained in this Affidavit are true and correct in all respects;
- 2
- The Broad-based Black Economic Empowerment Act, 2003 (Act 53 of 2003), Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000), the Preferential Procurement Regulations, 2017, National Small Business Act 102 of 1996 as amended and all documents pertaining to this Tender were studied and understood and that the above form was completed according to the definitions and information contained in said documents;
- 3
- The Tenderer understands that any intentional misrepresentation or fraudulent information provided herein shall disqualify the Tenderer's offer herein, as well as any other tender offer(s) of the Tenderer simultaneously being evaluated, or will entitle the Employer to cancel any Contract resulting from the Tenderer's offer herein;
- 4
- The Tenderer accepts that the Employer may exercise any other remedy it may have in law and in the Contract, including a claim for damages for having to accept a less favourable tender as a result of any such disqualification due to misrepresentation or fraudulent information provided herein;
- 5
- Any further documentary proof required by the Employer regarding the information provided herein, will be submitted to the Employer within the time period as may be set by the latter;

Signed by the Tenderer

Name of representative	Signature	Date



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

OPERATIONS AND MAINTENANCE TO BE DONE IN ACCORDANCE WITH TECHNICAL SPECIFICATION
ADHERANCE

Operations and Maintenance of Boilers for 12 months

Tender No.:		
Sch No.	Description	Amount
1	SCHEDULE 1: PRELIMINARIES AND GENERAL	R
2	SCHEDULE 2: OPERATIONS	R
3	SCHEDULE 3: SCHEDULED MAINTENANCE	R
4	SCHEDULE 4: UNSCHEDULED MAINTENANCE	R
5	SCHEDULE 5: PROVISIONS	R
6	SCHEDULE 6: EPWP	R
Total carried to total summary table		R

Summary Table

	Totals	
	Total of Schedule 1-6 excl VAT	R
	Value added Tax (VAT) The Tenderer shall add 15% of the Total of Schedule of Quantities above	R
	Tender Sum incl of VAT carried to: 'Form of Offer and Acceptance' DPW-07-EC	R

Schedule 1 Preliminary and General

Item no.	Item Description	Unit	QTY	Rate	Total
	As-built information and Operating and Maintenance Manuals:				
1.1	Obtaining of all available information, compiling, reproducing (1) one set of hard copy as-built and operating & maintenance manuals as specified in FA 04. Documents to be handed over to the Departmental Representative / Engineer.	each	1		
1.2	Submit (1) one set of as-built drawings and operating & maintenance manuals in electronic format. The copies shall be in PDF and AutoCAD 2014 format with no passwords protection.	each	1		
1.3	Logging and recording of operating of conditions, services, maintenance visits, reports, breakdowns, samples, inspections, tests etc.	monthly	12		
	Provision of Personal Protective Equipment (PPE)				
1.4	Contractors shall provide all employees with all required PPE, such as safety shoes, protective gloves and ear and eye protection for the full duration of the contract. Priced per month. (as per SI OHS specification)	monthly	12		
	Occupational Health and Safety: Compliance with the applicable Act including specified additional requirements				
1.5	Health and Safety Plan (Safety File)	each	1		
1.6	First Aid kit: Supply and maintain on site for duration of contract.	monthly	12		
	Total to be carried to Summary Page				

Schedule 2 Operations

Item no.	Item Description	Unit	QTY	Rate	Total
	Full operation of steam boilers. Priced all inclusive per month for all qualified operators / supervision and related personal to operate and manage the boilers for a minimum of 17 hours per day, 7 day a week.				
2.1	3x Boiler Operators	Monthly	12		
2.2	3x Boiler Assistants	Monthly	12		
2.3	1x Boiler Supervisor	Monthly	12		
Total to be carried to Summary Page					

Schedule 3 Scheduled Items

Item no.	Item Description	Unit	QTY	Rate	Total
Supply rates as per Technical Specification. Sum given in the bill below shall be inclusive of all labour, supplies, material, transport and equipment required to complete the service					
	12 Month Statutory Boiler Inspection				
3.1	Preparation of boilers for external inspection, including removal of chain grate, welding seam covers and insulation and cladding, as required by the Occupational Health and Safety Act, No 85 of 1993 and witnessed by the approved Inspection Authority.	each	1		
	36 Month Statutory Boiler Inspection				
3.2	Preparation of boilers for internal fire and water side and external inspection, including removal of chain grate, all insulation and cladding, as required by the Occupational Health and Safety Act, No 85 of 1993 and witnessed by the approved Inspection Authority.	each	1		
	The routine inspections and maintenance checks shall include all material and labour cost required to conduct the items specified.				
3.3	Routing daily maintenance inspections and duties to be conducted as specified in tender document FA 16 02/1.	daily	365		
3.4	Routing weekly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/2	weekly	52		
3.5	Routing monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/3	monthly	12		
3.6	Routing three monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/4	quarterly	4		
3.7	Routing six monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/5	semester	2		
3.8	Routing twelve monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/6	annual	1		
	Supply new tools and equipment equipment to be utilized for the daily operation of the boiler house and related sytems.				
3.9	Steam boiler blowdown spanner	each	2		
3.10	Steam boiler handhole spanner	each	2		
3.11	Steam boiler manhole spanner	each	2		
3.12	Steam boiler grate crank handle spanner	each	2		
3.13	Coal shovel (spade)	each	2		
3.14	Wheelbarrow	each	1		
3.15	Ash and grit trolleys:	each	1		
	Miscellaneous				
3.16	Supply of Boiler Chemicals and salt for 12 Months	40kg/month	12		
3.17	Water treatment agent	monthly	12		
3.18	Cleaning Material	monthly	12		
3.19	Water Treatment Test	monthly	12		
3.20	Coal Testing	monthly	12		
	Total to be carried to Summary Page				

Schedule 4 Breakdowns

Item no.	Item Description	Unit	QTY	Rate	Total
Supply rates as per Technical Specification. Sum given in the bill below shall be inclusive of all labour, supplies, material, transport and equipment required to complete the service					
	Boiler valves				
4.1	Main Steam Valve	each	1		
4.2	Safety Valve	each	2		
4.3	Blow Down Valve	each	2		
4.4	Steam Stop	each	2		
4.5	Air Vents/Release	each	2		
4.6	Feed Water Check Valve	each	2		
4.7	Drain Valve	each	2		
	Refractories and brickwork:				
4.8	Recast all new rear flue brick work, with new on completion of inspection.	each	1		
4.9	Recast all new ignition and flue arches with new on completion of inspection.	each	1		
4.10	Boiler soot blower	each	1		
4.11	Blow-down sump	each	1		
4.12	Boiler chain grate (Stoker+Links)	each	1		
4.13	Chain grate drive mechanism and accessories	each	1		
4.14	Boiler lagging, insulation and steel cladding.	each	1		
4.15	Boiler feed-water tank.	each	1		
4.16	Boiler feed-water pumps:	each	1		
	Boiler water - level equipment and controls: Mobreys				
4.17	Supply new switch float operated controls (Mobrey type)	each	2		
4.18	Supply new single gauge glass with two rubbers.	each	2		
4.19	Supply new single gauge glass shut off valve shaft handle.	each	2		
4.20	Supply new single gauge glass shut off valve shaft.	each	2		
4.21	Supply new single gauge glass shut off valve graphite gasket.	each	2		
4.22	Supply of new high water level control.	each	2		
4.23	Supply of new water level control alarm.	each	2		
4.24	Boiler chemicals and softner plant (water treatment plant)	each	1		
4.25	Coal conveying equipment: coalscrew + gearbox	each	1		
4.26	Coal Hopper	each	1		
4.27	Grit collectors	each	1		
4.28	Boiler Room Distribution Board	each	1		
4.29	Boiler mounted electrical control panels	each	1		
	Fans and damper controls				
4.30	FD Fan	each	2		
4.31	ID Fan	each	2		
4.32	Fan Bearings set of 2	each	4		
4.33	Fan V-Belts	each	4		
	Electrical conductors and switchgear				
	P. V. C. single core 600/1000 volt grade conductors supplied				
4.34	1.5 mm ²	m	20		
4.35	2.5 mm ²	m	20		
4.36	4 mm ²	m	20		
4.37	6 mm ²	m	20		
4.38	10 mm ²	m	20		
4.39	2.5mm ²	m	20		
4.40	4mm ²	m	20		
4.41	6mm ²	m	20		
4.42	10mm ²	m	20		
	Circuit breaker supplied				
4.43	20 A 5 k A single pole	each	5		
4.44	20 A 15 k A single pole	each	5		
4.45	10 A 15 k A single pole	each	5		
4.46	60 A 15 k A triple pole	each	2		
4.47	160 A 15 k A triple pole	each	2		
	Circuit breaker type isolator supplied				
4.48	30 A Double pole isolator	each	2		
4.49	60 A Double pole isolator	each	2		
4.50	60 A Triple pole isolator	each	2		
	Electrical 3 phase motor over loads supplied				
4.51	220 v overload	each	2		
4.52	380 v overload	each	2		
4.53	12 v overload	each	2		
	Electrical 3 phase boiler electrical panel relays supplied				
4.54	FD fan balance relay	each	2		
4.55	ID fan balance relay	each	2		
4.56	water pump relay	each	2		
4.57	Painting of equipment, plant and building/floors:	each	2		
	Steam and condensate installation:				
4.58	Recondition of existing steam traps sets including steam and water side valves.	each	1		
	Total to be carried to Summary Page				

Schedule 5 Provisions

Item no.	Item Description	Unit	QTY	Rate	Total
	Labour- for all areas.				
	The rates for labour will be deemed to include for statutory minimum labour rates				
	Working hours (7:30-16:30)				
5.1	Artisan	R /hr	1		
5.2	Artisan in training	R /hr	1		
5.3	Artisan Forman	R /hr	1		
	After Hours (17:00-7:00)				
5.4	Artisan	R /hr	1		
5.5	Artisan in training	R /hr	1		
5.6	Artisan Forman		1		
	Transport				
5.7	LDV transport	R/Km	1		
	Starting point for Ehlanzeni Region sites is Nelpruit Post Office				
	Starting point for Nkangal Region sites is Witbank Post Office				
	Starting point for Gert Sibande Region sites is Ermelo Post Office				
	Non- scheduled materials				
5.8	Allow for the amount of R 500,000,00 for the provisional cost of non- scheduled material that may be used. The above labour and transport rates will apply. Supplier material slip to be provided	sum	1	R 500 000,00	R 500 000,00
5.9	Percentage mark- up on non schedule materials that may be used. (Percentage (%))	%	20%	R 100 000,00	R 100 000,00
	Total carried to Summary page				R

SCHEDULE 6 – Expanded Public Works Program – (EPWP)

Item no.	Item Description	Unit	QTY	Rate	Total
	EMPLOYMENTS OF YOUTH WORKERS				
	The unit of measurement shall be the number of youth workers at the labour rate of R3710.40 per month multiplied by the period employed in months and the rate tender shall include full compensation for all costs associated with the employment of one youth workers and for complying with the conditions of contract.				
6.1	Allow for R 3,710.40/mth x 12mths	monthly	12	R 3 710,40	R 44 524,80
	General (EPWP compliance) @ R 185,52 per day working 8 hours per day only on weekdays				
	PROVISION OF EPWP DESIGNED OVERRALLS AND HARD HATS TO EPWP BENEFICIARIES				
6.2	Supply 2 x EPWP branded overalls, 1x EPWP branded hard hat and safety shoes	sum	1		
	Total to be carried to Summary Page				



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

BOILER TERM CONTRACT - MECHANICAL

TECHNICAL SPECIFICATION FA - STEAM GENERATING MAINTENANCE AND OPERATIONS

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FA 01 SCOPE

(a) This specification covers the general term contract for the steam generating maintenance and operations which include the following type of coal-fired boiler:

- (i) Fire-tube type boilers with chain grate stokers

(b) This specification also covers the term contract to the following ancillary boiler and boiler house equipment:

- (i) Coal handling equipment
- (ii) Ash handling equipment
- (iii) Grit collectors and chimneys
- (iv) Chain grate and underfeed stokers
- (v) Induced draught fan and damper controls
- (vi) Forced draught fan and damper controls
- (vii) Boiler level controls and alarms
- (viii) Feed-water pumps
- (ix) Hot well tanks
- (x) Water treatment plant and equipment
- (xi) Coal chutes and hoppers
- (xii) Boiler main steam valves, safety valves, non-return valves, blow-down and drain valves
- (xiii) Soot blower (if applicable)

- (xiv) Refractories
 - (xv) Instrumentation and controls
 - (xvi) Electrical control panel
 - (xvii) Spares and tooling
 - (xviii) Insulation and cladding
 - (xix) Ladders and landings.
- (c) This specification also addresses the following:
- (i) Hydraulic testing and internal and external inspections
 - (ii) Boiler efficiencies
 - (iii) Operating of boilers
 - (iv) Coal quality and control.
- (d) This specification shall form an integral part of the term contract for the contract document, and shall be read in conjunction with the additional and particular specifications compiled as part of this document.

This specification shall act as a guideline to the Particular Specification and, in the event of any discrepancies between the Technical Specification and the Particular Specification, the latter shall take precedence.

The Contractor shall at all times adhere to this specification unless otherwise specified in the Particular Specification.

FA 02 STANDARD SPECIFICATIONS

FA 02.01 GENERAL STANDARD SPECIFICATIONS, REGULATIONS AND CODES

The latest edition, including all amendments up to date of tender, of the following specifications, publications and codes of practice shall be read in conjunction with this specification and shall deemed to form part thereof:

FA 02.01.01 SANS and other specifications and codes

- SANS 0400 - The applications of the building regulations
- SANS 0142 - Code of practice for the wiring of premises
- SANS 0140 - Identification colour marking
- SANS 044 - Parts I to IV: Welding
- SANS 460 - Copper tubes for domestic plumbing
- SANS 0103 - The measurement and rating of environmental noise with respect to annoyance and speech communications.

SANS Specifications listed on page 3 of the DPW specification OWG 371

- CKS 332 - Specifications for industrial V-belts

Atmospheric Pollution Prevention Act, No 45 of 1965

BS 2790
BS 1740
BS 21
BS 1640

FA 02.01.02 Department of Public Works specifications

- OWG 371 A&B - Specification of materials and methods to be used (latest version)
- STD.PWD.VII - Standard Specification for steam boiler installations (Issue VII 1997)

- Standard Specification for electrical installations and equipment pertaining to mechanical installations

FA 02.01.03 Occupational Health and Safety Act of 1993

All regulations and statutory requirements as laid down in the latest edition of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) shall be adhered to.

FA 02.01.04 Manufacturers' specifications, codes of and practice and installation instructions

All equipment and materials shall be installed, maintained strictly in accordance with the manufacturers' specifications, instructions and codes of practice.

FA 02.01.05 Municipal regulations, laws and by-laws

All municipal regulations, laws, by-laws and special requirements of the Local Authority shall be adhered to unless otherwise specified.

FA 02.01.06 CSIR Publications

Technical Guide K15, CSIR 1970: A guide to water treatment in low-pressure and medium-pressure boilers

FA 03 **VARIATIONS AND ADDITIONS TO STANDARD SPECIFICATIONS**

The following additional general specifications and requirements shall be read in conjunction with this specification and shall be adhered to unless otherwise specified in the Particular Specification.

FA 03.01 **GENERAL REPAIR AND INSTALLATIONS REQUIREMENTS**

- (a) All materials and equipment supplied and installed shall be of new high quality, design and manufactured to the relevant specifications, suitable for providing efficient, reliable and trouble-free service.
- (b) All work shall be executed in a first-class workman-like manner by qualified tradesmen.
- (c) All equipment, component parts, fittings and materials supplied and/or installed, shall conform in respect of quality, manufacture, test and performance to the requirements of the applicable current SANS specifications and codes, except where otherwise specified or approved by the Departmental Representative in writing.
- (d) All materials and workmanship which, in the opinion of the Departmental Representative, is inferior to that specified for the work will be condemned. All condemned material and workmanship shall be replaced or rectified as directed and approved by the Departmental Representative.
- (e) The Contractor shall submit a detailed list of the equipment and material to be used to the Departmental Representative for approval before placing orders or commencing installation.
- (f) All new equipment, materials and systems shall be installed and positioned such as to not impede on access routes, entrances and other services. The Contractor shall coordinate these items taking other services and equipment into account.
- (g) All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.
- (h) The Contractor shall make sure that all safety regulations and measures are applied and enforced during the repair, operations and maintenance periods to ensure the safety of the

public and User Client.

- (i) Repair work shall be programmed in accordance with General Decommissioning, Testing and Commissioning Procedures, to ensure the shortest possible down-time of any service and the least inconvenience to the User Client and the public. The Contractor shall make sure that the necessary notifications and notices are timeously put into place for these activities.

FA 04 OPERATING AND MAINTENANCE MANUALS

The Contractor shall be responsible for the compilation of an inventory list and operating and maintenance manuals.

All information shall be recorded and reproduced in electronic format, as well as three sets of hard copies to be supplied to the Department.

Over and above what is specified in Operating and Maintenance Manuals, the operating and maintenance manual to be compiled shall be structured to include at least the following:

- (a) System description
 - Complete system description and the working of the plant.
- (b) Commissioning data
 - Complete commissioning, test and inspection data of plant.
- (c) Operating data
 - (i) Plant running check list and frequency of servicing required;
 - (ii) Safety precautions to be implemented;
 - (iii) Manual and automatic operation;
 - (iv) Operator's duties (logging requirements);
 - (v) Lubricating oils and service instructions;
 - (vi) Pre-start checklist for each system;
 - (vii) Starting and stopping procedures.
- (d) Mechanical equipment
 - (i) Description of all major items with the make, model number, names, addresses and telephone numbers of the suppliers, manufacturer or their agents;
 - (ii) Design capacities of all equipment, including selection parameters, selection curves, capacity tables, etc;
 - (iii) Manufacturers' brochures and pamphlets;
 - (iv) Schedule of spares with part numbers recommended to be held as stock.
- (e) Maintenance instructions
 - (i) Schedule of maintenance particulars, frequency of services and replacements;
 - (ii) Trouble-shooting guide;
 - (iii) Part number of all replacement items and spares;
 - (iv) Capacity curves of pumps, fans and compressors;
 - (v) Serial numbers of all items of equipment.
- (f) Electrical equipment
 - (i) Schedule of equipment, indicating manufacturer, type, model number, capacity and addresses and telephone numbers of suppliers;
 - (ii) Maintenance instructions;

- (iii) Manufacturers' brochures and pamphlets;
 - (iv) Complete as-built circuit diagrams and diagrammatic representation of interconnections of all electrical equipment.
- (g) Instrumentation and control
 - (i) Description of each control system;
 - (ii) Schedule of control equipment indicating manufacturer, type, model number, capacity and addresses and telephone numbers of suppliers;
 - (iii) Maintenance instructions;
 - (iv) Manufacturer's brochures and pamphlets.
- (h) Drawings
 - (i) Paper prints of all as-built mechanical and electrical drawings;
 - (ii) Wiring diagrams framed behind glass shall be mounted adjacent to each relevant control panel.

FA 05 LOGGING AND RECORDING PROCEDURES

The Contractor shall under this term contract institute a logging and recording system as part of his maintenance control plan as defined in General and Maintenance. This shall consist of a log and record book which shall be utilized to log and record all operations, faults, system checks, breakdowns, maintenance visits, inspections, coal delivery, chemical and salt deliveries, ash removal, readings, etc.

The logbook shall be kept in a safe place inside the boiler house and shall only be utilized by the boiler house supervisor, the Contractor and the Departmental Representative. Copies of the monthly entries and recordings into the logbook shall be submitted by the Contractor together with his monthly report to the Departmental Representative.

The logbook shall be structured to include at least the following:

- (a) Daily inspection and maintenance actions;
- (b) Monthly inspection and maintenance actions;
- (c) Three-monthly inspection and maintenance actions;
- (d) Six-monthly inspection and maintenance actions;
- (e) Annual inspection and maintenance actions;
- (f) Breakdown reports;
- (g) Daily boiler plant operating conditions, observations, recordings and measurements (including CO₂ measurement, steam consumption if available, steam pressure, water meter readings, etc);
- (h) Statutory inspection and test comments and reports;
- (i) Coal delivery report, stating the date, quality, quantity and delivery vehicle registration number;
- (j) Chemical and salt delivery reports, stating the date, quantity, description and vehicle registration number;
- (k) Ash removal report, stating the date and vehicle registration number.

The Contractor shall also institute an attendance register which shall be kept in a safe place inside the boiler house. This register shall be completed by all persons visiting the boiler house, including:

- (a) Boiler house operators, cleaning staff and supervisor
- (b) Contractor and maintenance personnel
- (c) Inspectors
- (d) Department personnel
- (e) Departmental Representative.

The register shall state the date, time-in, time-out, name, company and reason for visit.

A copy of the register shall be submitted by the Contractor together with his monthly report.

FA 06 TESTS AND INSPECTIONS ON COMPLETION OF REPAIR WORK

Except where otherwise provided in the Contract, the Contractor shall provide all labour, materials, power, fuel, accessories and properly calibrated and certified instruments necessary for carrying out such tests. The Contractor shall make arrangements for such tests and shall give at least 72 hours written notice to the Departmental Representative, before commencing the test.

In the event of the plant or installation not passing the test, the Department shall be at liberty to deduct from the Contract amount all reasonable expenses incurred by the Employer or the Departmental Representative attending the repeated test.

Whenever any installation or equipment is operated for testing or adjusting as provided for above, the Contractor shall operate the entire system for as long a period as may be required to prove satisfactory performance at all times in the occupied space served by that system for up to twenty-four hours a day continuously until the system is handed over.

The Contractor shall provide all labour and supervision required for such operation and the Department may assign operating personnel as observers, but such observation time shall not be counted as instruction time.

After completing the installation or system, all equipment shall be tested, adjusted and readjusted until they operate to the satisfaction and approval of the Departmental Representative.

The Contractor shall submit certificates of tests carried out to prove the efficiency of all equipment, as well as certificates to be obtained from all relevant authorities and statutory bodies, etc.

FA 07 QUALITY ASSURANCE SYSTEM

The Contractor shall institute an approved quality assurance (QA) system which shall be submitted to the Departmental Representative for approval. The records of this QA system shall be kept throughout the duration of the Contract and submitted to the Departmental Representative at regular intervals as required.

FA 08 COMMISSIONING AND RE-COMMISSIONING OF PLANT AND INSTALLATION

FA 08.01 GENERAL

On completion of the repair work and/or the installation of new systems the plant and equipment shall be put into operation after all tests and adjustments have been carried out to the satisfaction of the Departmental Representative. Where new plant is installed, the Contractor shall run and operate the system for a period of time as specified by the Departmental Representative and train the staff of the User Client to operate and maintain the system.

Logging of the operation of the installations shall commence immediately upon startup.

The Contractor shall submit a full commissioning report.

FA 08.02 RE-COMMISSIONING OF BOILERS AND ANCILLARY EQUIPMENT

On completion of the statutory inspections and tests or major boiler repairs the Contractor shall re-commission the boiler and its ancillary equipment. This operation shall be done strictly in accordance with the manufacturer's specification and shall be witnessed by the Departmental Representative. This shall include but not be limited to the following:

- (a) All required pre-commissioning mechanical checks:
 - (i) Check boiler shell waterside to ensure that it is clean of all residue and foreign matter.

- (ii) Check that all fittings, hand holes, manholes, blow-down valves, pipe connections, etc, are properly secured and installed in accordance with the manufacturer's specification.
 - (iii) Clean out feed pump strainers.
 - (iv) Check that all joint seals are replaced with new and properly installed.
 - (v) Check boiler shell gas side to ensure that it is clean of any dust, slag, ash, loose refractory waste material, etc.
 - (vi) Check and inspect all refractory work for compliance with manufacturer's specification.
 - (vii) Check that all tube holes has been brushed and free of any foreign matter.
 - (viii) Check that all moving components are free to move and that they are securely installed.
 - (ix) Check all expansion joints and seals. Reinstall all covers and doors and check that they are properly secured.
 - (x) Check that the stoker is properly installed and that all components are installed in accordance with manufacturer's specification. These checks shall include alignment, tensioning, movement of grate without obstruction, seals, movement of dampers, guillotine door, grate links, set points, secureness of all equipment and components.
 - (xi) Check for the correct installation and operation of the soot blowers.
 - (xii) Check and record that all lubrication to equipment and components have been done in accordance with manufacturer's specification.
 - (xiii) Check that the FD and ID fans have been correctly installed and reassembled in accordance with manufacturer's specification.
 - (xiv) Check and clean grit collector and ensure that grit discharge port seals are in place and seal properly
 - (xv) Check that chimneys are clean and securely supported and fixed.
 - (xvi) Check and ensure that all valves and safety valves are correctly installed and in the correct operating position, safety valves to be set in accordance with the required blow-off pressure for this installation.
 - (xvii) Check and clean out hot well tank and flush out water supply to boilers.
- (b) All required pre-commissioning electrical checks
- (i) Check all wiring connections for tightness and repair any hot connections.
 - (ii) Check that all electrical equipment have been properly reconnected in accordance with the manufacturer's specification.
 - (iii) Perform and record all required electrical insulation tests on equipment.
 - (iv) Check and test all controls with main circuits isolated.
 - (v) Check all motor-driven equipment for correct rotational directions.
 - (vi) Check and test the operation of all indication and warning lights.
 - (vii) Check, set, record and readjust all equipment control and set points in accordance with manufacturer's specification.
 - (viii) Run all motor-driven equipment for a period to ensure free movement and correct operation, feed pumps only to be operated for a short interval to check rotation.
- (c) Commissioning of the boiler

On completion of the pre-commissioning checks the Contractor shall proceed with the commissioning of the boiler. This shall be done strictly in accordance with the manufacturer's specification and shall include but not be limited to the following:

- (i) Fill boiler with feed water from the hot well tank to the prescribed level in the manner as described by the manufacturer.
- (ii) During this process all level and warning system checks shall be performed on the water level control system.
- (iii) The feed pump's operation must be tested and indication lights checked.
- (iv) Check, test and set up water softener and chemical dosing equipment to the required water quality for the boiler.
- (v) Set and adjust all stoker controls in accordance with the manufacturer's specification.

- (vi) Set and adjust ID and FD damper controls in accordance with the manufacturer's specification.
- (vii) Set and adjust combustion controls in accordance with the manufacturer's specification.
- (viii) Set and test steam pressure detector to the correct boiler operating pressure.
- (ix) Check the operation of the guillotine door and adjust to the required starting coal bed depth.
- (x) Check the coal hopper and coal level controls. Check and ensure that the coal conveying system operates and that the coal is at the correct level inside the hopper.
- (xi) Check and test the draught gauges for the correct operation.
- (xii) Proceed with lighting the fire.
- (xiii) Bring boiler up to steam, following the correct procedures as described by the manufacturer and ensuring correct combustion, coal bed depth, ignition line, etc, and that all controls are functioning properly and are set in the correct position.
- (xiv) When operating pressure has been reached the steam valve to the system has to be cracked open until full supply pressure to system is achieved, on which the valve can be fully opened.
- (xv) During the load conditions the boiler has to be readjusted and finally switched to automatic operation on completion of all automatic control functions for correct operation.

The Contractor shall visit, inspect, test and readjust the boiler over the 30-day period following the re-commissioning to ensure the correct functioning of the boiler and its associated equipment.

FA 09 GUARANTEE OF INSTALLATION AND EQUIPMENT

The Contractor shall provide guarantees obtained from the manufacturer(s) and/or supplier(s) to the effect that each piece of new equipment, supplied and installed under the repair work, complies with the required performance and will function as part of the complete system.

All new equipment, including, the complete new installations and the systems as a whole shall be guaranteed for a period of 12 (twelve) months commencing upon day of issue of certificate of completion for repair work of the installation.

FA 10 MAINTENANCE TOOLS AND SPARES

Each boiler house shall be equipped with the necessary maintenance tools and spares required by the specific type of boilers and installation for the daily operation and maintenance of the plant. At the start of the term contract the Contractor shall in the presence of the Departmental Representative make an inventory of the existing tools and spares, and any shortfall or damaged tools and spares shall be replaced with new. All replacement tools and spares shall be as specified by the boiler and equipment manufacturers. These tools and spares shall be kept in a lockable room or cabinet of which the boiler house supervisor and the Contractor shall carry keys. The Contractor shall on a monthly basis take stock of these items in the presence of the boiler house supervisor and record and report to the Departmental Representative.

The tools and spares to be carried shall include but not be limited to at least the following:

- (a) Tools
 - Manhole spanner
 - Hand hole spanner
 - Blow down spanner
 - Grate crank handle
 - Ash shovel

FA 11 COAL DELIVERY RECORDING AND CONTROL

As part of this term contract, the Contractor shall, in collaboration with the User Client and coal provider, institute a quality and delivery control plan for each boiler house. This control plan shall consist of a set of records to be completed with each coal delivery, stating the following:

- (a) Delivery note number (client responsibility)
- (b) Date of coal delivery
- (c) Quantity of coal delivered
- (d) Type of coal delivered, as specified by boiler manufacturer
- (e) Coal sample identification number
- (f) Contractor's signature on acceptance of information and coal sample
- (g) Coal deliverer's signature
- (h) Boiler house supervisor's signature
- (i) Comments by any contract role players

The Contractor shall be responsible for taking a sample of each batch of delivered coal and sending it to an approved laboratory for confirmation that the coal samples conform to the agreed type of coal for the specific installation. The result of the tested sample shall contain the following:

- (a) Various coal sampled mesh sizes
- (b) Calorific value
- (c) Moisture content
- (d) Ash content
- (e) Ash fusion temperature
- (f) Volatile content.

The results of these tests shall be submitted to the Departmental Representative.

The recorded information shall also be utilized to determine the boiler efficiency, together with other relevant information to be gathered.

The Contractor shall, in collaboration with the Departmental Representative, institute the necessary measures to ensure the safe keeping and security of the coal storage.

All the relevant recorded information shall be submitted monthly together with Contractor's maintenance schedules to the Departmental Representative.

FA 12 ASH REMOVAL RECORDING AND CONTROL

In most instances, the boiler ash is removed and is the responsibility of the client DCS. On instruction and as part of this term contract, the Contractor shall in collaboration with the Departmental Representative to remove boiler ash on a monthly basis, should it not be removed by the client. The contractor shall institute an ash removal control plan for each boiler house. This control plan shall consist of a set of records to be completed with each removal taking place and shall include the following:

- (a) Date the ash is removed;
- (b) Date of actual ash removal;
- (c) Approximate quantity of ash removed;
- (d) Ash destination address, to be completed by Removal Company;
- (e) Random samples of ash taken and recorded by Contractor;
- (f) Contractor's signature on acceptance of information;
- (g) Removal company signature;
- (h) Boiler house supervisor's acceptance signature;
- (i) Comments by any party.
- (j) Particulars of approved dumping site as indicated by the client, including certification after delivery

The Contractor shall at random take samples of the ash and send it to an approved laboratory for analysis in order to determine the amount of un-burnt carbon. The un-burnt carbon in the ash should normally not be more than 20 % per volume.

The Contractor shall, in collaboration with the User Client and the Departmental Representative, also institute a control plan to ensure safe handling and storing of the ash.

All the relevant recorded information shall be submitted, together with Contractor's maintenance schedules, monthly to the Departmental Representative.

FA 13 WATER TREATMENT CHEMICAL DELIVERIES AND CONTROL

As part of this term contract, the Contractor shall, in collaboration with the User Client and chemical supplier, institute a quality and delivery control plan for each boiler house. The control plan shall consist of a set of records to be kept up to date with each delivery of chemicals, stating the following:

- (a) Delivery note number
- (b) Date of delivery
- (c) Type and quantity of salts and chemicals delivered
- (d) Make-up water volume, recorded regularly
- (e) Feed-water volume, recorded regularly
- (f) Random sampled feed-water recorded by chemical supplier
- (g) Contractor's signature on acceptance of information
- (h) Chemical supplier deliverer's signature
- (i) Boiler house supervisor's signature
- (j) Comments by any party.

The type of salts and chemicals to be accepted as in compliance with the specification shall be agreed between the User Client and the Departmental Representative, and shall be applicable to the type of boilers employed, as well as the make-up water supplied to the feed tank.

The Contractor shall ensure, together with the chemical supplier, that at regular intervals the boiler feed-water be sampled and analyzed, feed-water treatment equipment be adjusted to ensure the correct dosing percentages and treatment for the specific installation.

The Contractor shall, in collaboration with the User Client and Departmental Representative, also institute a control plan to ensure safe handling and storing of the chemicals.

All the relevant recorded information shall be submitted, together with Contractor's maintenance schedules, monthly to the Departmental Representative.

Where the Contractor specified in the Particular Specification and/or Schedule of Quantities shall be responsible for the supply and delivery to site of the chemicals and salts for the duration of this term contract. The Contractor shall appoint an approved chemical supplier for the delivery of these chemicals and salts. The Departmental Representative reserves the right to send samples of these chemicals and feed water for analysis by an independent laboratory for compliance checks. Chemicals delivered and utilized shall conform to the boiler manufactures specifications

FA 14 BOILER EFFICIENCY CONTROL

As part of this term contract, the Contractor shall, in collaboration with the boiler house supervisor, institute a boiler efficiency control plan for each boiler house. The control plan shall consist of a set of records to be completed regularly by monitoring the following:

- (a) Date and time entries recorded
- (b) Make-up water meter reading
- (c) Feed-water to boiler meter reading
- (d) Steam pressure gauge reading
- (e) CO₂ percentage reading of exhaust gases
- (f) Final exhaust gas temperature reading

- (g) Furnace pressure gauge reading
- (h) Steam flow meter reading if installed
- (i) Quantity of coal consumed.

The Contractor shall, in collaboration with the boiler house supervisor, ensure that these records are taken at predetermined intervals to ensure the efficient operation of the plant. Together with the boiler manufacturer's information and the above-mentioned recorded information, the Contractor shall issue a calculation indicating the approximate plant efficiency.

All the relevant recorded information shall be submitted, together with the Contractor's maintenance schedules, monthly to the Departmental Representative. It shall be the responsibility of the Contractor to ensure that the boiler can operate at the design efficiency in all respects.

FA 15 REPAIR WORK TO INSTALLATIONS, SYSTEMS AND EQUIPMENT

FA 15.01 GENERAL

During the term contract all the systems, installations and equipment shall be repaired as specified in the Particular Specification. This repair work shall include but not be limited to the specified Particular Specification details.

All repair work shall be executed using approved materials and equipment suitable to the systems and/or installations they serve. The said repair work shall be executed in accordance with the relevant codes of practice, standards, regulations, municipal laws and by-laws, manufacturer's specifications and codes of practice and all additional and particular specifications included in this document.

The repair work items are listed in tabular form in the Particular Specification with all relevant details, such as capacity, size, manufacturer, model number, etc.

All repair work shall be executed within the period specified in the Appendix to Tender. All new equipment, materials and systems shall be furnished with a written guarantee of a defects liability period of 12 months commencing on the date of issue of a certificate of completion of the repair work. These guarantees shall be furnished in favour of the Department of Public Works.

Repair work items for the steam generating installations are categorized under the following headings:

- (a) Statutory inspections and tests
 - (i) Internal and external inspection
 - (ii) Hydraulic pressure test
- (b) Coal-fired boiler
 - (i) Boiler shell water side
 - (ii) Boiler shell gas side
 - (iii) Integral piping
 - (iv) Boiler valves and mountings
 - (v) Refractories and brickwork
 - (vi) Soot blowers
 - (vii) Lagging and cladding
- (c) Feed-water equipment and controls
 - (i) Feed-water tanks
 - (ii) Feed-water pumps
 - (iii) Water level equipment and controls

- (d) Combustion and draught equipment
 - (i) Stoker and stoker controls
 - (ii) Fans and damper controls
 - (iii) Combustion controls
 - (iv) Chimneys
 - (v) Ducting
- (e) Coal handling and conveying equipment
 - (i) Coal bunker and gratings
 - (ii) Coal conveying equipment
- (f) Ash and grit removal equipment
 - (i) Grit collectors
 - (ii) Ash conveying equipment
 - (iii) Ash and grit trolleys
 - (iv) Ash storage and handling
- (g) Electrical installation, wiring and control panels
 - (i) Instrumentation and controls
 - (ii) General electrical power and lighting installation
 - (iii) Electrical control panels
- (h) Water treatment equipment
 - (i) Water softener
 - (ii) Chemical dosing equipment
- (i) Boiler house ancillary equipment
 - (i) Blow-down sump
 - (ii) Ladders and galleries
 - (iii) Painting of equipment, plant and building.

FA 15.02 **STATUTORY INSPECTIONS AND TESTS**

The Contractor shall at the commencement of the term contract arrange for the compulsory 12 and 36 month statutory inspections and tests on each of the boilers in his/her contract in accordance with the Occupational Health and Safety Act, 1993. This shall include an internal and external inspection and hydraulic test of the boilers. These inspections and tests shall be performed and certified by an approved inspection authority. The Contractor shall be responsible for all the preparation work and ancillary work as specified. Only one boiler at a time shall be taken out of commission for these purposes in accordance with General Decommissioning, Testing and Commissioning Procedures.

During this period the Contractor shall inspect, service, repair, replace and overhaul all ancillary boiler equipment associated with these boilers. These actions shall be planned in such a manner as to minimize the down-time of the boiler, as well as without influencing the operation of the rest of the plant. All defective equipment shall be replaced and repair work required to the boilers shall be done.

All inspections and findings shall immediately be reported to the Departmental Representative.

FA 15.02.01 Hydraulic pressure testing and internal and external inspections

A hydraulic pressure test and internal and external inspection shall be performed on each boiler in accordance with the requirements of The Occupational Health and Safety Act, No 85 of 1993 as amended and shall be witnessed and certified by an approved inspection authority.

The inspections and hydraulic test shall be performed every 12 and 36 months as prescribed in the Occupational Health and Safety Act of 1993.

In accordance with the regulations the Contractor shall be responsible for providing the necessary tools, workmen, lights, equipment and apparatus which may be required by the Inspector for the purposes of the inspection and tests, and shall include the following equipment and actions:

- (a) All equipment, tools, rigging and other facilities necessary for conducting the test and inspections shall be provided.
- (b) The boiler test pump and gauges calibration certificates shall be made available prior to commencing the hydraulic testing.
- (c) The hydraulic test medium shall be clean cold water. The required test pressure shall be as stipulated in the Occupational Health and Safety Act, No 85 of 1993, as amended.
- (d) The maximum rating of any hand-held light source shall be 50 volt.
- (e) The hydraulic test date shall be confirmed / negotiated with the approved inspection authority.
- (f) All notices as required by the regulations shall be provided and put into place.
- (g) The up to date boiler log book and Government boiler register shall be made available to the Inspector.

FA 15.02.02 Boiler preparation for statutory inspection and testing

The following preparation work shall be carried out, prior to the external and internal inspection and hydraulic test, by the Contractor:

- a) All electrical supplies and controls to the boiler shall be isolated prior to starting of testing and inspection procedures.
- b) The boiler shall be emptied and cleaned. All scale deposits are to be removed from internal shell, tubes and water spaces. Methods to be used shall be approved by the Departmental Representative and shall carry the approval of the boiler manufacturer.
- c) Dismantle and remove boiler lagging and cladding where necessary and where directed by the Departmental Representative.
- d) Remove stoker from boiler
- e) Remove required refractory brickwork from boiler before inspection.
- f) All boiler fittings shall be stripped down, de-scaled, machined, re-seated, overhauled and tested to manufacturer's specification by approved Engineering works. These are to be certified as complying with the manufacturer's specification. Each boiler fitting shall be hydraulically tested and witnessed as such by the Departmental Representative.
- g) Any boiler fittings found to be beyond repair shall be replaced with new on approval of the Departmental Representative.
- h) Remove all manholes, hand hole covers, mud holes and wash-out plugs.
- i) Remove boiler fusible plug and replace with new.
- j) Clean out and wire brush stacks, smoke boxes, flues and plates.
- k) Smoke boxes, stack uptake and domes to be painted in accordance with manufacturer's specification.
- l) Tubes to be cleaned, inspected and replaced if necessary.
- m) Open and clean out all blow-down and other trenches and replace damaged and leaking pipework.

- n) Chemical cleaning of the tubes shall not be allowed without the consent of the Departmental Representative.
- o) Internal parts of the boiler shall only be painted on completion of the successful boiler inspection by the Inspector.

FA 15.02.03 Internal and external inspection

On completion of all the required preparation work the Contractor shall notify the Departmental Representative and shall arrange for the external and internal inspection of the boiler to take place by the approved inspection authority. The inspection shall be certified with relevant comments by the inspection authority.

FA 15.02.04 The hydraulic pressure test

On completion of the necessary preparation work and internal and external inspection and relevant repair work, the Contractor shall prepare for the hydraulic test to be executed, which shall include the following:

- (a) Replace all manholes, hand hole covers, mud holes and wash-out plugs. All joints are to be renewed.
- (b) Replace boiler refractory brickwork and refractories prior to hydraulic pressure.
- (c) Properly clean and expose all boiler seams, stay heads and mountings.
- (d) All safety valves, steam valves and other connections to the boiler shall be blanked off prior to starting of testing procedures.
- (e) Ensure that all water gauge cocks are in the off-position and that all gauge glass protectors are in place.
- (f) The boiler shall be filled with clean water up to the highest opening of the boiler shell.
- (g) The system shall be put under the specified hydraulic pressure, with the boiler test pump, at least 15 minutes prior to the witnessing of the hydraulic test pressure.
- (h) The pressure shall be maintained for a minimum period as specified by the Inspector.
- (i) On completion of the hydraulic test, all boiler controls shall be tested.
- (j) Any leaks resulting from the hydraulic test shall be repaired and witnessed by the Departmental Representative. Any repair work shall lead to a new hydraulic test to be witnessed by the Inspector.
- (k) The witnessed hydraulic test shall be signed off by the approved inspection authority.
- (l) After repair of defects and reinstallation of all equipment, components, lagging, fittings, etc, and approval and certification of all inspections and tests the Contractor shall put the boiler back into operation.

The re-commissioning shall be done strictly in accordance with the boiler manufacturer's specification and shall be witnessed by the Departmental Representative.

FA 15.03 **BOILER PLANT EQUIPMENT AND INSTALLATION**

Any repair work which may be required on the boiler plant installation shall be executed with approved materials, equipment, methods and tooling suitable for the specific application. The said repair work shall be executed in accordance with the relevant codes of practice, standards, regulations, statutory regulations, manufacturers' specifications and codes of practice and as specified in all additional and particular specifications included in this document. During the statutory inspections and tests the following items are to be repaired and serviced as required by the Inspection Authority, boiler manufacturer and this specification.

FA 15.03.01 Coal-fired boilers

- (a) Boiler shell water side

Check and inspect boiler shell for any signs of corrosion, leaks, damages and ensure that the inside is clear of all foreign matter. All scale deposits are to be removed by means of approved method of the boiler manufacturer. If any signs of damage and/or corrosion are observed, the Contractor shall notify the Departmental Representative. Together with the Inspection Authority a decision shall be taken on the approved type of repairs to be implemented, if repair work is possible. All repair work to the boiler shell shall be done in accordance with the boiler manufacturer's specification, by qualified personnel, and shall be approved and witnessed as complying by the Inspection Authority. Check and inspect all internal pipe connections for correct fitting and soundness, ensure that all openings are clear of any foreign matter. Replace all hand hole, manhole and mud hole covers using new joint seals and rings. All existing paint work to boiler shell shall be properly prepared and repainted in accordance with the manufacturer's specification.

(b) Boiler shell gas side

Remove all smoke box covers and doors. Clear and clean out all dust, slag, ash and any foreign matter. Brush and clean out furnace tubes ensuring that no foreign matter is left behind. Boiler furnace tubes are to be inspected by the Inspection Authority. If any tubes are found in need of replacement these shall be done in accordance with the boiler manufacturer's specification, by qualified personnel, and shall be approved and witnessed by the Inspection Authority. All existing paintwork to boiler shell shall be properly prepared and repainted in accordance with the manufacturer's specification. Replace all smoke box covers and doors and ensure that they are all properly secured.

(c) Integral pipe work

All integral pipe work to the boiler to be inspected, cleaned and checked. The Contractor shall ensure that any defective piping, fittings, etc, be replaced and/or repaired in accordance with the manufacturer's specification.

(d) Boiler valves and mountings

All boiler valves including safety, blow-down, steam stop, air release, feed-water check, sequencing, drain valves, etc, are to be stripped, de-scaled, inspected, and overhauled. Where valves are found to be beyond repair these shall be replaced with new ones on approval of the Departmental Representative.

Overhauling of valves shall include repacking of gland packing's, machining and reseating of valve seats and valves. All boiler valves and fittings shall be inspected by the Inspection Authority prior to reassembling. All valves shall be hydraulically pressure tested, prior to refitting, and witnessed by the Inspection Authority.

The Contractor shall ensure that certificates of compliance to the manufacturer's specification are obtained and issued to the Departmental Representative, on all overhauled and refurbished valves, prior to refitting to boilers.

All overhauling and refurbishing work to boiler valves shall be done in accordance with the manufacturer's specification.

All boiler valve mountings on removed boiler valves are to be inspected and replaced with approved new mountings in accordance with the manufacturer's specification, which shall include washers, bolts, nuts, studs, etc.

Safety valves are to be adjusted and tested to the correct blow-off pressure.

(e) Refractories and brickwork

All removed refractories and brickwork during the internal and external inspection are to be replaced with new in accordance with the manufacturer's specification. All other refractories and brickwork not removed shall be inspected and repaired where necessary.

All recasting and replacement brickwork and refractories shall be done with approved materials, tooling, moulds, etc, in accordance with the manufacturer's specification.

On completion of the above work the Inspection Authority shall inspect and certify the work.

(f) Soot blowers

All soot blowers are to be removed, inspected, cleaned, overhauled and refurbished in accordance with the manufacturer's specification. On completion prior to refitting the soot blowers shall be tested in the presence of the Inspection Authority.

(g) Lagging and cladding

Boiler lagging and cladding are to be inspected, repaired and/or replaced where necessary.

On completion of statutory inspections and testing the removed lagging and cladding are to be replaced in an approved manner, replacing damaged sections of cladding and lagging, fixing screws to be properly secured and missing screws replaced. On completion cladding has to be repainted if necessary.

Where lagging and cladding are damaged beyond repair it shall be replaced with approved type as supplied by the manufacturer of the boiler.

FA 15.03.02 Feed-water equipment and controls

(a) Feed-water tanks

The feed-water tank has to be emptied, inspected, cleaned, repaired and refilled and put back into operation. Where only a single feed-water tank exists, this operation shall be carefully planned, as a complete plant shut-down will have to be arranged. This shall be done in close collaboration with the User Client and Engineer, ensuring the minimum shut-down period. Where dual feed-water tanks are present, only one tank at a time shall be taken out of operation for the necessary repair and service work.

The repair work to these tanks shall include at least the following:

- (i) Inspect and test the feed-water tank and associated equipment and pipework for any leakages.
- (ii) Isolate supply water, condensate inlets and feed-water outlet to tank.
- (iii) Empty tank by means of draining it through the drain valves.
- (iv) Remove and clean tank of all mud, sediment, scale deposits and foreign matter by means of approved methods.
- (v) Carry out all necessary repair work to the tanks and associated equipment and pipework.
- (vi) Inspect tank lining for any defects and corrosion and if necessary carry out any required repair actions.
- (vii) Inspect, test, repair and replace if necessary the filling mechanism.
- (viii) Inspect tank stand for any defects and damages, and carry out the necessary repair work if any.
- (ix) Inspect lagging and cladding to feed-water tanks and carry out the

- necessary repair or/and replacement work.
- (x) Refill feed-water tank with clean water and open feed-water supplies to boilers.
- (xi) Inspect painting to tank and tank stand and if necessary prepare and repaint.

(b) Feed-water pumps

The feed-water pumps to the boilers are to be inspected, tested, serviced, and repaired together with their associated equipment and pipe work. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the feed-water pumps and equipment shall include at least the following:

- (i) Inspect and test the feed-water pumps for correct operation.
- (ii) Replace gland packings, seals and gaskets.
- (iii) Inspect and test for any bearing noise and replace if necessary.
- (iv) Clean out pump strainers, check non-return valves, valves, etc.
- (v) Test pump motor windings for balance phases, insulation test and check wiring.
- (vi) Inspect pump mountings and repair if necessary.

(c) Water level equipment and controls

The boiler water level and feed pump controls are to be inspected, tested, adjusted, serviced and repaired in accordance with the manufacturer's specification. This shall include at least the following:

- (i) Float type water level controls are to be dismantled, stripped, de-scaled, cleaned, serviced, repaired and where necessary replaced.
- (ii) All water level controls are to be reassembled, refitted, tested and adjusted in accordance with the manufacturer's specification. The adjustments shall be in accordance with the manufacturer's specification for starting and stopping the pumps.
- (iii) Low water level alarms shall be tested, inspected and adjusted to the correct level ensuring that the alarms are sound and indicated.
- (iv) Where modulating valves are fitted these shall be inspected, tested, serviced and repaired in accordance with the manufacturer's specification. The pressure relief valve on pump discharge shall be cleaned, serviced, overhauled and readjusted to the correct blow-off level.
- (v) Replace water level gauge glasses and gaskets.

FA 15.03.03 Combustion and water treatment

(a) Stoker and stoker controls

The stoker and stoker controls are to be inspected, tested, serviced, and repaired together with their associated equipment. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

- (i) The repair work to the stoker, stoker controls and equipment shall include at least the following:
- (ii) Remove stoker from boiler furnace during the statutory inspections.
- (iii) Inspect and replace burnt or/and damaged chain grate links and rods where necessary.
- (iv) Replace chain grate bearings.
- (v) Inspect sprockets and replace if required.
- (vi) Inspect shafts, rear roller and re-machine or replace if necessary.

- (vii) Inspect stoker chassis for straightness, alignment and possible damages, and repair if necessary.
- (viii) Inspect undergrate damper guide vanes and ensure that they are clean of any dust, slag and foreign matter.
- (ix) Renew and recast all refractories and brickwork in accordance with the manufacturer's specification.
- (x) Inspect main worm wheel for any defects and replace if necessary.
- (xi) Replace all joint seals with new.
- (xii) Reassemble stoker and stoker components.
- (xiii) Replace guillotine door support cables.
- (xiv) Inspect, service and overhaul stoker drive and gearbox in accordance with the manufacturer's specification.
- (xv) Replace shear pin.
- (xvi) Adjust and readjust grate tension.
- (xvii) Check and adjust fuel bed depth indicator.
- (xviii) Lubricate all required lubrication points as directed by the manufacturer.
- (xix) Mount FD fan and controls onto stoker.
- (xx) Reinstall stoker into boiler furnace in accordance with manufacturer's specification.

(b) Fans and damper controls

The FD and ID fans and associated dampers and damper controls are to be dismantled, stripped, inspected, serviced, repaired and, where necessary, components have to be replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the FD and ID Fans, dampers and damper controls shall include at least the following:

- (i) Dismantle and strip down above equipment during the statutory inspections.
- (ii) Inspect fan impeller blades, clearances, etc, for correct curvature and clearance adjustment.
- (iii) Replace V-belts.
- (iv) Replace FD and ID fan bearings with new.
- (v) Inspect fan casings and repair if required.
- (vi) Clean casing and repaint.
- (vii) Inspect damper controls and dampers for free movement, fan impeller clearance adjustment, linkage adjustments, control movements and settings. Repair, service and replace any defective equipment.
- (viii) Test fans and pulling motor windings for balance phases, insulation test and check wiring.
- (xi) Lubricate all required lubrication points and replace oils as directed by the manufacturer.
- (x) Inspect fan mountings and repair if necessary.
- (xi) Reassemble and refit fans, damper controls and dampers.

(c) Combustion controls

The combustion control equipment shall be dismantled, stripped, inspected, serviced, repaired and, where necessary, components be replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the combustion control equipment shall include at least the following:

- (i) Dismantle and strip down above equipment during the statutory inspections.
- (ii) Inspect, service, adjust and repair combustion control equipment.
- (iii) Inspect, service, repair and adjust chain drives and linkages.

- (iv) Test motor windings for balance phases, insulation and check wiring.
- (v) Lubricate all required lubrication points and replace oils as directed by the manufacturer.
- (vi) Inspect mountings and repair if necessary.

(d) Smoke stack

The smoke stack shall be inspected and repaired where required. This shall include at least the following:

For self-supporting stacks check torque tension of holding-down bolts, check access door and reseal, inspect smoke stack for any defects and repair if required, clean out the base of the stack, check and repair lagging and cladding if fitted, prepare and repaint where required.

For guyed type smoke stack inspect and replace, if necessary, guy cables and securing points, re-tension guy cables, check and repair lagging and cladding if fitted, prepare and repaint where required.

(e) Ducting

The gas ducting shall be inspected and repaired where necessary. This shall include replacing all joint and expansion seals, cleaning out of ducting of all foreign matter, repairing and/or replacing any defective ducting, prepare and repaint ducting.

FA 15.03.04 Coal handling and conveying equipment

(a) Coal bunker

The coal bunkers or coal storage shall be inspected, cleaned out, and damaged structural elements and brickwork be repaired.

For coal bunkers the coal gratings and supports shall be inspected and all defective and/or damaged sections be repaired and/or replaced as might be necessary. Clear the coal storage area of any foreign objects.

(b) Coal conveying equipment

The coal conveying equipment shall be inspected, serviced, tested, repaired and, where necessary, components be replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the coal conveying equipment shall include at least the following:

- (i) Test all equipment for correct functioning.
- (ii) For en masse conveyors open covers, inspect links, chains and travelling ducting for any defects and/or damages, repair and/or replace components where necessary.
- (iii) For screw elevators inspect bushes, screw, casing, etc, for any defects and/or damages, repair and/or replace components where necessary.
- (iv) Inspect, service, lubricate and where necessary repair gear boxes and drives.
- (v) Test conveying equipment motor windings for balance phases, insulation and check wiring. Where necessary motors shall be reconditioned.
- (vi) Inspect, test, service, adjust and where necessary repair and/or replace hopper coal level equipment.
- (vii) Inspect, test, service and repair coal conveying electrical control panel

ensuring that all controls function properly in accordance with the design.

FA 15.03.05 Ash and grit removal equipment

(a) Grit collectors

The grit collector shall be inspected, serviced, tested, repaired and, where necessary, components be replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the grit collector shall include at least the following:

- (i) Inspect grit collector supports and mountings for sturdiness, and repair and/or replace where necessary.
- (ii) Clear out grit collector of all grit, dust and foreign matter.
- (iii) Inspect all discharge port and other access opening seals and replace with new ones, ensure that grit trolley seals seat tightly onto grit trolley. Check flap operation.
- (iv) Prepare and repaint grit collector casing and supports.

(b) Ash conveying equipment

If ash conveying equipment are installed these equipment shall be inspected, serviced, tested, repaired and, where necessary, components be replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the ash conveying equipment shall include at least the following:

- (i) Test all equipment for correct functioning.
- (ii) For submerged belt ash conveyors drain sump, clean out, inspect belt, roller bearings, frame, etc, any defects and/or damages, repair and/or replace components where necessary.
- (iii) For screw ash elevators inspect bushes, screw, casing, etc, for any defects and/or damages, repair and/or replace components where necessary.
- (iv) Inspect, service, lubricate and where necessary repair gear boxes and drives.
- (v) Test ash conveying equipment motor windings for balance phases, insulation test and check wiring. Where necessary motors shall be reconditioned.
- (vi) Inspect, test, service, adjust and where necessary repair and/or replace control equipment.
- (vii) Inspect, test, service and repair ash conveying electrical control panel ensuring that all controls function properly in accordance with the design.

(c) Ash and grit trolleys

All ash and grit trolleys are to be inspected, serviced and repaired where necessary.

FA 15.03.06 Electrical installation, wiring and control panels

(a) Instrumentation and controls

All instrumentation and control equipment shall be inspected, tested, repaired, adjusted and where necessary replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the instrumentation and control equipment shall include at least the following:

- (i) Test all equipment for correct operation.
 - (ii) Inspect, test, service, adjust setting and if necessary repair and/or replace steam detector.
 - (iii) Inspect, recalibrate and if beyond repair replace steam pressure gauge.
- (b) General electrical power and lighting installation

The Contractor shall be responsible for the term contract work of the general power and lighting installation inside the boiler house. All repair work to this installation shall be done in accordance with the Standard Specification for Electrical Installations and Equipment pertaining to Mechanical Services of the Department of Public Works. This work shall include all repair work to the existing power sockets, cabling, wiring, lighting, and distribution boards.

- (c) Electrical control panels

All electrical control panels shall be inspected, tested, and repaired, including all equipment inside the control panel. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the electrical control panels shall at least include the following:

- (i) Test all control equipment for correct operation.
- (ii) Check and test all MCBs, isolators, contactors, overloads, other type of motor drives, pilot lights, control switches, etc, and readjust all set points; where equipment is found to be faulty these shall be replaced with new approved equipment.
- (iii) Check all wiring and connections for proper conducting and replace where hot connections are found.
- (iv) Clean out panel interior and exterior, inspect panel body, fascias, doors, paintwork, etc., and repair where necessary.

FA 15.03.07 Water treatment equipment

- (a) Water softener

The water softener shall be inspected, tested, repaired, adjusted and, where necessary, components be replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the water softener shall at least include the following:

- (i) Test all equipment for correct operation.
- (ii) Sample of feed-water shall be taken and analyzed to ensure that water softener is adjusted to the correct percentage. The hardness of the water shall be within the boiler manufacturer's specification.
- (iii) Check control and mixing equipment and salt container.

- (b) Chemical dosing equipment

The chemical dosing units and containers shall be inspected, tested, repaired, adjusted and where necessary, components be replaced. All repair and service work shall be done strictly in accordance with the manufacturer's specification.

The repair work to the chemical dosing units and containers shall include at least the following:

- (i) Test all equipment for correct operation.

- (ii) Sample of feed-water shall be taken and analyzed to ensure that the chemical dosing rate and chemicals conform to the requirements of the boiler manufacturer.
- (iii) Check, inspect, service and repair control and dosing pump equipment.
- (iv) The above work shall be done in collaboration with the water treatment supplier company.

FA 15.03.08 Boiler house ancillary equipment

- (a) Blow-down sump

The blow-down sump shall be emptied, cleaned out, inspected and any repair work to the structure, manhole covers and frames, vent pipes, sparge pipes, etc, to be carried out.

- (b) Ladders and galleries

The ladders and galleries inside the plant room shall be inspected and any defects and/or damages repaired. Ladders and galleries shall be prepared and repainted. All mountings and fixing points shall be inspected and repaired if necessary.

- (c) Painting of equipment, plant and building

The Contractor shall on completion of the repair work clean and repaint the complete plant room and equipment as specified in accordance with the Department's Specification.

FA 16 **MAINTENANCE TO INSTALLATIONS, SYSTEMS AND EQUIPMENT**

FA 16.01 **GENERAL**

Maintenance responsibilities for each installation including all units and components as specified, shall commence with access to the site. A difference shall be made in payment for the maintenance prior to and after practical completion of repair work.

Maintenance responsibilities of the completed installation shall commence upon the issue of a certificate of practical completion for repair work, and shall continue for the remainder of the 36-month contract period.

This part of the Contract shall include:

- (a) Routine preventative maintenance;
- (b) Corrective maintenance, and
- (c) Breakdown maintenance,

as defined in General Maintenance, for the specified installations described under FA 01 of this specification.

The maintenance work to be performed and executed shall be done strictly in accordance with Additional Specification SA: General Maintenance, and as specified in Particular Specification PFA and this specification.

The said maintenance work shall be executed in accordance with the relevant codes of practice, statutory regulations, standards, regulations, municipal laws and by-laws and the manufacturers' specifications and codes of practice.

The maintenance schedules and frequency shall be developed under the maintenance control plan to be instituted by the Contractor, as specified in General Maintenance.

All new equipment, components and materials supplied and installed under the maintenance contract shall be furnished with a prescribed manufacturer's guarantee.

The maintenance work and items are to be categorized for each maintenance activity under the following headings:

- (a) Coal-fired boiler
- (b) Combustion equipment
- (c) Coal handling equipment
- (d) Ash handling equipment
- (e) Grit collection and draught equipment
- (f) Water treatment and feed-water tanks
- (g) Steam and condensate installation
- (h) Electrical installation and controls.

The Contractor shall be remunerated monthly, based on his performance, for maintaining the complete installation in a perfect functional condition.

FA 16.02 ROUTINE PREVENTATIVE MAINTENANCE

This routine maintenance of the installations, systems and equipment shall be done in accordance with General Maintenance and the Particular Specification related to this work.

The routine maintenance work to be performed and executed shall include, but not be limited to the items listed in tables FA 16.02/1, FA 16.02/2, FA 16.02/3, FA 16.02/4, FA 16.02/5 and FA 16.02/6 below under the respective headings.

These actions and findings shall be logged and reported on the relevant approved schedules and reports.

TABLE FA 16.02/1: DAILY ACTIONS AND MAINTENANCE

ITEM	MAINTENANCE DESCRIPTION	ACTION RESPONSIBILITY	ACTION
1	Measure CO2 content of exhaust with CO2 analyzer.	Boiler house supervisor	Check/Record
2	Blow-down gauge glasses.	Boiler house supervisor	Check/Record
3	Test level controls for correct functioning.	Boiler house supervisor	Check/Record
4	Inspect boiler valves for leakages.	Boiler house supervisor	Check/Record
5	Inspect boiler feed-water pumps for leakages, correct functioning and bearing noises.	Boiler house supervisor	Check/Record
6	Clean exterior of boiler and keep boiler plant room clean.	Boiler house supervisor	Check/Record
	Check stoker grate tension and report to Contractor if need to be adjusted. to adjust tension in accordance with manufacturer's specification, if reported.	Boiler house supervisor and Contractor	Check/Record
8	Check stoker grate links and rods for any damages. All damages to be reported to Contractor who shall replace any damaged links or/and rods.	Boiler house supervisor and Contractor	Check/Record
9	Complete log book actions as specified in FA 06, FA 12, FA 13, FA 14 and FA 15. Boiler house supervisor	Boiler house supervisor	Check/Record

TABLE FA 16.02/2: WEEKLY ACTIONS AND MAINTENANCE

ITEM	MAINTENANCE DESCRIPTION	ACTION RESPONSIBILITY	ACTION
1	All as listed under table FA 16.02/1	Boiler house supervisor and Contractor	Check/Record/Adjust/Repair
2	Test safety valves as described by the boiler manufacturer.	Contractor	Test/Record
3	Check the furnace draught gauge for correct operation in accordance with the manufacturer's specification.	Contractor	Check/Record
4	Inspect stoker brickwork and refractories and if found to be damaged it must be repaired.	Contractor	Check/Record
5	Lubricate all required lubrication points, including soot blowers, stoker drive shaft bearings, guillotine door and check stoker drive oil level.	Boiler house supervisor and Contractor	Check/Service/Record
6	Visual inspection of all boiler house equipment and installations for any pending defects, faults, etc.	Boiler house supervisor and Contractor	Check/Record
7	Inspect and test all control functions and readjust if necessary.	Contractor	Test/Record/Adjust

TABLE FA 16.02/3: MONTHLY ACTIONS AND MAINTENANCE

ITEM	MAINTENANCE DESCRIPTION	ACTION RESPONSIBILITY	ACTION
1	All as listed under tables FA 16.02/1 and FA 16.02/2	Boiler house supervisor and Contractor	Check/Record Adjust/Repair Check/Service/Record
2	Clean out all strainers. Contractor		
3	Inspect and test soot blowers for correct operation. Check/Record	Contractor	
4	Inspect all V-Belts and replace if necessary.	Contractor	Check/Record/Replace
5	Inspect all brickwork and refractories and repair and/or Replace where necessary.	Contractor	Check/Record Repair Check/Record Replace
6	Inspect all seals and joints for leakages and replace if necessary.	Contractor	
7	All grease nipples to be greased with specified grease in accordance with equipment manufacturer's specification.	Contractor	Check/Service/Record
8	Test and analyse water quality, adjust and repair water treatment equipment if necessary and where specified, supply and deliver chemicals and salts.	Contractor and chemical supplier	Test/Record Adjust/Repair
9	Sample and analyse coal quality.	Boiler house supervisor, coal supplier and Contractor	Check/Record/Test
10	Check ash removal implementation and report.	Boiler house supervisor, ash removal company and Contractor	Check/Record
11	Test and record boiler efficiency.	Boiler house supervisor and Contractor	Test/Record
12	Check coal conveying equipment for correct functioning and check for any visual faults or defects and repair if necessary.	Contractor Contractor	Check/Record/Repair Check/Record
13	Inspect, service, repair and replace where required all electrical equipment and installations.	Contractor	Test/Record Adjust/Repair
14	Inspect, service all steam and condensate piping and equipment.	Contractor	Test/Record Adjust/Repair

TABLE FA 16.02/4: THREE-MONTHLY ACTIONS AND MAINTENANCE

ITEM	MAINTENANCE DESCRIPTION	ACTION RESPONSIBILITY	ACTION
1.0	All as listed under tables FA 16.02/1, FA 16.02/2 and FA 16.02/3	Boiler house supervisor and Contractor	Check/Record/Adjust/Repair
2.00	Lubricate ID and FD damper control units.	Contractor	Check/ Record Service
3.00	Replace ID and FD fan bearing grease.	Contractor	Check/ Record Service
4.00	Brush and clean fire tubes and clean flue, back plate, combustion chamber and remove all grit and soot deposits. Inspect and repair where necessary.	Contractor	Check/Record/Service/Repair
5.00	Check boiler water side for scale deposits and clean and de-scale.	Contractor	Check/Record/Service/Repair
6.00	Replace stoker gear box and drive oils.	Contractor	Check/Record Service/Repair
7.00	Check, inspect, service all coal conveying equipment and repair where necessary.	Contractor	Check/Record Service/Repair
8.00	Check, inspect, service and repair if necessary grit collectors and chimney stacks.	Contractor	Check/Record Service/Repair
9.00	Inspect, repair and replace where necessary all lagging and cladding.	Contractor	Check/Record Service/Repair

TABLE FA 16.02/5: SIX-MONTHLY ACTIONS AND MAINTENANCE

ITEM	MAINTENANCE DESCRIPTION	ACTION RESPONSIBILITY	ACTION
1	All as listed under tables FA 16.02/1, FA 16.02/2 and FA 16.02/3	Boiler house supervisor and Contractor	Check/Record/Adjust/Repair
2	Inspect stoker chassis, repair and replace as required.	Contractor	Check/Record/Service/Repair
3	Fully test, inspect, service, adjust, repair and replace as required ID and FD dampers.	Contractor	Check/Record/Service/Repair
4	Inspect, descale, clean out, repair and replace as required feed-water tanks.	Contractor	Check/Record/Service/Repair

TABLE FA 16.02/6: ANNUAL ACTIONS AND MAINTENANCE

ITEM	MAINTENANCE DESCRIPTION	ACTION RESPONSIBILITY	ACTION
1	All as listed under tables FA 16.02/1, FA 16.02/2, FA 16.02/3 and FA 16.02/4	Boiler house supervisor and Contractor	Check/Record/Adjust/Repair
2	Annual survey by Occupational, Health and Safety Inspector.	Contractor, Department and Inspector	Inspect/Test/Service/Repair
3	Inspect and repaint all equipment and building elements where required.	Contractor	Inspect/Test/Service/Repair
4	Inspect, clean, repair blow-down sump.	Contractor	Inspect/Test/Service/Repair
5	Remove, strip, service, repair, adjust and repair level controls, alarms and safety equipment.	Contractor	Inspect/Test/Service/Repair

FA 16.03 **CORRECTIVE MAINTENANCE**

This corrective maintenance of the installations, systems and equipment shall be done in accordance with General Maintenance and the Particular Specification related to this work.

The Contractor shall inspect and check all equipment, materials, systems and installation for any pending breakdowns, maladjustments or anomalies of equipment.

The Contractor shall report and take actions to correct such shortfall.

FA 16.04 **BREAKDOWN MAINTENANCE**

Breakdown maintenance of the installations, systems and equipment shall be done in accordance with General Maintenance.

All breakdown problems experienced shall be acted upon within the time limitations allowed in the General Maintenance specifications.

All breakdown maintenance shall be done in accordance with the relevant specifications, standards, regulations and codes.

The Contractor shall have access to the necessary spares, equipment and tools for any possible breakdowns.