



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

TENDER

FOR

**SERVICE, MAINTENANCE AND OPERATION OF
STEAM BOILER**

AT

KIMBERLEY DCS

NORTHERN CAPE PROVINCE

DEPARTMENT OF PUBLIC WORKS
AND INFRASTRUCTURE
KIMBERLEY REGIONAL OFFICES
PRIVATE BAG X5002
KIMBERLEY
8300

PROJECT MANAGER:
L. Sebopetja

YOU ARE HEREBY INVITED TO BID TO THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA

PLEASE TAKE NOTE

TENDER NUMBER: *ID: 96741*

CLOSING TIME: 11:00

CLOSING DATE: *22/10/2021*

BIDS RECEIVED AFTER THE CLOSING TIME AND DATE ARE LATE AND WILL, AS A RULE NOT BE ACCEPTED FOR CONSIDERATION

The Tax Clearance Certificate for Bid Purposes from the Receiver of Revenue and the Bid Form must be completed and signed in the original that is in ink. Forms with photocopied signatures or other such reproduction of signatures will be rejected.

BID DOCUMENTS MAY BE POSTED TO

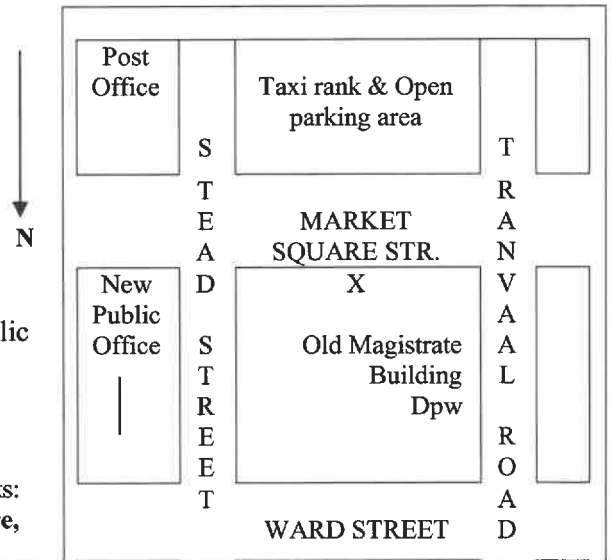
REGIONAL MANAGER
Department of Public Works
Private Bag X5002
KIMBERLEY
8300

ATTENTION: BID SECTION: ROOM N22

Bid documents that are posted must reach the Department of Public Works before 11:00 on the closing date of the bid.

OR

The bid documents may be deposited at the Department of Public Works:
Head Office: **Room 29, Old Magistrate Offices, 21-23 Market Square, Kimberley, 8300.**



The Office of the Department of Public Works is open **Mondays to Fridays**
07:30 – 12:45 / 13:30 – 15:30. However, if the bid is late, it will, as a rule not be accepted for consideration.

Bidders should ensure that bids are delivered timeously to the correct address.

SUBMIT ALL BIDS ON THE OFFICIAL FORMS - DO NOT RETYPE.

Bids by telegram, facsimile or other similar apparatus will not be accepted for consideration.

SUBMIT EACH BID IN A SEPARATE SEALED ENVELOPE.

The Government Tender Bulletin is available on the Internet on the following web sites:

1. <http://www.treasury.gov.za>
2. <http://www.gov.za/bids/>

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

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES TENDERS FOR:

Project title:	Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)
Reference no:	19/2/4/2/2/2021-2024

Tender no:	ID: 96741		
Advertising date:	01/10/2021	Closing date:	22/10/2021
Closing time:	11h00	Validity period:	90 days

It is estimated that tenderers should have a CIDB contractor grading designation of **6ME** or **6ME*** 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 **6MEPE** or **6MEPE*** or higher.

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

Only tenderers who are responsive to the following 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:

<input checked="" type="checkbox"/>	Only those tenderers who satisfy the eligibility criteria stated in the Tender Data may submit tenders.
<input checked="" type="checkbox"/>	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).
<input checked="" type="checkbox"/>	All parts of tender documents submitted must be fully completed and signed where required.
<input checked="" type="checkbox"/>	Submission of (DPW-07 EC): Form of Offer and Acceptance.
<input checked="" type="checkbox"/>	Submission of (PA-11): Declaration of Interest and Tenderer's Past Supply Chain Management Practices.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	Submission of (PA-29): Certificate of Independent Bid Determination.
<input checked="" type="checkbox"/>	The tenderer will be required to submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts) together with his tender.
<input type="checkbox"/>	Submission of (DPW-16 EC): Site Inspection Meeting Certificate as proof of attendance of compulsory site inspection meeting. <i>insert motivation why the site inspection meeting is declared compulsory</i>
<input checked="" type="checkbox"/>	Use of correction fluid is prohibited.
<input checked="" type="checkbox"/>	Registration on National Treasury's Central Supplier Database (CSD).
<input checked="" type="checkbox"/>	Compliance with Pre-qualification criteria for Preferential Procurement as indicated below.
<input type="checkbox"/>	Submission of proof of registration on National Treasury's Central Supplier Database (CSD) for all sub-contractors for 30% compulsory sub-contracting (attach CSD print out).
<input checked="" type="checkbox"/>	Submission of PA 36 and Annexure C as proof of Compliance to Local Production and Content requirements.
<input checked="" type="checkbox"/>	Submission of (DPW-09EC): Particulars of Tenderer's Projects.

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".

<input checked="" type="checkbox"/>	Submission of PA 40: Declaration of designated groups for preferential procurement
<input type="checkbox"/>	<i>Specify other responsiveness criteria</i>

Tenderer must comply with the Pre-qualification criteria for Preferential Procurement listed below

<input type="checkbox"/>	A tenderer having stipulated minimum B-BBEE status level of contributor: <input checked="" type="checkbox"/> Level 1 or <input checked="" type="checkbox"/> Level 2 or <input type="checkbox"/> Level 3
<input checked="" type="checkbox"/>	An EME or QSE
<input type="checkbox"/>	A tenderer subcontracting a minimum of 30% to: <input type="checkbox"/> An EME or QSE which is at least 51% owned by black people <input type="checkbox"/> An EME or QSE which is at least 51% owned by black people who are youth <input type="checkbox"/> An EME or QSE which is at least 51% owned by black people who are women <input type="checkbox"/> An EME or QSE which is at least 51% owned by black people with disabilities <input type="checkbox"/> An EME or QSE which is at least 51% owned by black people living in rural or underdeveloped areas or townships <input type="checkbox"/> A co-operative which is at least 51% owned by black people <input type="checkbox"/> An EME or QSE which is at least 51% owned by black people who are Military veterans <input type="checkbox"/> An EME or QSE;

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

<input checked="" type="checkbox"/> 80/20 Preference points scoring system	<input type="checkbox"/> 90/10 Preference points scoring system	<input type="checkbox"/> 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. (To be used in instances where the estimate cannot be reasonably determined or when one is unsure as to what the market price may be).

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.*

Minimum functionality score to qualify for further evaluation:	50
Functionality criteria:	Weighting factor:
1. Number of similar projects completed in steam boilers service, maintenance and operation or installation 1.1. 5 projects and above = 5 points 1.2. 4 projects = 4 points 1.3. 3 projects = 3 points 1.4. 2 projects = 2 points 1.5. 1 projects = 1 point 1.6. No information provided = 0 point Provide practical completion certificates/ job cards as proof	30

<p>2. Staffing Resources 1: Experience as Steam Boiler Technician/Artisan</p> <p>2.1. 5 years and above = 5 points 2.2. 4 years = 4 points 2.3. 3 years = 3 points 2.4. 2 years = 2 points 2.5. 1 years = 1 point 2.6. No information provided = 0 point</p> <p>Provide copies of CVs and certified copies of qualifications/certificates as proof</p>	20
<p>3. Staffing Resources 2: Number of Steam Boiler Operators</p> <p>3.1. 7 operators and above = 5 points 3.2. 6 operators = 4 points 3.3. 5 operators = 3 points 3.4. 4 operators = 2 points 3.5. 1 to 3 operators = 1 point 3.6. No information provided = 0 point</p> <p>Provide copies of CVs and certified copies of qualifications/certificates as Boiler Operator/Attendance as proof</p>	30
<p>4. Financial Credibility</p> <p>4.1. Credit rating of A = 5 points 4.2. Credit rating of B = 4 points 4.3. Credit rating of C = 3 points 4.4. Credit rating of D = 2 points 4.5. Credit rating of E = 1 point 4.6. No information provided = 0 point</p> <p>Provide Bank rating from banking institution as proof</p>	20
<p>Total</p>	<p>100 Points</p>

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 National Department of Public Works and Infrastructure, 21-23 Market Square, Old Magistrate Building, Kimberley, 8301. A non-refundable bid deposit of R 500.00 is payable (cash only) on collection of the bid documents.

Site inspection meeting

A pre-tender site inspection meeting will **not be** held in respect of this tender. Attendance of said pre- tender site inspection meeting is **select**

The particulars for said pre- tender site inspection meeting are:

Venue: **(type in here the place or "N/A")**

Date: **(type in here the date or "N/A")**

Starting time: **(type in here the time or "N/A")**

quiries related to tender documents may be addressed to:

DPW Project Manager:	Lerato Sebopetja	Telephone no:	053 838 5347
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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".

Cell no:	082 806 0387	Fax no:	
E-mail:	Lerato.sebopetja@dpw.gov.za		

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).

<p>Tender documents may be posted to:</p> <p>The Director-General Department of Public Works and Infrastructure Private Bag X5002 Kimberley 8301</p> <p>Attention: Procurement section: Room N 32</p>	OR	<p>Deposited in the tender box at:</p> <p>21-23 Market Square Old Magistrate Building Phakamile Mabitja New Wing Entrance</p>
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Compiled by:

Lerato Sebopetja		16/09/2021
Name of Project Manager	Signature	Date

PA-09 (EC): LIST OF RETURNABLE DOCUMENTS

Project title:	Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)		
Tender / Quote no:	ID: 96741	Reference no:	19/2/4/2/2/2021-2021
Receipt Number:	<i>insert receipt number</i>		

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
Submission of (PA-29): Certificate of Independent Bid Determination	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
Site Inspection Meeting Certificate (DPW-16 EC) <i>(if applicable)</i>	1 Page	Yes
Particulars of Tenderer's Projects (DPW-09 EC)		

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 F.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 F.2.18 of the Standard Conditions of Tender]

Tender document name	Number of pages issued	Returnable document
Record of Addenda to tender documents (DPW-21 EC) <i>(if applicable)</i>	1 Page	Yes
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 (if applicable)	Pages	Yes
Schedule for Imported Materials and Equipment (DPW-23 EC) (if applicable)	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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>insert document name</i>	Pages	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>insert document name</i>	Pages	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>insert document name</i>	Pages	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>insert document name</i>	Pages	<input type="checkbox"/> Yes <input type="checkbox"/> No

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-07 (EC): FORM OF OFFER AND ACCEPTANCE

Project title:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>		
Tender no:	<i>ID:96741</i>	Reference no:	<i>19/2/4/2/2/2021-2024</i>

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:
Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 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:.....
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AND WHO IS (if applicable):

Trading under the name and style of:

AND WHO IS:

*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"
 For Internal & External Use

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.
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Tender no: ID: 96741

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 contact 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
select
 - (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
select

NB. Guarantees submitted must be issued by either an insurance company duly registered in terms of the 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):

.....

Other Contact Details of the Tenderer are:

Telephone No..... Cellular Phone No.

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**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"
For Internal & External Use

Fax No
 Postal address
 Banker Branch.....
 Registration No of Tenderer at Department of Labour
 CIDB Registration Number:

Tender no: ID:96741

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 1 Agreement and contract data, (which includes this agreement)
- Part 2 Pricing data
- Part 3 Scope of work
- Part 4 Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

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 Organisation:	

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"
 For Internal & External Use

Tender no: ID: 96741

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.

*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"
 For Internal & External Use

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:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>		
Bid no:	ID: 96741	Reference no:	19/2/4/2/2/2021-2024

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.



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



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 / Pearsal 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).	<input type="checkbox"/> Yes	<input type="checkbox"/> 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.	<input type="checkbox"/> Yes	<input type="checkbox"/> 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?	<input type="checkbox"/> Yes	<input type="checkbox"/> 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?	<input type="checkbox"/> Yes	<input type="checkbox"/> 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-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			
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)



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:

- * Delete which is not applicable.
- NB:** This resolution must, where possible, be signed by all the Directors / Members / Partners of the Bidding Enterprise.
- 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).
- 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).
- 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)*



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: _____

_____ (code)

Postal Address: _____

_____ (code)

Telephone number: _____

Fax number: _____



	Name	Capacity	Signature
1			
2			
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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 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.
3. 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.
4. 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).

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

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017 AND THE AMENDED B-BBEE CODES.

1. GENERAL CONDITIONS

1.1. The following preference point systems are applicable to all bids:

- 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. The value of this bid is estimated to ~~Not Exceed~~ R50 000 000 (all applicable taxes included) and therefore the... **80/20**.....system shall be applicable.

1.3. Preference points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contribution.

1.3.1 The maximum points for this bid are allocated as follows:

	POINTS
1.3.1.1 PRICE	80
1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION	20
Total points for Price and B-BBEE must not exceed	100

1.4. Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5. An Exempted Micro Enterprise (EME) is only required to obtain a sworn affidavit or a certificate issued by Companies and intellectual property Commission (CIPC) confirming their annual turnover of R10 Million or less and level of black ownership to claim points.

1.6. Qualifying Small Enterprise (QSE) is only required to obtain a sworn affidavit or a certificate issued by Companies and intellectual property Commission (CIPC) confirming their annual turnover of R10 Million or less and level of black ownership to claim points.

Preference Points Claim for Bids: PA-16

- 1.7 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.
- 1.8 CERTIFICATES ISSUED BY IRBA AND ACCOUNTING OFFICER HAVE BEEN DISCONTINUED; HOWEVER VALID CERTIFICATES ALREADY ISSUED BEFORE 01 JANUARY 2017 MAY BE USED UNTIL THEY PHASE OUT COMPLETELY BY DECEMBER 2017

2. DEFINITIONS

- (a) **“all applicable taxes”** includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- (b) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (c) **“B-BBEE status level of contributor”** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (d) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- (e) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (f) **“comparative price”** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- (g) **“consortium or joint venture”** 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;
- (h) **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- (i) **“EME”** means an Exempted Micro Enterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (j) **“Firm price”** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- (k) **“functionality”** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- (l) **“non-firm prices”** means all prices other than “firm” prices;
- (m) **“person”** includes a juristic person;
- (n) **“QSE”** means a Qualifying Small Enterprise as defines by Codes of Good Practice under

Preference Points Claim for Bids: PA-16

section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

- (o) **“rand value”** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- (p) **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- (q) **“total revenue”** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;
- (r) **“trust”** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- (s) **“trustee”** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20 or 90/10

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

P_s = Points scored for comparative price of bid under consideration

P_t = Comparative price of bid under consideration

Preference Points Claim for Bids: PA-16

P_{min} = Comparative price of lowest acceptable bid

5. Points awarded for B-BBEE Status Level of Contribution

5.1 In terms of Regulation 6(2) and /or 7(2), of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

- 5.2 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.3 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.4 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.5 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. BID DECLARATION

6.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1

7.1 B-BBEE Status Level of Contribution: =(maximum of 10 or 20 points)

Preference Points Claim for Bids: PA-16

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or Sworn Affidavit for EME's and QSE's.

8 SUB-CONTRACTING (relates to 5.5)

8.1 Will any portion of the contract be sub-contracted? YES / NO (delete which is not applicable)

8.1.1 If yes, indicate:

(i) what percentage of the contract will be subcontracted?

.....%

(ii) the name of the sub-contractor?

(iii) the B-BBEE status level of the sub-contractor?

.....

(iv) whether the sub-contractor is an EME/ a QSE? YES / NO (delete which is not applicable)

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

9 DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm

9.2 VAT registration number :

9.3 Company registration number

9.4 TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One person business/sole propriety
- Close corporation
- Company
- (Pty) Limited

[TICK APPLICABLE BOX]

Preference Points Claim for Bids: PA-16

5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

9.6 COMPANY CLASSIFICATION

- Manufacturer
 - Supplier
 - Professional service provider
 - Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

9.7 Total number of years the company/firm has been in business?

9.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraph 7 of the foregoing certificate/ Sworn Affidavit, qualifies the company/ firm for the preference(s) shown and I / we 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 paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) Disqualify the person from the bidding 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) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, 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

WITNESSES:

- 1.
- 2.

SIGNATURE(S) OF BIDDER(S)

DATE:.....

ADDRESS:.....

.....

PA- 29: CERTIFICATION OF INDEPENDENT BID DETERMINATION

Project title:	Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)		
Bid no:	ID: 96741	Reference no:	19/2/4/2/2/2021-2024

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 *pe 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.

Certification of Independent Bid Determination: PA-29

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:



Certification of Independent Bid Determination: PA-29

- (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.
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



Certification of Independent Bid Determination: PA-29

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

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.

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

PA36: Declaration Certificate for Local Production and Content for Designated Sectors.

(This form has been aligned with NT - SBD 6.2)

PA-36: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

- x is the imported content in Rand
y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp at no cost.

PA36: Declaration Certificate for Local Production and Content for Designated Sectors.

(This form has been aligned with NT - SBD 6.2)

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Valves products	70 %
Electrical cables	90 %
Pumps and Medium voltage motors	70 %

3. Does any portion of the goods or services offered have any imported content?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.resbank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

4. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)



PA36: Declaration Certificate for Local Production and Content for Designated Sectors.

(This form has been aligned with NT - SBD 6.2)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. ID: 96741

ISSUED BY: (Procurement Authority / Name of Institution):

.....
NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.isp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
do hereby declare, in my capacity as
of(name of bidder
entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.



PA36: Declaration Certificate for Local Production and Content for Designated Sectors.

(This form has been aligned with NT - SBD 6.2)

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

(d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

Annex C

Local Content Declaration - Summary Schedule

(C1) Tender No.
 (C2) Tender description:
 (C3) Designated product(s)
 (C4) Tender Authority:
 (C5) Tendering Entity name:
 (C6) Tender Exchange Rate:
 (C7) Specified local content %

Pula

EU

GBP

Note: VAT to be excluded from all calculations

Calculation of local content			
Tender item no's	List of items	Tender price - each (excl VAT)	Tender value net of exempted imported content
(C8)	(C9)	(C10)	(C11)
		(C20) Total tender value	(C21) Total Exempt imported content
		(C22) Total Tender value net of exempt imported content	(C23) Total Imported content
		(C24) Total local content	(C25) Average local content % of tender

Calculation of local content			
Tender item no's	List of items	Tender price - each (excl VAT)	Tender value net of exempted imported content
(C8)	(C9)	(C10)	(C11)
		(C12) Total exempted imported content	(C13) Imported value
		(C14) Local value	(C15) Local content % (per item)

Tender summary			
Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C16)	(C17)	(C18)	(C19)
		(C20) Total tender value	(C21) Total Exempt imported content
		(C22) Total Tender value net of exempt imported content	(C23) Total Imported content
		(C24) Total local content	(C25) Average local content % of tender

Signature of tenderer from Annex B

Date: _____

PA- 40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

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 / under developed area/township	Indicate if military veteran
1.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
6.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
8.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
9.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
10.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
11.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
12.		%	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> 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



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

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

Project title:	Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)		
Tender / quotation no:	ID: 96741	Closing date:	dd/mm/yyyy 22/10/2021
Advertising date:	dd/mm/yyyy 01/10/2021	Validity period:	90 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 commencement date	Contractual completion date	Current percentage progress
1						
2						
3						
4						
5						
6						
7						
8						

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



DPW-10.2 (EC): VARIABLE CONSTRUCTION GUARANTEE – (GCC (2010) 2nd EDITION: 2010)

Director-General
Department of Public Works
Government of the Republic of South Africa

To: **Department of Public Works and Infrastructure**
Private Bag X5002
Kimberley
8300

Sir,

VARIABLE CONSTRUCTION GUARANTEE FOR THE EXECUTION OF A CONTRACT IN TERMS OF GCC (2010) 2nd EDITION 2010

1. With reference to the contract between _____
_____ (hereinafter referred to as the “**contractor**”) and the Government of the Republic of South Africa in its Department of Public Works (hereinafter referred to as the “**employer**”), Contract/Tender No: _____, for the **Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)** (hereinafter referred to as the “**contract**”) for the sum of R _____, (**insert amount in words**.....) , (hereinafter referred to as the “**contract sum**”).

I / We, _____
in my/our capacity as _____ and hereby
representing _____ (hereinafter referred to as the “**guarantor**”) advise that the **guarantor** holds at the **employer’s** disposal the sum of R _____, (**insert amount in words**.....) being 10% of the **contract sum** (excluding VAT), for the due fulfilment of the **contract**.
2. I / We advise that the **guarantor’s** liability in terms of this guarantee shall be as follows:
 - (a) From and including the date on which this guarantee is issued and up to and including the day before the date on which the last **certificate of completion** of works is issued, the **guarantor** will be liable in terms of this guarantee to the maximum amount of 10% of the **contract sum** (excluding VAT);
 - (b) The **guarantor’s** liability shall reduce to 5 % of the **value of the works** (excluding VAT) as determined at the date of the last **certificate of completion** of works, subject to such amount not exceeding 10% of the **contract sum** (excluding VAT);
 - (c) This guarantee shall expire on the date of the last **final approval certificate**.
3. The **guarantor** hereby renounces the benefits of the exceptions *non numeratae pecunia; non causa debiti; excussionis et divisionis; and de duobus vel pluribus reis debendi* which could be pleaded against the enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves to be conversant, and undertake to pay the **employer** the amount guaranteed on receipt of a written demand from the **employer** to do so, stating that (in the **employer’s** opinion and sole discretion):
 - (a) the **contractor** has failed or neglected to comply with the terms and/or conditions of the **contract**; or
 - (b) the **contractor’s** estate is sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa.

4. Subject to the above, but without in any way detracting from the **employer's** rights to adopt any of the procedures provided for in the **contract**, the said demand can be made by the **employer** at any stage prior to the expiry of this guarantee.
5. The amount paid by the **guarantor** in terms of this guarantee may be retained by the **employer** on condition that upon issue of the last **final approval certificate**, the **employer** shall account to the **guarantor** showing how this amount has been expended and refund any balance due to the **guarantor**.
6. The **employer** shall have the absolute right to arrange his affairs with the **contractor** in any manner which the **employer** deems fit and the **guarantor** shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the **guarantor**. Without derogating from the foregoing, any compromise, extension of the construction period, indulgence, release or variation of the **contractor's** obligation shall not affect the validity of this guarantee.
7. The **guarantor** reserves the right to withdraw from this guarantee at any time by depositing the guaranteed amount with the **employer**, whereupon the **guarantor's** liability ceases.
8. This guarantee is neither negotiable nor transferable, and
 - (a) must be surrendered to the **guarantor** at the time when the **employer** accounts to the **guarantor** in terms of clause 5 above, or
 - (b) shall lapse in accordance with clause 2 (c) above.
9. This guarantee shall not be interpreted as extending the **guarantor's** liability to anything more than payment of the amount guaranteed.

SIGNED AT _____ ON THIS _____ DAY OF _____ 200__

AS WITNESS

1. _____
2. _____

By and on behalf of

(insert the name and physical address of the guarantor)

NAME: _____

CAPACITY: _____
(duly authorised thereto by resolution attached marked Annexure A)

DATE: _____

- A. No alterations and/or additions of the wording of this form will be accepted.
- B. The physical address of the guarantor must be clearly indicated and will be regarded as the **guarantor's domicilium citandi et executandi**, for all purposes arising from this guarantee.



C. This GUARANTEE must be returned to: _____

DPW-10.4 (EC): FIXED CONSTRUCTION GUARANTEE - (GCC (2010) 2nd EDITION: 2010)

Director-General
Department of Public Works
Government of the Republic of South Africa

To: **Department of Public Works and Infrastructure**
Private Bag **iX5002**
Kimberley
8300

Sir,

FIXED CONSTRUCTION GUARANTEE FOR THE EXECUTION OF A CONTRACT IN TERMS OF GCC (2010) 2ND EDITION 2010

1. With reference to the contract between _____
_____ (hereinafter referred to as the “**contractor**”) and the Government of the Republic of South Africa in its Department of Public Works (hereinafter referred to as the “**employer**”), Contract/Tender No: _____, for the **Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)** (hereinafter referred to as the “**contract**”), for the sum of R _____, (**insert amount in words**.....), (hereinafter referred to as the “**contract sum**”).

I / We, _____
in my/our capacity as _____ and hereby representing _____ (hereinafter referred to as the “**guarantor**”) advise that the **guarantor** holds at the **employer**’s disposal the sum of R _____, (**insert amount in words**.....) being 5% of the **contract sum** (excluding VAT), for the due fulfillment of the **contract**.

2. The **guarantor** hereby renounces the benefits of the exceptions *non numeratae pecunia; non causa debiti; excussionis et divisionis; and de duobus vel pluribus reis debendi* which could be pleaded against the enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves to be conversant, and undertake to pay the **employer** the amount guaranteed on receipt of a written demand from the **employer** to do so, stating that (in the **employer**’s opinion and sole discretion):
 - (a) the **contractor** has failed or neglected to comply with the terms and/or conditions of the **contract**; or
 - (b) the **contractor**’s estate is sequestrated; liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa.
3. Subject to the above, but without in any way detracting from the **employer**’s rights to adopt any of the procedures provided for in the **contract**, the said demand can be made by the **employer** at any stage prior to the expiry of this guarantee.
4. The amount paid by the **guarantor** in terms of this guarantee may be retained by the **employer** on condition that upon the issue of the last **final approval certificate**, the **employer** shall account to the **guarantor** showing how this amount has been expended and refund any balance due to the **guarantor**.
5. The **employer** shall have the absolute right to arrange his affairs with the **contractor** in any manner which the **employer** deems fit and the **guarantor** shall not have the right to claim his release on

account of any conduct alleged to be prejudicial to the **guarantor**. Without derogating from the foregoing, any compromise, extension of the construction period, indulgence, release or variation of the **contractor's** obligation shall not affect the validity of this guarantee.

- 6. The **guarantor** reserves the right to withdraw from this guarantee at any time by depositing the guaranteed amount with the **employer**, whereupon the **guarantor's** liability ceases.
- 7. This guarantee is neither negotiable nor transferable, and
 - (a) must be surrendered to the **guarantor** at the time when the **employer** accounts to the **guarantor** in terms of clause 4 above, or
 - (b) shall lapse on the date of the last **certificate of completion** of works.
- 8. This guarantee shall not be interpreted as extending the **guarantor's** liability to anything more than the payment of the amount guaranteed.

SIGNED AT _____ **ON THIS** _____ **DAY OF**
 _____ **20**_____.

AS WITNESS

- 1. _____
- 2. _____

By and on behalf of

(insert the name and physical address of the guarantor)

NAME: _____

CAPACITY: _____
(duly authorised thereto by resolution attached marked Annexure A)

DATE: _____

- A. No alterations and/or additions of the wording of this form will be accepted.**
- B. The physical address of the guarantor must be clearly indicated and will be regarded as the guarantor's *domicilium citandi et executandi*, for all purposes arising from this guarantee.**
- C. This GUARANTEE must be returned to:** _____



DPW-15 (EC): SCHEDULE OF PROPOSED SUBCONTRACTORS

Project title:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>		
Tender no:	<i>ID: 96741</i>	Reference no:	<i>19/2/4/2/2/2021-2024</i>

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

We confirm that all subcontractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor
1			
2			
3			
4			
5			

Name of representative	Signature	Capacity	Date

Name of organisation:	
------------------------------	--



DPW-22 (EC): PARTICULARS OF ELECTRICAL CONTRACTOR

Project title:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>		
Tender no:	<i>ID: 96741</i>	Reference no:	19/2/4/2/2/2021-2024

Name of Electrical Contractor:	
Address:	
Electrical Contractor registration number at the Electrical Contracting Board of S.A.:	

Name of Tenderer	Signature	Date



PG-01.1 (EC) SCOPE OF WORKS – (GCC (2010) 2nd EDITION: 2010)

Project title:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>		
Tender no:	<i>ID: 96741</i>	Reference no:	<i>19/2/4/2/2/2021-2024</i>

C3. Scope of Works

CONTENTS

C3.1 STANDARD SPECIFICATIONS

C3.2 PROJECT SPECIFICATIONS

A: GENERAL

PS-1 PROJECT DESCRIPTION

Service, maintenance and operation of two coal fired Steam Boilers for 36 Months

PS-2 DESCRIPTION OF SITE AND ACCESS

The client might request employees of the bidder to be screened fo security clearance

PS-3 DETAILS OF CONTRACT

36 Months Contract.

PS-4 CONSTRUCTION AND MANAGEMENT REQUIREMENTS

PS-5 CONSTRUCTION PROGRAMME

PS-6 SITE FACILITIES AVAILABLE

PS-7 SITE FACILITIES REQUIRED

PS-8 REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC

PS-9 OCCUPATIONAL HEALTH AND SAFETY

PS-10 ADVERSE WEATHER CONDITIONS

NOTE: This is an example only. Compiler / Designer to provide the applicable contents.

B: AMENDMENTS TO THE STANDARD SPECIFICATIONS

Insert amendments to standard specifications

C3.3 PARTICULAR SPECIFICATIONS

List particular specifications



Tender no: *ID:96741*

C3.1 STANDARD SPECIFICATIONS:

The standard specifications on which this contract is based are the **South African Bureau of Standards Standardized Specifications for Civil Engineering Construction SABS 1200**. *(Note to compiler. "SABS" has been changed to "SANS"; the SABS 1200 specifications are due to be replaced in the foreseeable future by SANS 2100)*

Although not bound in nor issued with this Document, the following Sections of the Standardized Specifications of SABS 1200 shall form part of this Contract:

A - 1986 - GENERAL / D – (etc, to be provide by compiler)



Tender no: ID:96741

C3.2 PROJECT SPECIFICATIONS:

Status

The Project Specification, consisting of two parts, forms an integral part of the contract and supplements the Standard Specifications.

Part A contains a general description of the works, the site and the requirements to be met.

Part B contains variations, amendments and additions to the Standardized Specifications.

In the event of any discrepancy between a part or parts of the Standardised of Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Engineer before the execution of the work under the relevant item.

A GENERAL

PS-1 PROJECT DESCRIPTION:

Service, maintenance and operation of coal fired Steam Boilers for 36 Months



Tender no: ID: 96741

B: AMENDMENTS TO THE STANDARD SPECIFICATIONS:

Insert amendments to standard specifications



Tender no: IO: 96741

C3.3 PARTICULAR SPECIFICATIONS:

Insert particular specifications

AWARDING OF STATE CONTRACTS

- The State reserves rights to make an award or award a contract to more than one supplier to address product availability, equitable distribution of opportunities and compatibility. Due diligence will be applied to ensure that pricing is affordable, market related and aligned to end-user requirements.

In awarding of tenders, the department will apply inter alia, equitable distribution of opportunities.

DPW-03 (EC): TENDER DATA

Project title:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>
Reference no:	19/2/4/2/2/2021-2024

Tender no:	ID: 96741	Closing date:	22/10/2021
Closing time:	11h00	Validity period:	90 days

Clause number:	
	<p>The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement as per Government Notice No. 423 published in Government Gazette No. 42622 of 8 August 2019 and as amended from time to time. (see www.cidb.org.za).</p> <p>The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.</p> <p>Each item of data given below is cross-referenced to the clause marked "C" in the above mentioned Standard Conditions of Tender.</p>
C.1.1	The employer is the Government of the Republic of South Africa in its Department of Public Works and Infrastructure.
C.1.2	<p>For this contract the three volume approach is adopted.</p> <p>This procurement document has been formatted and compiled under the headings as contained in the CIDB's "Standard for Uniformity in Construction Procurement."</p> <p>The three volume procurement document issued by the employer comprises the following:</p> <p>Volume 1: Tendering procedures T1.1 - Notice and invitation to tender (PA-04 EC) T1.2 - Tender data (DPW-03 EC)</p> <p>Volume 2: Returnable documents T2.1 - List of returnable documents (PA-09 EC) C1.1 - Form of offer and acceptance (DPW-07 EC) C2.2 - Bills of Quantities / Lump sum document (if a returnable document) T2.2 - Returnable schedules</p> <p>Volume 3: Contract Part C1: Agreement and contract data C1.2 - Contract data (DPW-04 EC or DPW-05 EC) C1.3 - Form of guarantee (DPW-10.1 EC / DPW-10.3EC or DPW-10.2 EC/DPW-10.4 EC)</p> <p>Part C2: Pricing data C2.1 - Pricing instructions (PG-02.2 EC or PG-02.1EC) C2.2 - Bills of Quantities / Lump sum document (if not a returnable document)</p> <p>Part C3: Scope of work C3 - Scope of work (PG-01.2 EC or PG-01.1EC)</p> <p>Part C4: Site information C4 - Site information (PG-03.2 EC or PG03.1EC)</p>

Tender no:

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".



C.1.4

The Employer's agent is:

Name:	<i>Insert name of agent</i>
Capacity:	<i>Select</i>
Address:	<i>Insert address of agent</i>
Tel:	<i>Insert tel of agent</i>
Fax:	<i>Insert fax of agent</i>
E-mail:	<i>Insert e-mail address of agent</i>

C.2.1
C.3.11

A. ELIGIBILITY IN RESPECT OF CIDB REGISTRATION:

The following tenderers who are registered with the CIDB, or are *capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated (* tenderers who are capable of being so registered, or who have applied for registration but have not yet received confirmation of such registration, must provide, with this tender, acceptable documentary proof thereof):

- a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a **ME** or **ME**** class of construction work; and
- b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above

Joint ventures are eligible to submit tenders provided that:

1. every member of the joint venture is registered with the CIDB;
2. the lead partner has a contractor grading designation in the **ME** or **ME**** class of construction work; and
3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations for a **ME** or **ME**** class of construction work

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

A contract will be entered into with a tenderer who has in his employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for supervisory and management staff. - **select**

B. INDICATE THE FUNCTIONALITY WEIGHTING APPLICABLE TO THIS BID:

Note: Functionality will only 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
1. Number of similar projects completed in steam boiler service, maintenance and operation or installation 1.1. 5 projects and above = 5 points 1.2. 4 projects = 4 points 1.3. 3 projects = 3 points 1.4. 2 projects = 2 points 1.5. 1 project = 1 point 1.6. No information provided = 0 point	30
Provide practical completion certificates/ job cards as proof	



<p>2. Staffing Resources 1: Experience as Steam Boiler Technician/Artisan</p> <p>2.1. 5 years and above = 5 points 2.2. 4 years = 4 points 2.3. 3 yaers = 3 points 2.4. 2 years = 2 points 2.5. 1 year = 1 point 2.6. No information provided = 0 point</p> <p>Provide copies of CV's and certified copies of qualifications/certificates as proof</p>	<p>20</p>
<p>3. Staffing Resources 1: Number of Steam Boiler Operators</p> <p>3.1. 7 operataors and above = 5 points 3.2. 6 operators = 4 points 3.3. 5 operators = 3 points 3.4. 4 operators = 2 points 3.5. 1 to 3 operators = 1 point 3.6. No information provided = 0 point</p> <p>Provide copies of CV's and certified copies of qualifications/certificates as Boiler Operator/Attendance as proof</p>	<p>30</p>
<p>4. Financial Credibility</p> <p>4.1 Credit rating of A = 5 pons 4.2. Credit rating of B = 4 points 4.3 Credit rating of C = 3 points 4.4. Credit rating of D = 2 points 4.5. Credit rating of E = 1 points 4.6. No information provided = 0 point</p> <p>Provide Bank rating from banking institution as proof</p>	<p>20</p>
<p> </p>	<p> </p>
<p>Total</p>	<p>100 Points</p>

(Weightings will be multiplied by the scores allocated during the evaluation process to arrive at the total functionality points)

<p>Minimum functionality score to qualify for further evaluation:</p> <p><i>(Total minimum qualifying score for functionality is 50 Percent).</i></p>	<p>50</p>
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C ELIGIBILITY IN RESPECT OF RISK TO EMPLOYER:

Provisions applicable to Evaluation Method 1 and 2:
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 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 Project Manager, failing which the tender offer will *mutatis mutandis* be declared non-responsive.

C.1. Technical risks:

C.1.1 Criterion 1: Quality of current and previous work



	<p>Quality of current and previous work performed by the Tenderer in the class of construction work stated above as per the evaluation report prepared by the Professional 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).</p> <p>C.1.2 Criterion 2: Contractual commitment Adherence to contractual commitments, demonstrated by the Tenderer in the performance on current and previous work, evaluated in terms of: a) 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; b) the degree to which previous projects have been completed within the contractual completion periods and/or extensions thereto; and c) general contract administration, i.e. compliance with contractual aspects such as laws and regulations, insurances, security, written contract instructions, subcontractors, time delay claims, etc as can generally be expected in standard/normal conditions of contract.</p> <p>C.2 Commercial risks:</p> <p>The level to which agreement with the Tenderer is reached in respect of the adjustment of rates which are considered to be imbalanced or unreasonable and to eliminate errors or discrepancies, without changing the tendered total price, over and above the correction of arithmetical errors as provided for in C.3.9.</p>
C.2.7	For particulars regarding a pre-tender site inspection meeting, see Notice and Invitation to Tender T1.1
C.2.12	<p>If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements. A tenderer may submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. Provided that the tenderer's main tender offer is according to specification and would under normal circumstances be recommended for acceptance, his alternative tender offer may also be considered for the purpose of the award of the contract.</p> <p>Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.</p> <p>Alternative tender offer permitted: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
C.2.13.2	The list of Returnable Documents identifies which of the documents a tenderer must complete when submitting a tender offer. The tenderer must submit his tender offer by completing the Returnable Documents, signing the "Offer" section in the "Form of Offer and Acceptance" and delivering the Returnable Documents back to the Department.
C.2.13.5	The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are as per Notice and Invitation to Tender T1.1.
C.2.13.6 C.3.5	A two-envelope procedure will not be followed.
C.2.15	The closing time for submission of tender offers is as per Notice and Invitation to Tender T1.1.
C.2.16	The tender offer validity period is as per Notice and Invitation to Tender T1.1.
C2.16.3	Omit the wording of the last sentence for those projects which are subject to CPAP



C.2.18	The tenderer will be required to submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts): <input checked="" type="checkbox"/> Together with his tender; or <input type="checkbox"/> Within fourteen (14) calendar days of the date on which he has been requested to do so prior to the award of the contract.
C.2.19	Access shall be provided for inspections, tests and analysis as may be required by the Employer.
C.3.4.1 C.3.4.2	The location for opening of the tender offers, immediately after the closing time thereof shall be at: 21-23 Market Square, Old Magistrate Building, Kimberley
C.3.8	The words "responsive tender" and "acceptable tender" shall be construed to have the same meaning.
C.3.9.3	Omit the wording and replace with the following: "Notify the tenderer of all errors, omissions and/or rate imbalances that are identified in the tender offer and request the tenderer to, within a stipulated time, accept the total of prices as corrected in accordance with C.3.9.4."
C.3.9.4	Omit the wording of the first sentence and replace with the following: "In cases where tender offers contain errors, omissions and/or rate imbalances, these are to be corrected as follows:"
C.3.9.4	Add sub paragraph c) to C.3.9.4, as follows: "c) If the tenderer does not accept the corrected tender offer, or cannot reach consensus with the Employer on a corrected tender offer, the tender is to be classified as not acceptable/non responsive and removed from further contention."
C.3.11.1	The procedure for the evaluation of responsive tenders is Method 2: Financial Offer and Preference.
C.3.13	Add the following to sub paragraph a), as follows: The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act, 2004 (Act No. 12 of 2004) as a person prohibited from doing business with the public sector;
C.3.17	Provide to the successful tenderer one copy of the signed contract document.



DPW-05: (EC) CONTRACT DATA - (GCC (2010) 2nd EDITION: 2010)

Project title:	Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)		
Tender no:	IO: 96741	Reference no:	19/2/4/2/2/2021-2024

	PART 1: DATA PROVIDED BY THE EMPLOYER
	CONDITIONS OF CONTRACT
	The General Conditions of Contract for Construction Works, Second Edition, 2010, published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685, is applicable to this Contract and is obtainable from www.saice.org.za

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Second Edition, 2010, are applicable to this Contract:

CLAUSES	COMPULSORY DATA
1.1.1.8	Amend Clause 1.1.1.8 to include the word "rights" to read as follows: "Contract Data" means the specific data which, together with these General Conditions of Contract, collectively describe the rights, risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract.
1.1.1.13	Amend Clause 1.1.1.13 as follows, clarify when the defects liability period starts: "Defects Liability Period" means the period stated in the Contract Data, commencing on the date indicated on the Certificate of Completion or Certificates of Completion in the event of more than one Certificate of Completion is issued for different parts of the Works, during which the Contractor has both the right and the obligation to make good defects in the materials, Plant and workmanship covered by the Contract. Defects liability period is: 12 months.
1.1.1.14 & 5.14.7	The time for achieving Practical Completion of the whole of the works is: 36 Months measured from the <u>Commencement</u> Date. The time thus stated includes special non-working days and the year-end break. <u>or, if Practical Completion in portions is required,</u> The times for achieving Practical Completion for the portions as set out in the Scope of Works are <i>mutatis mutandi</i> : For portion 1 within <i>insert description as may be applicable</i> For portion 2 within <i>insert description as may be applicable</i> For portion 3 within <i>insert description as may be applicable</i> For portion 4 within <i>insert description as may be applicable</i> <i>(followed by further portions as required)</i> The time for achieving Practical Completion of the whole of the Works is: <i>insert total contract period here, measured from the Commencement Date. The time thus stated includes special non-working days</i>



	and the year-end break.
1.1.1.15	The name of the Employer is: The Government of the Republic of South Africa in its Department of Public Works.
1.1.1.16	The name of the Engineer is: <i>Insert the legal name of the Engineer</i>
1.1.1.26	The Pricing Strategy is a: Re-measurement Contract.
1.1.1.31	Not applicable to this Contract.
1.1.1.35	Insert the definition of "Value of Works" as Clause 1.1.1.35: "Value of Works" means the value of the Works certified by the Engineer as having been satisfactorily executed and shall include the value of the works done, the value of the materials and/or plant and Contract Price Adjustments.
1.2.1.2	Employer's address: Physical Address: 21-23 Market Square, Old Magistrate Building Kimberley 8301 Postal Address: Private Bag X5002 Kimberley 8301 Facsimile: <i>insert fax no</i> Telephone: 053 838 5347
	Engineer's address: Physical Address: <i>insert physical address</i> <i>insert town</i> <i>insert code</i> Postal Address: <i>insert postal address</i> <i>insert town</i> <i>insert postal code</i> Facsimile: <i>insert fax no</i> Telephone: <i>insert tel no</i>
1.3.4	Not applicable to this Contract.
1.3.5	Replace Clause 1.3.5 with the following provisions: (a) The Employer will become the owner of the information, documents, advice, recommendation and reports collected, furnished and/or compiled by the Contractor during the course of, and for the purposes of executing this Contract, all of which will be handed over to the Employer on request, but



	<p>in any event on the termination and/or cancellation of this Contract for whatever reason. The Contractor relinquishes its retention or any other rights thereon to which it may be entitled.</p> <p>(b) The copyright of all documents, recommendations and reports compiled by the Contractor during the course of and for the purposes of finalizing the Works will vest in the Employer, and may not be reproduced or distributed or made available to any person outside the Employer's service, or to any institution in any way, without the prior written consent of the Employer. The Employer shall have the right to use such material for any other purpose without the approval of information or payment to the Contractor.</p> <p>(c) The copyright of all electronic aids, software programmes etc. prepared or developed in terms of the Contract shall vest in the Employer, who shall have the right to use such material for any other purpose without the approval of, information or payment to the Contractor.</p> <p>(d) In case of the Contractor providing documents, electronic aids, software programs or like material to the Employer, the development of which has not been at the expense of the Employer, copyright shall not vest in the Employer. The Contractor shall be required to indicate to which documents, electronic aids, software programs or like material this provision applies.</p> <p>(e) The Contractor hereby indemnifies the Employer against any action, claim, damages or legal cost that may be instituted against the Employer on the grounds of an alleged infringement of any copyright, patents or any other intellectual property right in connection with the Works outlined in this Contract.</p> <p>(f) All information, documents, recommendations, programs and reports collected or compiled must be regarded as confidential and may not be communicated or made available to any person outside the Employer's service and may not be published either during the currency of this Contract or after termination thereof without the prior written consent of the Employer.</p>
3.1.3	<p>1. The Engineer's authority to act and/or to execute functions or duties or to issue instructions are expressly excluded in respect of the following:</p> <p>(a) Appointment of nominated Sub-contractors – clause 4.4.3;</p> <p>(b) Granting of an extension of time and/or ruling on claims associated with claims for extension of time – clauses 5.12.3, 10.1.5;</p> <p>(c) Acceleration of the rate of progress and determination of the cost for payment of such acceleration – clause 5.12.4;</p> <p>(d) Rulings on claims and disputes – clauses 10.1.5, 10.2.3 and 10.3.3;</p> <p>(e) Suspension of the Works – clause 5.11.1;</p> <p>(f) Final Payment Certificate – clause 6.10.9;</p> <p>(g) Issuing of <i>mora</i> notices to the Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1;</p> <p>(h) Cancellation of the contract between the Employer and Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1.</p>
	<p>2. In order to be legally binding and have legal bearing and consequence, any ruling in respect of the above matters (a) to (h) must be on an official document, signed and issued by the Employer to the Contractor.</p> <p>3. The Contractor must submit claims, demands, notices, notifications, updated particulars and reports in writing, as well as any other supporting documentation pertaining thereto, in respect of any of the above listed matters (a) to (h), to the Engineer within the time periods and in the format(s) as determined in the relevant clauses of the Conditions of Contract. Failing to deliver such to the Engineer timeous and in the correct format will invalidate any claim and the consequences of such</p>

	<p>failure will <i>mutatis mutandis</i> be as stated in clause 10.1.4.</p> <p>4. Clauses 6.10.9 and 10.1.5 shall be amended as follows to indicate the limitation on the Engineer's authority in respect thereof:</p> <p>Clause 6.10.9 – Amend to read as follows:</p> <p>Within 14 days of the date of final approval as stated in the Final Approval Certificate, the Contractor shall deliver to the Engineer a final statement claiming final settlement of all moneys due to him (save in respect of matters in dispute, in terms of Clauses 10.3 to 10.11, and not yet resolved). The Employer shall within 14 days issue to the Contractor a Final Payment Certificate the amount of which shall be paid to the Contractor within 28 days of the date of such certificate, after which no further payments shall be due to the Contractor (save in respect of matters in dispute, in terms of Clauses 10.3 to 10.11 and not yet resolved).</p> <p>Clause 10.1.5 – Amend to read as follows:</p> <p>Unless otherwise provided in the Contract, the Employer shall, within 28 days after the Contractor has delivered his claim in terms of Clause 10.1.1 as read with Clause 10.1.2, deliver to the Contractor his written and adequately reasoned ruling on the claim (referring specifically to this Clause). The amount thereof, if any, allowed by the Employer shall be included to the credit of the Contractor in the next payment certificate.</p> <p>5. Insert the following under 3.1.3: Provided that, notwithstanding any provisions to the contrary in the Contract, the Employer shall have the right to reverse and, should it deem it necessary, to amend any certificate, instruction, decision or valuation of the Engineer and to issue a new one, and such certificate instruction, decisions or valuations shall for the purposes of the Contract be deemed to be issued by the Engineer, provided that the Contractor shall be remunerated in the normal manner for work executed in good faith in terms of an instruction issued by the Engineer and which has subsequently been rescinded.</p>
3.2.2.1	<p>Amend Clause 3.2.2.1 to insert the word "Plant" to read as follows:</p> <p>Observe the execution of the Works, examine and test material, Plant and workmanship, and receive from the Contractor such information as he shall reasonably require.</p>
3.2.3.2	<p>Amend Clause 3.2.3.2 to insert the word "Plant" to reads as follows:</p> <p>Notwithstanding any authority assigned to him in terms of Clauses 3.2.2 and 3.2.4, failure by the Engineer's Representative to disapprove of any work, workmanship, Plant or materials shall not prejudice the power of the Engineer thereafter to disapprove thereof and exercise any of his powers in terms of the Contract in respect of thereof.</p>
4.8.2.1	<p>Amend Clause 4.8.2.1 to include the word "person", as follows:</p> <p>Makes available to the Employer, or to any such contractor, person or authority, any roads or ways for the maintenance of which the Contractor is responsible, or</p>
4.8.2.2	<p>Amend Clause 4.8.2.2 to include "Employer" and "contractors", as follows:</p> <p>Provides any other facility or service of whatsoever nature to the Employer or to any of the said contractors, persons or authorities,</p>
5.3.1	<p>The documentation required before commencement with Works execution are:</p> <p>Health and Safety Plan (Refer to Clause 4.3) Initial programme (Refer to Clause 5.6) Security (Refer to Clause 6.2) Insurance (Refer to Clause 8.6)</p>

	<i>insert other requirements</i> <i>insert other requirements</i> <i>insert other requirements</i>
5.3.2	The time to submit the documentation required before commencement with Works execution is: 21 days .
5.4.2	The access to, and possession of, the Site referred to in Clause 5.4.1 shall be enter "exclusive" or "not exclusive" to the Contractor. In the event of access to, and possession of, the Site is not exclusive to the Contractor, the following limitations apply: Insert an exposition of limitation.
5.8.1	The non-working days are: Saturdays and Sundays The special non-working days are: (1) Public Holidays; (2) The year-end break commencing on 16 December until the Sunday preceding the first working Monday of January of the succeeding year.
5.9.1	Amend Clause 5.9.1 as follows: On the Commencement Date, the Engineer shall deliver to the Contractor three (3) copies, at no cost to the Contractor, of the drawings and any instructions required for the commencement of the Works. The cost of any additional copies of such drawings and/or instructions, as may be required by the Contractor, will be for the account of the Contractor.
5.13.1	The penalty for failing to complete the Works is: Rinsert penalty amount per day <u>or, if completion in portions is required,</u> The penalty for failing to complete portion 1 of the Works is: Rinsert penalty amount per day . The penalty for failing to complete portion 2 of the Works is: Rinsert penalty amount per day . The penalty for failing to complete portion 3 of the Works is: Rinsert penalty amount per day . The penalty for failing to complete portion 4 of the Works is: Rinsert penalty amount per day . Followed by further portions as required. The penalty for failing to complete the whole of the works is: Rinsert penalty amount per day .
5.14.1	Amend the second paragraph of Clause 5.14.1 as follows: When the Works are about to reach the said stage, the Contractor shall, in writing, request a Certificate of Practical Completion and the Engineer shall, within 14 days after receiving such request, issue to the Contractor a written list setting out the work to be completed to justify Practical Completion. Should the Engineer not issue such a list within the 14 days, the Contractor shall notify the Employer accordingly. Should the Employer not issue such a list within 7 days of receipt of such notice, Practical Completion shall be deemed to have been achieved on the 14 th day after the contractor requested the Certificate of Practical Completion.
5.16.1	Amend Clause 5.16.1 to delete the proviso in the third paragraph of this clause.
5.16.2	Amend Clause 5.16.2 as follows: No certificate other than the Final Approval Certificate referred to in Clause 5.16.1 shall be deemed to

	constitute approval of the Works or shall be taken as an admission of the due performance of the Contract or any part thereof, nor of the accuracy of any claim made by the Contractor, nor shall any other certificate exclude or prejudice any of the powers of the Engineer and/or the Employer.
5.16.3	The latent defect period for all works is: 5 years .
6.2.1	The type of security for the due performance of the Contract, as selected by the Contractor in the Contract Data, must be delivered to the Employer.
6.2.3	Amend Clause 6.2.3 as follows: If the Contractor has selected a performance guarantee as security, he shall ensure that it remains valid and enforceable as required in terms of the Contract.
6.5.1.2.3	The percentage allowance to cover overhead charges is: 33%, except on material cost where the percentage allowance is 10%.
6.8.2	Contract Price Adjustment (CPA) will be applicable: "No" . If CPA is indicated as 'Yes' above the value of payment certificates is to be adjusted by a Contract Price Adjustment Factor: The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: The value of "x" is 0.15. The values of the coefficients are: a = 0.25. (Labour) b = 0.3 (Contractor's equipment) c = 0.3 (Material) d = 0.15 (Fuel) The values of the coefficients for "Repair and Maintenance Project" (RAMP) contracts are: a = 0.35 (Labour) b = 0.20 (Contractor's equipment) c = 0.35 (Material) d = 0.10 (Fuel) The urban area nearest the Site is insert name of urban area . (Select urban area from Statistical News Release, P0141, Table 7.1.) The applicable industry for the Producer Price Index for materials is insert name of industry . (Select the applicable industry from Statistical News Release, P01421, Table 11.) The area for the Producer Price Index for fuel is insert name of area . (Select the area from Statistical News Release, P01421, Table 12.) The base month is insert month 20insert year . (The month prior to the closing of the tender.)
6.8.3	Price adjustments for variations in the costs of special materials are not allowed.
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is: 85 % .
6.10.3	The limit of retention money is dependent on the security to be provided by the Contractor in terms of Clause 6.2.1.



6.10.5	<p>Replace Clause 6.10.5 with the following:</p> <p><u>In respect of contracts up to R2 million and in respect of contracts above R2 million where the Contractor elects a security by means of a 10% retention, 50% of the retention shall be released to the Contractor when the Engineer issues the Certificate of Completion in terms of clause 5.14.4. The remaining 50% of the retention shall be released in accordance with the provisions of the conditions of contract and will become due and payable when the Contractor becomes entitled, in terms of Clause 5.16.1, to receive the Final Approval Certificate.</u></p> <p><u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or fixed guarantee of 5% of the Contract Sum (excl. VAT) and a 5% retention of the Value of the Works (excl. VAT), the cash deposit or fixed guarantee, whichever is applicable, shall be refunded to the Contractor or return to the guarantor, respectively, when the Engineer issues the Certificate of Completion in terms of Clause 5.14.4. The 5% retention of the Value of the Works (excl. VAT) shall become due and payable when the Contractor becomes entitled, in terms of Clause 5.16.1, to receive the Final Approval Certificate.</u></p> <p><u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or a variable guarantee of 10% of the Contract Sum (excl. VAT), the cash deposit or the variable guarantee, whichever is applicable, will be reduced to 5% of the Value of the Works (excl. VAT) when the Engineer issues the Certificate of Completion in terms of Clause 5.14.4. The balance of the cash deposit shall become due and payable or the variable guarantee shall expire when the Contractor becomes entitled in terms of Clause 5.16.1 to receive the Final Approval Certificate.</u></p>
7.9.1	<p>Insert the following at the end of Clause 7.9.1:</p> <p>Provided that, should the Contractor on demand not pay the amount of such costs to the Employer, such amount may be determined and deducted by the Employer from any amount due to or that may become due to the Contractor under this or any other previous or subsequent contract between the Contractor and the Employer.</p>
8.2.2.1	<p>Insert the following as a second paragraph to Clause 8.2.2.1:</p> <p>The Contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works, failing which the Employer may cause same to be done and recover the reasonable costs associated therewith from the Contractor.</p>
8.4.3	<p>Insert a new Clause 8.4.3 as follows:</p> <p>The Contractor shall on receiving a written instruction from the Engineer immediately proceed at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the Works.</p>
8.6.1.1.1	<p>Amend Clause 8.6.1.1.1 to read as follows: Contract Sum plus 10%.</p>
8.6.1.1.2	<p>The value of Plant and materials supplied by the Employer to be included in the insurance sum is: Nil</p>
8.6.1.1.3	<p>The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is: Nil</p>
8.6.1.3	<p>Amend Clause 8.6.1.3 to delete reference to limit of indemnity, to read as follows:</p> <p>Liability insurance that covers the Contractor against liability for the death of, or injury to any person, or loss of, or damage to any property (other than property while it is insured in terms of Clause 8.6.1.1) arising from or in the course of the fulfillment of the Contract, from the Commencement Date to the date of the end of the Defects Liability Period, if there is one, or otherwise to the issue of the Certificate of Completion.</p>



8.6.1.5	<p>1. Public liability insurance to be effect by the Contractor to a minimum value of:</p> <p><input type="checkbox"/> R5 million</p> <p>or</p> <p><input type="checkbox"/> R <i>insert amount in figures (and in words)</i></p> <p>With a deductible not exceeding 5% of each and every claim.</p> <p>2. Support insurance is to be effected by the Contractor to a minimum value of:</p> <p>R <i>insert amount in figures (and in words)</i></p> <p>With a deductible not exceeding 5% of each and every claim.</p>
8.6.5	<p>Amend Clause 8.6.5 as follows:</p> <p>Save as otherwise provided in the Contract Data, the insurances referred to in Clause 8.6.1 shall be effected with an insurance company registered in the Republic of South Africa. The Contractor shall submit the insurance policy to the Employer for approval, if so requested.</p>
8.6.7	<p>Amend Clause 8.6.7 as follows:</p> <p>If the Contractor fails to effect and keep in force any of the insurances referred to in Clause 8.6.1, the Employer may cancel the Contract in terms of Clause 9.2.</p>
8.6.8	<p>Insert a new Clause 8.6.8 in provide for high risk insurance for projects executed on areas classified as "High Risk Areas".</p> <p>HIGH RISK INSURANCE</p> <p>In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:</p> <p>(1) Damage to the Works</p> <p>The Contractor shall, from the date of Commencement of the Works until the date of the Certificate of Completion, bear the full risk of and hereby indemnifies and holds harmless the Employer against any damage to and/or destruction of the Works consequent upon a catastrophic ground movement as mentioned above. The Contractor shall take such precautions and security measures and other steps for the protection of the Works as he may deem necessary.</p> <p>When so instructed to do so by the Engineer, the Contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works, at the Contractor's own costs.</p> <p>(2) Injury to Persons or Loss of or damage to Properties</p> <p>The Contractor shall be liable for and hereby indemnifies and holds harmless the Employer against any liability, loss, claim or proceeding arising during the Contract Period whether arising in common law or by Statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above.</p> <p>The Contractor shall be liable for and hereby indemnifies the Employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the Site, whether belonging to or under the control of the Employer or any other body or person whomsoever arising out of or caused by a catastrophic ground</p>



	<p>movement, as mentioned above, which occurred during the Contract Period.</p> <p>(3) It is the responsibility of the Contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in Clauses 8.6.8(1) and 8.6.8 (2) above. Without limiting his obligations in terms of the Contract, the Contractor shall, within 21 days of the Commencement Date and before Commencement of the Works, submit to the Employer proof of such insurance policy, if requested to do so.</p> <p>(4) The Employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the Contractor's default of his obligations as set out in Clauses 8.6.8 (1), 8.6.8 (2) and 8.6.8 (3). Provided that, should the Contractor on demand not pay the amount of such costs to the Employer, such amount may be determined and deducted by the Employer from any amount due to or that may become due to the Contractor under this or any other existing or subsequent contract between the Contractor and the Employer.</p>
9.1.4	<p>Amend Clause 9.1.4 as follows:</p> <p>In the circumstances referred to in Clauses 9.1.1, 9.1.2 or 9.1.3 (provided that the circumstances in 9.1.3 is not due to the fault of the Contractor, his employees, contractors or agents), and whether or not the Contract is terminated under the provisions of this Clause, the Contractor shall be entitled to payment of any increased cost of or incidental to the execution of the Works which is specifically attributable to, or consequent upon the circumstances defined in Clauses 9.1.1, 9.1.2 or 9.1.3;</p>
9.1.5	<p>Amend Clause 9.1.5 as follows:</p> <p>If the Contract is terminated on any account in terms of this Clause (provided that the circumstances in 9.1.3 is not due to the fault of the Contractor, his employees, contractors or agents) , the Contractor shall be paid by the Employer (insofar as such amounts or items have not already been covered by payments on account made to the Contractor) for all measured work executed prior to the date of termination, the amount (without retention), payable in terms of the Contract and, in addition:</p>
9.1.6	<p>This Clause is not applicable to this Contract.</p>
9.2.1.3.8	<p>Insert a new Clause 9.2.1.3.8 as follows:</p> <p>Has failed to effect and keep in force any of the insurances referred to in Clause 8.6.1,</p>
9.2.4	<p>Insert a new Clause 9.2.4 as follows, to provide for unilateral termination by the Employer:</p> <p>The Employer shall be entitled at any time to unilaterally terminate or cancel this Contract or any part thereof. Save for the following, the Contractor shall not be entitled to claim any other amounts whatsoever in respect of such termination or cancellation of this Contract. The Employer shall be obliged to pay the Contractor as damages and/or loss of profit the lesser of:</p> <p>9.2.4.1 An amount not exceeding 10% of the Contract Sum;</p> <p>9.2.4.2 10% of the value of incomplete work; or</p> <p>9.2.4.3 The Contractor's actual damage or loss as determined by the Employer after receipt of evidence substantiating any such damage or loss.</p>
9.3.2.2	<p>Amend Clause 9.3.2.2 as follows to delete the proviso on lien:</p> <p>The ownership of Plant and unused materials brought onto the Site by the Contractor, and for which the Employer has not made any payment, shall revert to the Contractor and he shall, with all reasonable dispatch, remove from the Site such Plant, materials and all Construction Equipment and Temporary Works.</p>
9.3.3	<p>Insert the following at the end of Clause 9.3.3</p>

	After cancellation of the Contract by the Contractor, the Contractor, when requested by the Employer to do so, shall not be entitled to refuse to withdraw from the Works on the grounds of any lien or a right of retention or on the grounds of any other right whatsoever.
10.1.3.1	Amend Clause 10.1.3.1 as follows to insert the word "Plant": All facts and circumstances relating to the claims shall be investigated as and when they occur or arise. For this purpose, the Contractor shall deliver to the Engineer, records in a form approved by the Engineer, of all the facts and circumstances which the Contractor considers relevant and wishes to rely upon in support of his claims, including details of all Construction Equipment, labour, Plant and materials relevant to each claim. Such records shall be submitted promptly after the occurrence of the event giving rise to the claim.
10.1.6	Insert a new Clause 10.1.6 as follows: If the Employer fails to give his ruling within the period referred to in Clause 10.1.5 he shall be deemed to have given a ruling dismissing the claim.
10.2.1	Amend Clause 10.2.1 as follows: In respect of any matter arising out of or in connection with the Contract, which is not required to be dealt with in terms of Clause 10.1 or which does not require the decision or ruling of the Employer, the Contractor or the Employer shall have the right to deliver a written dissatisfaction claim to the Engineer. This written claim shall be supported by particulars and substantiated.
10.2.2	Amend Clause 10.2.2 as follows: If, in respect of any matter arising out of or in connection with the Contract, which is not required to be dealt with in terms of Clause 10.1 or which does not require the decision or ruling of the Employer, the Contractor or the Employer fails to submit a claim within 28 days after the cause of dissatisfaction, he shall have no further right to raise any dissatisfaction on such matter.
10.3.2	Amend Clause 10.3.2 as follows to replace "adjudication" with "court": If either party shall have given notice in compliance with Clause 10.3.1, the dispute shall be referred to court proceedings in terms of Clause 10.8, unless amicable settlement is contemplated.
10.3.3	Replace "Engineer" with "Employer".
10.4.2	Amend Clause 10.4.2 as follows to provide for submission to court: If the other party rejects the invitation to amicable settlement in writing or does not respond in writing to the invitation within 14 days, or amicable settlement is unsuccessful, either party may submit the dispute to court.
10.4.4	Amend Clause 10.4.4 to delete reference to "adjudication" and "arbitration" to read as follows: Save for reference to any portion of any settlement or decision which has been agreed to be final and binding on the parties, no reference shall be made by or on behalf of either party in any subsequent court proceedings, to any outcome of an amicable settlement, or to the fact that any particular evidence was given, or to any submission, statement or admission made in the course of the amicable settlement.
10.5 10.6 & 10.7	The entire provisions of these Clauses are not applicable to this Contract.
10.10.3	Amend Clause 10.10.3 as follows to reword and remove reference to "arbitrator": The court shall have full power to open up, review and revise any ruling, decision, order, instruction, certificate or valuation of the Engineer and Employer and neither party shall be limited in such proceedings before such court to the evidence or arguments put before the Engineer or Employer for the purpose of



obtaining his ruling.

	PART 2: DATA PROVIDED BY THE CONTRACTOR
1.1.1.9	The name of the Contractor is: <i>Insert legal name of Contractor</i>
1.2.1.2	<p>The address of the Contractor is:</p> <p>Physical Address: <i>insert physical address</i> <i>insert town</i> <i>insert code</i></p> <p>Postal Address: <i>insert postal address</i> <i>insert town</i> <i>insert postal code</i></p> <p>Facsimile: <i>insert fax no</i></p> <p>Telephone: <i>insert tel no</i></p>
6.2.1	<p>The security to be provided by the Contractor shall be one of the following:</p> <p>(a) Cash deposit of 10 % of the Contact Sum (excl. VAT) <input type="checkbox"/> YES or <input type="checkbox"/> NO</p> <p>(b) Variable performance guarantee of 10 % of the Contract Sum (excl. VAT) <input type="checkbox"/> YES or <input type="checkbox"/> NO</p> <p>(c) Retention of 10 % of the value of the Works (excl. VAT) <input type="checkbox"/> YES or <input type="checkbox"/> NO</p> <p>(d) Cash deposit of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT) <input type="checkbox"/> YES or <input type="checkbox"/> NO</p> <p>(e) Performance guarantee of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT) <input type="checkbox"/> YES or <input type="checkbox"/> NO</p> <p>NB: Guarantees submitted must be issued by either an insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 53 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.</p>



PG-02.1 (EC) PRICING INSTRUCTIONS – (GCC (2010) 2nd EDITION: 2010)

Project title:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>		
Tender no:	ID: 96741	Reference no:	19/2/4/2/2/2021-2024

C2.1 Pricing Instructions

1. GENERAL

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract, the Specifications (including the Standard, Project and Particular Specifications) and the Drawings.

2. DESCRIPTION OF ITEMS IN THE SCHEDULE

The Bill of Quantities has been drawn up generally in accordance with Civil Engineering Quantities 1990 issued by the SA Institution of Civil Engineers.

The short descriptions of the items in the Bill of Quantities are for identification purposes only and the measurement and payment clause of the Standardized Specifications and the Particular Specifications, read together with the relevant clauses of the Project Specification and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

3. QUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Bill of Quantities are estimates only, and subject to remeasuring during the execution of the work. The Contractor shall obtain the Engineer’s detailed instructions for all work before ordering any materials or executing work or making arrangements for it.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities and in accordance with the General and Special Conditions of Contract, the Standard, Project and Particular Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

4. PROVISIONAL SUMS

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract 2010. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the “Amount” column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Bill of Quantities, or to the provisional percentages and sums in the Summary of the Bill of Quantities will lead to the disqualification of the Tenderer.

5. PRICING OF THE BILL OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.



Tender no: ID:96741

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Tenderer omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Total" column. "Rate Only" items have been included where:

- (a) an alternative item or material is contemplated;
- (b) variations of specified components in the make-up of a pay item may be expected; and
- (c) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For 'Rate Only' items no quantities are given in the "Quantity" column but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

All rates and amounts quoted in the Bill of Quantities shall be in rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities.

The Tenderer shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself before submitting his tender (as far as is practicable) as to:

- (a) the form and nature of the Site and its surroundings, including subsurface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of work and materials necessary for the execution and completion of the Works,
- (d) the means of access to the Site and the accommodation he may require

and, in general, shall be deemed to have obtained all information (as far as is practicable) as to risks, contingencies and all other circumstances which may influence or affect his Tender.

6. CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

7. ARITHMETICAL ERRORS

Arithmetical errors found in the Bill of Quantities as a result of faulty multiplication or addition, will be corrected by the Engineer at the tender evaluation stage, as set out in the Tender Data.



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8. UNITS OF MEASUREMENT

The units of measurement described in the Bill of Quantities are metric units for which the standard international abbreviations are used. Non-standard abbreviations which may appear in the Bill of Quantities are as follows:

No.	=	Number
%	=	Percent
Sum	=	Lump sum
PCsum	=	Prime cost sum
Prov sum	=	Provisional sum
m ³ .km	=	Cubic metre - kilometre
Km-pas	=	kilometre - pass
m ² .pass	=	square metre – pass



Tender no: ID: 96741

C2.1 Bill of Quantities

Insert Bill of Quantities



PG-03.1 (EC) SITE INFORMATION – (GCC (2010) 2nd EDITION: 2010)

Project title:	<i>Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)</i>		
Tender no:	<i>ID:96741</i>	Reference no:	<i>19/2/4/2/2/2021-2024</i>

C4 Site Information

1. Site inspection meetings will be arranged on site handover or during the course of the project

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

KIMBERLEY PRISON

BOILER TERM CONTRACT - MECHANICAL INSTALLATIONS

TECHNICAL SPECIFICATION FA - STEAM GENERATING INSTALLATION

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FA 01 SCOPE

(a) This specification covers the general term contract for the steam generating installations which include the following two types of coal-fired boilers:

(i) Horizontal packaged wetback shell and 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 / Engineer in writing.
- (d) All materials and workmanship which, in the opinion of the Departmental Representative / Engineer, 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 / Engineer.
- (e) The Contractor shall submit a detailed list of the equipment and material to be used to the Departmental Representative / Engineer 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 and construction 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.

This shall be done in accordance with 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 utilised 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 utilised by the boiler house supervisor, the Contractor and the Departmental Representative / Engineer. 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 / Engineer.

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 / Engineer.

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 Engineer, 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 / Engineer 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 / Engineer.

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 / Engineer for approval. The records of this QA system shall be kept throughout the duration of the Contract and submitted to the Departmental Representative / Engineer 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 / Engineer. Where new plant is installed, the Contractor shall run and operate the system for a period of time as specified by the Departmental Representative / Engineer 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 / Engineer. 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 manufacturers 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 / Engineer 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 / Engineer.

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 / Engineer.

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 / Engineer, 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 / Engineer.

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 / Engineer 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 / Engineer, 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 / Engineer.

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 / Engineer, 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 / Engineer, 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 / Engineer.

Where specified in the Particular Specification and/or Schedule of Quantities the Contractor shall be responsible for the supply and delivery to site of the chemicals and salts for the 24-month term contract period. The Contractor shall appoint an approved chemical supplier for the delivery of these chemicals and salts. The Departmental Representative / Engineer 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 / Engineer. 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) Statuary 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 / Engineer.

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 / Engineer 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 / Engineer.
- 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 / Engineer.
- g) Any boiler fittings found to be beyond repair shall be replaced with new on approval of the Departmental Representative / Engineer.
- 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 / Engineer.
- 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 / Engineer 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 / Engineer. 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 / Engineer.

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 / Engineer. 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 / Engineer.

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 / Engineer, 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, 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, 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.
- (ix) 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 contractwork 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 analysed 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/Repair
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
2	Clean out all strainers.	Contractor	Check/Service/Record
3	Inspect and test soot blowers for correct operation.	Contractor	Check/Record
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
6	Inspect all seals and joints for leakages and replace if necessary.	Contractor	Check/Record Replace
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	Check/Record/Repair
13	Inspect, service, repair and replace where required all electrical equipment and installations.	Contractor	Check/Record
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.

FA 17 **MAINTENANCE, SERVICING AND REPAIRS TO INCINERATORS**

17.1 **Applicable regulations**

All applicable regulations regarding incinerators shall be adhered to including;

Department of Public Works specifications

- OWG 371 A&B Specification of materials and methods to be used (latest version)
- STD.PWD Standard Specification for incinerators

- 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.

- 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.

- All 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.

17.2 **MAINTENANCE, SERVICING AND REPAIRS TO GAS & OIL FIRED BOILERS
INCINERATORS**

Description of installation in various areas

- South African Police Service Complex (SAPS) consist of, hot water systems, incinerators and heating plant equipment.
- Military Bases consists of hot water systems, incinerators and heating plant equipment
- Correctional Services: Prisons consist of hot water systems and incinerators.
- All Departments falling under others, such as Home Affairs, Labour, and smaller non - complex SAPS Stations will be attended to as is required.

17.3 The description of the service required entails the following: The servicing of the units as per the attached checklist included under additional forms of this specification.

Prices for servicing include checking of equipment as stipulated in schedule and must, include, labour, transport, consumables, minor and incidental repairs and all other overheads.



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

OCCUPATIONAL HEALTH AND SAFETY
FOR
CONSTRUCTION PROJECT:
SERVICE, MAINTENANCE AND OPERATION OF STEAM
BOILERS
AT
KIMBERLEY DCS
MANAGED ON BEHALF OF
THE DEPARTMENT OF
PUBLIC WORKS AND INFRASTRUCTURE

PRINCIPAL CONTRACTOR RECEIPT

Received by:

Name:

Signature:

Date:

Capacity:

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1. PREAMBLE

In terms of Construction Regulation 4(1)(a) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and 5(1) construction regulation of 2014, the Department of Public Works, as the Client and/or its Agent on its behalf, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Principal Contractor who is making a bid or appointed to perform construction work for the Client and/or its Agent on its behalf with the same.

The Client's further duties are as described in The Act and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

2. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT

These Specifications should be read in conjunction with the Act, the Construction Regulations and all other Regulations and Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project.

The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

2.1 APPLICATIONS AND INTERPRETATION

This document is to be read and understood in conjunction with the following, inter- alia:

- *Occupational Health and Safety Act 85 of 1993 (OHS Act).*
- *All regulations published in terms of the OHS Act.*
- *Construction Regulations, 2014*
- *SABS codes referred to by the OHS Act.*
- *Contract Documents*
- *Basic Conditions of Employment Act (Act 75 of 1997)*
- *National Environmental Management Act 107 of 1998 and all Regulations*
- *Compensation for Occupational Injuries and Diseases (COID) Act No. 130 of 1993*

ABBREVIATIONS

- OHS : Occupational Health and Safety
- CEO : Chief Executive Officer
- CR : Construction Regulations
- HCS : Hazardous Chemical Substances
- MSDS : Material Safety Data Sheet

- AIA : Approved Inspection Authority
- HBA : Hazardous Biological Agents
- OEL : Occupational Exposure Limit
- CSIR : Council for Scientific and Industrial Research
- H&SS : Health and Safety Specification
- HS&EP : Health, Safety and Environmental Plan
- HS&EF : Health, Safety and Environmental File
- CHSO : Construction Health and Safety Officer

3. PURPOSE

The Department is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments, and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor (and his /her contractor) with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for the Department of Public Works and Infrastructure. The Principal Contractor (and his /her contractor) is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements

4. DEFINITIONS

The following definitions from the Occupational Health and Safety Act are listed as follows:

“Chief Executive Officer”

In relation to a body corporate or an enterprise conducted by the State, means the person who is responsible for the overall management and control of the business of such body corporate or enterprise.

“Danger”

Means anything that may cause injury or damage to persons or property.

“Employee”

Means, subject to the provisions of Subsection (2), any person who is employed by or works for any employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person.

“Employer”

Means, subject to the provisions of Subsection (2), any person who employs or provides work for any person or remunerates that person or expressly or tacitly undertakes to remunerate him, but excludes a labour broker as defined in Section 1(1) of the Labour Relations Act, 1953 (Act No. 28 of 1956).

“Healthy”

Means free from illness or injury attributable to occupational causes.

“Machinery”

Means any article or combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to performing work, or which is used or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, confining, transforming, transmitting, transferring or controlling any form of energy.

“Medical Surveillance”

Means a planned programme of periodic examination (which may include clinical examinations, biological monitoring or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner. Plant Includes fixtures, fittings, implements, equipment, tools and appliances, and anything which is used for any purpose in connection with such plant. Properly Used Means used with reasonable care, and with due regard to any information, instruction or advice supplied by the designer, manufacturer, importer, seller or supplier.

User

In relation to plant or machinery, means the person who uses plant or machinery for his own benefit or who has the right of control over the use of plant or machinery, but does not include a lessor of, or any person employed in connection with, the plant or machinery.

Reasonably Practicable

Means practicable having regards to: a) the severity and scope of the hazard or risk concerned, b) The state of knowledge reasonably available concerning that hazard or risk and of any means to remove or mitigate that hazard or risk. c) the availability and suitability of means to remove or mitigate that hazard or risk; and d) The cost of removing or mitigating that hazard or risk in relation to the benefits deriving there from.

“Risk”

Means the probability that injury or damage will occur.

“Safe”

Means free from any hazard.

“Standard”

Means any provision occurring: a) in a specification, compulsory specification, code of practice or standard method as defined in Section 1 of the Standards Act, 1993 (Act No. 29 of 1993); OR b) in any specification, code or any other directive having standardization as its aim and issued by an institution or organization inside or outside the Republic which, whether generally or with respect to any particular article or matter and whether internationally or in any particular country or territory, seeks to promote standardisation.

The following definitions from the Construction Regulations are listed as follows:

“Agent” – means any person who acts as a representative for a Client;

“Client” – means any person for whom construction work is performed;

“Construction Work” is defined as any work in connection with –

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

“Health and Safety File” – means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

“Health and Safety Plan” – means a site, activity or project specific documented plan in accordance with the client’s health and safety specification;

“Health and Safety Specification” – means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to construction work;

“Electrical installation” means any electrical installation as defined in regulation 1 of the Electrical Installation Regulations, published under Government Notice R.2270 of 11 October 1985;

“Method Statement” – means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

“Principal Contractor” – means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the Client to be in overall control and management of a part of or the whole of a construction site;

“Risk Assessment” – means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

“Competent person” – means any person having the knowledge, training, experience and qualifications specific to the work or task being performed: Provided that where appropriate qualifications and training are registered in terms of the provisions of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995), these qualifications and training shall be deemed to be the required qualifications and training.

“Maintenance” – (maintenance management) means the schemes that can be based on a number of techniques to focus on those parts which deteriorate and need to be maintained, such as the following:

- a) Preventive – planned maintenance which involves replacing parts and consumables or making necessary adjustments at pre-set intervals, so that no hazards are created by component deterioration or failure.
- b) Condition-based – involves monitoring the condition of critical parts and carrying out maintenance whenever necessary to prevent hazards which could otherwise occur.

“Toolbox talks” – where the team leader, after conducting pre-task planning, shares all the tasks at hand and discusses task allocation, the identified risks and the control measures with all his/her team members on site before commencing a specific task and documenting the agreed strategy. (This shall be done to ensure a common understanding of the tasks, risks and control measures required.)

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

5.1. Overall Supervision and Responsibility for OH&S

The Client and/or its Agent shall ensure that the Principal Contractor implements and maintains the agreed and approved H&S Plan. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any one or more of his/her duties under the Act and Regulations.

5.2. Further (Specific) Supervision Responsibilities for OH&S

Several appointments or designations of responsible and /or competent people in specific areas of construction work are required by the Act and Regulations. The following competent appointments, where applicable, in terms of the Construction Regulations and other Regulations shall be made to ensure compliance to the Act, Regulations and SANS Standards.

LEGAL DOCUMENTATION/APPOINTMENTS

The following documents must be provided in the Health and Safety Plan (H&SP):

- Health and Safety Policy signed by CEO or statement of commitment to SHE
- Letter of good standing with the Compensation Commissioner, Federated Employers or similar insurer.
- HSE Organogram (or table), outlining the HSE Team, as well as the appointment(s) they have under the Act and Regulations (reference to specific section/regulation applicable to appointment)
- The competency of each member of the HSE Team must be provided and should include knowledge, training, experience & qualifications specific to the appointment.

Signed copies of the following legal appointments must be provided in the Health, Safety and Environmental Plan:

APPOINTMENT	OHS-ACT / REGULATION REFERENCE
Section 16.2 appointment	Section 16.2
HSE Representative (if necessary)	Section 17(1)
Incident Investigator	GAR 9(2)
First Aiders	GSR 3(4)
Fire Fighters	ER 9 & CR 29
Risk Assessor	HCS Reg (Incl. Asbestos & Lead); CR 9

The following information must be provided in the H&SP:

- Indicate the estimated number of employees to be working on site.
- Indicate the expected number of sub-contractors to be appointed by the Principal Contractor.

The following competent persons, where applicable, shall be appointed in writing by the Principal Contractor, prior to any work being carried out, and shall adhere to the requirements of the specific sub-regulations.

The competency of each of these appointed competent persons must be provided and should include knowledge, training, experience & qualifications specific to the appointment.

APPOINTMENT	OHS-ACT / REGULATION REFERENCE
Construction Manager	CR 8 (1)
Assistant Construction Manager	CR 8 (2)
Construction H&S Officer where applicable	CR 8 (5)
Construction Supervisor	CR 8 (7)
Construction Assistant Supervisor	CR 8(8)
Risk assessor	CR 9(1)
Fall Protection Competent Person	CR 10 (1)
Temporary works competent person	CR12 (2)
Excavation Work Supervisor	CR 13 (1)(a)
Demolition Work	CR 14 (1)
Competent Person (Use of Explosives for Demolition Work)	CR14(11)
Scaffolding Erector/ Team Leader/ Inspector	CR 16 (1)
Suspended platform Competent Person	CR 17(1)
Rope Access Work Competent Person	CR 18 (1) (a)
Material Hoist Competent Person	CR 19(8)(a)
Bulk Mixing Plant Competent Person	CR 20 (1)
Explosive Powered Tools Competent Person	CR 21(2)(b)

Construction Vehicle and Mobile Plant Competent Person	CR23 (1)(d)
Electrical Machinery Competent Person	CR 24 (c)
Stacking and Storage Supervisor	CR 28 (a)
Fire Equipment Inspector	CR 29(h)

Indicate in the H&SP, which of these listed appointments are applicable to the construction work in question (project specific).

No work involving any of the listed appointments may be performed without the knowledge and approval of an appointed competent person.

5.3 Communication & Liaison

5.2.1 The Principal Contractor will communicate all health and safety concerns with the DPW Health and Safety Officer.

6. RESPONSIBILITIES

6.1 Client/Agent

6.1.2 The Client/Agent shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan and when compliant, approve the plan.

6.2 Principal Contractor

6.2.1 The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction. Annexure 2 of this construction regulation contains a "Notification of Construction Work" form. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.

6.2.2 The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation.

6.2.3 The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.

6.2.4 The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the

health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.

- 6.2.5 The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- 6.2.6 The Potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations. (Note: This shall have to be contained in the conditions of tender upon which a tenderer's offer is based.)
- 6.2.7 The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- 6.2.8 The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Sub-contractor.
- 6.2.9 The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.
- 6.2.10 The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.
- 6.2.11 The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.
- 6.2.12 A letter of good standing in terms of COIDA (Compensation Commissioner) must be submitted to DPW.

7. SCOPE OF WORK

Service, Maintenance and Operation of Steam Boilers. These specifications are applicable to the specific scope of work pertaining to the above-mentioned project as detailed in the tender documents.

8. HEALTH AND SAFETY FILE

- a) The Principal Contractor must, in terms of Construction Regulation 7(7), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done. A more detailed list of documents and other legal requirements that must be kept in the Health and

b) The Health and Safety File will remain the property of the Client and/or its Agent on its behalf throughout the period of the project and shall be consolidated and handed over to the Client and/or its Agent on its behalf at the time of completion of the project

9. RISK ASSESSMENTS

In terms of Construction Regulations 5 the Client will prepare a baseline risk assessment for the construction work project. The Principal Contractor shall, before commencement of any construction work and during the construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on site, and must include –

- (a) the identification of the risks and hazards to which persons may be exposed to;
- (b) the analysis and evaluation of the risks and hazards identified;
- (c) a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (b) a monitoring plan; and
- (e) a review plan.

The following hazards are identified:

- Drilling (Breaking of walls)
- Formwork and support work
- Scaffolding
- Construction vehicles and mobile equipment
- Electrical installations and electrical machinery
- Housekeeping
- Stacking and storage practices
- Fire risks and fire precautions
- Use of jackhammers
- Hot work (steel cutting and welding)
- Portable electrical tools
- Intoxicated persons on site
- Use of ladders
- Impact of construction work upon occupants of buildings not evacuated for the duration of the work
- Working at height (fall protection)
- Noise
- Potential presence of asbestos that forms part of the structure (cement fibre)
- Dust

Site Specific risk assessment of the above must be submitted to DPW before commencement of work.

10. HEALTH AND SAFETY POLICY

Each contractor to submit a suitable documented Health and Safety Policy as required by Section 7 of the OHS Act.

11. IDENTIFICATION OF HAZARDS AND DEVELOPMENT OF RISK ASSESSMENTS, STANDARD WORKING PROCEDURES (SWP) AND METHOD STATEMENTS

The Principal Contractor is required to develop Risk Assessments, Standard Working Procedures (SWP) and Method Statements for each activity executed in the contract or project.

The identification of hazards is over and above the hazards identification programme and those hazards identified during the drafting of the Health and Safety Plan.

12. ARRANGEMENTS FOR MONITORING AND REVIEW

12.1 Monthly Audit by Client and/or its Agent on its behalf

The Client and/or its Agent on its behalf will be conducting Periodic Audits at times agreed with the Principal Contractor Audit to comply with Construction Regulation 4(1)(d) to ensure that the principal Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan.

12.3 Reports

- a) The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she:
 - i. dies
 - ii. becomes unconscious
 - iii. loses a limb or part of a limb
 - iv. is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

OR where:

- i. a major incident occurred
 - ii. the health or safety of any person was endangered
 - iii. where a dangerous substance was spilled
 - iv. the uncontrolled release of any substance under pressure took place
 - v. machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
 - vi. machinery ran out of control, to the Provincial Director of the Department of Labour within seven days and at the same time to the Client and/or its Agent on its behalf.
- b) The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations.

- c) The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".
- d) The Principal Contractor is required to provide a.s.a.p. the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports.

12.4 Review

The Principal Contractor is to review the Hazard Identification, Risk Assessments and Standard Work Processes at each Production Planning and Progress Report meeting as the construction work develops and progresses and each time changes are made to the designs, plans and construction methods and processes.

The Principal Contractor must provide the Client and/or its Agent on its behalf, other Contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated in the above paragraph.

12.5 Site Rules and other Restrictions

a) Site OH&S Rules

The Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction. When required for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

b) Security Arrangements

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period.

12.6 Training

a) General Induction Training

All employees of the Principal and other Contractors must be in possession of proof of General Induction training

b) Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training.

12.7 Accident and Incident Investigation

The Principal Contractor is responsible to oversee the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to receive first aid or be referred for medical treatment by a doctor, hospital or clinic. (General Administrative Regulation 9)

The Principal Contractor is responsible for the investigation of all non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar incidents in future.

Notwithstanding the requirements of Section 24 of the Act, ALL incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

13 OUTLINED DATA, REFERENCES AND INFORMATION ON CERTAIN AND/OR SPECIFIC OBLIGATORY REQUIREMENTS TO ENSURE COMPLIANCE

OHS Act Section/ Regulation	Subject	Requirements
Construction. Regulation	Notice of carrying out Construction work	<ul style="list-style-type: none"> • Department of Labour notified • Copy of Notice available on Site
General Admin. Regulation 4	Copy of OH&S Act (Act 85 of 1993)	<ul style="list-style-type: none"> • Updated copy of Act & Regulations on site. • Readily available for perusal by employees.
COID Act Section 80	Registration with Compensation Insurer	<ul style="list-style-type: none"> • Written proof of registration/Letter of good standing available on Site
Construction. Regulation 4 & 5(1)	H&S Specification & Programme	<ul style="list-style-type: none"> • H&S Spec received from Client and/or its Agent on its behalf • OH&S programme developed & Updated regularly
Section 8(2)(d) Construction. Regulation	Hazard Identification & Risk Assessment	<ul style="list-style-type: none"> • Hazard Identification carried out/Recorded • Risk Assessment and – Plan drawn up/Updated • RA Plan available on Site • Employees/Sub-Contractors informed/trained
Section 16(2)	Assigned duties (Managers)	<ul style="list-style-type: none"> • Responsibility of complying with the OH&S Act assigned to other person/s by CEO.
Section 37(1) & (2)	Agreement with Mandatories/ (Sub-)Contractors	<ul style="list-style-type: none"> • Written agreement with (Sub-)Contractors • List of Subcontractors displayed. • Proof of Registration with Compensation Insurer/Letter of Good Standing
Section 24 & General Admin. Regulation 8 COID Act Sect.38, 39 & 41	Reporting of Incidents (Dept. of Labour)	<ul style="list-style-type: none"> • Incident Reporting Procedure displayed. • All incidents in terms of Sect. 24 reported to the Provincial Director, Department of Labour, within 3 days. (Annexure 1)(WCL 1 or 2) and to the Client and/or its Agent on its behalf • Cases of Occupational Disease Reported • Copies of Reports available on Site • Record of First Aid injuries kept

General Admin. Regulation 9	Investigation and Recording of Incidents	<ul style="list-style-type: none"> • All injuries which resulted in the person receiving medical treatment other than first aid, recorded and investigated by investigator designated in writing. • Copies of Reports (Annexure 1) available on Site • Tabled at H&S Committee meeting • Action taken by Site Management.
Construction. Regulation Driven Machinery Regulations 18 & 19	Cranes & Lifting Machines Equipment	<ul style="list-style-type: none"> • Competent person appointed in writing to inspect Cranes, Lifting Machines & Equipment • Written Proof of Competence of above appointee available on Site. • Cranes & Lifting tackle identified/numbered • Register kept for Lifting Tackle • Log Book kept for each individual Crane • Inspection: - All cranes - daily by operator <ul style="list-style-type: none"> - Tower Crane/s - after erection/6monthly - Other cranes - annually by comp. person • - Lifting tackle(slings/ropes/chain slings etc.) - daily or before every new application
General Safety Regulation 3	First Aid	<ul style="list-style-type: none"> • Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed) • First Aid freely available • Equipment as per the list in the OH&S Act. • One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed) • List of First Aid Officials and Certificates • Name of person/s in charge of First Aid box/es displayed. • Location of First Aid box/es clearly indicated. • Signs instructing employees to report all Injuries/illness including first aid injuries • PSE Risk Assessment carried out • Items of PSE prescribed/use enforced
General Safety Regulation 2	Personal Safety Equipment (PSE)	

		<ul style="list-style-type: none"> • Records of Issue kept • Undertaking by Employee to use/wear PSE • PSE remain property of Employer, not to be removed from premises GSR 2(4)
General Safety Regulation 13A	Inspection of Ladders	<ul style="list-style-type: none"> • Competent person appointed in writing to inspect Ladders • Ladders inspected at arrival on site and weekly there after. • Inspections register kept • Application of the types of ladders (wooden, aluminium etc.) regulated by training and inspections and noted in register

Occupational Health and Safety Act,(Act No.85 of 1993)-[OHSA] and Regulations as follows:

- Construction Regulations[CR]
- General Administrative Regulations[GAR]
- General Safety Regulations[GSR]
- Environmental Regulations for Workplaces[ERW]
- General machinery Regulations [GMR]
- Hazardous Chemical Substances Regulations[HCSR]
- Electrical Installations Regulations[EIR]
- Electrical Machinery Regulations[EMR]
- Lift, Escalator and Passenger Conveyor Regulations
- Pressure Equipment Regulation [PER]
- Ergonomics Regulations
- Facilities Regulations
- Noise Induced Hearing Loss

14. LOCKOUT PROCEDURE

Contractors undertaking maintenance and repair work must submit a suitably documented lockout/tag-out procedure to be approved before work commences.

15. HOUSEKEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 25. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in production. Good housekeeping will enhance production time.

In promotion of environmental control all waste, rubble, scrap etc, will be disposed of at a registered dump site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied.

Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

NOTE: No employer (Principal Contractor) shall require or permit any person to work at night or after hours unless there is adequate, suitable artificial lighting including support services in respect of Health and Safety.

16. ELECTRICAL EMERGENCY RESPONSE PROCEDURE

Contractors undertaking electrical maintenance and repair work must submit a suitably documented Electrical Emergency Response Procedure to be approved before work commences.

17. RECORD KEEPING

Record keeping is a system where relevant documentation is kept for auditing or inspection purposes and may be referenced to at any stage during or after a project.

The contractor shall ensure that all records pertaining to the project shall be kept in terms of legislative. The contractor shall ensure that the SHE files shall be kept for the duration of the project to be open to audit or inspection by any party who is entitled to audit or inspect the project. The contractor shall ensure that SHE files is handed over to the client on completion of the project.

18. COMPLIANCE TO COVID-19 DIRECTIVES

The contractor should comply with Directives of NCID, Dept. of Health Dept. Of Labour & Employment.

- 18.1 Induction wrt COVID-19 is mandatory.
- 18.2 Specific COVID-19 PPE is mandatory
- 18.3 Screening at relevant area i.e. entrances

Kimberley Regional Office
DCS Area: Kimberley: 36-Month Boiler Term Contract
FA - Steam Generation - Horizontal Coal Fired Boiler

Item	Description Contractor to note that all work conducted on the boilers and other items mentioned in this tender, shall be done in accordance with manufacturer's specification.	Unit	QTY	Rate	Amount
	<u>GENERAL</u>				
	As-built information and Operating and Maintenance Manuals:				
02001	Obtaining of all available information, compiling, reproducing (1) one set of hard copy as-built and operating & maintenance manuals as specified in SB 05.01 and FA 04. Documents to be handed over to the Departmental Representative / Engineer.	sum	2		
02002	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.	sum	2		
02003	Logging and recording of operating of conditions, services, maintenance visits, reports, breakdowns, samples, inspections, tests etc.	sum	2		
	Total				
	<u>STATUTORY INSPECTIONS FOR 12 MONTH AND 36 MONTH BOILER INSPECTIONS</u>				
02004	Decommission and isolate boiler for preparation of statutory 12 and 36 month inspections and tests.	sum	2		
02005	12 month inspection: Preparation of boilers for internal fire (gas) side / 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.	sum	4		
02006	36 month inspection: Preparation of boilers for internal fire and water side / 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.	sum	2		

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	Carried Forward				
	Brought Forward				
02007	12 month inspection: Allow for the cost of Inspection Authority to perform all required inspections and tests related to the internal/external inspection as required by the Occupational Health and Safety Act, No 85 of 1993, including submission of all reports/certificates and completion of the necessary record books.	sum	4	27,950.00	
02008	36 month inspection: Allow for the cost of Inspection Authority to perform all required inspections and tests related to the internal/external inspection as required by the Occupational Health and Safety Act, No 85 of 1993, including submission of all reports/certificates and completion of the necessary record books.	sum	2		
02009	12 and 36 month inspection: Allow for all the required assistance, notices, tools, equipment, etc, for the Inspection authority's inspection and tests.	sum	2		
02010	12 and 36 month inspection: Preparation of boilers for hydraulic pressure tests, as required by the Occupational Health and Safety Act, No 85 of 1993, including all required equipment and tools necessary to pressurize the boiler under pressure for the inspection Authority's witnessing and certification of test.	boilers	2		
	Total				
	<u>REQUIRED WORK TO BOILERS DURING STATUTORY INSPECTIONS</u>				
	Boiler shell water side:				
02011	Clean out and de-scale complete boiler (acid pickle) once (1) including final refilling of the boiler with treated water.	no	2		
02012	Replace one manhole cover seal, including the installation of all items ready for pressure testing.	no	2		
02013	Replace all manhole, hand-hole, mud-hole cover seals and joint rings, including the installation of all items ready for pressure testing.	no	2		

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	Carried Forward				
	Brought Forward				
02014	Additional boiler shell thickness test, as directed by the Inspection Authority.	m ²	5		
02015	Additional boiler welding crack test, as directed by the Inspection Authority.	m ²	5		
02016	Additional X - Ray Tests to the boiler shell water side and welds, as directed by the Inspection Authority.	m ²	5		
02017	Additional Non Destructive Test to the boiler shell water side and welds, as directed by the Inspection Authority.	m ²	5		
02018	Additional Magnetic Particle Test to the boiler shell water / steam and welds, as directed by the Inspection Authority.	m ²	5		
02019	Complete de-scale, de-rust and clean boiler shell. Prepare and repaint boiler external shell with undercoat and 2 (two) coats of approved steam boiler shell coating.	m ³	250		
	Total				
	Boiler shell gas side:				
02020	Clear and clean all fire tubes to remove dust, slag, ash, grit and foreign matter, ready for inspection.	no	2		
02021	Brush and clean out all fire tubes by means of (shot / water blast / scatter scaler to remove carbon residue) ready for inspection.	no	2		
02022	Inspect boiler gas side, document condition and observations and deliver report to the Authorised Inspection Authority / Departmental Representative / Engineer.	no	2		
02023	The complete removal and replacement of steam boiler gas tubes, as specified by the boiler manufacturer. The completed work shall be inspected and certified by an Authorised Inspection Authority and witnessed by the Departmental Representative / Engineer. Relacement includes boiler commissioning.	no	12		
	Carried Forward				

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	Brought Forward				
02024	The complete removal and replacement of boiler stay tubes, as specified by the boiler manufacturer. The completed work shall be inspected and certified by an Authorised Inspection Authority and witnessed by the Departmental Representative / Engineer. Relacement includes boiler commissioning.	no	2		
02025	Prepare, clean and repaint all pipework / walkways / galleries (external) on boiler. Paint colour to suit existing.	m ²	50		
	Total				
	Boiler valves and mountings complete per boiler:				
02026	Dismantle, remove and strip down all boiler valves.	no	2		
02027	De-scale and clean all boiler valves and mountings.	no	2		
02028	Inspection of all boiler valves and mountings.	no	2		
02029	Overhauling all boiler valves by a Certified Technician.	no	2		
02030	Hydraulic testing, setting, adjustment and reassembling of all boiler valves.	no	2		
02031	Certification of all boiler valves in accordance with manufacturer's specification.	no	2		
02032	Refitting, installing, testing and adjustment of all boiler valves and mountings.	no	2		
	Total				
	Refractories and brickwork:				
02033	Remove and break down all boiler refractories and brickwork.	no	2		
02034	Recast and complete installion of all new rear flue brick work, with new on completion of inspection.	no	2		
02035	Recast and complete installation of all new ignition and flue arches with new on completion of inspection.	no	2		
	Total				
	Carried Forward				
	Brought Forward				
	Boiler soot blowers				

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02036	Dismantle, remove and strip down soot blowers.	no	2		
02037	Clean all soot blower components.	no	2		
02038	Inspection of soot blowers.	no	2		
02039	Complete overhauling of boiler soot blower.	no	2		
02040	Testing of soot blowers.	no	2		
02041	Lubrication of soot blowers where required.	no	2		
02042	Complete refitting, installation, testing, commissioning and adjustment of soot blower.	no	2		
02043	Remove old redundant packing, repack soot blower with new packing, including commission and testing.	no	2		
	Total				
	Boiler chain grate (Stoker mat)				
	Remove and complete replacement of boiler chain grate damaged / defective parts. The replacement shall include the decommissioning of the boiler and all items required to install defective parts before recommission and testing boiler chain grate for full operation.				
02044	Removal and complete replacement of boiler chain grate common links.	no	500		
02045	Removal and complete replacement of boiler chain grate drive links.	no	100		
02046	Removal and complete replacement of boiler chain grate side links.	no	100		
02047	Removal and complete replacement of boiler chain grate drive link rods. The replacement shall include washers and split pins.	no	50		
02048	Removal of complete chain grate, ready for cleaning and inspection of boiler fire side.	no	2		
02049	Re installation of chain grate after inspection, including chain grate commissioning.	no	2		
	Total				
	Carried Forward				
	Brought Forward				
	Chain grate drive mechanism and accessories				
02050	Remove and complete replacement of chain grate drive motor including complete installation.	no	2		

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02051	Remove and rewind chain grate drive motor including complete installation.	no	2		
02052	Replace chain grate drive gearbox complete.	no	2		
02053	Remove and total overhaul and recomission of drive gearbox, including complete installation.	no	2		
02054	Remove and complete replacement of chain grate rear roller.	no	2		
02055	Remove and complete replacement of chain grate front roller complete.	no	2		
02056	Remove and complete replacement of all chain grate side seals complete per boiler.	no	2		
02057	Remove and complete replacement of chain grate carbofrax blocks end stops.	no	2		
02058	Remove and complete replacement of chain grate carbofrax block stays/keeps.	no	4		
02059	Remove and complete replacement of all chain grate carbofrax blocks.	no	15		
02060	Remove and complete replacement of chain grate drive cogs. Per set of two (2).	Sets	2		
	Total				
	Boiler lagging, insolation and steel cladding.				
02061	Remove and reinstall all removed lagging and cladding in preperation of statutory inspections as per manufacture specification.	sum	2		
02062	Remove and complete replacement of damaged lagging / insolation sections to suit existing and installed as per manufacture specification.	m ²	25		
02063	Remove and replace damaged metal cladding sections to suit existing and installed as per manufacture specification.	m ²	25		
	Total				
	Carried Forward				
	Brought Forward				
	Logging, repair, delivery, etc procedures as per technical specifications FA, FB & FC.				
02064	Logging and recording procedures as per Technical Specification FA 05.	sum	0		
02065	Tests and inspections as per Technical Specification FA 06	sum	0		
02066	Quality assurance system as per Technical Specification FA 07.	sum	0		

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02067	Decommissioning, Commissioning and Testing prior to repair work as per Technical Specification FA 03 & FA 08.	sum	0		
02068	Guarantee of installation as per Technical Specification FA.09	sum	0		
02069	Provision of maintenance tools and spares as per Technical Specification FA.10	sum	0		
02070	Recording and control of coal delivery (system set-up) as per Technical Specification FA.11	sum	0		
02071	Recording and control of ash removal (system set-up) as per Technical Specification FA.12	sum	0		
02072	Water treatment and chemicals / salt delivery, recording and control (system set-up) as per Technical Specification FA.13	sum	0		
02073	Boiler efficiency control as per Technical Specification FA.14	sum	0		
02074	Repair and service work - Statutory Inspection and tests - as per Technical Specification FA15	sum	0		
02075	Maintenance to installations - as per Technical Specification FA 16	sum	0		
02076	Repair and service work - as per Technical Specification FB 11	sum	0		
02077	Variations to standard specification - as per Technical Specification FA 03, FB 03 & FC 03	sum	0		
	Carried Forward				
	Brought Forward				
02078	Decommissioning, Commissioning and Testing prior to repair work as per Technical Specification FB 08.	sum	0		
02079	Decommissioning, Commissioning and Testing prior to repair work as per Technical Specification FC 08.	sum	0		
02080	Statutory tests and inspections - as per Technical Specification PFA 05	sum	0		
02081	General Maintenance - as per Technical Specification PFA 06	sum	0		
02082	TRepair and service work - Boiler house ancillary equipment - as per Technical Specification FA12	sum	0		
	Total				
	VARIOUS ROUTINE PREVENTATIVE MAINTENANCE ACTIONS AS SPECIFIED IN TECHNICAL SPECIFICATION - FA 16				

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	The routine inspections and maintenance checks shall include all material and labour cost required to conduct the items specified.				
02083	Routing daily maintenance inspections and duties to be conducted as specified in tender document FA 16 02/1.	no	540		
02084	Routing weekly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/2	no	142		
02085	Routing monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/3	no	36		
02086	Routing three monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/4	no	12		
02087	Routing six monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/5	no	6		
02088	Routing twelve monthly maintenance inspections and duties to be conducted as specified in tender document FA 16 02/6	no	3		
	Total				
	Boiler feed-water tank.				
02089	Service as per Technical Specification FA 15.03.02	sum	2		
02090	Remove and replace lagging and insulation with new galvanised sheeting to suit existing.	m ²	20		
	Total				
	Carried Forward				
	Brought Forward				
	<u>FEED-WATER EQUIPMENT AND CONTROLS</u>				
	Feedwater tank additional requirements:				
02191	Adjust make-up water ball float valve to correct level.	sum	2		
02192	Check and adjust tank temperature control system c/w all valves and sparge pipe.	sum	2		
02193	Refill tank with treated make-up water. (in event of damage to hot well tank)	sum	2		
	Total				
	Boiler feed-water pumps:				
02194	Isolate boiler, strip, dismantle, de-scale and clean out feed water-pumps.	set	2		
02195	Inspect and report on condition of pump and motor components.	no	2		

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02196	Replace packings, seals, pump and pump motor bearings and gaskets.	no	2		
02197	Replace and worn-out or/and damaged impellers, diffusers and stage casings to suit existing, all inclusive of all gaskets and seals.	sum per stage	2		
02198	Clean out pump strainers	set	2		
02199	Inspect and repair pump mountings	set	2		
02200	Remove insulation and cladding from feed water suction line and delivery line and set cladding aside for reuse. Replace insulation with rock wool insulation, refit cladding and paint over if applicable to mild steel.	m ²	30		
02201	Overhaul existing feed water check valves and test for correct operation.	no	2		
02202	Refit, install and test feed-water pumps	set	4		
	Total				
	Boiler water - level equipment and controls:				
02203	Dismantle, strip, de-scale and clean, replace dual and single switch float operated controls (Mobrey type)	set	2		
02204	Supply and install new switch float operated controls (Mobrey type)	no	2		
	Carried Forward				
	Brought Forward				
02205	Dismantle, strip, de-scale and clean both (2) water-level gauge glasses. Replace all with new, gauge glasses, rubbers, graphite gaskets and refit to boiler.	set	2		
02206	Supply and install new single gauge glass with two rubbers. Refit to boiler.	no	2		
02207	Supply and install new single gauge glass shut off valve shaft handle. Refit to boiler.	no	2		
02208	Supply and install new single gauge glass shut off valve shaft. Refit to boiler.	no	2		
02209	Supply and install new single gauge glass shut off valve graphite gasket. Refit to boiler.	no	2		
02210	Dual and single level controls to be overhauled, inspected, tested, adjusted and refitted.	set	2		
02211	Test alarm levels and operation and recalibrate.	set	2		
02212	Test dual mobrey controls for correct operation and recalibrate.		2		
02213	Inspect repair, reconditioning, commissioning, high water level controls.	no	2		

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02214	Inspect repair, reconditioning, commissioning, low water level controls.	no	2		
02215	Remove and complete replacement / commissioning of new low water level control.	no	2		
02216	Remove and complete replacement / commissioning of new high water level control.	no	2		
02217	Remove and complete replacement / commissioning of new water level control alarm.	no	2		
	Total				
	Additional boiler related items				
02218	Inspect, test, service and recalibrate steam pressure gauge. Includes issue of certificate.	no	2		
02219	Remove and repack gland packing on boiler main crown valve.	no	2		
02220	Remove and repack boiler blowdown gland packing with new packing, including new stainless steel studs, nuts and washers.	no	2		
02221	Remove and replace ID fan belts (one), including commissioning.	no	6		
	Total				
	Boiler chemicals and softner plant				
02222	Remove, supply and install new pressure pump and electric motor, to suit existing. Including commissioning.	no	4		
02223	Remove, supply and install new pressure pump pressure vessel and bladder, to suit existing. Including commissioning.	no	2		
02224	Remove, supply and install new pressure pump gauge, non return valve and pressure switch, to suit existing. Including commissioning.	no	2		
02225	Water softener : Remove and replace "resin" with new in dual vessels.	Lt	175		
02226	Supply, delivery, installation and commissioning of steam boiler brine tank salt. Sufficient boiler salt shall be kept on site at all times and the item shall be priced all inclusive per month. Item priced (6 x 50 kg bags of salt per month)	no	18		
02227	Supply, delivery and installation of steam boiler chemicals for boiler working at full capacity, minimum of 17 hours per day, 7 days a week. Chemicals supplied shall conform to the boiler manufactures specification. Sufficient boiler chemical shall be kept on site at all times and the item shall be priced all inclusive for one months supply of chemicals.	no	18		
	Total				
	Ducting:				

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02228	Inspect and clean all gas ducting	no	2		
02229	Replace all joint seals and gaskets with new	no	2		
02230	Prepare and repaint gas ducting	m ²	10		
02231	Weld socket on gas ducting and install new dial type gas thermometer to suit existing.	no	2		
	Total				
	<u>COAL HANDLING AND CONVEYING EQUIPMENT</u>				
	Coal bunker:				
02232	Inspect and clean out coal bunker for full access to the complete coal screw below ground level. Allowance shall be made by the contractor for the removal of coal.	m ³	100		
	Carried Forward				
	Brought Forward				
02233	Reinstall coal removed from coal bunker. Allowance shall be by the contractor for the install of coal.	m ³	100		
02234	Supply, deliver, install, test, commission and handing-over of a new permanent 1.5 Kw submersible pump installation inside coal conveying equipment chamber below coal bunkers.	no	2		
02235	Remove, clean, test, reinstall and commission submersible pump inside coal conveying equipment chamber, below coal bunkers.	no	2		
	Total				
	Coal conveying equipment:				
02236	Remove and complete replacement of high level vertical coal screw with equivalent new unit, complete screw with new tube casing.	no	2		
02237	Dismantle, strip down, clean and inspect coal elevator and horizontal travelling equipment. Including assembling and commissioning of the coal elevator.	no	2		
02238	Inspect and service conveyor gearbox drive chains and gears.	no	2		
02239	Remove and complete replacement of conveyor gearbox to suit existing.	no	2		
02240	Remove and complete replacement of two (2) conveyor gearbox drive chain gears to suit existing.	no	4		

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02241	Test, inspect, service, commission motor drives and gear boxes, including testing windings for balancing of phases, insulation test and check wiring.	no	2		
02242	Lubricate all required lubrication points and replace gearbox oil as directed by the manufacturer.	no	2		
02243	Remove and complete replacement of coal hopper level control pressure switch.	no	2		
02244	Inspect, test, service and repair coal hopper and level control.	no	2		
02245	Inspect, clean, test electrical control panel and controls.	no	2		
	Carried Forward				
	Brought Forward				
02246	Prepare and clean complete coal screw casing, prepare and repaint with two coats of approved paint.	no	2		
02247	Remove and complete replacement / commissioning of new coal screw drive motor and coupling, including commission.	no	2		
02248	Remove and complete replacement of new vertical coal screw gearbox and coupling, including commissioning. Gearbox shall suit existing.	no	2		
02249	Remove and complete replacement / commissioning of horizontal cross feed coal screw with gear box and motor. Gearbox shall suit existing.	no	1		
02250	Remove and complete replacement of horizontal coal screw 150 mm diameter x 6 m.	no	2		
02251	Remove and complete replacement of coal screw outer tube 150 mm diameter x 6 m. inclusive of flanges and bolts.	no	2		
02252	Remove and complete replacement of coal screw coupling.	no	2		
	Total				
	COAL TESTING				
	NOTE: COAL SUPPLIED BY USER DEPARTMENT				
02253	Test coal and report back to Departmental Representative / Engineer on conformance/non-conformance of coal as specified by the boiler manufacturer. Coal testing shall include, collecting sample, transport, test, certification from a approved laboratory. Priced per sample test.	no	18		
	Total				

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FA - Steam Generation - Horizontal Coal Fired Boiler

ASH AND GRIT REMOVAL EQUIPMENT					
	NOTE:				
	Grit collectors:				
02254	Inspect, clean out all grit, dust and foreign matter, including inspection of grit collector supports and casing material.	sum	6		
02255	Inspect all access ports and discharge ports, and replace all joint seals and gaskets with new.	no	6		
02256	Prepare and repaint complete grit collector, support structure and casing.	m ²	16		
	Carried Forward				
	Brought Forward				
02257	Removal and disposal of boiler ash to an approved dumping site. Priced per removal of 2 m ³ of ash per load.	m ³	250		
	Total				
	Ash and grit trolleys:				
02258	Inspect, clean out, service and recondition existing grit and ash trolleys a acceptable working condition.	no	2		
02259	The supply, delivery and replacement of (set of 2) new ash trolley wheels to suit existing.	no of sets	4		
02260	The supply and delivery of a new replacement ash trolley complete, to suit existing.	no	2		
	Total				
	Ash conveyor skip/hoist and related equipment				
02261	Remove, supply and install new hoist steel cable to suit existing. Including fitting of all cable clamps and commissioning.	m	120		
02262	Remove, supply and install new hoist motor cut out limit switches to suit existing. Including commissioning.	no	2		
02263	Remove, complete refurbishment of hoist electrical motor and gearbox. The refurbishment shall include, motor rewind, new motor and gearbox bearings, oils etc, required for full refurbishment. Including commissioning.	no	2		
02264	Remove, supply and install new hoist electrical motor gearbox to suit existing. Including commissioning.	no	2		
02265	Remove, supply and install new hoist electrical motor to suit existing. Including commissioning.	no	2		
	Total				
	ELECTRICAL INSTALLATION, WIRING AND CONTROL PANELS				
	Boiler Room Distribution Board				

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02266	All wiring to be tidied up, neatly bundled and secured to backing plates, including replacement of an new updated legend card.	sum	2		
02267	Cover plate to be secured and installed correctly.	no	2		
02268	Inspect, test, service and clean all instrumentation and control equipment.	no	2		
Total					
Carried Forward					
Brought Forward					
Boiler mounted electrical control panels:					
02269	Inspect, test, service and clean all the electrical control panels	no	2		
02270	Inspect and test the operation and condition of all MCBs, motor starters, overloads, indication lights, control equipment, selector switches, etc, and replace where necessary. (every 6 months during the contract period)	no	2		
02271	Check and repair all primary and secondary control panel wiring for proper conducting where required.	no	2		
02272	Clean out control panels interior and exterior, inspect panel body, fascias, doors. (inclusive of painting and minor repairs)	no	2		
02273	Remove and complete replacement of boiler panel electric indicator lights to suit existing.	no	2		
02274	Any additional tests which may be required by the Departmental Representative / Engineer resulting from the above inspections.	prov	2		
02275	Attendance and profit on item 02273	sum' %	2		
Total					
General lighting installation:					
02276	Remove and complete replacement / commissioning of faulty lamps (Mercury vapour 250 Watt)	no	6		
02277	Remove and complete replacement / commissioning of faulty fluorescent tubes (58 Watt)	no	8		
02278	Remove and complete replacement / commissioning of faulty double tube, 58 Watt open channel fluorescent fitting	no	8		
02279	Remove and complete replacement / commissioning of faulty High Bay fitting (Mercury vapour 250 Watt)	no	6		
Total					
Electrical conductors and switchgear					
	P. V. C. single core 600/1000 volt grade conductors supplied and drawn into conduit and measured from point to point.				

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02280	1.5 mm ²	m	100		
02281	2.5 mm ²	m	100		
02282	4 mm ²	m	100		
02283	6 mm ²	m	100		
02284	10 mm ²	m	100		
	Total				
		Carried Forward			
		Brought Forward			
	Bare copper stranded earth conductor supplied and drawn into conduit with other conductors and measured point to point.				
02285	2.5mm ²	m	100		
02286	4mm ²	m	100		
02287	6mm ²	m	100		
02288	10mm ²	m	100		
	Total				
	Circuit breaker supplied, installed and connected in distribution board:				
02289	20 A 5 k A single pole	no	10		
02290	20 A 15 k A single pole	no	4		
02291	20 A 15 k A single pole	no	0		
02292	10 A 15 k A single pole	no	4		
02293	60 A 15 k A triple pole	no	4		
02294	160 A 15 k A triple pole	no	4		
	Total				
	Circuit breaker type isolator supplied, installed and				
02295	30 A Double pole isolator	no	4		
02296	60 A Double pole isolator	no	2		
02297	60 A Triple pole isolator	no	4		
	Total				
	Electrical 3 phase motor over loads supplied, installed and connected.				
02298	220 v overload	no	4		
02299	380 v overload	no	4		
02300	12 v overload	no	5		
	Total				
	Electrical 3 phase boiler electrical panel relays supplied, installed and connected.				
02301	FD fan balance relay	no	4		
02302	ID fan balance relay	no	6		
02303	water pump relay	no	4		
	Total				
	BOILER HOUSE ANCILLARY EQUIPMENT				
	Blow-down sump:				

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02304	Clean blow down sump drain into existing sewage system.	no	2		
	Carried Forward				
	Brought Forward				
02305	Inspect, clean all blow-down gullies, secure piping and test for correct blowdown operation.	no	2		
02306	Repair existing boiler house blow down trench where concrete is cracked and unstable.	m ²	16		
02307	Repair fixing points for covering. Protect covering from corrosion with etch coat primer, paint and	m ²	16		
	Total				
	Ladders and galleries on one (1) boiler:				
02308	Clean and inspect ladders and galleries for any defects, corrosion, mountings and supports.	m	10		
02309	Repair ladder steps, side rails, gallery floors and hand rails.	m	10		
02310	Prepare and repaint ladders and galleries.	m ²	100		
	Total				
	Painting of equipment, plant and building:				
02311	Clean boiler house interior walls (where painting is not required).	m ²	250		
02312	Clean and prepare walls for painting. Repaint boiler house interior walls with two coats of high quality approved paint, in accordance with the Department's specification PW 371	m ²	250		
02313	Clean and prepare for painting, and repaint boiler house interior floor demarcation lines in accordance with the Department's specification PW 371.	m ²	40		
02314	Clean and prepare for painting, and repaint Boiler House interior roof structural steel, doors and frames, inside roof, etc, in accordance with the Department's specification PW 371.	m ²	300		
	Total				
	BOILER HOUSE PIPED INSTALLATIONS				
	Steam and condensate installation:				
02315	Clean, test, inspect, service all steam and condensate pipe, fittings, accessories, components and equipment inside the boiler house.	sum	2		
02316	Repair and complete recondition of existing steam traps sets including steam and water side valves.	no	2		

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FA - Steam Generation - Horizontal Coal Fired Boiler

		Carried Forward			
		Brought Forward			
	Blow-down pipe installation, per one (1) boiler:				
02317	Clean out blow-down pipe channel and remove all old blow-down piping, drain pipework and accessories. (Ensure that the drainage point is piped correctly into the drain pit and functioning properly)	m	16		
02318	All blow-down and drains pipework to be removed and replaced with steam schedule 40 piping and welded fittings. (Ensure that the drainage point is piped correctly into the drain pit and functioning properly)	m	30		
	Total				
	BOILER HOUSE MANAGEMENT				
02319	Establish and implement a system for the system efficiency and boiler performance audit. FA- 14	no	2		
	Total				
	Boiler House Tools and Equipment				
	Supply new tools and equipment equipment to be utilized for the daily operation of the boiler house and related sytems.				
02320	Steam boiler blowdown spanner	no	2		
02321	Steam boiler handhole spanner	no	2		
02322	Steam boiler manhole spanner	no	2		
02323	Steam boiler grate crank handle spanner	no	2		
02324	Coal shovel (spade)	no	2		
	Total				
	BOILER HOUSE OPERATION				
02325	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.	month	36		
	Total				
	Amount carried forward to final summary page				

Shedule 1		Preliminary and General			
Payment refers to	Item	Description	Qty	Unit Rate	Amount
		Conditions of Contract: Compliance with contractual requirements and obligations in terms of Contract and Contract Data			
	1002	Conditions accepted as elsewhere measured: Fixed	0	sum	
	1002	Conditions accepted as elsewhere measured: Time related	0	sum	
	1003	Conditions accepted as elsewhere measured: Value related	0	sum	
	1004	Surety, performance bond: Fixed	0	sum	
	1005	Insurance: Construction works: time related	0	sum	
	1006	Insurance: Public Liability: Time related	0	sum	
	1007	Insurance: Special Risks: (SASRIA): Time related	0	sum	
	1008	Insurance: Occupational Compensation (COID): Time related	0	sum	
	1009	Programme of Works: Compile & Submit: Fixed	0	sum	
	1010	Programme of Works: Maintaine current: Time related	0	sum	
	1011	Preliminary & General: balance of items: Fixed	0	sum	

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		Facilities as specified or necessary for the duration of the contract including establishment at commencement and removal upon completion			
1013		Admin facilities: Site Instruction book, communications etc	0	sum	
1014		Scaffolding - Acquire and install complete for safe use. Use and remove from site as required.	0	m high (vert)	
1016		Occupational Health and Safety: Compliance with the applicable Act including specified additional requirements Safety Officer appointment	36		
		Carried Forward			
		Brought Forward			
1017		Submit Health and Safety Plan	1	sum	
1018		First Aid kit: Supply and maintain on site for duration of contract.	1	sum	
1019		Monthly Safety meetings: Conduct and record print all proceedings.	0	sum	
1020		Balance of safety related compliance including HIV requirements	0	sum	

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	Supervision and Management of the progress of construction works including the attendance at meetings at the site with the Departmental Representative / Engineer as and when required, including quality control of all work done by technical staff.			
1021	Supervision and Management	0	sum	
1022	Access control and identification of staff	0	sum	
1023	Quality system	0	sum	
1024	Monthly expenses - telephone, Fax, cell phone, e.mail facilities - to be available 24hrs a day / 7 days a week	0	months	
	Additional tests			
1026	Additional tests required by the Departmental Representative/Engineer	1	sum	
1027	Attendance and profit on item 1026	%		
	Provision and reporting of required contractor staff / subcontractor / additional employment.			
1030	Monthly EPWP/NYS reporting and submission of all on site staff personnel information, as required by the Department. The information as per the sample (three sheets) included under additional documents, shall be completed and priced for submission per month.	0	months	

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Carried Forward					
Brought forward					
	1032	Waste removal, recycling and disposal All waste materials and liquids to be removed from site and disposed in an approved or identified dumping site such that accumulation of waste does not unsafely restrict access to site for the full duration of the contract (24 month contract). Priced per month. Wherever possible waste material will be recycled.	0	months	
	1033	Provision of Personal Protective Equipment (PPE) Where required, contractors shall provide all employees with all required PPE, such as safety shoes, overalls, protective gloves and ear and eye protection for the full duration of the contract (36 month contract). Priced per month. (as per SI OHS specification) Asbestos removal	36	months	

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1034	Complete removal and disposal of any asbestos material in accordance with the OHS act of 1993. The price shall include and take into account, the procedure and documentation required for the disposal thereof.	0	kg	
TOTAL FOR PRELIMINARY AND GENERAL - CARRIED FORWARD TO SUMMARY PAGE				



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA



EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

EPWP IMPLEMENTATION FRAMEWORK ON NDPWI PROJECTS

Kimberley DCS: Service, maintenance and operation of Steam Boilers (36 Months)

In order to make tender / contract documents fully EPWP compliant (labour-intensive construction projects) the following clauses and / or additions need to be included in the documentation:

1. Tender Document Cover

The following EPWP Logo to be included on the bottom of the front cover



EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

2. Tender Notice and Invitation to Tender

The following must be included in the notice and invitation to tender (for Contract Documentation for the Works):

"Only tenderers who employ staff which satisfy EPWP requirements are eligible to submit tenders."

3. Contract Data

The following must be included in the contract data in the contract with the Employer:

Linkage of payment for labour-intensive component of works to submission of project data

The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoices shall not be paid until all pending labour information has been submitted.

Applicable labour laws

The current Ministerial Determination (also downloadable at www.epwp.gov.za), Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.

4. Bill of Quantities



- Due to the nature of the works involved, this type of project is feasible as a labour Intensive project i.e. the construction activities will require skilled/unskilled labour.
- Noted that only few items were identified to be implemented LI on the BOQ. The QS is kindly requested to identify more activities that will be done LI in the BOQ.
- Below are some of the potential focus areas where employment creation can be optimized. The following activities must be marked in the bill of quantities with the letter (LI);

LI Activities
All excavations works not exceeding 1.5 m
Masonry
Brickwork
Waterproofing (requires skilled labour and semi-skilled labour)
Cleaning of roof
Carpentry and joinery (requires skilled and semi-skilled labour)
Shelving
Installation of handle doors, door closers, nameplates, bathroom fittings
Signage,
Installation of pinning boards , writing boards
Plastering (Internal and External)
Tiling
Plumbing and Drainage & stormwater drainage
Paintwork
Installation of Fencing
Landscaping
Sewer connections
Water connections
Road signs
Paving to parking area
Fencing and installation of gate

6. Employment Targets

The contractor needs to provide a realistic estimate on the number of jobs that the project has the potential to create throughout the project duration as the project will be implemented using Labour Intensive Construction methods on elements where it is economical and feasible for this construction method.

Estimated no of jobs to be created:

NYS Beneficiaries = 2
Local Labour = N/A

7. Employment requirements



Tenderers are advised that this contract will be subject to the Expanded Public Works Program (EPWP) aimed at alleviating and reducing unemployment.

Tenderers must allow for any costs for the following employment requirements of the EPWP

60% women

55% youth aged between 18 and 35 years

2% people with disability

100% unskilled labour utilized must reside within the boundaries of the Municipality ward where this contract is executed, with preference to the local community closest or at the walking distance to the contract site. Wherever possible local skilled tradesmen are to be employed on this contract with the view to maximize utilization of local resources.

8. Employment of Community Liaison Officer (CLO)

- 8.1. The Contractor shall allow for and pay any and all costs necessary for the engagement of the services of a Community Liaison Officer (CLO) for the full duration of a project.
- 8.2. A CLO will be identified by the local structures (Project Steering Committee) of the ward areas and appointed following a fair and transparent interviewing process, to be conducted in the presence of local structures and the contractor representative, in order to assist the Contractor in the procurement of any local labour, etc. required for this project.
- 8.3. The Contractor is to liaise with the CLO and afford him any assistance needed in ensuring sound working relations with the local community.
- 8.4. Key Responsibilities of the CLO are envisaged to include and not necessary be limited to:
 - a) Assisting local leadership in conducting skills and resources audit which facilitates sourcing labour from within the ward or targeted areas for employment, as required by contractor,
 - b) Assisting in the procurement of materials from local resources, as required by the contractor,
 - c) Assisting the contractor by identifying areas of potential conflict and or threats to the project or to stakeholders in the project and recommend appropriate action to the contractor.
 - d) Assisting contractor and stakeholders in the project in the resolution of any conflict which may arise.
 - e) Establishing and ensuring that sufficient and open communication channels between the contractor and the work force are maintained.
 - f) Establish and ensuring that efficient and open communication channels between the contractor and the community are maintained



- g) Identifying and reporting to the Contractor regarding issues where communication between stakeholders is necessary, recommend courses of action and facilitate such communications
- h) Assisting the Contractor and the work force in the establishment of grievance procedures and necessary recommendation to the Contractor regarding the grievances and solution thereto.
- i) Attending to site meetings and project implementation meetings as required by the Contractor and prepare periodic reports as may be required by the Contractor from time to time.
- j) Attending to such other duties which are consistent with the functions of a CLO, as may be required by the Contractor from time to time.

9. EPWP Branding

9.1. Signboard

EPWP Programme at the project level shall always be promoted through the projects signage board that embrace EPWP logo at the bottom, correct measurement for this signage board will be provided by the project leader during the site handing over meeting.

The Contractor is responsible for ensuring that the project board remains neatly and safely erected for the full duration including the maintenance period, after which the project board and posts are to be dismantled and handed to the client in good order

9.2. Personal Protective Equipment (PPE)

All local labourers including contractor & sub-contractors' shall be provided with EPWP branded Personal Protective Equipment (PPE), as per the branding specifications.

Overalls to be orange in colour as per EPWP Corporate image and requirements (Annexure E). Branding to be done in full colour. Specification with the exception of Correctional Services contracts where the participants top and bottom would be green.

10. Reporting

The Contractor's payment invoice shall be accompanied by labour information for the corresponding period in an EPWP reporting format (Annexure B). The completed EPWP reporting template should be accompanied by the following supporting documents:

- Contract of employment (Individual and/or Entity) - once-off
- Certified South African ID copy (certification date not older than 3 months)- once-off
- Attendance register of participants- periodically
- Proof of payment of participants- periodically
- Schedule of payment for SMMEs- periodically (N/A)



The Consultant shall, before certifying a contractor’s payment certificate, ensure that contractor has submitted labour information in a format and timeframe specified by the employer.

If the information submitted by the contractor is inadequate the consultant shall not submit the payment certificate to the employer for payment. If the contractor chooses to delay submitting payment invoices, labour information shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoice shall not be paid until all pending labour information has been submitted.

12.02 PROVISION OF EPWP DESIGNED OVERALLS, EAR PLUGS, SAFETY GLOVES, HARD HATS TO YOUTH WORKERS (NYS) AS WELL AS SAFETY BOOTS.

12.02.01 Supply 2 x EPWP branded overalls, 1 x EPWP branded hard hat, 2 sets of ear plugs, 2 sets of safety gloves and 2 pair of safety boots to each youth worker per year for three years.

R.....Unit: PC.Sum. **Total cost carried to Schedule 6 item 6.2.**

Youth worker overalls should be orange (top and bottom) as per EPWP branding specification with the exception of Correctional Services contracts where the overalls should be blue (top and bottom). **A minimum of two sets of overalls, two pair of safety boots, two sets of ear plugs and two sets of safety gloves per youth worker should be supplied.** Hard hats should be orange and branded as per the EPWP branding specification which shall be provided to the Contractor.

SCHEDULE 6 – Expanded Public Works Program – (EPWP)					
Skills Development – Internship/Beneficiary					
		UNIT	Quantity	Rate	AMOUNT/year one, two and three
	Employment of Youth Workers				R c
6.1	<u>EMPLOYMENTS OF YOUTH WORKERS</u>				
	Employment of Youth Workers				
	The unit of measurement shall be the number of youth workers at the labour rate of R3000.00 per month as the amount agreed by MINMEC multiplied by the period employed in months and the rate tender shall include full compensation for all costs associated with the employment of four youth workers and for complying with the conditions of contract. The cost for the training shall be excluded from this item. This item is based on 36 months appointment for youth worker/s.				
	Allow for minimum of R3000.00/mth x 12 mths	NO	2		
	Allow for 6% increase in year two x 12 mths	NO	2		
	Allow for 6% increase in year three x 12 mths	NO	2		
	Profit and attendance (ref.SL 11.05.02)				
	(a) Admin cost	Months	36		
	(b) Transport cost	Months	36		
6.2	<u>PROVISION OF EPWP PPE TO YOUTH WORKERS</u>				
	Supply 2 x EPWP branded overalls, 1 x EPWP branded hard hat, 2 sets of ear plugs, 2 sets of safety gloves and 2 pair of safety boots to each youth worker per year for three years	SUM	1		
6.3	<u>Provision of small tools in a tools box for youth workers</u>				
	Provide all youth worker with prescribe tools for the respective trade specification for the mentioned tools to be provided by the service provider. These tools will become the property of the youth workers after the completion of the program (ref. SL 11.06.01)	NO	6		
	One tools box per youth per year for three years.				
6.4	<u>Provisional SUM for Training/s</u>				
	Funds will only be claimed if youth/s has been taken for a formal training/s with accredited institution	SUM	1	R 42, 000	R 42, 000
Total cost carried to summary page.		Subtotal			

Summary Kimberley Prison 36-Month Boiler Term Contract

Tender No: ID: 96741

Schedule no.	Description	Amount
1	Preliminaries and General (P&G)	
2	Steam Generation (FA) Horizontal Coal Fired Boiler	
3	Steam Distribution (FB)	0
4	Hot water Generation (FC)	0
5	Incinerators (IC)	0
6	Dayworks	
7	EPWP	
Total carried to total summary table		

Final Summary

Totals

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

