

TENDER NUMBER: MTH 11/2022

WILLOWVALE PRISON: INSTALLATION OF STANDBY GENERATOR SET

TENDER DOCUMENT CONSISTING OF: VOLUME1: TENDERING PROCEDURES VOLUME2: RETURNABLE DOCUMENTS VOLUME3: THE CONTRACT ISSUED BY: DEPARTMENT OF PUBLIC WORKS 5TH FLOOR PRD BUILDING SUTHERLAND STREET MTHATHA 5100	
VOLUME1: TENDERING PROCEDURES VOLUME2: RETURNABLE DOCUMENTS VOLUME3: THE CONTRACT ISSUED BY: DEPARTMENT OF PUBLIC WORKS 5TH FLOOR PRD BUILDING SUTHERLAND STREET MTHATHA	TENDER DOCUMENT
VOLUME2: RETURNABLE DOCUMENTS VOLUME3: THE CONTRACT ISSUED BY: DEPARTMENT OF PUBLIC WORKS 5TH FLOOR PRD BUILDING SUTHERLAND STREET MTHATHA	CONSISTING OF:
VOLUME3: THE CONTRACT ISSUED BY: DEPARTMENT OF PUBLIC WORKS 5 TH FLOOR PRD BUILDING SUTHERLAND STREET MTHATHA	VOLUME1: TENDERING PROCEDURES
ISSUED BY: DEPARTMENT OF PUBLIC WORKS 5 TH FLOOR PRD BUILDING SUTHERLAND STREET MTHATHA	VOLUME2: RETURNABLE DOCUMENTS
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5 TH FLOOR PRD BUILDING SUTHERLAND STREET MTHATHA	ISSUED BY:
SUTHERLAND STREET MTHATHA	DEPARTMENT OF PUBLIC WORKS
MTHATHA	5 TH FLOOR PRD BUILDING
	SUTHERLAND STREET
5100	МТНАТНА
	5100
NAME OF BIDDER	NAME OF BIDDER
JULY 2022	JULY 2022

VOLUME 1: TENDERING PROCEDURES

T1.1 Tender Notice and Invitation to Tender



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

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES TENDERS FOR:

Project title:	Project title: Willowvale Prison: installation of generator			
Tender no:	MTH11/2022	Reference no:		
Advertising date:	01 July 2022	Closing date:	22 Jully 2022	
Closing time:	11h00	Validity period:	12 Weeks (84 calendar days)	

1. REQUIRED CIDB GRADING

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

2. RESPONSIVNESS CRITERIA

2.1 Substantive responsiveness criteria

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

1	\boxtimes	Only those tenderers who satisfy the eligibility criteria stated in the Tender Data may submit tenders.
2		Tender offer must be properly received on the tender closing date and time specified on the invitation, fully completed either electronically (if issued in electronic format), or by writing legibly in non-erasable ink. (All as per Standard Conditions of Tender).
3	\boxtimes	Use of correction fluid is prohibited.
4	\boxtimes	Submission of (DPW-07 EC): Form of Offer and Acceptance.
5		Submission of (PA-16): Preference points claim form in terms of the Preferential Procurement Regulations 2017.
6	\boxtimes	Submission of (PA – 36 and Annexure/s C): Declaration Certificate for Local Production and Content for designated sectors.
7	\boxtimes	Submission of Proof of 30% Subcontracting participation and related documents in terms of the Preferential Procurement Regulations 2017
8	\boxtimes	Submission of DPW-09 (EC): Particulars of Tenderer's Projects.
9		Submission of DPW-16 (EC): Site Inspection Meeting Certificate
10		Submission of record of attending compulsory virtual bid clarification / site inspection meeting.
11		Submission of DPW-21 (EC): Record of Addenda to tender documents

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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".

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Effective date: 27 June 2022

Version: 2022/03

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



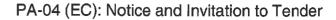
PA-04 (EC): Notice and Invitation to Tender

12	The tenderer shall submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts) together with his tender.
13	The tenderer shall submit his fully priced and completed sectional summary- and final summary pages with the tender.
14	Site briefing is compulsary and bidders must sign attendence register on site as a proof of attendence
15	Specify other responsiveness criteria
16	Specify other responsiveness criteria
17	Specify other responsiveness criteria
18	Specify other responsiveness criteria

2.2 Administrative responsiveness criteria

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

1		Any correction to be initialled by the person authorised to sign the tender documentation as per PA 15.1 or PA 15.2 resolution of board/s of directors / or PA15.3 Special Resolution of Consortia or JV's.
2		Submission of applicable (PA-15.1, PA-15.2, PA-15.3): Resolution by the legal entity, or consortium / joint venture, authorising a dedicated person(s) to sign documents on behalf of the firm / consortium / joint venture.
3		Submission of (PA-11 revised): Bidder's disclosure.
4	\boxtimes	Submission of (PA 40): Declaration of Designated Groups for Preferential Procurement.
5	\boxtimes	Submission of proof of Registration on National Treasury's Central Supplier Database (CSD).
6		Submission of DPW-15 (EC): Schedule of proposed sub-contractors
7		The tenderer shall submit his fully priced Bills of Quantities (complete document inclusive of all parts) within 14 days from request.
8		Upon request, submission of fingerprints obtainable from local SAPS including any other additional documentation and information required for vetting purposes.
9		Upon request, submission of a fully completed security clearance application form with supporting documentation and information as required. The security clearance form will be provided by the Employer for projects requiring a security clearance.
10		Submission of (PA-16) Perference certificate
11		Submmision of (PA-36) Declaration certificate for local production content for designated sector
12		Specify other responsiveness criteria
13		Specify other responsiveness criteria
14		Specify other responsiveness criteria
15		Specify other responsiveness criteria





3. PRE-QUALIFICATION CRITERIA

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

A tenderer having stipulated minimum B-BBEE status level of contributor:

	⊠Level 1 or ⊠Level 2 or □Level 3	
	An EME or QSE	
	A tenderer subcontracting a minimum of 30% to: An EME or QSE which is at least 51% owned by black people An EME or QSE which is at least 51% owned by black people who are An EME or QSE which is at least 51% owned by black people who are An EME or QSE which is at least 51% owned by black people with dis An EME or QSE which is at least 51% owned by black people living i areas or townships A co-operative which is at least 51% owned by black people An EME or QSE which is at least 51% owned by black people An EME or QSE;	e women abilities in rural or underdeveloped
minii	e: Functionality will be applied as a prequalification criterion. Such criteria a mum requirements where after bids will be evaluated solely on the basis of p	
	onality criteria:	Weighting factor:
Total		100 Points



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4. BID EVALUATION METHOD

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

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

5. ELIGIBILITY IN RESPECT OF RISK TO THE EMPLOYER:

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

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

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

5.1 Technical risks:

Criterion 1: Experience on comparable projects during the past 5 years.

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

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

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

Adherence to contractual commitments and quality of performance of comparable current and previous projects performed by the Tenderer as per the evaluation report prepared by the Consultant Team, based on its research and inspection of a representative sample of the Tenderer's current and previous work as reflected on form DPW-09 (EC), as well as, if necessary, of any additional work executed by the Tenderer,



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not reflected on form DPW-09 (EC). Failing to provide contactable references will result in the tender offer be *mutatis mutandis* declared non-responsive.

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

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

Criterion 3: Suitably qualified and appropriately experienced human resources

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

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

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

5.2 Commercial risks:

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

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



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

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

(a)	Minimum 30% mandatory Subcontracting to SMMEs in accordance with the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017 as published in the Government Gazette Notice No. 40553 of 20 January 2017.	Not applicable
(b)	Minimum Targeted Local Manufacturers of Material Contract Participation Goal, in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017	Applicable
(c)	Minimum Targeted Local Building Material Suppliers Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017.	Applicable
(d)	Minimum Targeted Local Labour Skills Development Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017.	Applicable
(e)	Minimum Targeted Enterprise Development Contract Participation Goal in accordance with the cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013 and the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017.	Applicable
(f)	Minimum Targeted Contract Skills Development Goal in accordance with the cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 43495 of 3 July 2020 and the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017.	Applicable
(g)	DPWI National Youth Service training and development programme (NYS).	Not applicable
(h)	Labour Intensive Works	Applicable
(i)		Select
(j)		Select

7. 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 <i>i</i> 5th floor PRD Building surthrland street Mthatha. A non-refundable bid deposit of R R100.00 <i>t</i> is payable (cash only on collection of the bid documents.



PA-04 (EC): Notice and Invitation to Tender

8. SITE INSPECTION MEETING

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

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

Venue:	Willowvale Prison			
Virtual meeting Link:	(type in here the place or "N/A")			
Date:	13 july 2022	Starting time:	10h00	

9. ENQUIRIES

Enquiries related to tender documents may be addressed to:

DPWI Project Manager:	M. Mazwana Telephone no:		047 502 7102	
Cellular phone no:	079 514 8381	Fax no:		
E-mail:	meyisi.mazwana.dpw.gov.za			

10. 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 retyped).

Tender documents may be posted to:		Deposited in the tender box at:
The Director-General Department of Public Works and Infrastructure Private Bag X 5007 Mthatha 5099	OR	5th floor PRD BUILDING Sutherland street Reception
Attention: Procurement section: Room Reception		

11. COMPILED BY:

M. MAZWAJA	Madula	1 July 209
Name of Project Manager	Signature	Date



DPW-03 (EC): TENDER DATA

Project title:	Willowvale Prison: Installation of standby generator
Reference no:	

Tender no:	MTH 11/2022	Closing date:	22 July 2022
Closing time:	11h00	Validity period:	84 days

	Y
Clause number:	
	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).
	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.
	Each item of data given below is cross-referenced to the clause marked "C" in the above mentioned Standard Conditions of Tender.
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	For this contract the three volume approach is adopted.
	This procurement document has been formatted and compiled under the headings as contained in the CIDB's "Standard for Uniformity in Construction Procurement."
	The three volume procurement document issued by the employer comprises the following:
	Volume 1: Tendering procedures T1.1 - Notice and invitation to tender (PA-04 EC) T1.2 - Tender data (DPW-03 EC)
	Volume 2: Returnable documents T2.1 - List of returnable documents (PA-09 EC) C1.1 - Form of offer and acceptance (DPW-07 EC) C1.2 - Contract Data T2.2 - Returnable schedules
	Volume 3: Contract Part C1: Agreement and contract data C1.2 - Contract data (Part 1: Data provided by employer) (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)
	Part C2: Pricing data C2.1 - Pricing Assumptions (PG-02.2 EC or PG-02.1EC) C2.2 - Bills of Quantities / Lump sum document (if not a returnable document)
	Part C3: Scope of work C3 - Scope of work (PG-01.2 EC of PG-01.1EC)
	Part C4: Site information C4 - Site information (PG-03.2 EC or PG03.1EC)



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C.1.4	The Employer's agent is:		
	Name:	M. Mazwana	
	Capacity:	Departmental Project Manager	
	Address:	7 th floor PRD Building Sutherland Street Mthatha	
	Tel:	047 502 7102/079 514 8381	
	Fax:		
	E-mail:	meyisi.mazwana@dpw.gov.za	

C.2.1 C.3.11

A. <u>ELIGIBILITY IN RESPECT OF CIDB REGISTRATION:</u>

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 3 EB or 3 EB** 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;
- the lead partner has a contractor grading designation in the 3 EB or 3 EB** 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 3 EB or 3 EB** class of construction work

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. - *Applicable*

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

DPW-03 (EC): Tender data

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 Facto	
Total	100 Points	

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

Minimum functionality score to qualify for further evaluation	uation:

(Total minimum qualifying score for functionality is 50 Percent).

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

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).

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.

C.2 Commercial risks:

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.

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C.2.7	For particulars regarding a pre-tender site inspection meeting, see Notice and Invitation to Tender T1.1
C.2.12	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.
	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.
	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.
	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.
	Alternative tender offer permitted: Yes ☐ No ☒
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):
	☐ Together with his tender;
	or 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: Department of public Works and Infrastructure 5 th Floor PRD Building PRD Building Mthatha 5099
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.

VOLUME 2: RETURNABLE DOCUMENTS

T2.1 List of Returnable documents



PA-09 (EC): LIST OF RETURNABLE DOCUMENTS

Project title:	Willowvale Prison: Installation of standby generator		
Tender / Quote no:	Reference no:		
Receipt Number:	insert receipt number		

1. RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

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

Yes Yes Yes Yes Yes Yes
Yes Yes
Yes
Yes
Yes
Yes

^{*} In compliance with the requirements of the CIDB SFU Annexure G



Tender no:

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

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

3. RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

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

Tender document name	Number of pages issued	Returnable document
Schedule of proposed sub-contractors (DPW-15 EC) (if applicable)	1 Page	Yes
Particulars of Electrical Contractor (DPW-22 EC) (if applicable)	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)

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

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



Tender no:

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

Legai	Status of Tendering Entity:	Documentation to be submitted with the tender, or which may be required during the tender evaluation:
if the 1	Tendering Entity is:	
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

C1.1 Form of Offer and Acceptance



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

Project title:	Willovale Prison: Inst	Willovale Prison: Installation of standby generator					
Tender / Quotation n	o: MTH11/2022		Reference no:				
OFFER	OFFER						
The Employer, identif procurement of: <i>Installation of back u</i>		nature bl	ock, has solicited offers	to enter into a contract for the			
The Tenderer, identifi addenda thereto as lis tender.	ed in the offer signature blated in the returnable scheo	ock, has lules, and	examined the documen d by submitting this offer	its listed in the tender data and has accepted the conditions of			
acceptance, the Tende including compliance v	erer offers to perform all of	the obligations accor	ations and liabilities of th ding to their true intent a	is part of this form of offer and e Contractor under the contract nd meaning for an amount to be a.			
	ICLUSIVE OF ALL APPLICAE insurance fund contributions an			des value- added tax, pay as you earn,			
Rand (in words):							
Rand in figures:	R						
	precedence over the amount in figure negotiated and agreed price will			cted to further price negotiation with d 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: Natural Person or Partnership:						
And: Whose Registration			Whose Identity Number(s)	is/are:			
And: Whose Income Tax	Reference Number is:	OR	Whose Income Tax Refere	ence Number is/are:			
		25					
CSD supplier number:			CSD supplier number:				

^{*}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"

Page 1 of 5



Tender / Quotation no: MTH11/2022

					AND WH	O IS (if ap	plicable):	
Tradi	ng unde	er the name and	d style of:	<u>ğ</u>				
					AN	ID WHO I	S:	
M 	r /her cap	herein, and wh	r s	/ N	1 s	············	Directors / Members / Pa	f Attorney, signed by all the rtners of the Legal Entity must thorising the Representative to
SIGNE	D FO	R THE TENDE	ERER:					
	N	ame of repres	entative			S	Signature	Date
WITNE	ESSED	BY:						
		Name of wit	ness			S	Signature	Date
The of The of	ficial do ficial al	ocuments ternative				n the app	propriate block)	(N.B.: Separate Offer and Acceptance forms are to be completed for the main and for each alternative offer)
SECU	RITY C	FFERED:						L
(a) (b)	(exclu	ding VAT) will	be applicab	le and wil	l be deduc	ted by the	million, a payment reduction Employer in terms of the approvide security as indicated	on** of 5% of the contact value oplicable conditions of contract of below:
	(1)	cash deposi						Yes No
	(2) variable construction guarantee of 10 % of the Contract Sum (excluding VAT) Yes No				Yes No			
	(3)	payment red	luction of 10	% of the	value cert	ified in the	payment certificate (excludi	ing VAT) Yes D No D
	(4)	cash deposi	t of 5% of th	e Contrac	ct Sum (ex	cluding V	AT) and a payment reduction	n of 5%
	(5) fix	of the value xed construction					ding VAT) excluding VAT) and a payme	Yes No I
		reduction of	5% of the v	alue certi	fied in the	payment	certificate (excluding VAT)	Yes 🔲 No 🔲

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

^{*}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 / Quotation no: MTH11/2022

The Tenderer elects as its <i>domicilium citandi et executandi</i> 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.
Fax No
Postal address
Banker Branch
Registration No of Tenderer at Department of Labour
CIDB Registration Number:
A C C E D T A N C E

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

The terms of the contract are contained in:

- Part C1 Agreement and contract data, (which includes this agreement)
- Part C2 Pricing data
- Part C3 Scope of work
- Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

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

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

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

^{*}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



1.1.6.

Detail:

Subject:

For the Employer:						
Name of signa	atory	Signature	Date			
Tender / Quotation no: M	ГН11/2022					
Name of Organisation:	Department of Public Works and Infrastructure					
Address of Organisation:	PRD Bulding , S Mthatha 5099	Sutherland street				
WITNESSED BY:						
Name of witne	ss	Signature	Date			
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:						

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.

^{*}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





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

T2.2 Returnable Docume	ents required for tender evaluation purpose



PA-11: BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest (1) in the enterprise, employed by the state?

YES / NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

⁽¹⁾ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.



2.2	Do you, or any person connected with the bidder, have a relationshi who is employed by the procuring institution?	p with any person YES / NO
2.2.1	If so, furnish particulars:	
	······································	
2.3	Does the bidder or any of its directors / trustees / shareholders / mor any person having a controlling interest in the enterprise have a other related enterprise whether or not they are bidding for this controlling interest in the enterprise have a other related enterprise whether or not they are bidding for this controlling.	ny interest in any
2.3.1	If so, furnish particulars:	
3 D	ECLARATION	
	I, the (name)	
2 1	I have road and Lundarstand the contents of this disclesure.	

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 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 consortium2 will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 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.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to

² 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.



combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature	Date
Position	Name of bidder

This form has been aligned with SBD4



PA-29: CERTIFICATION OF INDEPENDENT BID DETERMINATION

Project title:	Willowvale Prison: Installation of standby generator		
Bid no:	Re	eference no:	

INTRODUCTION

- 1. This PA-29 [Certificate of Independent Bid Determination] must form part of all bids¹ invited.
- 2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *per* se prohibition meaning that it cannot be justified under any grounds.
- 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.
 - 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:

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".

Page 1 of 3
For External Use

Effective date 20 September 2021

Version: 2021/01

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

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



behalf of the bidder.

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	o hereby make the following statements that I certify to be true and complete in every respe	ect:	
Ιc	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 no true and complete in every respect.	t to be	
3.	I am authorized by the bidder to sign this Certificate, and to submit the accompanying t	oid, on	

4. Each person whose signature appears on the accompanying bid has been authorized by the

bidder to determine the terms of, and to sign the bid, on behalf of the bidder.

- 5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.



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

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

Nous of Didden	O'mantura.	Dete	B 111
Name of Bidder	Signature	Date	Position

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



PA-15.1: RESOLUTION OF BOARD OF DIRECTORS

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

(Leg	gally correct full name and registrati	on number, if applicable, of the Enterprise)				
Hel	ld at		(place)			
on			_ (date)			
RE	SOLVED 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 / Te	(Project description as per Bid / Tender Document)				
	Bid / Tender Number:		(Bid / Tender Number as per Bid / Tender Document)			
2.						
	in *his/her Capacity as:		(Position in the Enterprise)			
		:				
			ender, as well as to sign any Contract, and Bid / Tender to the Enterprise mentioned			
	Name	Capaci	ity Signature			
L	1					
	2					
L	3					
	4					
	5					
	6					
	7					
	8					
	9					
_1	10					
1	11					
1	12					
1	13					
1	14					
1	15					
1	16					



PA-15.1: Resolution of Board of Directors

17		
18		
19		
20		

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

document being signed. Note: **ENTERPRISE STAMP** * 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.



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) **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. 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. The Enterprise chooses as its domicilium citandi et executandi for all purposes arising from this joint venture agreement and the Contract with the Department in respect of the project under item 1 above; Physical address:

(code)



PA:	-1	5.	2:	Resc	olution	of Board	lot	Directors	to enter	· into	Consortia or	Joint Ve	ntures
-----	----	----	----	------	---------	----------	-----	-----------	----------	--------	--------------	----------	--------

Postal Address:		
-		
	(
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).
- 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).
- 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

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". Page 2 of 2 Effective date 20 September 2021



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) Held at _____ (place) **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:

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

(Project description as per Bid /Tender Document)



PA-15.3: Special Resolution of Consortia or Joint Ventures

В.	*Mr/Mrs/Ms:	
	in *his/her Capacity	as:(Position in the Enterprise)
	and who will sign as	follows:
	connection with and	uthorised to sign the Bid, and any and all other documents and/or correspondence in relating to the Bid, as well as to sign any Contract, and any and all documentation, ward of the Bid to the Enterprises in Consortium/Joint Venture mentioned above.
C.		stituting the Consortium/Joint Venture, notwithstanding its composition, shall conduct ne name and style of:
D.	the obligations of the	he Consortium/Joint Venture accept joint and several liability for the due fulfilment of Consortium/Joint Venture deriving from, and in any way connected with, the Contract Department in respect of the project described under item A above.
E.	agreement, for wha Notwithstanding suc	es to the Consortium/Joint Venture intending to terminate the consortium/joint venture tever reason, shall give the Department 30 days written notice of such intention. In decision to terminate, the Enterprises shall remain jointly and severally liable to the due fulfilment of the obligations of the Consortium/Joint Venture as mentioned under
F _*	Enterprises to the C	te Consortium/Joint Venture shall, without the prior written consent of the other onsortium/Joint Venture and of the Department, cede any of its rights or assign any or other than the consortium/joint venture agreement in relation to the Contract with the to herein.
G.	purposes arising fro	ose as the domicilium citandi et executandi of the Consortium/Joint Venture for all m the consortium/joint venture agreement and the Contract with the Department in trunder item A above:
	Physical address:	
	ä	
		(Postal code)
	Postal Address:	
		(Postal code)
	Telephone number:	



PA-15.3: Special Resolution of Consortia or Joint Ventures

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

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

Note:

- * Delete which is not applicable.
- NB: This resolution must be signed by <u>all</u> the Duly Authorised Representatives of the Legal Entities to the consortium/joint venture submitting this tender, as named in item 2 of Resolution PA-15.2.

 Should the number of the Duly Authorised Representatives of the Legal Entities joining forces in this tender exceed the space
- 3. available above, additional names, capacity and signatures must be supplied on a separate page.
- Resolution PA-15.2, duly completed and signed, from the separate Enterprises who participate in this consortium/joint venture, must be attached to this Special Resolution (PA-15.3).



DPW-16 (EC): SITE INSPECTION MEETING CERTIFICATE

	Willowvale Prison: Inst	allation of standby ge	nerator
Tender no:		Reference no:	
Closing date:			
This is to certify that I,			representing
			in the company of
		vis	sited the site on:
certify that I am satisfied with	n the description of the wo	rk and explanations giv	
certify that I am satisfied with	n the description of the wo	rk and explanations giv	
certify that I am satisfied with meeting and that I understar	n the description of the wo	rk and explanations giv	en at the site inspection
certify that I am satisfied with meeting and that I understar	n the description of the wo	rk and explanations giv	en at the site inspection
certify that I am satisfied with meeting and that I understand contract.	n the description of the wo	rk and explanations giv done, as specified and	en at the site inspection implied, in the execution of this



PA16: 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

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

GENERAL CONDITIONS 1.

- 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 **Exceed**R50 000 000 (all applicable taxes included) and therefore the...80/20.....svstem shall be applicable.
- 1.3. Preference points for this bid shall be awarded for:
 - Price: and
 - (b) B-BBEE Status Level of Contribution.
- The maximum points for this hid are allegated as follows: 4 9 4

1.3.1	i ne 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.

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". Page 1 of 6 Version: 2021/01 For Internal Use Effective date 20 September 2021



- 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;
- (I) "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



- 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;
- (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.
- Preference points shall be calculated after prices have been brought to a comparative basis 3.2 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

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right)$$
 or $Ps = 90\left(1 - \frac{Pt - P\min}{P\min}\right)$

Where

Ps Points scored for comparative price of bid under consideration

Pt Comparative price of bid under consideration



Pmin = 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 1.3.1.2 AND 5.1	TERMS OF	PARAGRAPI	HS
7.1	B-BBEE Status Level of Contribution: =	(maximum	of 10 or 20 poin	ıts)
	(Points claimed in respect of paragraph 7.1 must be in accordance paragraph 5.1 and must be substantiated by means of a B-BI Verification Agency accredited by SANAS or Sworn Affidavit for EN	BEE certifica	ate issued by	
8	SUB-CONTRACTING (relates to 5.5)			
8.1	Will any portion of the contract be sub-contracted? YES / NO (de	elete which i	s not applicab	le)
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 (de	elete which is	s not applicab	le)
De	esignated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √	
	k people			
	ck people who are youth			
	ck people who are women			
_	k people with disabilities k people living in rural or underdeveloped areas or townships			
	perative owned by black people			
	k people who are military veterans			
	OR			
Any	EME			
Any	QSE			
9 9.1	DECLARATION WITH REGARD TO COMPANY/FIRM Name of company/firm			
9.2	VAT registration number			
9.3	Company registration number :			į
9.4	TYPE OF COMPANY/ FIRM Partnership/Joint Venture / Consortium One person business/sole propriety Close corporation Company (Pty) Limited			



TICK / 9.5	APPLICAB DESCR	LE BOX] RIBE PRINCIPAL BUSINESS ACTI\	/ITIES
3000001111		•••••	

9.6	Manufa Supplie		
		ervice providers, e.g. transporter, et PPLICABLE BOX]	C.
9.7	Total nu	ımber of years the company/firm ha	s been in business?
9.8	certify t paragra	hat the points claimed, based on th	thorised to do so on behalf of the company/firm, be B-BBE status level of contribution indicated in worn Affidavit, qualifies the company/ firm for the ge that:
	(i) (ii)		e in accordance with the General Conditions as
	(iii)	paragraph 7, the contractor may	warded as a result of points claimed as shown in be required to furnish documentary proof to the
	(iv)		ontribution has been claimed or obtained on a or oditions of contract have not been fulfilled, the
		that person's conduct;	amages it has incurred or suffered as a result of
		of having to make less favo	nim any damages which it has suffered as a result burable arrangements due to such cancellation;
		shareholders and directors business from any organ of	ctor, its shareholders and directors, or only the who acted on a fraudulent basis, from obtaining state for a period not exceeding 10 years, after ear the other side) rule has been applied; and hal prosecution
	WITN	ESSES:	
1		v	
2.			SIGNATURE(S) OF BIDDER(S)
DATE:	*********	ADDRESS:	



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

Project title:	Insert project description		
Tender / quotation no:		Closing date:	dd/mm/yyyy
Advertising date:	dd/mm/yyyy	Validity period:	days

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

1.1. Current projects

Proj	 2	ω	4	5	0	7	8
Projects currently engaged in							
Name of Employer or Representative of Employer							
Contact tel. no.		A =					
Contract sum							
Contractual commence-ment date							
Contractual completion date							
Current percentage progress							

Tender no:

12 Completed projects

		9	00	7	6	Δı	4	ω	2	_	(fiv
Name of Tenderer											Projects completed in the previous 5 (five) years
											Name of Employer or Representative of Employer
Signature											Contact tel. no.
											Contract sum
											Contractual commence-ment date
Date											Contractual completion date
									<u>(</u>		Date of Certificate of Practical Completion



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: 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.

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". Page 1 of 4



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:

	Description of services, works or goods	Stipulated minimum threshold
	electric cables	90%
	Generator	90%
3.	Distribution boards Does any portion of the goods or servi	90%
J .	have any imported content? (Tick applicable box)	ces offered
	YES NO	

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.



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

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

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

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)

	OSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)
IN I	RESPECT OF BID NO.
	SUED 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.jsp . 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.
do l	e undersigned, (full names), nereby declare, in my capacity as
	ty), the following:
(a)	The facts contained herein are within my own personal knowledge.
(b)	I have satisfied myself that:
	 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:



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

(This form has been aligned with NT - SBD 6,2)

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. 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:

T2.2 Returnable Documents that will be incorporated into the contract



PA-40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

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Name of Tenderer						EME' QSE'	\Box EME † \Box QSE 2 \Box Non EME/QSE (tick applicable box)	icable box)
1. LIST ALL PROP	LIST ALL PROPRIETORS, MEMBERS OR SHAREHOLDERS BY NAME, IDENTITY NUMBER, CITIZENSHIP AND DESIGNATED GROUPS.	R SHAREHOLD	ERS BY NAME, IC	DENTITY NUMBER	, CITIZENSHIP A	IND DESIGNATE	O GROUPS.	
Name and Surname #	Identity/ Passport number and Citizenship##	Percentage	Black	Indicate if youth	Indicate if woman	Indicate if person with disability	Indicate if living in Rural (R) / Under Developed Area (UD) / Township (T) / Urban (U).	Indicate if military veteran
1.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	□R □ UD □T □ U	□ Yes □ No
2.		%	☐ Yes ☐ No	□ Yes □ No	☐ Yes ☐ No	☐ Yes ☐ No	□ R □ UD □ T □ U	□ Yes □ No
3.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	□R □ UD □T □ U	□ Yes □ No
4.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
5.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	□ R □ UD □ T □ U	☐ Yes ☐ No
6.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
7.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	□R □ UD □T □ U	☐ Yes ☐ No
8.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
9.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
10.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	□R □ UD □T □ U	□ Yes □ No
11.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	□R □ UD □T □ U	☐ Yes ☐ No
12.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		□ Yes □ No

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

¹ EME: Exempted Micro Enterprise ² QSE: Qualifying Small Business Enterprise



Tender no:

2. DECLARATION:

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

- The information and particulars contained in this Affidavit are true and correct in all respects;
- Procurement Regulations, 2017, National Small Business Act 102 of 1996 as amended and all documents pertaining to this Tender were studied and understood The Broad-based Black Economic Empowerment Act, 2003 (Act 53 of 2003), Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000), the Preferential and that the above form was completed according to the definitions and information contained in said documents;
- 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
- 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; Ю
- 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

Date
Signature
Name of representative



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

Projec	ct title:	Willowva	le Prison: Installation of star	ndby generato	r
Tende	er no:		Reference	no:	
Infra	astructure before the	submission	communications received from of this tender offer, amending tach additional pages if more s	the tender doc	uments, have been taken
	Date		Title	or Details	
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.				_	
10.					
11.					
12.					
13.					
					1
	Name of Tendere	r	Signature		Date
			ations were received from th of this tender offer, amending t		
	Name of Tendere	•	Signature		Date

Effective date: 20 September 2021 Version: 1.2



Name of organisation:

Proj	ect title:	Willowval	le Prison: Insta	llation of standb	by generator	
Ten	ender no:		Reference no:			
Ve d	otify you that it is our inte confirm that all subcontra nal Home Builders Regis	ctors who a	are contracted to			
	Name and address of p Subcontractor	proposed	Nature and ex	tent of work	Previous e Subcontra	experience with ctor



DPW-15 (EC): SCHEDULE OF PROPOSED SUBCONTRACTORS

Pro	ject title:	Willowvale	e Prison: Install	ation of standby g	generator	
Ten	der no:			Reference no:		
We	notify you that it is our into confirm that all subcontra onal Home Builders Regis	actors who a	re contracted to co			ntract. as home builders with the
	Name and address of Subcontractor	proposed	Nature and exte	ent of work	Previous Subcont	s experience with
1						
2						
3						
4						
5						
-						
N:	ame of representative		Signature	Capac	ity	Date
N	lame of organisation:					



DPW-22 (EC): PARTICULARS OF ELECTRICAL CONTRACTOR

Project title: Ngcobo Prison: Installati		ion of steel mesh coverage	e to open court yards
Tender no:		Reference no:	
Name of Electrical Contr	actor:		
Address:			
Electrical Contractor reg Department of Labour	istration number at the		_
Name of Tenderer	Signa	ature	Date



DPW-23 (EC): SCHEDULE FOR IMPORTED MATERIALS AND EQUIPMENT

Project title:	Willowvale Prison: Installation of standby generator		
Tender no:	Reference no:		

This schedule should be completed by the tenderer. (Attach additional pages if more space is required)

Item	Material / Equipment	Rand (R) (Excluding VAT)
1.		R
2.		R
3.		R
4.		R
5.		R
6.		R

The Contractor shall list imported items, materials and/or equipment which shall be excluded from the Contract Price Adjustment Provisions (if applicable) and shall be adjusted in terms of currency fluctuations only. Copies of the supplier's quotations for the items, materials or equipment (provided that such costs shall not be higher than the relevant contract rate as listed above) should be lodged with the Principal Agent / Engineer of the Department of Public Works and Infrastructure within 60 (sixty) days from the date of acceptance of the tender. No adjustment of the local VAT amount, nor the contractor's profit, discount, mark-up, handling costs, etc. shall be allowed.

These net amounts will be adjusted as follows:

FORMULA:

The net amount to be added to or deducted from the contract sum:

$$A = V (\underline{Z} - 1)$$

A = the amount (R) of adjustment

V = the net amount (supplier's quotation) (R) of the imported item

Y = exchange rate at the closing date of tender submission

Z = exchange rate on the date of payment.

Name of Tenderer	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".

Page 1 of 1
For Internal Use

Effective date: 20 September 2021

Version: 1.3

VOLUME 3: CONTRACT

Part C1 Agreement and contract data





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

Project title: Willowvale prison: installation of standby generator		tallation of standby generator	
Tender no:	MTH11/2022	Reference no:	

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
Bidders to note that materials procured for the works should be from South African manufactures and suppliers. Imported materials shall only be considered under exceptional circumstances, based on compelling technical justifications, and subject to the approval by the NDPWI.

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	The time for achieving Practical Completion of the whole of the works is: 6 Months measured from the Commencement Date. The time thus stated includes special non-working days and the year-end break.
5.14.7	or, if Practical Completion in portions is required,
	The times for achieving Practical Completion for the portions as set out in the Scope of Works are <i>mutatis</i> mutandi:
	For portion 1 within insert description as may be applicable
	For portion 2 within insert description as may be applicable
	For portion 3 within insert description as may be applicable
	For portion 4 within insert description as may be applicable
	(followed by further portions as required)



The time for achieving Practical Completion of the whole of the Works is: **6 Months**, **measured from the Commencement Date**. The time thus stated includes special non-working days 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 and Infrastructure.
1.1.1.16	The name of the Engineer is: N/A
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: PRD Buidlin , Sutherland street Mthatha 5099
	Postal Address: P/Bag x 5007 Mthatha 5099
	Facsimile: <i>insert fax no</i> Telephone: <i>insert tel no</i>
	Engineer's address: Physical Address: insert physical address insert town insert code
	Postal Address: insert postal address insert town insert postal code
	Facsimile: insert fax no
	Telephone: insert tel no
1.3.4	Not applicable to this Contract.



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1.3.5 Replace Clause 1.3.5 with the following provisions: The Employer will become the owner of the information, documents, advice, recommendation and (a) 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 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. The copyright of all documents, recommendations and reports compiled by the Contractor during the (b) 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. (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. In case of the Contractor providing documents, electronic aids, software programs or like material to (d) 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. The Contractor hereby indemnifies the Employer against any action, claim, damages or legal cost that (e) 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. All information, documents, recommendations, programs and reports collected or compiled must be (f) 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. 3.1.3 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: (a) Appointment of nominated Sub-contractors – clause 4.4.3; (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; (c) Acceleration of the rate of progress and determination of the cost for payment of such acceleration - clause 5.12.4; (d) Rulings on claims and disputes – clauses 10.1.5, 10.2.3 and 10.3.3; (e) Suspension of the Works – clause 5.11.1; (f) Final Payment Certificate - clause 6.10.9; (g) Issuing of *mora* notices to the Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1; (h) Cancellation of the contract between the Employer and Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1.



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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.

- 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 failure will mutatis mutandis be as stated in clause 10.1.4.
- 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:

Clause 6.10.9 - Amend to read as follows:

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).

Clause 10.1.5 - Amend to read as follows:

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.

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.

3.2.2.1 Amend Clause 3.2.2.1 to insert the word "Plant" to read as follows: 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. 3.2.3.2 Amend Clause 3.2.3.2 to insert the word "Plant" to reads as follows: 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.

4.8.2.1 Amend Clause 4.8.2.1 to include the word "person", as follows:

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

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4.8.2.2	Amend Clause 4.8.2.2 to include "Employer" and "contractors", as follows:		
	Provides any other facility or service of whatsoever nature to the Employer or to any of the said contractors, persons or authorities,		
5.3.1	The documentation required before commencement with Works execution are:		
	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) insert other requirements insert other requirements insert other requirements		
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 not exicusive to the Contracto In the event of access to, and possession of, the Site is not exclusive to the Contractor, the following limitations apply:		
504	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: Ro.0575 per R100.00 of contract amount per day		
	or, if completion in portions is required,		
	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.		

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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 14th 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)

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6.8.2	The urban area nearest the Site is Willovale . (Select urban area from Statistical News Release, P0141, Table 7.1.)
	The applicable industry for the Producer Price Index for materials is <i>insert name of industry</i> . (Select the applicable industry from Statistical News Release, P01421, Table 11.)
	The area for the Producer Price Index for fuel is <i>insert name of area</i> . (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	Replace Clause 6.10.5 with the following:
	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.
	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.
	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.
7.9.1	Insert the following at the end of Clause 7.9.1:
	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.
8.2.2.1	Insert the following as a second paragraph to Clause 8.2.2.1:
	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.

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	The Contractor shall an receiving a suritten instruction from the Engineer immediately present at his arms and				
	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.				
8.6.1.1.1	Amend Clause 8.6.1.1.1 to read as follows: Contract Sum plus 10%.				
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance sum is:				
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is:				
8.6.1.3	Amend Clause 8.6.1.3 to delete reference to limit of indemnity, to read as follows:				
	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.				
8.6.1.5	1. Public liability insurance to be effect by the Contractor to a minimum value of:				
	R5 million				
	or				
	R insert amount in figures (and in words)				
	With a deductible not exceeding 5% of each and every claim.				
	2. Support insurance is to be effected by the Contractor to a minimum value of:				
	R insert amount in figures (and in words)				
	With a deductible not exceeding 5% of each and every claim.				
8.6.5	Amend Clause 8.6.5 as follows:				
	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.				
8.6.7	Amend Clause 8.6.7 as follows:				
	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.				
8.6.8	Insert a new Clause 8.6.8 in provide for high risk insurance for projects executed on areas classified as "High Risk Areas".				
	HIGH RISK INSURANCE				
	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:				

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8.6.8	(1) Damage to the Works 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.
	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.
	(2) Injury to Persons or Loss of or damage to Properties
	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.
	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 movement, as mentioned above, which occurred during the Contract Period.
	(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.
	(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.
9.1.4	Amend Clause 9.1.4 as follows:
	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;
9.1.5	Amend Clause 9.1.5 as follows:
	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:
9.1.6	This Clause is not applicable to this Contract.



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9.2.1.3.8	Insert a new Clause 9.2.1.3.8 as follows:				
	Has failed to effect and keep in force any of the insurances referred to in Clause 8.6.1,				
9.2.4	Insert a new Clause 9.2.4 as follows, to provide for unilateral termination by the Employer:				
	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:				
	9.2.4.1 An amount not exceeding 10% of the Contract Sum;				
	9.2.4.2 10% of the value of incomplete work; or				
	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.				
9.3.2.2	Amend Clause 9.3.2.2 as follows to delete the proviso on lien:				
	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 revest to the Contractor and he shall, with all reasonable dispatch, remove from the Site such Plant, materials and all Construction Equipment and Temporary Works.				
9.3.3	Insert the following at the end of Clause 9.3.3				
	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.				

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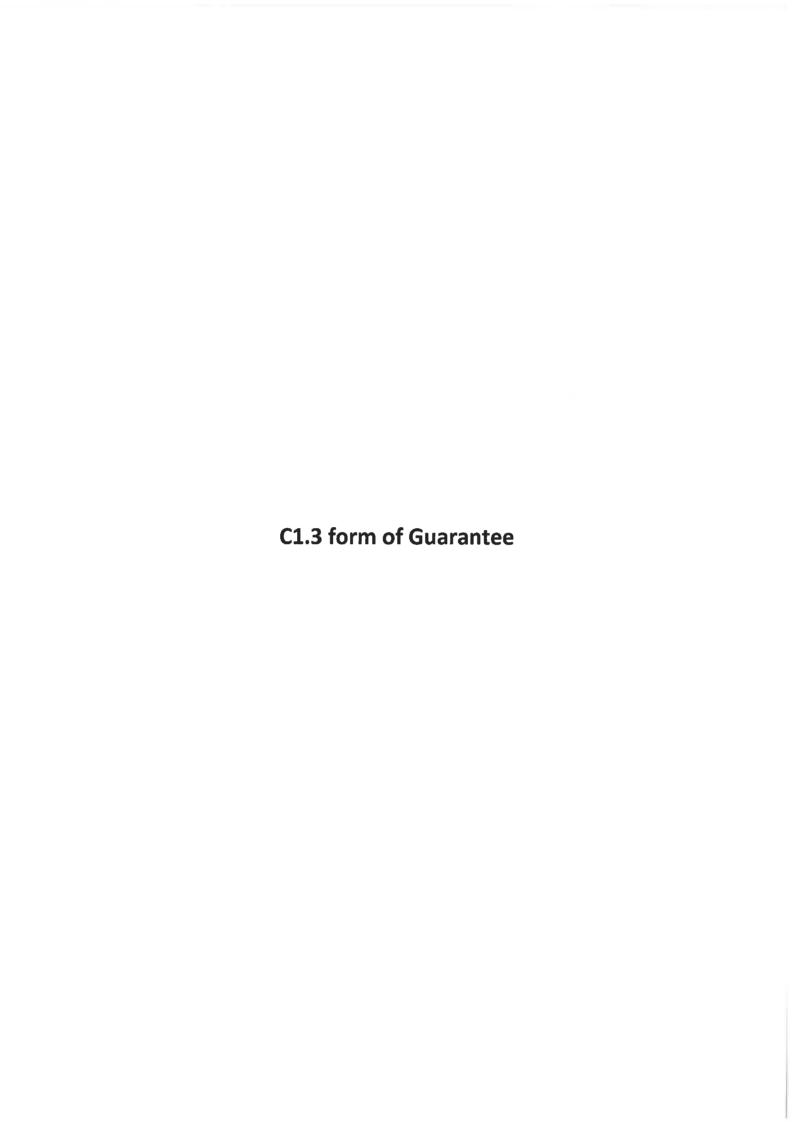
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10.3.2	Amend Clause 10.3.2 as follows to replace "adjudication" with "court":
	If either party shall have given notice in compliance with Clause 10.3.1, the dispute shall be referred to court proceedings in terms of Clause 10.8, unless amicable settlement 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 with 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 or 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.



Tender no: MRH11/2022

	PART 2: DATA PROVIDED BY THE BIDDER					
1.1.1.9	The name of the Bidder is:					
1.2.1.2	The address of the Bidder is:					
	Postal address:					
	Post	al Code: _				
	Tel: Fax:					
	TAX / VAT Registration No:					
	Physical address:					
	Postal Code:					
	Post	ur 00uc		7.5		
	E-mail address:					
6.2.1	The security to be provided by the Contractor shall be one of the following					
	(a) Cash deposit of 10 % of the Contact Sum (excl. VAT)	☐ YES	or	□ NO		
	(b) Variable performance guarantee of 10 % of the	□ vro		□ N0		
	Contract Sum (excl. VAT)	☐ YES	or	□ NO		
	(c) Retention of 10 % of the value of the Works (excl. VAT) (d) Cash deposit of 5 % of the Contract Sum (excl. VAT) plus	☐ YES	or	□ NO		
	(d) Cash deposit of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT)	☐ YES	or	□ NO		
	(e) Performance guarantee of 5 % of the Contract Sum (excl. VAT)					
	plus retention of 5 % of the value of the Works (excl. VAT)	☐ YES	or	□ NO		
	NB: Guarantees submitted must be issued by either an insurance complications of the language o	rt-Term İnsui 1 (Act 94 of 1	ance A 990) o	ct, 1998 (Act 53 n the pro-forma		





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

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

FOR ATTENTION

Insert name
Private Bag insert no
insert town
insert postal code

Sir,

1.

2.

VAT);

(c)

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

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 and Infrastructure (hereinafter referred to as the "employer"), Contract/Tender No: insert Contract / Tender No, for the insert description of works (hereinafter referred to as the "contract") for the sum of R insert amount, (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 <i>insert amount</i> , (<i>insert amount in words</i>) being 10% of the contract sum (excluding VAT), for the due fulfilment of the contract.
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

(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

be liable in terms of this guarantee to the maximum amount of 10% of the contract sum (excluding

This guarantee shall expire on the date of the last final approval certificate.

exceeding 10% of the contract sum (excluding VAT);

- 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



DPW-10.2 (EC): Variable Construction Guarantee - GCC GCC (2010) 2nd Edition 2010

Tender no: (Insert Tender Number)

- (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 aforegoing, 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 20

7	By and on behalf of
	(insert the name and physical address of the guarant
	NAME:
	CAPACITY: (duly authorised thereto by resolution attached mark Annexure A)
	DATE:
No alterations and/or addi	tions of the wording of this form will be accepted.
The physical address of t	he guarantor must be clearly indicated and will be regarded as the guaranto
domicilium citandi et exec	cutandi, for all purposes arising from this guarantee.
This GUARANTEE must b	e returned to:



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

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

FOR ATTENTION

Insert name Private Bag insert no insert town insert postal code

Sir,

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

With	With reference to the contract between			
of F inse "co	(hereinafter erred to as the "contractor") and the Government of the Republic of South Africa in its Department Public Works and Infrastructure (hereinafter referred to as the "employer"), Contract/Tender No: ert Contract / Tender No, for the insert description of Works (hereinafter referred to as the ntract"), for the sum of R insert amount, (insert amount in words), (hereinafter referred to as the ntract sum").			
1 / W	Ve,			
in m	ny/our capacity asand hereby			
"gua (<i>in</i> s	resenting (hereinafter referred to as the arantor") advise that the guarantor holds at the employer's disposal the sum of R <i>insert amount</i> , sert amount in words) being 5% of the contract sum (excluding VAT), for the due fulfillment of the tract.			
deb the to b	guarantor hereby renounces the benefits of the exceptions <i>non numeratae pecunia; non causa iti; excussionis et divisionis;</i> and <i>de duobus vel pluribus reis debendi</i> which could be pleaded against enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves e conversant, and undertake to pay the employer the amount guaranteed on receipt of a written hand 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			

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.

in force within the Republic of South Africa.

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 quarantor showing how this amount has been expended and refund any balance due to the quarantor.

Construction Guarantee - GCC

DPW-10.4 (EC):

GCC (2010) 2nd Edition 2010

Fixed

Tender No: insert Contract / Tender No.

- 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 aforegoing, 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
 - must be surrendered to the guarantor at the time when the employer accounts to the guarantor in terms of clause 4 above, or
 - shall lapse on the date of the last certificate of completion of works.
- This guarantee shall not be interpreted as extending the guarantor's liability to anything more than the 8. payment of the amount guaranteed.

				20
AS W	ITNESS			
۱.		.		
2.				
	By and on behalf of			
		(insert the name	and physical address	s of the guarantor
		NAME:		
		CAPACITY: (duly authorised Annexure A)	l thereto by resolution	n attached marked
		DATE:		
Α.	No alterations and/or additions of the we	ording of this form v	vill be accepted.	
3.	The physical address of the guarantor m		_	d as the guarantor's
	domicilium citandi et executandi, for all		-	
C.	This GUARANTEE must be returned to:	<u> </u>		

For Internal & External Use

Effective date 20 September 2021

PART C2: Pricing Data



Provisional amounts have been included in the Contract Participation Goal section in the Bill of Quantities for the training of Work Integrated Learners and Candidates for professional registration. The contractor shall price his Profit and Attendance (all inclusive of associated costs to the contractor for implementation and reporting), based on the provisional amount in the Contract Participation Goal section in the Bill of Quantities.

The contractor shall complete a separate bill of quantities upon award, indicating the type and number of beneficiaries as well as the associated Notional Cost of Training to be provided, on which payment will be based.

The CPG value to be achieved will be based on the contract amount as defined by the Standard, which will be offset against the provisional amount allowed for within the Contract Participation Goal section in the Bill of Quantities.

The contractor shall apportion the cost of accommodating work integrated learners (P1 and P2 learners) and candidates for professional registration by using Table 3 in the Standard and this cost will be used to determine the Rand value and will be used in determining the contract participation goal in the Bills of Quantities.

Table 3: Notional Cost of Training; Headcount

Type of Training	Provision for stipends (Unemployed learners only)	Provisions for mentorship	Provisions for additional costs*	Total costs	
Opportunity				Unemployed learners	Employed learners
Method 1					
Occupational qualification	R7 000	R0	R9 000	R16 000	R9 000
Method 2					
TVET College graduates	R14 000	RO	R9 000	R23 000	N/A
Apprenticeship	R14 000	R0	R12 000	R26 000	R12 000
Method 3					
P1 and P2 learners	R24 000	R20 000	R4 500	R48 500	N/A
Method 4					
Candidates with a 3 year diploma	R37 000	R20 000	R4 500	R61 500	R20 000
Candidates with 4 year qualification	R47 000	R20 000	R4 500	R71 500	R20 000

Note: The notional cost of providing training opportunities will increase by CPI on an annual basis based on April CPI. Should the rates increase after bid award or during construction the rates will be adjusted as a remeasureable item.

Example: Training Target Calculation for a R65,7m GB contract

Contract amount R65 700 000
Contract duration 12 Months
CSDG 0,50%

Minimum CSDG target 0,50% x R65 700 000 = R328 500 (Minimum requirement)

Skills Types	Number of learners	Notional Cost / Learner / Quarter	Notional cost/learner/year	Total Notional Cost over 12 months Contract
Method 2: Workplace learning opportunities, with unemployed TVET graduates	1	R23 000	R92 000	R92 000
Method3: Candidacy for an unemployed learner with a 3-year qualification	1	R61 500	R246 000	R246 000
Total	2			R338 000

Tender No: PG-02.1 (EC) Pricing Assumptions – GCC GCC (2010) 2nd Edition 2010

C2.1.16.7 NATIONAL YOUTH SERVICE TRAINING AND DEVELOPMENT PROGRAMME

The programme shall be implemented in terms of the Implementation of the National Youth Service Programme under the Expanded Public Works (EPWP) and shall be priced in the CPG section of the Bills of Quantities.

Provision has been made within the Contract Participation Goal section in the Bill of Quantities for the National Youth Service Training and Development Programme CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.7. The contractor to price all elements of this section and allowance must be made for submitting monthly reports in the prescribed manner as per examples of reports bound in the specification document.

C2.1.16.8 LABOUR-INTENSIVE WORKS

Labour Intensive Works Applicable Yes ⊠ No □

Where labour intensive work is specified in the Bill of Qualities and indicated by "LI" the contractor must price for and include in rates. Contractors are expected to use their initiative to identify additional activities that can be done labour-intensively to comply with the set minimum labour intensity target. Allowance must be made for submitting monthly reports illustrating the value of the works executed under Labour Intensive Works.

C2.2 Submission of Accrual Reports

The Contractor shall submit accrual reports to the client representative at the end of March and September each year for the duration of the Service Contract period from the date of appointment up to and including project closeout. This is to ensure that PMTE complies with the accounting framework GRAP, which requires that PMTE disclose all its accruals as at the end of each reporting date. Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.3. Submission of Monthly Local Material Utilisation Report (Local Content)

The contractors shall be responsible for record keeping, documenting and submission of monthly local material utilization report with supporting documentation to the Employer's representative within 7 working days of the beginning of the successive month, in terms of DTI&C designated industry/sector/sub-sector schedule as per the PA36 and Annexures C attached to the tender document. The final percentage achievement to be reconciled upon completion of the project and form part of the final account. Allowance must be made for submitting monthly reports illustrating the value of local material utilisation report.

C.2.2 Bill Of Quantities/Lump Sum Document	

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE



BILLS OF QUANTITIES

Comprising of:

Section 1 - Preliminaries and General

Section 2 - Bill of Quantities

Section 3: Final Summary



GENERATOR INSTALLATION ELECTRICAL ENGINEERING SERVICES

TENDER NUMBER

ITEM NO	DESCRIPTION	UNIT	RATE	AMOUNT
TIEMNO		ONIT	MAIE	AMOUNT
	PRELIMINARIES AND GENERAL (Applicable to the whole of the Works)			
	FIXED CHARGE ITEMS			
	Establisment of Facilities in the Site			
	Facilities for Contractor			
1	Offices and storage sheds	Item		
2	Living accommodation, albution and latrine facilities	Item		
3	Water supplies, electric power, communications	Item		
4	Establishment of OHS Act Requirments	item		
5	Other Fixed-Charge Obligations (Specify)			
		Item		
6	Removal of site establishment on completion of works	Item		
	TIME RELATED ITEMS			
	TIME RELATEDITEMS			
	Establisment of Facilities in the Site			
	Facilities for Contractor			
7	Offices and storage sheds	item		
8	Living accommodation, albution and latrine facilities	Item		
9	Water supplies, electric power, communications	Item		
10	Employment of Community Liason Officer	Item		
11	OHS Act Requirements			
12	Other time related obligations (Specify)	Item		
13	Supervision for the duration of the contract.	item		
,,,	esportation for the database of the definition.	non		
14	Company and Head Office overhead costs	item		
	Facilities for the Engineer			
	L SVIII OF LINE LINE OF			
15	a. Name Board (2 No.)	item		
	TEMPORARY WORKS			
46	Destruction of suinting states to until according to the late to according	9		
16	Protection of existing structure until construction in vicinity is complete	item		
	Provision of detecting devices for:			
	, restating desired in.			
17	a. Water and sewer pipes	item		
18	b. Electrical and other cables	item		
19	Other	item		
	Existing services			
20	Hand excavation necessary for locating and exposing existing services in all materials in roadways m3	2		
21	Temporary protection, as required in terms of the project specification,	Item		
	of existing services			
22	Complaince with OHS Act and Regulation (including the	Item		
	Construction Regulation, 2014)	1114777		



MATATIELE SAPS GENERATOR INSTALLATION ELECTRICAL ENGINEERING SERVICES

	/IBER:

ITEM NO	DESCRIPTION	UNIT	RATE	AMOUNT
			BROUGHT FORWARD	
23	Environmental Magement in accordance to EMP and EA	Item		
24	Quality Management Plan	Item		
	quanty management run	no.n		
25	HIV/AIDS Awareness	Item		
26	COVID Hastin and Cafety Begylesmants	lla an		
20	COVID Health and Safety Requirements	Item		
	DAYWORK			
	Labour			
27	Skilled labour Hrs	100		
27				
21	Semi-skilled labour Hrs	200		
28	Unskilled labour Hrs	300		
	Materials			
29	a. Allow for net cost of goods or materials actually used	item		
30	b. Overheads, charges and profits on item above	45.000/		
30	b. Overneads, charges and profits on item above	15,00%		
			FORWARD TO SECTION 4 SUMMARY	

BILL NO 2: WILLOWVALE PRISON GENERATOR INSTALLATION GENERATOR SET INSTALLATION

REFERS TO	ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	1	EMERGENCY STANDBY GENERATOR ENGINE				
	2	The manufacturing, supply, delivery and installation of a 100kVA (3 phase) self-contained automatic starting standby diesel alternator set, as specified hereafter.				
		The Engine shall be a Diesel Fuelled, cold starting liquid cooled, compression ignition, direct injection industrial type as complying with BS5514 part 1-5as amended and the cooling system shall be thermostatically controlled entirely self- contained and shall consist of a Radiator, fan and Circulating pump as per PW 722 specification.				
		The following form part of genset: Water jacket heater, fuel level indicator, fire fuse link shut off system, drip tray, battery charger, battery charger amp meter, canopy lights, fuel filling pump, Anti vibration mounts, Modern with Sim Card, One alarm hooter and red light shall be supplied and installed on the outside of the generator container and A Remote Control Generator Switch "ON/OFF/AUTO"				
	3	.01 100kVA, 3 phase with 3CR12 Container Supply Install	ea ea	1		
	4	3CR12 CHANGE OVER PANEL WITH CONTROLLER				
		The control shall contain the engine, alternator management & protection system, as well as the control logistics for the remote changeover switchgear. These functions shall be controlled by a microprocessor-based programmable controller and it shall be equipped with an optional GSM cellphone-type modem as per PW 722 specification. [modern with sim card], c/w adjustable CB, motorized c/o & by pass switch				
		.01 Control Panel Supply	ea	1		
	5	Install REMOTE ALARM MMIC PANEL & ASSOCIATED WIRING	ea EOD TH	1 IE GEN	SET	
		The panel shall be installed in the Charge Office/ Station Commanders office approximately 70m from the generator set position. The mimic panel must fit into furniture and blend with design. Before manucfacture, the Contractor shall submit and obtain the approval, from the Engineer, for the mimic panel.	POR I	ie Gen	SEI	
		Supply and install the remote alarm must have potential free contacts which shall indicate the following on each set:				
	-	Mains on/off. 2.Alternator running. 3. Common fault alarm. 4. Buzzer which can only be reset at the generator panel. 5.Fuel low	item	1		
	6	LUBRICATION, OILS AND DIESEL				
		Supply and fill up to 100% all required lubications to run generator including diesel. Tank shall be a 800L capacity	item	1		
	8	PADLOCKS				
		Supply and install padlocks. (Viro A 82) - Master Key system, where one set will be given to the end user for spares.	Set	4		
	9	EXHAUST SILENCER - Sound Attenuated				
	s	Design supply and install the stainless steel exhaust silencer for the mentioned generator, including lagging as specified.	item	2		
	10	WARNING NOTICES		1		
		Supply and Install warning notices as specified. Set of Warning Notices as per SANS and OHS specifications.	item	1		
		ard to Summary Page				

BILL NO 2: WILLOWVALE PRISON GENERATOR INSTALLATION GENERATOR SET INSTALLATION

PAYMENT REFERS TO	ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	11	LOW VOLTAGE SUPPLY CABLES				
		Supply and install the following 600/1000V PVC/SWA/PVC cables with copper conductors to SABS 1507 laid vertically or horizontally in conduiting or ducting or clipped direct in accordance with the specification and drawings, including fixing. (Termination elsewhere).				
	12	.01 70 mm2 x 4 core PVC SWA PVC Supply Install	m m	100 100		
	13	.03 2,5mm² x 4-core PVC SWA PVC Supply Install	m m	100 100		
	14	CABLE TERMINATIONS Termination of LV cable as specified including connection of conductors, cable lugs, captive glands, shrouds, etc. for the following cable sizes.				
	15	.01 70 mm2 x 4 core Supply Install	ea ea	3		
	16	.02 2,5mm² x 4-core PVC SWA PVC Supply Install	ea ea	2 2		
	17	CABLE JOINTS Jointing of LV cable as specified including connection of conductors, jointing kit, etc. for the following cable sizes.				
	18	.01 70 mm2 x 4 core Supply Instal!	ea ea	1 1		
	19	BARE COPPER EARTH WIRES Supply and install 600/1000V conductors and bare stranded copper conductors on wire ways or trenching including terminations for earthing in accordance with the specification and drawings.				
	20	.01 35 mm2 Bare Copper Earth Wire Supply Install	ea ea	100 100		
	21	.01 2,5 mm2 Bare Copper Earth Wire Supply Install	ea ea	100 100		
		EARTHING AND ASSECCORIES Supply and install 1.2 m long copper coated earth spike incl earth clamp and earth coupling on Distribution Board.				
	22	.01 1,2m earth spike Supply Install	ea ea	4 4		
	23	Service Existing Distribution Board/Panel				
		Work includes replacing damaged or missing doors or cover plates, making neat exisitng wiring, replacing broken door locks, installing new labels, danger signs, updating legends and general cleaning.				
		.01 Main Distribution Board Supply Install	ea ea	1 1		
		02 Sub-Distribution Board Supply Install	ea ea	3 3		
		03 Distribution Kiosk Supply Install	ea ea	1		

PAYMENT REFERS TO	ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Brought for	ward				R -
	25	Spray Paint Existing Distribution Board/Panel Work includes spray painting the DB faces plates and doors from orange/white/grey to red.				
		.01 Main Distribution Panel Supply Install	ea ea	1		
		.02 Distribution Board Supply Install	ea ea	3		
		.03 Distribution Klosk Supply Install	ea ea	1		
	26	CABLE TRENCH AND ACCESSORIES Excavate in all materials for trenches, backfill, compact and				
		dispose of surplus material for 600mm deep x 400mm wide .01 In earth .02 Soft rock .03 Hard rock	m³ m³ m³	50 10 10		
	27	Cable sleeves .01 110 mm dia cable flex Supply & Install		100		
		Electrical Manhole Supply and build either pre-cast or full wall manhole withlight	m	100		
		duty cover with the following minimum inside dimensions: -650 x 650 x 600mm deep .01 Electrical Manhole				
		Supply & Install	ea	1		
	Carried for	ard to Summary Page				

EFERS O	ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	29	SITE TESTING, COMMISSIONING & DOCUMENTATION "Cold-start" test (NFPA 110, 5-13.2 (a) through (g)) where a normal power failure is simulated and the maximum expected emergency load supplied. Record engine and generator performance data. Maximum emergency starting load will be supplied using facility load.				
		Installation Acceptance Testing Procedures: Check alarm and engine shut down functioning on: .01 Start and Stop Test .02 Phase Sequence Test (Rotation) .03 Phase Balance Test (Voltage) .04 Low Oil Pressure Protective Device Test .05 Over Temperature Protective Device Test .06 Controls, Direction of Rotation				
	30	.01 Testing & commissioning of all above Equipment	sum	1		
	31	AS BUILT DRAWINGS				
		Submit "As Built" drawings for approvals and carry out required changes for approval	sum	1		
	32	COMPLIANT CERTIFICATES				
		Submit Electrical Compliant Certificates for approvals and carry out required changes for approval	item	1		
	33	DOCUMENTATION				
	34	.01 Submit completed Approval and Guarantees	set	3		
	35	.02 Hard copy: O & M manuals	set	3		
	36	.03 Electronic copy: O & M manuals	set	3		
	37	FACTORY TEST - [Perfomance Assurance Certification]				
		Genset shall be manufactured, Installed, Repaired and tested as per the lated STANDBY POWER REGULATIONS and section 43 of the Occupational Health and Safety Act, 1993.				
		Factory tests shall be carried out to ensure correct operation of the control panel and the manufacturer shall prove to the satisfaction of the Engineer and Client representative that all controls are correctly installed and operational as per the specification.				
		In lieu of NFPA 110 5-13.2.3 (h) & (i), hook up the dry-type load bank to generator and perform a stepped load test on the generator at 25%, 50%, 80% and 100% of the nameplate KW rating of the generator. Each step to last fifteen (15) minutes record engine and generator data as detailed in the specification.				
		Factory Acceptance Testing Procedures: .01 Engine Inspection .02 Generator Inspection .03 Mounting & Coupling Inspection .04 Insulation Resistance Test* .05 High Potential Test*				
		.06 Alternator Over Speed (1 min.)* .07 Over Speed Protective Device Test .08 Winding Resistance Test .09 Start and Stop Test .09 Phase Sequence Test (Rotation) .11 Phase Balance Test (Voltage)				
		12 Low Oil Pressure Protective Device Test 13 Over Temperature Protective Device Test 14 Controls, Direction of Rotation 15 Maximum Power Test				
		NOTE: Trip for Mechanical Engineer (1off), Electrical Engineer (1 off) and NDPW Representative (1off)				
	ļr	Should the Generator Set fail this test it will be Contractors responsibility to transport Engineer and Client Representatives for future tests.	item	_1		

PAYMENT REFERS TO	ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	37	1 YEAR MAINTENANCE PLAN Quarterly service of the plant as per the manufacturers instructions or recommendation and tender specification. Service shall include: Labour for period. During this time, any breakdowns outside of normal working hours, labour, mileage and any out of town expenses will be chargeable.	item	1	KAIL	AMOUNI
	Carried forw	ard to Summary Page				R -

PAYMENT REFERS TO	ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	38	STRUCTURAL - TYPICAL GENERATOR BASE				
	39	,01 Construction of 25 mpa concrete slab, Mesh Ref 193 and finished with a wooden float [size = 3000mmL x 1500mmW x 150mmH	m³	15		
	40	,02 GMS Ballustrade installed in accordance with National Building Regulation and Finished in high visibility yellow gloss paint.				
	41	,03 Galvanised balustrading Supply Install	m m	30 30		
T						
	Carried forw	vard to Summary Page				R -

TENDER NO.: ELECTRICAL/MECHANICAL INSTALLATION SUMMARY OF BILL OF QUANTITIES: TOTAL BILL NO 2 ENGINE SET INSTALLATION R TOTAL BILL NO 2 ELECTRICAL AND CABLES. R TOTAL BILL NO 2 TESTING, COMMISSIONING AND DOCUMENTATION. R

: 1 YEAR MAINTENANCE PLAN...... R

WILLOWVALE PRISON GENERATOR INSTALLATION

TOTAL BILL NO 2

TOTAL BILL NO 2

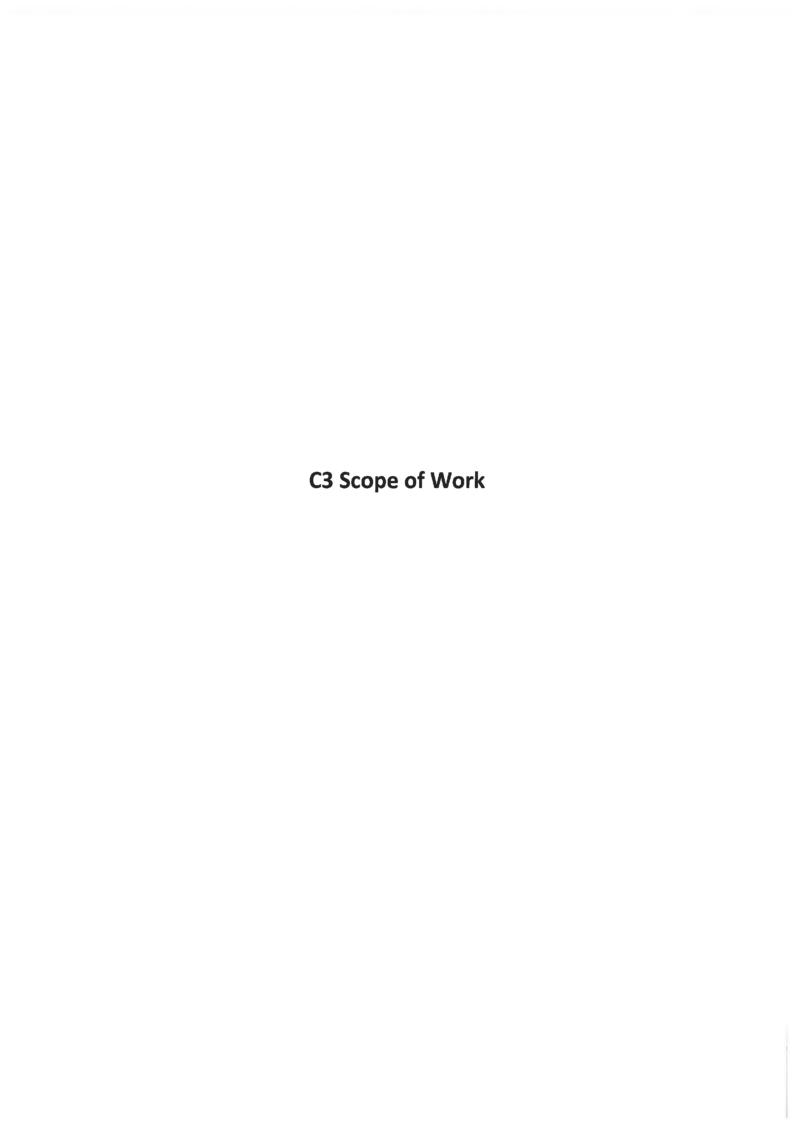
Carried forward to Final Summary Page

R

FINAL SUMMARY

Preliminary and General	R
Estimated Price for Health and Safety Plan including COVID-19	R
ELECTRICAL/ MECHANICAL INSTALLATION	R
SUB TOTAL	R
VALUE-ADDED TAX (VAT)	
The Tenderer shall add 15% of the Total of Bill of Quantities above	
for Value-Added Tax	R
TENDER SUM CARRIED TO THE FORM OF OFFER.	R
SIGNED ON BEHALF OF TENDERER:	





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

Project title:	Willowvale prison: installation of standby generator				
Tender no:	MTH11/2022	Reference no:			

C3. Scope of Works

CONTENTS

- C3.1 STANDARD SPECIFICATIONS
- C3.2 PROJECT SPECIFICATIONS

A: GENERAL

Willowvale prison: installation of standby generator

Willowvale prison is in the main street at Willowvale. It is also accessible from the main street.

- PS-3 DETAILS OF 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 PARTICULAR SPECIFICATIONS Insert amendments to particular sepcifications

C3.3 PARTICULAR SPECIFICATIONS

List particular sepcifications

C3.4 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)

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3.5 PROJECT SPECIFICATIONS:

Status

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

Part1 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 and, if applicable, the Particular 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.

3.5.1 GENERAL

PS-1 PROJECT DESCRIPTION:

Insert project specification

3.5.2 AMENDMENTS TO THE STANDARD AND PARTICULAR SPECIFICATION:

Insert amendments

C3.5.3 PARTICULAR SPECIFICATIONS:

Insert particular specification

C3.6 STANDARD MINIMUM REQUIREMENTS

In terms of section 5(2) of the Construction Industry Development Board Act, 2000 (Act no. 38 of 2000) (the Act), the Construction Industry Development Board is empowered to establish and promote best practice standards, Standard Requirements and Guidelines which includes the following but not limited to:

- C3.61 cidb Best Practice: Green Building Certification, No. 34158 Government Gazette, 1 April 2011
- C3.6.2 cidb Standard for Developing Skills through Infrastructure Contracts, No. 36760 Government Gazette, 23 August 2013
- C3.6.3 cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013
- C3.6.4 Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017, No. 40553 Government Gazette, 20 January 2017
- C3.6.5 cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts, No. 41237 Government Gazette, 10 November 2017
- C3.6.6 cidb Standard for Minimum Requirements for Engaging Contractors and Sub-Contractors on Construction Works Contracts, No. 41237 Government Gazette, 10 November 2017
- C3.6.7 cidb Standard for Minimum Requirements for Engaging Contractors and Sub- Contractors on Construction Works Contracts, No. 42021 Government Gazette, 9 November 2018



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C3.6.8 cidb Standard for Developing Skills through Infrastructure Contracts, No. 43495 Government Gazette, 3 July 2020

C3.7 CONTRACT PARTICIPATION GOALS

The contractor shall achieve in the performance of the contract the following Contract Participation Goals (CPGs) as indicated below. Provision for pricing of compliance with the achieving the CPGs is made in the Contract Participation Goal Section of the Bills of Quantities and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced thereunder and no additional claims in this regard shall be entertained:

C3.7.1 Minimum Thirty Percent (30%) Mandatory Sub-contracting Contract Participation Goal

MINIMUM THIRTY PERCENT (30%) MANDATORY SUBCONTRACTING TO SMMES: IMPLEMENTATION OF PREFERENCIAL PROCUREMENT RGULATIONS 2017

Minimum Percentage Participation Goal Applicable	Yes 🗌	No 🗌
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It is the requirement of the employer that the contractor enhances the use of local Small, Micro and Medium Enterprises (SMME's) in executing this contract, irrespective whether the 30% Participation Goal is applicable or not.

The thirty percent (30%) mandatory Sub-contracting shall be achieved in the execution of the contract. in terms of in accordance with the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017 as published in the Government Gazette Notice No. 40553 of 20 January 2017.

- (a) SMME's involvement of at least five percent (5%) of the tender amount at the time of tender to be sourced from within 50km radius of the project site with the intention to maximize use of local SMMEs within "Insert Ward/s, Municipal District, Town, City, Province",
- (b) SMME's involvement of at least twenty five percent (25%) of the Tender Value to be sourced from within 250km radius of the project site.

Note to PM: A feasibility study must be undertaken at project level to verify that the contract participation goal can realistically be achieved within the targeted area. Such feasibility study shall be included in the contract data. Guidelines for undertaking a feasibility study are given in Appendix A of Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts No. 41237 GOVERNMENT GAZETTE,10 November 2017. The above example may be used if the project is located in a relatively small town. The percentage is determined by introducing the project to the local community at least one year in advance whilst planning is completed and then again at least two months prior to tender to establish the local capacity of SMMEs in conjunction with the local Contractor Forums, Councilors and Community Leaders. If the project is in a large city one could also specify the ward/s which must take preference which is generally the ward or wards closest to where the project is being executed. (Delete this instruction)

Bidders are cautioned not to under-price items earmarked to be executed by SMMEs as adjustment to too low rates will not be entertained by the Employer.

Bidders to sub-contract a minimum of thirty percent (30%) of the tender amount including VAT at the time of tender (All inclusive, Including VAT), to any one or more of the following categories:

- a. An EME or QSE
- b. An EME or QSE which is at least 51% owned by black people
- c. An EME or QSE which is at least 51% owned by black people who are youth
- d. An EME or QSE which is at least 51% owned by black people who are women
- e. An EME or QSE which is at least 51% owned by black people with disabilities
- f. An EME or QSE which is at least 51% owned by black people living in rural or underdeveloped areas or townships
- g. A co-operative which is at least 51% owned by black people



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- h. An EME or QSE which is at least 51% owned by black people who are Military veterans
- . More than one of the categories referred to in paragraphs (a) to (h).

Bidders to refer to the CSD for a list of prospective sub-contractors provided with the tender. The bidder to refer to the CSD website should the list provided be insufficient.

Bidders must ensure that the sub-contractors conform to the following:

- a. Possess relevant accreditation where applicable;
- b. Be registered with relevant bodies (CIDB, various Councils, etc.) where applicable;
- c. Possess necessary capabilities to deliver the sub-contracted work;
- d. Meet the requirements in terms of the stipulated designated groups; and
 - e. Geographical located at the place where the project will be delivered. Geographical location must be determined using the following criteria:
 - Relevant Ward. If not available:
 - Relevant neighbouring Wards. If not available;
 - Relevant Local Municipality. If not available;
 - Relevant District Municipality. If not available;
 - Relevant Metro. If not available;
 - Relevant Province. If not available;
 - Relevant Neighbouring Province. And If not available;
 - Anywhere within the borders of South Africa.

It is the bidder's responsibility to source alternative SMMEs should the parties with whom agreements were entered into at the time of tendering either no longer exist or do not perform or render work of an acceptable standard, subject to the approval by the Employer. Failure to achieve the minimum thirty percent (30%) SMME participation based on the tender amount including VAT, will result in a two percent (2%) penalty on the amount of work on which there is no compliance (Excluding VAT), unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

Note to PM: The percentage penalty is project specific which must be guided by the value and the complexity of the project, and should be realistic (**Delete this instruction**).

C3.7.2 Minimum Targeted Local Material Manufacturer Contract Participation Goal

Minimum Percentage Participation Goal Applicable	Yes ⊠ No 🗌
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It is the requirement of the employer that the contractor enhances the use of local Small, Micro and Medium Enterprise Local Material Manufacturers (SMME's) in executing this contract, irrespective whether a minimum percentage Participation Goals is applicable or not.

The Minimum Targeted Local Manufacturers of Material Contract Participation Goal shall be achieved in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017.

A Targeted Local Material Manufacturer is a targeted enterprise that operates or maintains a factory or establishment that produces on its premises materials or goods required by the principal contractor for the performance of the contract.

Note: Adapted from SANS 10845-7:2015, definition 2.13

Preference shall be given to the Targeted Local Material Manufacturer in willowvale Eastern Cape and provided that:

- (a) Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- (b) The nonavailability of such materials shall not adversely affect the desired progress of the specific works,



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- (c) The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof,
- (d) Materials of at least 2% of the total value of materials purchased including VAT to be sourced from within 50km radius of the project site,
- (e) Material of at least <u>8%</u> of the total value of materials purchased including VAT to be sourced from within 250km radius of the project site.

Failure to achieve the minimum ten percent (10%) Targeted Local Material Manufacturer participation expressed as a percentage of the original tender amount, excluding allowances and VAT, will result in a two percent (2%) penalty of the prorate targeted value of materials not complied with unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

Example: Total material to be purchased from local manufacturers = R 10 Million and only achieved a R8 Million CPG then the penalty = R2 Million x 2%. The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

Note to PM: Note to PM: A feasibility study must be undertaken at project level to verify that the contract participation goal can realistically be achieved within the targeted area. Such feasibility study shall be included in the specifications. Guidelines for undertaking a feasibility study are given in Appendix A of Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts No. 41237 GOVERNMENT GAZETTE,10 November 2017 The above example may be used if the project is located in a relatively small town. The percentage is determined by introducing the project to the local community at least one year in advance whilst planning is completed and then again at least two months prior to tender to establish the local capacity of suppliers in conjunction with the local Business Forums, Contractor Forums, Councillors and Community Leaders. If the project is in a large city one could also specify the ward/s which must take preference which is generally the ward or wards closest to where the project is being executed. The percentage penalty is project specific which must be guided by the value and complexity of the project, and should be realistic. (Delete this instruction)

C3.7.3 Minimum Targeted-Local Building Material Suppliers Contract Participation Goal

Minimum Dargan	tage Participation Goal Appl	icoblo	Yes 🛛 No 🗀
wiimimum rercen	laue Famicidalion Goal Abbi	icable	TESIXINO I

It is the requirement of the employer that the contractor enhances the use of local Small, Micro and Medium Enterprise Local Material Suppliers (SMME's) in executing this contract, irrespective whether a minimum percentage Participation Goals is applicable or not.

The Minimum Targeted Local Manufacturers of Material Contract Participation Goal shall be achieved in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017.

A targeted supplier is a targeted enterprise that

- owns, operates or maintains a store, warehouse or other establishment in which goods are bought, kept in stock and regularly sold to wholesalers, retailers or the public in the usual course of business; and
- b) engages, as its principal business and in its own name, in the purchase and sale of goods. Note: Adapted from SANS 10845-7:2015, definition 2.14

Preference shall be given to the local material suppliers in the **Willowvale Eastern Cape Town**, and provided that:

- (a) Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- (b) The none availability of such materials shall not adversely affect the desired progress of the specific works.
- (c) The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof.
- (d) Materials of at least two percent (2%) of the total value of materials purchased including VAT to be sourced from within 50km of the project site,



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(e) Material of at least eight percent (8%) of the total value of materials purchased including VAT to be sourced from within 250km of the project site.

Failure to achieve the minimum ten percent (10%) Targeted Local Material Manufacturer participation expressed as a percentage of the original tender amount, excluding allowances and VAT, will result in a two percent (2%) penalty of the prorate targeted value of materials not complied with, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

Example: Total material to be purchased from local manufacturers = R 10 Million and only achieved a R8 Million CPG then the penalty = R2 Million x 2%. The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

Note to PM: Note to PM: A feasibility study must be undertaken at project level to verify that the contract participation goal can realistically be achieved within the targeted area. Such feasibility study shall be included in the contract data. Guidelines for undertaking a feasibility study are given in Appendix A of Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts No. 41237 GOVERNMENT GAZETTE, 10 November 2017 The above example may be used if the project is located in a relatively small town. The percentage is determined by introducing the project to the local community at least one year in advance whilst planning is completed and then again at least two months prior to tender to establish the local capacity of suppliers in conjunction with the local Contractor Forums, Councillors and Community Leaders. If the project is in a large city one could also specify the ward/s which must take preference which is generally the ward or wards closest to where the project is being executed. The percentage penalty is project specific which must be guided by the value and complexity of the project, and should be realistic. (Delete this instruction)

C3.7.4 Minimum Targeted Local Labour Skills Development Contract Participation Goal

Minimum Percentage Participation Goal Applicable Yes ⋈ No [э III	Yes ⊠ N	Applicable	Goal	² articipation	Percentage	Minimum
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It is the requirement of the employer that the contractor enhances the use of local labour in executing this contract. This is required to be done through the use of both traditional building techniques and labour-intensive construction techniques careful and considered construction planning and implemented in the project irrespective whether a minimum percentage Participation Goal is applicable or not.

The Minimum Targeted Local Labour Skills Development Contract Participation Goal shall be achieved in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017.

Targeted labour: individuals who:

- are employed by the principal contractor, sub-contractor or targeted enterprises in the Performance of the contract:
- b) Are defined as the target group in the targeting data; and
- Permanently reside in the target area or who are recognized as being residents of the target Area on the basis of identification and association with and recognition by the residents of the target area.

Adapted from SANS 10845-7:2015, definition 2.12

Targeting of labour by skills categories is only permissible within categories of semi-skilled And unskilled labour.

Contract participation goals for semi-skilled and unskilled labour shall be limited to on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract and in a manner that does not compromise worker health and safety. In the case of targeted labour, the certification of records shall be in accordance with SANS 10845-8.

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Beneficiaries will be sourced from the Willowvale Eastern Cape The contractor shall attain or exceed the enterprise development goal in the performance of the contract. Failing to achieve the Participation Goal will result in a thirty percent (30%) penalty of the value not achieved, excluding VAT for noncompliance, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

Note to PM: Note to PM: A feasibility study must be undertaken at project level to verify that the contract participation goal can realistically be achieved within the targeted area. Such feasibility study shall be included in the contract data. Guidelines for undertaking a feasibility study are given in Appendix A of Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts No. 41237 GOVERNMENT GAZETTE, 10 November 2017. The above example may be used if the project is located in a relatively small town. The percentage is determined by introducing the project to the local community at least one year in advance whilst planning is completed and then again at least two months prior to tender to establish the local capacity of suppliers in conjunction with the local Contractor Forums, Councillors and Community Leaders. If the project is in a large city one could also specify the ward/s which must take preference which is generally the ward or wards closest to where the project is being executed. The percentage penalty is project specific which must be guided by the value and complexity of the project and should be realistic. (Delete this instruction)

C3.7.5 Minimum Targeted Enterprise Development Contract Participation Goal

Minimum Percentage Participation Goal Applicable Yes ⊠ No [Minimum	Percentage	Participation	Goal Applicable	Yes 🔀 No 🏾	٦
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The aim of this best practice standard for indirect targeting for enterprise development in accordance with the Standard for Indirect Targeting for Enterprise Development (published in Government Gazette 36190 of 25 February 2013) and the Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts (published in Government Gazette 41237 of 10 November 2017) is to promote enterprise development by providing for a minimum contract participation goal (CPG) of five percent (5%) of the contract amount as defined in the Standard (Tender amount, excluding allowances and VAT on selected contracts to be undertaken by joint-venture partners or to be sub-contracted to developing contractors that are also to be beneficiaries of enterprise development support from the main contractor.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

The contractor shall attain or exceed the enterprise development goal in the performance of the contract. Failing to achieve the Participation Goal will result in A) a thirty percent (30%) penalty of the value not achieved, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The lead partner or main contractor shall dedicate a minimum five percent (5%) of total project value to provide developmental support to targeted subcontractor or joint venture partner applicable to contracts in Grades 7 to 9, General Building and Civil Engineering contracts. Preference will be given to (Insert type of enterprises. eg General Building, Electrical, Mechanical, Plumbing, etc. It could be either just one or any combination of all) Enterprises.

Note to PM: Specify preferred Enterprises based on discussions with the local contractor forums, Community leaders and councillors. A feasibility study must be undertaken at project level to verify that the contract participation goal can realistically be achieved within the targeted area. Such feasibility study shall be included in the contract data. Guidelines for undertaking a feasibility study are given in Appendix A of Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts No. 41237 GOVERNMENT GAZETTE,10 November 2017 (Delete this instruction)

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Provision for pricing of compliance with the aforementioned is made in the preliminaries and it is explicitly pointed out that all requirement in respect of the aforementioned are deemed to be priced thereunder and no additional claims in this regard shall be entertained.

C3.7.5.1 Criteria

The main or lead partner of the successful bidder shall:

- (a) There must be a needs analysis for indirect targeting and development or skill standard and should be development in at least any two developmental areas namely;
 - · Administrative and cost control systems
 - construction management systems and plans
 - planning, tendering and programming
 - · business; technical; procurement skills
 - legal compliance
 - · credit rating/history; financial loan capacity/history
 - · contractual knowledge
- (b) The above needs analysis shall be mutually agreed upon between contractor and targeted enterprise
- (c) The contractor shall appoint an enterprise development coordinator to:
 - perform needs analysis on the targeted enterprise to identify developmental goals
 - develop a project specific enterprise development plan to improve the targeted enterprise/s performance in the identified developmental areas
 - provide internal mentorship support to improve the targeted enterprise/s performance
 - monitor and submit to the employer's representative a monthly enterprise development report thereby reporting on the progress of the agreed development areas with the targeted enterprise/s
 - submit a project completion report to the Employer's representative for each targeted enterprise.

C3.7.5.2 Management

The contractor shall provide a competent person/s to provide internal mentorship to the Targeted Enterprise/s in the two agreed developmental areas.

C3.7.5.3 Competence Criteria for an Enterprise Development Co-ordinator

The enterprise development co-ordinator shall have the following competencies:

- Minimum experience of 5 years in the construction industry at Managerial level as a Site Agent, Contracts Manager, Site Manager, Construction Manager, Business Development Manager or Enterprise Development Manager.
- Minimum experience of 2 years in training and development in Building or Construction; and
- National Diploma or B Degree in the Built Environment or Business Management

C3.7.5.4 Format of Communications

The contractor shall submit to the Employer's Representative:

Project interim reports in the specified format (ED105P) detailing interim values of the CPG that
was achieved together with an assessment of the enterprise development support provided should



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be tabled and discussed at least monthly at progress meetings between employer's representative and the contractor:

- Project completion report in the specified format (ED101P) to the Employer's Representative for acceptance within 15 days of achieving practical completion. The report shall include the value of the CPG that was certified in accordance with the contract, cidb registration numbers of each and every targeted enterprise, and the value of the subcontracted works or of the joint venture entered into; and the participation parameter
- Enterprise development declaration (ED104P).

C3.7.5.5 The Key Personal

The contractor shall appoint an Enterprise Development Co-ordinator and a competent person/s to provide internal mentorship.

C3.7.5.6 Management Meetings

The contractor shall report to the Employer's Representative on the implementation and progress of the targeted enterprise development and CPG at monthly progress site meetings.

C3.7.5.7 Forms for contract administration

The contractor shall submit to the Employer's Representative the following proformas:

- Form ED 105P Project Interim Report
- Form ED 104P Enterprise Development Declaration
- Form ED 101P Project Completion Report

C3.7.5.8 Records

The contractor shall:

- keep records of the targeted enterprise development
- keep records of the payments made to the targeted enterprises in relation to the CPG.
- ensure all the documentation required in terms of the Standard is provided with each monthly progress payment certificate and according to a prescribed format where applicable.

C3.7.5.9 Payment Certificates

The contractor shall:

- achieve the measurable CPG and providing enterprise development support to the targeted enterprise/s as per the Standard.
- submit payment certificates to the Employer Representative at intervals determined in the Contract.

C3.7.5.10 Compliance requirements

Non-compliance with the Best Practice Project Assessment Scheme

The wording of regulation 27A of the cidb regulations makes provision for the Board to enforce the cidb code of conduct in the event of clients being found to be in breach of the best practice project assessment scheme.

- Not including the requirements of the cidb standards in the conditions of tender
- Not registering the award of contract on the cidb Register of Projects (RoP)
- Not reporting practical completion on the cidb Register of Projects (RoP)

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3.7.6 Minimum Targeted Contract Skills Development Goal (CSDG)

Minimum Percentage Participation Goal Applicable Yes ⊠ No ☐

The contractor shall achieve or exceed in the performance of the contract the Contract Skills Development Goal (CSDG) established in the Standard for Developing Skills through Infrastructure Contracts (published in Government Gazette No 43495 of 3 July 2020 and the Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts (published in Government Gazette 41237 of 10 November 2017).

Failing to achieve the targeted Contract Skills Development Goal will result in A) a thirty percent (30%) penalty of the value of the portion not achieved, excluding VAT, and B) the issuing of completion certificates only after the completion certificate of achieving the skills development goal, countersigned by the relevant individuals has been submitted, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The contractor shall apportion the learners in the different construction activities based on the scope of work. The cost of accommodating learners will be determined by using Table 3 in the Standard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.

C3.7.6.1 <u>Methodology</u>

The contractor shall achieve the measurable contract skills development goal by providing opportunities to learners requiring structured workplace learning using one or a combination of any of the following in relation to work directly related to the contract or order:

Method 1: structured workplace learning opportunities for learners towards the attainment of a part or a full occupational qualification;

Method 2: structured workplace learning opportunities for apprentices or other artisan learners towards the attainment of a trade qualification leading to a listed trade (GG No. 35625, 31 August 2012) subject to at least sixty percent (60%) of the artisan learners being holders of public TVET college qualifications;

Method 3: work integrated learning opportunities for University of Technology or Comprehensive University students completing their national diplomas;

Method 4: structured workplace learning opportunities for candidates towards registration in a professional category by a statutory council listed in Table 1 above.

The contract skills participation goals, expressed in Rand, shall not be less than the contract amount multiplied by a percentage (%) factor given in Table 2 in the Standard for the applicable class of construction works.

Table 2: Contracting skills development goals for different classes of engineering and construction works contracts



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	ruction works as identified in terms of Regulation 25 struction Industry Regulations 2004	Construction skills development goal
Designation	Description	(CSDG) (%)
CE	Civil Engineering	0.25
CE and GB	Civil engineering and General Building	0.375
EE	Electrical Engineering works (buildings)	0.25
EP	Electrical Engineering works (infrastructure)	0.25
GB	General Building	0.5
ME	Mechanical Engineering works	0.25
SB	Specialist	0.25

The contractor shall apportion the learners in the different construction activities based on the scope of work. The cost of accommodating learners will be determined by using Table 3 in the Standard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.

Table 3: Notional Cost of Training per Headcount

Type of Training	Provision for stipends	Provisions for	Provisions for	Total	costs
Opportunity	(Unemployed learners only)	mentorship	additional costs*	Unemployed learners	Employed learners
Method 1					
Occupational qualification	R7 000	R0	R9 000	R16 000	R9 000
Method 2					
TVET College graduates	R14 000	R0	R9 000	R23 000	N/A
Apprenticeship	R14 000	R0	R12 000	R26 000	R12 000
Method 3					
P1 and P2 learners	R24 000	R20 000	R4 500	R48 500	N/A
Method 4			· · · · · · · · · · · · · · · · · · ·		
Candidates with a 3 year diploma	R37 000	R20 000	R4 500	R61 500	R20 000
Candidates with 4 year qualification	R47 000	R20 000	R4 500	R71 500	R20 000

- (a) The successful contractor may employ part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) directly or through a Skills Development Agency (SDA), (A1 List of cidb accredited SDAs).
- (b) The successful contractor must employ at least sixty percent (60%) of the learners from an FET / TVET college should the contractor select to have part/full occupational qualification learners and trade qualification learners contributing to the CSDG.
- (c) The successful contractor shall employ at least (insert percentage number) from eligible part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) in the employment of the employer.
- (d) The successful contractor shall ensure that no single method shall contribute more than seventy five percent (75%) of the CSDG for the contract.
- (e) The successful contractor may only place thirty three percent (33%) employed employees or that of his subcontractors contributing to the CSDG.



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- (f) The contractor shall employ at least sixty percent (60%) of the learners from a Public FET / TVET college should the contractor select to have trade qualification learners (Method 2) contributing to the CSDG.
- (g) One of the objectives of the project is to train (Insert number) Occupational qualifications, trade qualification, work integrated learners P1 and P2 learners, professional candidates (Delete that which is not applicable).

C3.7.6.2 Management

- (a) The successful contractor must keep site records regarding the part/full occupational qualification learners', trade qualification learners', work integrated learners' or candidates' (delete that which is not applicable) progress, site attendance, hours worked and other relevant information as required by the Standard.
- (b) The successful contractor shall provide the required number of appropriately qualified mentors to the maximum number of part/full occupational qualification learners, trade qualification learners, work integrated learners in the proportion as specified in the Standard.
- (c) The successful contractor shall provide a supervisor to manage the training of the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates (delete that which is not applicable).
- (d) The successful contractor shall submit to the employer's representative a baseline training plan in the specified format (Pro-forma A2) for the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates (delete that which is not applicable) within 30 days of start of the contract.
- (e) The successful contractor shall submit to the employer's representative project interim report in the specified format (Pro-forma A3) on the progress of each of part/full occupational qualification learner, trade qualification learner, work integrated learner, candidate (delete that which is not applicable) every three months.
- (f) The successful contractor shall submit to the employer's representative the names and particulars in the specified format (Pro-forma A4) of the supervisor, mentors for the part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) within 30 days of start of the contract.
- (g) The successful contractor shall keep a daily record of all the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates on site and their daily activities and shall be made available to the employer's representative on request.
- (h) The successful contractor shall submit to the employer's representative the reports on the progress and status of the part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) with the monthly invoice for the payment certificate.
- (i) The successful contractor shall have health and safety inductions for all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable).
- (j) The successful contractor shall conduct entry and exit medical tests of all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable).
- (k) The successful contractor shall provide personal protective equipment (PPE) to all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) at the start of their employment on site.



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Based on the agreed skills methods the contractor may employ part/full Occupational Qualification Learners and /or Trade Qualification Learners and/or Work Integrated Learners and/or Candidates (delete that which is not applicable) directly or through a Skills Development Agency (SDA), training provider or skills development facilitator (Form A1 - List of cidb accredited SDAs). The contractor shall ensure that no more than one Method shall be applied to any individual concurrently in the calculation of the CSDG for the contract.

Note to PM: Note to PM: A feasibility study must be undertaken at project level to verify that the contract participation goal can realistically be achieved within the targeted area. Such feasibility study shall be included in the contract data. Guidelines for undertaking a feasibility study are given in Appendix A of Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts No. 41237 GOVERNMENT GAZETTE.10 November 2017

C3.7.7 NATIONAL YOUTH SERVICE TRAINING AND DEVELOPMENT PROGRAMME (NYS)

The programme shall be implemented in terms of the Implementation of the National Youth Service Programme under the Expanded Public Works (EPWP) and shall be priced in the CPG section of the Bills of Quantities. Monthly reports are to be submitted to the Employer's Representative.

Failure by the contractor to achieve the specified number to be trained in the NYS section of the CPG section within the Bills of quantities will result in a thirty percent (30%) penalty of the value not achieved, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the nonachievement was beyond his/her control.

C3.7.8 LABOUR-INTENSIVE WORKS

ı	abour	Intonoivo	Participation	Cool	Annlinghia
Į	Labour	intensive	Participation	Goal	Applicable

Yes	M	No	

Where labour intensive work is specified in the Bill of Qualities and indicated by "LI" the contractor must price for and include in rates. Contractors are expected to use their initiative to identify additional activities that can be done labour-intensively to comply with the set minimum labour intensity target. Allowance must be made for submitting monthly reports illustrating the value of the works executed under Labour Intensive Works.

Failure by the contractor to achieve the specified value of the Labour Intensive Participation Goal as stipulated within the Bills of quantities will result in a thirty percent (30%) penalty of the value not achieved, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the nonachievement was beyond his/her control.

Employer's objectives:

The employer's objectives are to deliver public infrastructure using labour-intensive methods in accordance with EPWP Guidelines.

Labour-intensive works:

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work. A twenty percent (20%) penalty of the value of the works will be imposed on items where unauthorised use of plant was used to carry out work which was to be done labour-intensively.

Labour-intensive competencies of supervisory and management staff:

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5

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"Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Appendix C) at NQF outlined in Table 1

C3.7.8.1 GENERIC LABOUR-INTENSIVE SPECIFICATION

Should labour-intensive works be applicable to the contract the following Generic Labour-intensive Specification (informed by SANS 1921-5, Construction and management requirements for works contracts - Part 5: Earthworks) which covers activities which are to be performed by hand, should be inserted in the Scope of Works without amendment or modification as set out below. (Delete item in total if labour-intensive works are not applicable to the contract)

Contractors are referred to the Guidelines for the Implementation of Labour-intensive Infrastructure Projects under the Expanded Publics Works Programme (EPWP) for the generic labour-intensive specification applicable to the contract.

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- trenches having a depth of less than 1.5 metres
- stormwater drainage
- roads
- sidewalks and non-motorised transport infrastructure
- water and sanitation

Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail

Hand excavateable material

Hand excavateable material is:

a) granular materials:

- i) whose consistency when profiled may in terms of table 2 be classified as very loose, loose, medium dense, or dense; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm:

b) cohesive materials:

- i) whose consistency when profiled may in terms of table 2 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note

- 1) A boulder is material with a particle size greater than 200mm, a cobble and gravel is material between 60 and 200mm.
- 2) A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60° with respect to the horizontal) into the material being used.

Table 2: Co	nsistency of materials w	hen profiled	
GRANULA	RMATERIALS	COHESIVE	MATERIALS
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30- 40 mm; can be moulded



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			by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of a geological pick; requires many blows for excavation.	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point.

Trench excavation

All hand excavateable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers;

- a) to ninety percent (90%) Mod AASHTO;
- b) such that in excess of 5 blows of a dynamic come penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than ten (10%) gravel of size less than 10mm and contains no isolated boulders, or
- c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

Excavation

All excavateable material including topsoil classified as hand excavateable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. Any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

Clearing and grubbing

Grass and bushes shall be cleared by hand.

Shaping

All shaping shall be undertaken by hand.

Loading

All loading shall be done by hand. Haulage equipment should be selected in a manner that allows loading by hand to the greatest extent possible.

<u>Haul</u>

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage.

Spreading

All material shall be spread by hand.



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Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved. Appropriate rollers should be used where higher (than can be achieved by hand) levels of compaction are required or for large areas.

Grassing

All grassing shall be undertaking by sprigging, sodding, or seeding by hand.

Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must to be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

Manufactured Elements

Elements manufactured or supplied by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. Where the mass of an element exceeds 55 kg, consideration should be given to the size of the element relative to its total mass related to the number of workers who would be needed to lift such mass

C3.8 Submission of Accrual Reports

The Contractor shall submit accrual reports to the client representative at the end of March and September each year for the duration of the Service Contract period from the date of appointment up to and including project closeout. This is to ensure that PMTE complies with the accounting framework GRAP, which requires that PMTE disclose all its accruals as at the end of each reporting date.

C.3.9 Submission of Monthly Local Material Utilisation Report (Local Content)

The contractors shall be responsible for record keeping, documenting and submission of monthly local material utilization report with supporting documentation to the Employer's representative within 7 working days of the beginning of the successive month, in terms of DTI&C designated industry/sector/sub-sector schedule as per the PA36 and Annexures C attached to the tender document. The final percentage achievement to be reconciled upon completion of the project and form part of the final account. Failure by the contractors to achieve the specified percentage of local content per designated industry/sector/sub-sector as listed will result in a thirty percent thirty percent (30%) penalty of the value not achieved, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.



HEALTH AND SAFETY SPECIFICATION

WILLOWVALE PRISON: INSTALLATION OF STANDBY GENERATOR

WCS 049507

MANAGED BY THE DEPARTMENT OF PUBLIC WORKS & INFRUSTRUCTURE

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1. PREAMBLE

In terms of Construction Regulation 5(1)(b) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), 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 thereunder. 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.

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. Notwithstanding this, cognizance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.

Due to the wide scope and definition of construction work, every construction activity and site will be different, and circumstances and conditions may change even on a daily basis. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. *This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan.* The Health and Safety Plan shall include documented 'Methods of Rev H&S Spec Guideline Oct 2015

Statement' (see definitions under Construction Regulations) detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the Risk Assessment.

The Department of Public Works is tasked to provide accommodation and operational facilities to a very large proportion of the approximate 35 National Departments responsible for the governance of the Department of Public Works. A very large number of State employees and public users of the facilities and the services provided there-in directly interacts with the facilities provided by the well-being, health and safety of a great number of people. This Department thus has directly or indirectly, an impact on the Republic of South Africa as well as the National Parliament.

In this a high premium is to be placed on the health and safety of the most valuable assets of the Department of Public Works. These are its personnel, the personnel of its Clients and the physical assets of which it is the custodian and may also include the public as well. The responsibilities the Department and relevant stakeholders have toward its employees and other people present in the facilities or on the sites are captured further in this specification document. These responsibilities stem from both moral, civil and a variety of legal obligations. The Principal Contractor is to take due cognisance of the above statement.

Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Principal Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of the Agent and/or Client.

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.

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. 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 on inter alia:

- a) Safety considerations affecting the site of the project and its environment;
- b) Health and safety aspects of the associated structures and equipment;
- c) submissions on health and safety matters required from the Principal Contractor(and his /her contractor); and
- d) the Principal Contractor's (and his /her contractor) health & safety plan.

To serve to ensure that the Principal Contractor (and his /her contractor) is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 6, 7 and 8 of the construction regulation (2014).

To inform the Principal Contractor that the Occupational Health and Safety Act, 1993 (Act 85 of 1993) in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations promulgated on 07 February 2014.

- 4. DEFINITIONS The most important definitions in the Act and Regulations pertaining to this specification document are hereby extracted.
- "Purpose of the Act" To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of 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; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.
- "Health & Safety Specification" means a document that includes information required under the construction regulation and obtained from the clients & designers during the early planning & design stage for a specific project on a specific site for use by the contractors when preparing their tenders or bids to clients.
- "Health & Safety Plan" means a document which is site specific and includes all identified hazards, safe work procedures to mitigate, reduce & control the hazards identified in a project.;
- "Agent" means any person who acts as a representative for a client;
- "Client" means any person for whom construction work is performed;
- "Construction Health & Safety Agent (SACPCMP)" The person or entity appointed by the client through the Agent and who has a full authority and obligation to act on the clients behalf in terms of the construction regulations;
- "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;

"Contractor" – means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors;

"Contract Amount" Financial value of the contract at the time of the award of the contract, exclusive of all allowance and any value added tax or sales tax which the law requires the employer to pay to the contractor.

"Practical Completion Certificates" A certificates issued in terms of a contract by the employer, signifying that the whole of the construction works have reached a state of readiness for occupation or use for the purposes intended, although some minor work may be outstanding.

"Accident" – means unplanned occurrence that happens due to the unsafe condition and may cause injury to a person, damage to the property, material, plant, equipment and the environment;

"Hazard" - means anything including work activities and practices with the potential to cause harm:

"Risk" - means the likelihood that harm will occur and the subsequent consequences.

"Risk assessment" – means a process to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to mitigate, reduce or control such hazards.

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

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

5.1 Structure and Organization of OH&S Responsibilities

5.1.1. Overall Supervision and Responsibility for OH&S

- a) The Client and/or its Agent on its behalf to ensure that the Principal Contractor, appointed in terms of Construction Regulation 5(1)(i), 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.
- b) The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act. The pro forma Legal Compliance Audit may be used for this purpose by the Principal Contractor or his/her appointed contractor.
- c) All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective appointment forms to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).
- d) The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 8 to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).

e) All Health and Safety Representatives (SHE-Reps) shall act and report as per Section 18 of the Act.

5.1.2 Required appointments as per the Construction Regulations:-

Item	Regulation	Appointment	Responsible Person
1.	3.	Application Construction work permit	Client
2.	5(1)(k)	Principal contractor for each phase or project	Client
3.	5(6)	Construction Health & Safety Agent	Client
4.	7.(1)(c)	Contractor	Principal Contractor
5.	7(3)	Contractor	Contractor
6.	8(1)	Construction manager	Contractor
7.	8(2)	Assistance Construction manager	Contractor
8.	8(7)	Construction supervisor	Contractor
9.	8(8)	Construction supervisor sub-ordinates	Contractor
10.	8(5)	Construction Safety Officer	Contractor
11.			
12.	9(1)	Person to carry out risk assessment	Contractor
13.	10(1)	Fall protection planner	Contractor
14.	12(1)	Temporal work designer	
15.	12(2)	Supervisor of temporal work operation	
16.	13(1)	Excavation supervisor	Contractor
17.	13(2)(k)	Competent person in the use of explosive for excavations	Contractor
18.	14(11)	Explosives expert	Contractor
19.	14(1)	Supervisor demolition work	Contractor
20.	16(2)	Scaffold supervisor	Contractor
21.	17(1)	Suspended platform supervisor	Contractor
22.	18(1)a	Rope access	Contractor
23.	19(8)(a)	Material hoist inspector	Contractor
24.	20(1)	Bulk mixing plant supervisor	Contractor
25.	21(2)	Explosive actuated fastening device inspector	Contractor
26.	21(2)(g)	Explosive actuated fastening device cartridge, nails and studs: issuer & collector	Contractor
27.	23 (1)	Operator : construction vehicle and mobile plant	Contractor

28.	28 (a)	Stacking and storage supervisor	Contractor
29.	29 (h)	Fire equipment inspector	Contractor

5.2 Communication, Participation & Consultation

- 5.2.1 Occupational Health & Safety matters/issues shall be communicated between the Employer, the Principal Contractor, the other Contractors, the Designer and other concerned parties shall be through the H&S Committee or other means determined by the client.
- 5.2.2 In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.
- 5.2.3 Consultation with the workforce on OH&S matters will be through their Supervisors and H&S Representatives ('SHE Reps')
- 5.2.4 The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and/or its Agent on its behalf and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

6. INTERPRETATION

- a) The Occupational Health and Safety Act and all its Regulations, with the exception of the Construction Regulations, distinguish between the roles, responsibilities and functions of employers and employees respectively. It views consultants and contractors as employees of the "owner" of a construction or operational project, the "owner" being regarded as the employer.
- b) (The position taken by the Construction Regulations is that the "owner", in terms of its instructions, operates (has to operate) in the role of client as per relevant definition. The contractors working for the "client" are seen to be in two categories, i.e. the Principal Contractor and Contractors.

c) The Principal Contractor has to take full responsibility for the health and safety on the site of the relevant project / contract. This includes monitoring health and safety conditions and overseeing administrative measures required by the Construction Regulations from all contractors on the project site.

7. RESPONSIBILITIES

7.1 Client

- a) The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project or phase/section of the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations.
- b) The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.
- c) The Client or his appointed Agent on his behalf will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.
- d) The Client or his appointed Agent on his behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:
 - have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
 - have failed to implement or maintain their health and safety plan;
 - have executed construction work which is not in accordance with their health and safety plan; or

act in any way which may pose a threat to the health and safety of any person(s)
present on the site of the works or in its vicinity, irrespective of him/them being
employed or legitimately on the site of the works or in its vicinity.

7.2 **Principal Contractor**

- a) 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.
- b) The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation.
- c) 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.
- d) 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.
- e) 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.
- f) 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.)

- g) 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.
- h) 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.
- i) 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.
- j) 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.
- k) 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.

7.3 Contractor

The contractor must demonstrate to the Principal Contractor that he has the Necessary competencies and resources to perform the construction work safely.

7.4 Responsibilities of Construction Health & Safety Agent (SACPCMP)

The construction Health & Safety Agent act as a link between the client, Principal Contractor and the project team members with respect to health & Safety, They are Required to ensure that the client carry out its H&S responsibilities in terms of

Legislation as well as to co-ordinate and ensure good H&S practices are maintained Throughout the duration of the project. In many cases this role starts from project Initiation to project close-out.

- a) H&S competence: In the event that the client is unable to satisfy the requirements of the Construction Regulations for whatever reasons, the construction H&S agent may be appointed to perform these functions on behalf of the client. Given the need to appoint a registered construction H&S agent that is competent and adequately resourced with respect to H&S matters.
- b) H&S goals: It is important that the construction H&S agents demonstrate clearly to clients how they are going to contribute to the achievement of any client H&S goals and objectives. They should also set their own H&S goals.
- c) H&S responsibilities: Prior to accepting the H&S agent appointment from clients, H&S agents need to ensure that they brief clients fully on the client's particular responsibilities in terms of the OH&SA of 1993 and Construction Regulations as amended from time to time. In the absence of acceptance by clients of these responsibilities, H&S agents will not be able to adequately meet their own H&S responsibilities and duties.
- d) H&S information: H&S agents must provide the designer or design team with all H&S information to enable them to conduct a design HIRA to identify the significant hazards that need to be included in the H&S specification. This information may be gathered from multiple sources such as, for example, discussion with the client, previous historical use of the site or facility, previous surveys and investigations and past H&S files.

8. SCOPE OF WORK

Installation of a standby generator at Willowvale DCS

9. PREPARING A HEALTH & SAFETY PLAN

- (a) The level of detail required for a H&S plan will depend on how complex the workplace is (in particular, the number of contractors at the workplace at any one time) and the risks involved in the work. The plan must be easily accessible in a construction site and it must be clearly understood by management, supervisors & workers on construction site.
- (b) The plan must be implemented, maintained and kept up to date during the construction of the project.
- (c) The principal contractor should prepare a H&S plan that includes
 - project information;

 client requirements for H&S management on the project;
 Environmental restrictions and existing on-site risks arrangements, imposed by others or developed by the principal contractor, to control significant site H&S risks; H&S file & project H&S review.

(d) The H&S plan should include the following information:

- details of the client, that is the person commissioning the construction work, for example their name, representative and contact details; details of the principal contractor;
- details of the construction project, for example address of the workplace, anticipated start and end date and a brief description of the type of construction work that the H&S plan will cover;
- details on how subcontractors will be managed and monitored, including how the principal contractor intends to implement and ensure compliance with the H&S plan such as checking on the performance of subcontractors and how non-compliance will be handled; and
- details on how the risks associated with falls, falling objects, moving plant, electrical work and all high risk construction work that will take place on a construction project will be managed.

(e) The H&S plan should also include information on:

- the provision and maintenance of a hazardous chemicals register, safety data sheets and hazardous chemicals storage;
- the safe use and storage of plant;
- the development of a construction project traffic management plan;
- obtaining and providing essential services information electrical, gas, telecom, water and similar services:
- workplace security and public safety; and
- ensuring workers have appropriate licences and training to undertake the construction work.

(f) The H&S plan must contain:

- a general description of the type of work activities involved in the project and not just a description of the facility to be constructed;
- the project program or schedule details, including start and finish dates, showing principal activities;
- details of client, design team, principal contractor, subcontractors, and major suppliers; and
- extent and location of relevant existing records, surveys, site investigation and geotechnical reports, 'as-built' plans, H&S files.

10. HEALTH AND SAFETY FILE

- a) The H&S file is a document prepared by the principal contractor containing important project H&S information for use by the owner of the completed structure after construction has been completed.
- b) The principal contractor is responsible for producing an H&S file. It contains important project H&S information for use by the owner of the completed structure after construction has been completed. It is essential that the process of compiling the file commences as early as possible to ensure sufficient time to gather the required information.
- c) The Principal Contractor must, in terms of Construction Regulation 7(1) (b), 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 & Safety File.
- d) The contractor must ensure that the client's format and layout of the H&S file is adhered to. The contractor must identify the responsible person that will prepare the H&S file and who will be responsible for the drafting of as-built drawings. The contractor must establish procedures:
- e) 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.

11. OH&S GOALS AND OBJECTIVES AND ARRANGEMENTS FOR MONITORING AND REVIEWING OH&S PERFORMANCE

The Principal Contractor is required to maintain an acceptable disabling incident frequency rate (DIFR) and report on this to the Client and/or its Agent on its behalf on a monthly basis.

11.1 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.

11.1.1 Monthly Audit by Client and/or its Agent.

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.

a) A representative of the Principal Contractor and the relevant Health and Safety Representative(s) (SHE-Reps) must accompany the Client and/or its Agent on its behalf on all Audits and Inspections and may conduct their own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results. The Client and/or its Agent on its behalf may require to be handed a copy of the minutes of the previous Health and Safety Committee meeting reflecting possible recommendations made by that committee to the Employer for reference purposes.

11.1.2 Health & Safety incident/accident reporting & investigations

- 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.
 - 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)
- (e) The results of the investigation to be entered into the Accident/Incident Register listed above. (General Administrative Regulation 9)
- (f) 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.

- (g) The Principal Contractor is responsible for the investigation of all accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.
- (h) 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.
 - Determine the underlying H&S deficiencies and other contributory factors
 - Identification of corrective/preventative actions and continual improvement
 - Communicating the outcome/results and documenting the events of the investigation.

(i) Reporting Of Near-Misses

- Department of Public Works views the reporting of near misses as a critical component in creating a positive health and safety awareness culture on site.
- Department of Public Works retains the right to enforce the reporting of near misses within 24 hours of occurrence.

12. 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.

12.1 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. Access control must include the rule that non-employees shall at all times be provided with fulltime supervision while on site. The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period.

If not already tasked to the H&S Officer appointed in terms of Construction Regulation, the Principal Contractor must appoint a competent person who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments.

12.1.1 Appointment of Health & Safety Representatives

a) H&S Representatives('SHE – Reps')

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one H&S Representatives for every 50 employees or part thereof. (Section 17 of the Act and General Administrative Regulation 6. & 7.)

H&S Representatives must be appointed in writing and the designation shall be in accordance with the Collective Agreement as concluded between the parties as is required in terms of General Administration Regulation 6.

12.1.2 Duties and Functions of the H&S Representatives

- The Principal Contractor must ensure that the designated H&S Representatives conduct at least a weekly inspection of their respective areas of responsibility using a checklist developed by a Principal Contractor.
- The report must be consolidated and submitted to the Health & Safety Committee.
- H&S Representatives must form part of the incident/accident investigating team.

12.1.3 Establishment of H&S Committee(s)

- The Principal Contractor must establish H&S Committees consisting of designated H&S Representatives together with a number of Employers Representatives appointed as per Section 19(3) that are not allowed to exceed the number of H&S Representatives on the committee.
- The persons nominated by the employer on a H&S Committee must be designated in writing for such period as may be determined by him. The H&S Committee shall co-opt advisory (temporary) members and determine the procedures of the meetings including the chairmanship.
- The H&S Committee must meet minimum monthly and consider, at least, an agreed Agenda for the first meeting. Thereafter the H&S Committee shall determine its own procedures.

12.1.4 Training & Awareness

The contents and syllabi of all training required by the Act and Regulations including any other related or relevant training as required must be included in the Principal Contractor's Health and Safety Plan and Health and Safety File.

a) Training & Induction

All employees performing work or task on site that potentially impact on H&S must be competent & have the necessary appropriate education, training & experience.

All the training must be closely aligned with the risk profile of the project; procedures must be put in place to ensure that all workers are aware of the consequences of their work activities & benefits of improved H&S performance.

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

b) Site Specific Induction Training

All employees of the Principal and other Contractors must be in possession of Site Specific Occupational Health and Safety Induction or other qualifying training.

c) Other Training

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

13. PROJECT/SITE SPECIFIC REQUIREMENTS

The following is a list of specific activities and considerations that have been identified for the project and site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Principal Contractor:

- a) Clearing & grabbling the area/site
- b) Site establishment
- c) Dealing with existing structures
- d) Location of existing services
- e) Boundary & Access control/Public liability exposures
- f) Protection against heat exhaustion, dehydration, wet & cold conditions
- g) Dealing with COVID-19, HIV & aids other related diseases

- h) Use of portable electrical & explosive tools
- i) Any Excavation work
- j) Any welding work
- k) Loading & offloading of trucks
- I) Driving & operations of Construction vehicles & mobile plant
- m) Temporal works and
- n) Construction work as defined in the construction regulation 2014

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

Administrative & Legal Requirements

Oue And Continue	Subject	Requirements
Ons Act section/		
Regulation		
Construction. Regulation	Notice of carrying out Construction	Department of Labour notified
	work	Copy of Notice available on Site
General Admin.	Copy of OH&S Act (Act 85 of 1993)	Updated copy of Act & Regulations on site.
Regulation 4		Readily available for perusal by employees.
COID Act	Registration with Compensation	Written proof of registration/Letter of good standing available on Site
Section of	insurer.	
Construction. Regulation 4	H&S Specification & Programme	H&S Spec received from Client and/or its Agent on its behalf
& 5(1)		OH&S programme developed & Updated regularly
Construction. Regulation 9	Hazard Identification & Risk	Hazard Identification carried out/Recorded
	Assessment	 Risk Assessment and – Plan drawn up/Updated
		RA Plan available on Site
		 Employees/Sub-Contractors informed/trained
Section 16(2)	Assigned duties (Managers)	Responsibility of complying with the OH&S Act assigned to other
		person/s by CEO.
Construction. Regulation	Designation of Person Responsible on	Competent person appointed in writing as
8(1)	Site	Construction Supervisor with job description
Construction. Regulation	Designation of Assistant for above	Competent person appointed in writing as
8(8)		Assistant Construction Supervisor with job description
Section 17 & 18	Designation of Health & Safety	 More than 20 employees - one H&S Representative, one additional H&S
General Administrative	Representatives	Rep. for each 50 employees or part thereof.
Regulations 6 & /		Designation in writing, period and area of responsibility specified in
		terms of GAR 6 & 7
		 Meaningful H&S Rep. reports.
		 Reports actioned by Management.
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Section 19 & 20	Health & Safety Committee/s	 H&S Committee/s established.
General Administrative		 All H&S Reps shall be members of H&S Committees
Kegulations 5		 Additional members are appointed in writing.
		 Meetings held monthly, Minutes kept.
		 Actioned by Management.
Section 37(1) & (2)	Agreement with Mandatories/	Written agreement with (Sub-)Contractors
	(Sub-)Contractors	 List of SubContractors displayed.
		 Proof of Registration with Compensation Insurer/Letter of Good Standing
		Construction Supervisor designated
		 Written arrangements re.
		H&S Reps & H&S Committee
		 Written arrangements re. First Aid
Section 24 &	Reporting of Incidents	Incident Reporting Procedure displayed.
General Admin.	(Dept. of Labour)	 All incidents in terms of Sect. 24 reported to the Provincial Director.
Regulation 8		Department of Labour, within 3 days. (Annexure 1)(WCL 1 or 2) and to
COID Act Sect.38, 39 & 41		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.	Investigation and Recording of	All injuries which resulted in the person receiving medical treatment
Negulation 8		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	Fall Prevention & Protection	 Competent person appointed to draw up the Fall Protection Plan
0.1		 Proof of appointees competence available on Site
		 Risk Assessment carried out for work at heights
		 Fall Protection Plan drawn up/updated
		 Available on Site
Construction Regulation	Cranes & Lifting Machines Equipment	Competent person appointed in writing to inspect Cranes, Lifting
22 & Driven Machinery		Machines & Equipment
Regulations 18		 Written Proof of Competence of above appointee available on Site.
		 Cranes & Lifting tackle identified/numbered
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		 Register kept for Lifting Tackle Log Book kept for each individual Crane Inspection: - All cranes - daily by operator 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 8(1)(a)	Designation of Stacking & Storage Supervisor.	 Competent Person/s with specific knowledge and experience designated to supervise all Stacking & Storage Written Proof of Competence of above appointee available on Site
Construction Regulation 29 Environmental Regulation 9	Designation of a Person to Co-ordinate Emergency Planning And Fire Protection	 Person/s with specific knowledge and experience designated to coordinate emergency contingency planning and execution and fire prevention measures Emergency Evacuation Plan developed: Drilled/Practiced Plan & Records of Drills/Practices available on Site Fire Risk Assessment carried out All Fire Extinguishing Equipment identified and on <i>register</i>. Inspected weekly. Inspection Register kept Serviced annually
General Safety Regulation	First Aid	 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.
General Safety Regulation 2	Personal Safety Equipment (PSE)	 PSE Risk Assessment carried out Items of PSE prescribed/use enforced

		 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	Inspection & Use of Welding/Flame	 Competent Person/s with specific knowledge and experience designated
ກ	Cutting Equipment	to Inspect Electric Arc, Gas Welding and Flame Cutting Equipment
		 Written Proof of Competence of above appointee available on Site
		 All new vessels checked for leaks, leaking vessels NOT taken into stock
		but returned to supplier immediately
		 Equipment identified/numbered and entered into a register
		 Equipment inspected weekly. Inspection Register kept
		 Separate, purpose made storage available for full and empty vessels
eral Safety Regulation	Inspection of Ladders	 Competent person appointed in writing to inspect Ladders
13A		 Ladders inspected at arrival on site and weekly thereafter. Inspections
		register kept
		 Application of the types of ladders (wooden, aluminium etc.) regulated by
		training and inspections and noted in register
General Safety regulation	Ramps	 Competent person appointed in writing to supervise the erection &
13B		inspection of Ramps. Inspection register kept.
		 Daily inspected and noted in register

15. THE PRINCIPAL CONTRACTOR'S GENERAL DUTIES

- The Principal Contractor shall at all times ensure his status of an "employer" as referred to in the Act, and will abide by his/her responsibilities, duties and functions as per the requirements of the Act and Regulations with specific reference to Section 8 of the Act.
- The Principal Contractor shall keep, and on demand make available, a copy of the Act on site at all times and in addition to that he/she will introduce and maintain a file titled "Health and Safety File", or other record in permanent form, which shall contain all relevant aspects and information as contemplated in the Construction Regulations. He/she will make this file available to the client or his representative whenever necessary or on request to an interested party.
- The project under control of the Principal Contractor shall be subject to periodic health and safety audits that will be conducted by the client at intervals agreed upon between the Principal Contractor and the client, provided such intervals will not exceed periods of one month.
- The Principal Contractor is to ensure that he/she and all persons under his control on the construction site shall adhere to the above specifications.
- The Principal Contractor should note that he/she shall be held liable for any anomalies including costs and resulting deficiencies due to delays caused by non-conformance and/or non-compliance to the above Health and Safety Specifications and the Health and Safety Plan based on these specifications.

16. THE PRINCIPAL CONTRACTOR'S SPECIFIC DUTIES

The Principal Contractor's specific duties in terms of these specifications are detailed in the Construction Regulations as published under government notice 07 August 2014, stipulated in Section 7.

17. THE PRINCIPAL CONTRACTOR'S SPECIFIC RESPONSIBILITIES WITH REGARD TO HAZARDOUS ACTIVITIES

The following examples of activities are identifiable as hazardous in terms of the Construction Regulations. The contractor shall execute the activities in accordance with the following Construction Regulations and other applicable regulations of the Act:

- Preparation of paint surfaces
- Painting of walls
- Working with cement products
- Creation of openings in walls
- Dust
- Construction of brick wall
- Metal/Steel work
- Exposure to noise
- Establishment of site office
- Locating of existing services
- Loading and offloading of trucks
- Aggregate/sand and other material delivery
- Protection against dehydration and heat exhaustion
- Manual and mechanical handling
- Lifting and lowering operations.
- Use of Potable electrical Equipment
- Angle grinder
- Electric Drilling Machine
- Skill Saw
- Use and storage of flammable liquids and other Hazardous substances
- Electrical installation work
- Mechanical works
- Working in the vicinity of the public, and staff of the client
- Working at heights
- Working in confined spaces
- Hot works i.e. welding, flame cutting etc.
- Excavation work

This list must not be taken to be exclusive or exhaustive! All of the above requirements will be read in conjunction with the relevant regulations and health and safety standards as required by the Act. All documents and records required by the Construction Regulations will be kept in the Health and Safety File and will be made available at any time when required by the client or his representative, or on request to an interested party.

18. GENERAL NOTES TO THE PRINCIPAL CONTRACTOR

Legal Framework

Part of legal obligations

The more important Acts and relevant subordinate/secondary legislation as well as other (inter alia Local Government) legislation that also apply to the State as well as to State owned buildings and premises: -

- a. The latest issue of SABS 0142: "Code of Practice for the Wiring of Premises"
- The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority
- c. The Fire Brigade Services Act 1987, Act 99 of 1987 as amended
- d. The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as amended and relevant proclaimed Regulations (SABS 0400)
- e. The Post Office Act 1958 (Act 44 of 1958) as amended
- f. The Electricity Act 1984, Act 41 of 1984
- g. The Regulations of Local Gas Board(s), including Publications of the SABS Standards and Codes of Practice, with specific reference to GNR 17468 dated 4th October 1997
- h. Legislation pertaining to water usage and the environment
- Legislation governing the use of equipment, which may emit radiation (e.g. X-Rays etc.)
- i. Common Law

19. HOUSEKEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 27. 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.

a) Facilities

The site establishment plan shall make provision for:

b) Dining room facilities

The contractor shall make provision for adequate dining room facilities for his employees on site.

c) Change rooms

The contractor shall make provision for adequate change rooms for his employees on site.

d) Ablution facilities

The contractor shall make provision for adequate ablution facilities for his employees on site.

These facilities shall be maintained by the contractor.

e) Smoking Areas

Designated smoking areas shall be established by Department of Public Works.

f) Drinking Water Facilities

The provision of drinking water facilities shall be negotiated between the Contractor and Department of Public Works.

g) Equipment Compliance Certificates

Before equipment is brought on site valid certificates of compliance issued by a competent person shall be presented. The equipment includes but shall not be limited to:

i.lifting equipment and lifting tackle

ii.power driven machinery

iii.electrical equipment

iv.testing and monitoring equipment

h) Barricading

All barricading shall be of the rigid type unless the use of non-rigid barricading has been approved in writing by the Department of Public Works Project Manager. The contractors' barricading standard shall be included in the Health and Safety Plan.

Where more than one contractor is working on a site, the fixed barricading shall be clearly marked with the company's name, site contact person as well as the contact number/s.

i) Erection of Structures for Logistic Support

Prior to site establishment Department of Public Works shall approve the contractor's site plan.

Department of Public Works shall approve all structures erected for logistical support by the contractor. These structures include fences, workshops, tool sheds, offices, ablution facilities, etc.

j) Salvage Yard Management

Depending on the site specific arrangements and procedures, Department of Public Works may provide the salvage yard and the resources to manage it.

The salvage yard management shall conform to safety, health and environmental requirements. The contractors are required to move the equipment from the place of work to the salvage yard.

k) Fall Arrest and Prevention Equipment

Approved fall prevention equipment shall be used at heights of less than 2.0 metres. Above heights of 2.0 metres fall prevention equipment shall include fall arrest Equipment. Users of fall arrest equipment shall, amongst other things be trained in what an appropriate load bearing point is for connecting fall prevention equipment. Any deviation from this requirement shall be negotiated and agreed with Department of Public Works in writing.

I) Hazardous Chemical Substances Waste Removal

Department of Public Works shall provide a facility to collect all hazardous chemical waste material.

The contractor shall provide adequately marked and sealable containers to transport The hazardous chemical waste from the source to the approved Department of Public Works disposal point.

m) Personal Protective Equipment (PPE)

Personal protective equipment issued shall be specific to the risks associated with the work to be performed and specific to conditions on site and shall comply with South African National Standards (SANS) or similar.

20. LOCKOUT SYSTEMS

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage to people and equipment as far as is reasonably practicable.

Physical/mechanical lock-out systems shall be part of the safety system and included in training. Lockouts shall be tagged and the system tested before commencing with any work or repairs.

21. IMPORTANT LISTS AND RECORDS TO BE KEPT

The following are lists of several records that are to be kept in terms of the Construction Regulations. The lists are:

- i. List of appointments
- ii. List of record keeping responsibilities
- iii. Inspection checklist

a) Contractor Risk Assessment Process

The risk assessment process shall include:

- 1) an evaluation of the method of the work to be conducted
- 2) the method statement on the procedure to be followed in performing the task shall be developed
- 3) the risk assessment will also include activities like:
 - i. Transportation of passengers and goods to and from site
 - ii. Site establishment
 - iii. Physical and mental capabilities of employees
 - iv. Others as may be specified.
- 4) the hazards as listed in the paragraph Site Specific Health and Safety Hazards
- 5) a review plan for risk assessments shall provide for:
 - i. the quarterly review of all applicable risk assessments
 - ii. the review of an assessment if there is reason to believe that the previous assessment is no longer valid, or there has been a change in a process, work methods, equipment or procedures and working conditions
 - iii. Risk assessment/s to be reviewed if the outcome of incident investigations and audits etc. requires such action.

A pre - task risk assessment shall be conducted in writing on every task and be facilitated by the team leader. All risk assessments and pre-task risk assessments shall be filed and be available on site.

b) Risk Profile

All contractors shall submit a risk profile of the work to be conducted with their Health and Safety Plan.

c) Risk Based Inspection Program

The inspection programme shall be risk based. The inspection plan shall form part of the Health and Safety Plan.

IMPORTANT CONTACT DETIALS

(FOR HEALTH & SAFETY ASPECTS ONLY)

The contractor is to add all the important contact information about essentials services, support and assistance.

	SERVICE	NUMBER	CONTACT PERSON
	Hospital		
000	Ambulance		
	Water Electricity		
C	Police		
	Fire Brigade		
	Engineer		

ADD OTHER IMPORTANT HEALTH & SAFETY CONTACT DETAILS AS MAY BE FOUND NECESSARY.

SECTION 37(2) AGREEMENTS CONCLUDED BETWEEN DEPARTMENT OF PUBLIC WORKS

(Hereinafter referred to as Department of Public Works)

AND

BUREWA TRADING 84 CC (Name of contractor/supplier/Agent/)

l,			[
(name)representing		[Insert	name of
contractor/supplier],	do hereby acknowledge that		
[insert name of contr	ractor/supplier] is an employer in his/her own right, with duties	as pres	cribed in
the Occupational He	ealth and Safety Act No. 85 of 1993 ("the Act"), as amended, and	agree t	o ensure
that all work will be p	performed and/or machinery or plant used in accordance with	the prov	isions of
the Act.			
I undertake that	[insert name of cor	ntractor/	/supplier]
shall strictly adhere	e to, and ensure that his/her employees adhere to, the p	rovision	s of the
Occupational Health	and Safety Act, 1993 (Act 85 of 1993).		
I have been provided	d with SHE specifications for project/service		[insert
brief details of	project/service, for example, name, contract/pro	oject	number]
	and will comply with the requirements set out in these.		
I accept and agree t	that the SHE specifications constitute arrangements and proc	edures	between
	[Insert name of contracto		
Safety Manager/Sa	afety Officer] and Department of Public Works, which will en	sure co	mpliance
by	[Insert name of contractor/su	pplier]	with the
provisions of the Act	t, as contemplated in section 37(2) of the Act.		

This agreement constitutes the sole agreement between the parties, and no variation, modification, or waiver of any of the provisions of this agreement or consent to any departure from these shall, in any manner, be of any force or effect, unless confirmed in writing and signed by both parties, and such variation, modification, waiver, or consent shall be effective only in the specific instance and for the specific purpose and to the extent for which it was made or given.

the requisite authority to do so.
Signed this day of
(Place)
(Full name)(Signature)on
behalf of
contract on behalf of the contractor)
Witnesses 1. 2.
Signed this
at(<i>Place</i>)
(Full nameon
Behalf of Department of Public Works . (Contracts and/or Project Manager or Department of Public Works representative)
Witnesses
1
2

This agreement is signed on behalf of the parties, each signatory to this warranting that he/she has

PROJECT: WILLOWVALE PRISON: INSTALLATION OF STANDBY GENERATOR		
WCS NO: 05813	(works control system number)	
SUPERVISION BY THE DEP	PARTMENT OF PUBLIC WORKS:	
Mr/Ms/Me -	CONSTRUCTION PROJECT MANAGER (Add full details of the project manager)	
M. MAZWANA	(vida idii detaile et ille preject illandger)	
<u>Mr /Ms/Me</u> -	CONSTRUCTION MANAGER (add full details)	
Mr /Ms/Me	AGENT: (full particulars of agent)	
SUPERVISION BY THE PRIN	NCIPAL CONTRACTOR:	
PRINCIPAL CONTRACTOR:	(full particulars of principle contractor / contractor)	
<u>Mr /Ms/Me</u> -	CONSTRUCTION HEALTH & SAFETY OFFICER (add full details and contact of this officer)	
Mr/Ms/Me -	CONSTRUCTION HEALTH & SAFETY MANAGER (add full details of this officer)	
Mr/Ms/Me -	CONSTRUCTION HEALTH & SAFETY AGENT (add full details of this officer)	

Mr /Ms/Me	-	CONSTRUCTION MANAGER (add full details of the head of the project)
30700		
200000000000000000000000000000000000000		

Part C4: Site Information



NATIONAL DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

ELECTRICAL ENGINEERING SERVICES

SPECIFICATION FOR THE SUPPLY, INSTALLATION AND COMMISSIONING OF AN OUTDOOR EMERGENCY GENERATOR SET FOR WILLOWVALE PRISON

Date: November 2021

Engineering Services Chief Directorate

Electrical Engineering Directorate
Electrical Engineering Standards & Specifications Committee
256 Madiba Street
Pretoria
0001

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SECTION 1 – GENERAL

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1. SECTION 1 - GENERAL

1.1. Intent of Specification

The specification is intended to cover the complete installation and commissioning of the generator plant. The minimum equipment requirements are outlined, but do not cover all the details of design and construction. Such details are recognised as being the exclusive responsibility of the contractor.

For the purposes of this document the following applies:

- Generator Contractor shall be referred to as the Generator Contractor or simply Contractor;
- The masculine includes the feminine:
- The singular includes the plural.

1.2. Standards and Codes

All standards referenced shall be the latest editions.

SANS 10142-1 the wiring of premises: Low Voltage Installations

SANS 8528 Reciprocating internal combustion engine driven alternating current

generating sets.

SANS 60034 Rotating electrical Machines SANS IEC 60947 Low Voltage Switchgear

OHSACT Occupational Health and Safety Act.

Department of Public Works Quality Specification Parts A, B and C.

Local municipality by-laws for generator installations. (To be obtained from local municipality)

1.3. Compliance with Regulations

The installation shall be erected and tested in accordance with the following Acts and regulations:

- a) The Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended,
- b) The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority,
- c) The Fire Brigade services Act 1987 (Act 99 of 1987) as amended,
- d) The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as emended.
- e) The Electricity Act 1984 (Act 41 of 1984) as amended.
- f) The environmental Act and regulations

1.4. Scope of Work

Included in this Outdoor Generator Specification

Supply, delivery, installation and commissioning of the complete outdoor 100 KVA emergency generator inside an IP65 canopy/container set on a concrete plinth as specified in this document.

The successful tenderer shall supply, deliver and install a complete single enclosed diesel driven standby generator set in a position that will be determined on site. The machine shall be totally enclosed in a 3CR12 stainless steel housing powder coated or within 50km from the coast with grade 316 steel housing powder coated. The exhaust shall be manufactured from stainless steel.

The housing is to be provided on galvanized 3CR12 stainless steel skids so that the generator set can be transported to site and placed in position on a concrete plinth, casted by the successful tenderer. The skids must be of sufficient height to allow for the passage of storm water under the set.

1.5. Co-ordinating

The Contractor shall familiarise himself with the requirements of the other professional disciplines and shall examine the plans and specifications covering each of these sections.

The generator space, noise and vibration requirements shall be carefully checked with other professional disciplines to ensure that the equipment can be installed in the proper sequence in the space allotted.

1.6. Tests Certificates and Inspections

The following tests are to be carried out:

- a) At the supplier's premises, before the generating set will be delivered to site Representatives of the Department must be present during the test to satisfy themselves that the generating set complies with the specification and delivers the specified output. The test must be carried out in accordance with SANS 8528. The Representative/Agent must be timeously advised of the date for the test.
- b) After completion of the works and before practical completion is taken, a full test will be carried out on the installation for a period of sufficient duration to determine the satisfactory working thereof. During this period the installation will be inspected and the contractor shall make good, to the satisfaction of the Representative/Agent, any defects which may arise.
- c) The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installation at completion.
- d) Test reports of both tests as specified under (a) and (b) are to be submitted to the Representative/Agent.

The total costs for these tests shall be included in the tendered amount.

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

1.7. Operating and Maintenance Manuals

The Contractor shall be responsible for the compilation of a complete set of Operating and Maintenance manuals.

This shall be done in accordance with Section 4 - Operating and Maintenance manuals.

All information shall be recorded and reproduced in electronic format as well as supplying the Representative/Agent with three sets of hard copies.

Approval of the final Operating and Maintenance Manuals shall be a prerequisite for issuing of a Certificate of Practical Completion of the installation.

1.8. Guarantee

After works completion of the installation have been achieved, there will follow a 12-month free maintenance period.

During this period the generator contractor shall maintain the generator installation as per the requirements of the Occupational Health and Safety Act. This maintenance shall include systematic examinations, adjustments and lubrication of all generator equipment. Electrical and mechanical parts shall be repaired or replaced whenever it is required to maintain optimum performance without additional cost to the Department, unless the condition was caused by misuse or vandalism of the generator equipment or natural hazards/force majeure.

The work under this section shall be performed by competent, qualified accredited personnel under the supervision and in the direct employment of the Generator Contractor and shall not be transferred to any non-affiliated agent. Contract maintenance and repair work shall be done during normal working hours and shall further provide emergency call-back service twenty-four (24) hours a day, seven (7) days a week.

During the guarantee/maintenance period the Department will invite tenders for the comprehensive maintenance of the generator, which will commence after the final completion has taken place, i.e. after the twelfth month guarantee period is over and all defects are corrected.

1.9. Materials and Workmanship

- a) The work throughout shall be executed to the highest standards and to the entire satisfaction of the Representative/Agent who shall interpret the meaning of the Contract Document and shall have the authority to reject any work and materials, which, in his judgement, are not in full accordance therewith. All condemned material and workmanship shall be replaced or rectified as directed and approved by the Representative/Agent.
- b) All work shall be executed in a first-class manner by qualified accredited tradesman.
- c) The Contractor shall be fully responsible for his work and shall replace any of the work which may be damaged, lost or stolen. The Contractor shall protect the building and its contents against damage by him, his employees or sub-contractors and shall make good any damage thereto.
- d) The Contractor shall indemnify the Employer of all liability for damages arising from injuries or disabilities to persons or damage to property occasioned by any act or omission of the Contractor or any of his sub-contractors, including any and all expenses, legal or otherwise, which may be incurred by the Employer or Representative/Agent in the defence of any claim, action or suit.
- e) The Contractor shall warrant that the materials and workmanship shall be of the highest grade, that the equipment shall be installed in a practical and first-class manner in accordance with the best practices and ready and complete for full operation. It is specifically intended that all material or labour which is usually provided as part of such equipment as is called for and which is necessary for its proper completion and operation shall be provided without additional cost whether or not shown or described in the Contract Document.
- f) The Contractor shall thoroughly acquaint himself with the work involved and shall verify on site all measurements necessary for proper installation and commissioning work. The Contractor shall also be prepared to promptly furnish any information relating to his own work as may be necessary for the proper installation work and shall co-operate with and coordinate the work of others as may be applicable.
- g) The Contractor shall inspect and verify that the existing power feeder system is compatible with the equipment offered and any changes or upgrading of the electrical supply shall be brought to the attention of the Representative/Agent.
- h) Material and equipment damaged in transit shall be replaced with undamaged material without additional cost to the Department.
- i) All components and their respective adjustment, which do not form part of the equipment installation work, but influence the optimum and safe operation of the equipment shall be considered to form part of, and shall be included in the Contractor's scope of works.
- j) All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.
- k) The Contractor shall make sure that all safety regulations and measures and environmental regulations are applied and enforced during the installation and guarantee period to ensure the safety of the public and the User Client.

1.10. Brochures

Detailed brochures of all equipment offered shall be presented together with the tender documents.

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2. SECTION 2 - EQUIPMENT REQUIREMENTS

2.1. Engine

2.1.1. General

The engine must comply with the requirements laid down in SANS 8528 and must be of the atomized injection, compression ignition type, running at a speed not exceeding 1500 r.p.m. The engine must be amply rated for the required electrical output of the set, when running under the site conditions. The starting period for either manual or automatic switching-on until the taking over by the generating set, in one step, of a load equal to the specified site electrical output, shall not exceed 15 seconds. This must be guaranteed by the Tenderer.

Turbo-charged engines will only be accepted if the Tenderer submits a written guarantee that the engine can deliver full load within the specified starting period.

Curves furnished by the engine makers, showing the output of the engine offered against the speed, for both intermittent and continuous operation as well a fuel consumption curves when the engine is used for electric generation, must be submitted with the Tender.

2.1.2. Rating

The set shall be capable of delivering the specified output continuously under the site Conditions, without overheating. The engine shall be capable of delivering an output of 110% of the specified output for one hour in any period of 12 hours consecutive running in accordance with SANS 8528.

2.1.3. De-Rating

The engine must be de-rated for the site conditions as set out in the Technical Specification, Section 3 of this document.

The de-rating of the engine for site conditions shall be strictly in accordance with SANS 8528 as amended to date. Any other methods of de-rating must have the approval of the Department and must be motivated in detail. Such de-rating must be guaranteed in writing and proved by the successful Tenderer at the site test.

2.1.4. Starting and Stopping

The engine shall be fitted with an electric starter motor and be easily started from cold, without the use of any special ignition devices under summer as well as winter conditions.

Tenderers must state what arrangements are provided to ensure easy starting in cold weather. Full details of this equipment must be submitted. In the case of water-cooled engines, any electrical heaters shall be thermostatically controlled. The electrical circuit for such heaters shall be taken from the control panel, and must be protected by a suitable circuit breaker.

2.1.5. Starter Battery

The set must be supplied a fully charged lead-acid type or maintenance free type battery, complete with necessary electrolyte. The battery must have sufficient capacity to provide the starting torque stipulated by the engine manufacturer. The battery capacity shall not be less than 120 Ah and shall be capable of providing three consecutive start attempts from cold and thereafter a fourth attempt under manual control of not less than 20 seconds duration each. The battery must be of the heavy duty "low maintenance" type, house in a suitable battery box.

2.1.6. Cooling

The engine may be either of the air- or water-cooled type. In the case of water-cooling, a built-on heavy duty, tropical type pressurised radiator must be fitted. Only stand-by sets that are water cooled shall have electric heaters.

For either method of cooling, protection must be provided against running at excessive temperatures. The operation of this protective device must give a visual and audible indication on the switchboard. Water-cooled engines shall in addition be fitted with a low water cut-out switch, installed in the radiator, to switch the set off in the event of a loss of coolant. The protection shall operate in the same way as the other cut-outs (e.g. low oil pressure). All air ducts for the cooling of the engine are to be allowed for. The air shall be supplied from the cooling fan cowling/radiator face to air outlet louvers in the enclosure.

2.1.7. Lubrication

Lubrication of the main bearings and other important moving parts shall be by forced feed system. An automatic low oil pressure cut-out must be fitted, operating the stop solenoid on the engine and giving a visible and audible indication on the switchboard.

2.1.8. Fuel Pump

The fuel injection equipment is suitable for operation with the commercial brands of diesel fuel normally available in South Africa.

2.1.9. Fuel Tank

The fuel tank shall be an integral part of the base frame of the generator set. The tank shall have sufficient capacity for standby sets to run the engine on full load for a period of 24 hours.

The diesel fuel storage system / tank which will be provided with the standby generator installation must be fitted with a fuel filtration and water separation system (filter & separator) which is entirely separate from the fuel supply line and line filter to the engine. This filtration and water separation system must be dedicated to purifying the content of the storage system / tank by way of the cleaning processes which are applied while circulating the fuel through the filter & separator unit.

The filtration system must be able to handle diesel fuel of "high" and of "low" sulphur content for an indefinite period. The suction line of the system must be connected to the lowest part of the storage system / tank. The return line must be connected in the top section of the storage system / tank in such a position and in such a way that the flow of fuel within the storage system / tank between the fuel return point and the fuel suction point will induce scouring of the bottom of the system / tank to effectively capture sediment and water in the to be filtered fuel.

The filtration unit must filter the diesel fuel, removing suspended particles of effective diameters down to 5 micron. In addition, it must separate all water from the fuel and the fuel storage system and automatically dispose of / dump such water into an open, removable receptacle for disposal at the installation or in a suitable position outside the building. Separation of the fuel and water must be sufficiently effective that the discharged water will meet the standard required for it to be disposed of into a municipal drain and sewer system.

The filter and water separator unit must draw its power from the DC batteries used to power the relevant generator set. The circulating pump shall be provided with a controller programmed to switch the pump through not more than three complete on and off cycles of equal time (i.e. 50% on; 50% off), per hour, with a deviation of not more than 10% ±. The pump must be capable of a duty cycle of not less than 60% running time. The flow rate through the circulating pump must be between 1 L/min and 1.25 L/min.

The filter cartridge of the filter and water separator unit must be replaceable, and, in normal operational conditions, not require replacement within periods shorter than three months. The replacement units must be readily available.

The filtration & separator system may be mounted against the wall of the plant room or on the inside of a container, which may house the installation as may be specified elsewhere in this document.

The tank shall be fitted with a suitable filter, a full height gauge glass, "low fuel level" alarm, giving an audible and visible signal on the switchboard as well as a low-low fuel level cut-out.

An electrically operated pump with sufficient length of oil resistant hose to reach 2m beyond the door of the canopy/container, shall be supplied, for each set for filling the fuel tank/s from 200 litre drums.

The interconnection fuel piping shall consist of copper tubes and the connection to vibrating components shall be in flexible tubing with armoured covering.

The contractor shall allow for the supply and installation of a fuel shut off fusible link in the container. The fusible link shall shut off the fuel at a temperature of 130 degrees in an event of a fire in the self-contain enclosure. The fusible link shall be mounted above the engine and coupled to the shut off valve by means of a 2mm stainless steel cable. The cable shall be installed to the shut off valve without any possibility of kinking the cable which may cause malfunctioning of the protection device.

2.1.10, Governor

The speed of the engine shall be controlled by a governor in accordance with ECM of SANS 8528 if not otherwise specified in the Detailed Specification.

The permanent speed variation between no load and full load shall not exceed 4.5% of the nominal engine speed and the temporary speed variation shall not exceed 10%. External facilities must be provided on the engine, to adjust the nominal speed setting by \pm 5% at all loads between zero and rated load.

2.1.11. Flywheel

A suitable flywheel must be fitted, so that lights fed from the set will be free from any visible flicker.

The cyclic irregularity of the set must be within the limit laid down in SANS 8528.

2.1.12. Exhaust Silencer

It is essential to keep the noise level as low as possible. An effective exhaust silencing system of the residential type must be provided and shall be capable of providing 20 to 30 decibels of suppression.

The exhaust system shall consist of 3CR12 steel for inland areas (greater than 50km from the coast) or Grade 304 stainless steel in coastal areas.

The exhaust pipe shall be installed in such a way that the expulsed exhaust fumes will not cause discomfort to the public. The exhaust pipe must be flexibly connected to the engine to take up vibrations transmitted from the engine, which may cause breakage. The exhaust piping and silencer shall be lagged and then cladded in stainless steel sheet to reduce the heat and noise transmission in the generator enclosure and shall be protected against the ingress of driving rain at 45° to the horizontal. The exhaust pipe must extend 0,5m above the canopy.

2.1.13. Accessories

The engine must be supplied complete with all accessories, air and oil filters, 3 instruction manuals, spare parts lists, the first fill of all lubricating oils, fuel, etc.

2.1.14. Exhaust emissions

The exhaust emissions shall comply with US Tier III/EU stage III standards.

2.2. Alternator

2.2.1. General

The alternator shall be of the self-excited brushless type, with enclosed ventilated drip-proof housing and must be capable of supplying the specified output continuously with a temperature rise not exceeding the limits laid down in SANS 60034-1 for rotor and stator windings.

The alternator shall be capable of delivering an output of 110% of the specified output, for one hour in any period of 12 hours consecutive running.

Both windings must be fully impregnated for tropical climate and must have an oil resisting finishing varnish.

2.2.2. Regulation

The alternator must preferably be self-regulated without the utilisation of solid-state elements. The inherent voltage regulation must not exceed plus or minus 5% of the nominal voltage specified, at all loads with the power factor between unity and 0,9 lagging and within the driving speed variations of 4.5% between no-load and full load.

2.2.3. Performance

The excitation system shall be designed to promote rapid voltage recovery following the sudden application of the load. The voltage shall recover to within 5% of the steady state within 300 milliseconds following the application of full load and the transient voltage dip shall not exceed 18%.

2.2.4. Coupling

The engine and alternator must be directly coupled by means of a high quality flexible coupling, ISO 9001:2000 approved and must be designed and manufactured to this quality system.

2.3. Switchboard

2.3.1. General

A switchboard must be supplied and installed to incorporate the equipment for the control and protection of the generating set and battery charging.

The switchboard must conform the specification as set out in the following paragraphs.

2.3.2. Construction

The switchboard shall be enclosed in the steel enclosure.

All equipment, connections and terminals shall be easily accessible from the front. The front panels may be either hinged or removable and fixed with studs and chromium-plated cap nuts. Self-tapping screws shall not be used in the construction of the board.

All pushbuttons, pilot lights, control switches, instrument and control fuses, shall be mounted on hinged panels with the control wires in flexible looms.

The steelwork of the boards must be thoroughly de-rusted, primed with zinc chromate and finished with two coats of signal red quality enamel, or a baked powder epoxy coating.

Suitably rated terminals must be provided for all main circuits and the control and protection circuits. Where cable lugs are used, these shall be crimped onto the cable strands. Screw terminals shall be of the type to prevent spreading of cable strands. All terminals shall be clearly marked.

For the control wiring, each wire shall be fitted with a cable or wire marker of approved type, and numbering of these markers must be shown on the wiring diagram on the switchboard. Control wiring shall be run in PVC trunking. The trunking shall be properly fixed to the switchboard steelwork. Adhesives shall not be acceptable for the fixing of trunking or looms.

The modular generator set controller and protection equipment shall be mounted on a separate easily replaceable panel.

All equipment on the switchboard, such as contactors, isolators, busbars, etc., shall have ample current carrying capacity to handle at least 110% of the alternator full load current.

Access to the cubicle will be such that all components can be conveniently reached for testing and maintenance purposes.

The necessary bushes and a screen over the terminals will be provided where the power feeds enter and leave the cubicle.

The cubicle will be so constructed that the ac and dc components are screened from one another.

2.3.3. Protection and Alarm Devices

All switchboards shall be equipped with protection and alarm devices as described below.

A circuit breaker and an adjustable current limiting protection relay must be installed for protection of the alternator. The protection relay shall be of the type with inverse time characteristics. The relay shall cause contactor to isolate the alternator and stop the engine.

Protection must be provided for overload, high engine temperature, low lubricating oil pressure, over speed, start-failure, and low water level.

Reset push buttons are required on the modular generator set controller and a visible signal are required and the engine must stop when any of the protective devices operate. In the case of manual operation of standby sets, it shall not be possible to restart the engine.

The indication on the modular generator set controller must be in ENGLISH.

"OVERLOAD"
"TEMPERATURE HIGH"
"OIL PRESSURE LOW"
"OVERSPEED"
"START FAILURE"
"LOW WATER LEVEL"

In addition an audible and visible flashing signal shall be provided, when:

- a) The fuel level in the service tank is low. The indication on the modular generator set controller shall be "FUEL LOW".
- b) The battery charger failed. The indication on the modular generator set controller shall be "CHARGER FAIL"

A low-low level sensor must be provided. At this level the engine must stop to prevent air entering the fuel system.

This is also applicable to the engine driven generator/alternator.

All alarm conditions must operate an alarm hooter. A pushbutton must be installed in the hooter circuit to stop the audible signal, but the fault indicating light on the control panel must remain lit until the fault has been rectified.

An on/off switch is not acceptable. After the hooter has been stopped, it must be re-set automatically, ready for a further alarm.

The hooter must be of the continuous duty and low consumption type. Both hooter and protection circuits must operate from the battery.

Potential free contacts from the alarm relay must be brought down to terminals for remote indication of alarm conditions.

A test pushbutton must be provided to test all indicators lamps.

2.3.4. Modular Generator Set controller

The modular generator set controller shall be an electronic unit to match those of the other modular generator set controllers and of a high quality i.e. Levato, Deep Sea Electronics, Circom. It must be provided with IO and communication facilities.

The modular generator set controller will be supplied with all its functions and shall be mounted on a separate easily replaceable panel with plug in termination blocks for easy installation and replacement.

The modular generator set controller interface will be implemented with relays, contactors etc.

The modular generator set controller will have a mimic display of the alternator/mains/ change over contactors configuration with LED's showing the status of the mains, alternator and change over contractors.

Configuration software shall be supplied with the system. The software will be capable of the following:

- Fault management (event log)
- Configuration management (software upgrades and function changes)
- Account management (energy management)
- Performance management (generator set point changes)
- Security management (passwords)

The modular generator set controller will have a standard RS 232/485 or Ethernet interface suitable for TCP I/P transport medium. All communication including configuration management will be done through this port. Equipment connected at each end of the RS 232 or Ethernet cable shall be adequately protected against transient over-voltages, lightning effects (particularly if the set and remote alarms are in separate buildings), switching surges, power system surges or mains and alternator borne noise/interference.

The controller will incorporate the following functions:

- Mains sensing
- Alternator output-voltage sensing
- Alternator over- frequency sensing
- Control of processor unit (self-diagnostics)
- Alarm/ Status indications
- · Control selector and operation
- Phase rotation monitor

A 4- position control selector on the controller will be provided to facilitate the following modes of operation:

- OFF: Diesel/ alternator generator set switched off
- MANUAL: Mains bypassed: Diesel/ alternator will not take load
- AUTO: Diesel /alternator takes load on mains failure
- TEST: Diesel /alternator takes load on mains failure

 A standby failure alarm (SF) will be given on the controller and to the output alarms when "Not in Auto" is selected.

The modular generator set controller must monitor the following

When the voltage of the incoming mains varies by more than a pre-program value (default +- 10%) from the normal voltage on any phase, the controller will signal that the incoming mains will be disconnected and the engine-starting sequence initiated.

When the frequency of the incoming mains varies by more than pre- program value (default +-5%) from the normal frequency, the controller will signal that the incoming mains will be disconnected and the engine-starting sequence initiated.

Upon restoration of the incoming mains to the pre-program value (default +-10%) of the normal voltage on all phases, the monitor will signal that the load will be disconnected from the alternator and reconnected to the incoming mains.

If the alternator has been disconnected from the load and the incoming mains within the voltage limits of +- 10% on all phases, the controller will signal that the load will be reconnected to the incoming mains.

Should the incoming mains fail or not in the specified limits while the engine is running under control of the cooling-off timer, the control for the cooling –off timer in the controller will be cancelled and the load connected to the alternator.

When the output voltage of the alternator varies by more than the pre-program value (default value +- 10 %) on ANY phase, the controller will signal that the load will be disconnected from the alternator and the engine stopped.

A software over and under-frequency monitor will be provided in the controller if the frequency exceeds or drop below pre-programmed values. It will meet the requirements of class G2 governing. The monitor will not be influenced by harmonics.

Note: Software monitors will include adjustable overshoot and undershoot timers to be fully compatible with Class G2 governing.

All timers will be implemented in software.

Incoming supply failure timer

It is essential that incoming supply failures, occurring at short intervals, do not cause a series of starts and stops.

A timer adjustable from 1 s to 10 s required

The timer default value will be generator set to 3 s

The signal generated by the mains voltage monitor will start the timer. If the duration of the signal is less than the generator setting on the timer, the signal is suppressed to that the switching and starting sequence is initiated. However, if the duration of the signal is more than the generator setting on the timer, the signal will be transmitted to initiate the switching and starting sequence.

Incoming supply restoration timer

It is essential that incoming supply failures, occurring at short intervals, do not cause a series of starts and stops.

A timer adjustable from 1 s to 10 s required.

The timer default value will be generator set to 3 s.

The signal generated by the mains voltage monitor will start the timer. If the duration of the signal is less than 150 sec, the signal is suppressed and the timer is regenerator set. However, if the duration of the signal is more than 150 sec, the signal will be transmitted to initiate the switching sequence.

Alternator supply/ incoming supply change-over timer

It is essential that the supply be disconnected from the load before the incoming supply is reconnected to the load. This will be software generator settable in the controller with a minimum of 5 seconds and maximum of 20 seconds.

On receipt of the switching signal, the alternator supply will be disconnected from the load and timer started. After 5 sec, the incoming supply will be reconnected to the load.

Engine cooling-off timer

After the load has been transferred to the incoming supply the engine will run without load for a period to cool off and then stop.

A timer, software adjustable in the controller from 5 to 10 min is required.

Repeat- start control

A repeat- start control is required in the controller software adjustable so that in the event of the engine falling to start on the first start attempt, the starter motor will be released and repeat the start attempt. The repeat-start attempt will be repeated 3 times.

The duration of each start attempt will be 6 sec with a period of 15 sec between successive start attempts.

Should the engine fail to start after the third start attempt, the controller will transmit a signal for alarm purposes.

In addition to the requirement for the switchboard instruments listed elsewhere in this document metering will also form part of the modular generator set controller and must be accessible on the software.

The modular generator set controller shall display the following alarm/status indications:

- High engine temperature.
- Low Oil pressure
- High/low alternator output voltage
- Over and under speed (frequency)
- Low water level
- Emergency stop activated
- Mains fail
- Battery charger fail
- Dummy load in operation (When provided)
- Unit not in Auto
- Engine running
- Low fuel alarm
- Engine start failure

Conditions one to six above will stop the engine.

The Contractor shall provide a remote alarm mimic panel and the associated control wiring for the set. The panel shall be installed in the duty/security room at the entrance to the building approximately 70m from the generator set position.

The mimic panels must fit into furniture and blend with the design. Before manufacture, the Contractor shall submit and obtain the approval, from the Engineer, for the mimic panel.

The remote alarm must have potential free relay contacts which shall indicate the following on each set:

- 1) Mains on/off
- 2) Alternator-running
- 3) Common fault alarm
- 4) Buzzer which can only be reset at the generator panel
- 5) Fuel low

The cable between the remote alarms is to be a signal cable with a screen and this option must be able to operate from a 12 / 24 V dc supply so that it can be powered from the generator set batteries.

A facility to originate a fault message should a warning or shutdown fault occur.

A facility to allow the mode of the control system to be changed to any of the four modes to allow the set to be run from a remote location.

A facility to originate a call to the control cellular and to transfer a fault message should a warning or shutdown fault occur. The alarm conditions above from the controller will be extended to four relays with a make and break contact and terminal strip to allow for remote monitoring of the following alarms:

- Mains fail
- Standby run
- Standby fail
- Low Fuel

A remote start facility must be supplied, software controllable in the controller.

All events relating to the status of the generator set shall be logged with date and time in a non-volatile memory (which can retain information for a period of 6 months in the absence of power to the controller) and the user shall be able to contain a hard copy on site.

The modular generator set controller system must be able to operate with a minimum DC supply voltage of 4 volts (without making use of either an internal or an external auxiliary battery) to allow cranking and starting under conditions of low battery capacity. Control cables between the set and the control panel shall be fitted with sockets for ease of undoing in the event the modular generator set controller has to be removed.

2.3.5. Manual Starting

Each switchboard shall be equipped with two pushbuttons marked "START" and "STOP" for manual starting and stopping of the set.

2.3.6. Battery Charging Equipment

Each switchboard shall be equipped with battery charging equipment.

The charger shall operate automatically in accordance with the state of the battery and shall generally consist of an air-cooled transformer, a full wave solid state rectifier, and the necessary automatic control equipment of the constant voltage system.

The charger must be fed from the mains. An engine driven alternator must be provided for charging the battery while the set is operational. Failure of this alternator must also activate the battery charger failure circuit.

The starter battery voltage will be software monitored by the modular generator set controller. The voltage will be digitally displayed.

2.3.7. Switchboard Instruments

Each generating set shall have a switchboard equipped as follows:

- a) One flush square dial voltmeter, reading the alternator voltage, scaled as follows:
- (i) 0-300V for single phase generators.
- (ii) 0-500V for three phase generators. In this case a six position and off selector switch must be installed for reading all phase and phase to neutral voltages.
- b) A flush square dial combination maximum demand and instantaneous ampere meter for each phase, with resettable pointer suitably scaled 20% higher than the alternator rating. A red arc stripe above scale markings from 0-20A and a red radial line through the scale at full-load current, shall be provided. This instrument shall be supplied complete with the necessary current transformer.
- c) One flush square dial vibrating type frequency meter, indicating the alternator frequency.
- d) A six-digit running hour meter with digital counter, reading the number of hours the plant has been operating. The smallest figure on this meter must read 1/10 hour.
- e) Fuses or m.c.b.'s for the potential voltage circuits of the meters.
- f) One flush square dial ampere meter suitably scaled for the battery charging current.
- g) One flush square dial voltmeter with a spring loaded pushbutton or switch for the battery voltage.

2.3.8. Marking

All labels, markings or instructions on the switchgear shall be in English.

2.3.9. Earthing

An earth bar must be fitted in the switchboard, to which all non-current carrying metal parts shall be bonded.

The neutral point of the alternator must be solidly connected this bar by means of a removable link labelled "EARTH". Suitable terminals must be provided on the earth bar for connection of up to three earth conductors, which will be supplied and installed by others.

2.3.10. Operation Selector Switch

A four-position selector switch must be provided on the switchboard marked "AUTO", "MANUAL", "and TEST" and "OFF".

With the selector on "AUTO", the set shall automatically start and stop, according to the mains supply being available or not.

With the selector on "TEST", it shall only be possible to start and stop the set with the pushbuttons, but the running set shall not be switched to the load.

With the selector on "MANUAL", the set must take the load when started with the pushbutton, but it must not be possible to switch the set on to the mains, or the mains onto the running set.

With the selector on "OFF", the set shall be completely disconnected from the automatic controls, for cleaning and maintenance of the engine.

2.3.11. Automatic Change-over System

A fully automatic change-over system must be provided to isolate the mains supply and connect the standby set to the outgoing feeder in case of a mains failure and reverse this procedure on return of the mains

The contactors for this system must be electrically and mechanically interlocked.

2.3.12. By-pass Switch and Main Isolator

The switchboard shall be equipped with an on-load isolator to isolate the mains and a manually operated on-load 4 pole 4 position by-pass switch, which shall switch the connected loads as follows:

NORMAL: will allow for the normal connection i.e. connects the incoming mains to the Automatic control gear or directly to the outgoing feeder.

In the GEN BY-PASS position the switch will disconnect the automatic changeover control gear, and will connect the municipal mains directly the essential supply busbar which will allow for the maintenance of either or both the generator and the automatic changeover equipment.

MAINS BY-PASS switching position would allow the generator to be connected directly to the essential supply busbar. This is when there is a problem with the automatic changeover equipment and there is no municipal power available.

The final position is an OFF position which will remove all power downstream of this switch.

It is required that this by-pass switch and mains isolator be mounted away from the automatic control gear, in a separate compartment, either on the side or in the lower portion of the switchboard cubicle, and that the switches are operated from the front of the compartment.

Contractor to note: The by-pass and mains isolator switch shall also break the main neutral.

2.3.13. Start Delay

Starting shall be automatic in event of a mains failure. A 0-15 second adjustable start delay timer shall be provided to prevent start-up on power trips or very short interruptions.

2.3.14. Stop Delay

A stop delay with timer is required for the set, to keep the set on load for an adjustable period of one to sixty seconds after the return of the mains supply, before changing back to the supply. An additional timer shall keep the set running for a further adjustable cooling period of 5 to 10 minutes at no-load before stopping.

2.4. Installation

Except for the supply of the incoming mains cable and outgoing feeder cables, the tenderer must include for the complete installation and wiring of the plant in running order, including the connection of the incoming cable and outgoing feeder cables.

The connecting of the cable and control cabling to the generator and the control terminals in the LV board remains the responsibility of the tenderer.

2.5. Warning Notices

Notices, in English, must be installed on the outside of the steel enclosure.

The successful tenderer must consult the Occupational Health and Safety Act 83 of 1993 and get approval of the wording from the Department's representative, prior to ordering the notices.

The notice shall be made of a non-corrodible and non-deteriorating material, preferable plastic, and must read as follows:

DANGER: This engine will start without notice. Turn selector switch on control board to "OFF" before working on the plant.

An engraved label shall be installed next to the fuel cap that indicates the following:

Base Tank Capacity
Bulk Tank Capacity (if provided)
Full load litres per hour consumption

2.6. Construction

The engine and alternator of the set shall be built together on a common frame, which must be mounted on a skid base on anti-vibration mountings. The set must be placed inside an IP65 canopy/container. A drip tray must be fitted under the engine. The tray must be large enough to catch a drip from any part of the engine.

The frame must be of the 'DUPLEX' type.

2.7. Operation

The set is required to supply the lighting and power requirements in the case of a mains power failure.

The set shall be fully automatic i.e. it shall start when any one phase of the main supply fails or get switched and shall shut down when the normal supply is re-established. In addition, it shall be possible to manually start and stop the set by means of pushbuttons on the switchboard.

The automatic control shall make provision for three consecutive starting attempts. Thereafter the set must be switched off, and the start failure relay on the switchboard must give a visible and audible indication of the fault.

To prevent the alternator being electrically connected to the mains supply when the mains supply is on and vice versa, a safe and fail proof system of suitably interlocked contactors shall be supplied and fitted to the changeover switchboard.

SECTION 3 – TECHNICAL SPECIFICATION (TO BE COMPLETED BY CONSULTING ENGINEER)

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3. SECTION 3 - TECHNICAL SPECIFICATION

3.1. General

Supply, deliver, install, commission, test and maintain an emergency generating set at Mganduli Prison.

This installation must comply fully with all the sections and drawings of this document. This technical specification is supplementary to the Equipment Requirements, Section 2, and must be read together where they are at variance the Technical Specification shall apply.

Supply, delivery, installation and commissioning of the complete outdoor emergency generator set inside an IP65 canopy/container on a concrete plinth as specified in this document and indicated on the drawings.

Concrete plinth to be provided as per attached drawing No. EE 010058/GB/03

The surface of the concrete plinth shall be 50mm higher than the existing ground level. The thickness and strength of the plinth shall be designed by the consulting engineer and are detailed on the drawings.

A tap to be provided to drain all the water that accumulates inside the bund wall. Final position of the tap will be determined on site. It is the engineer's responsibility to ensure plinth design complies with generator dimensions and weights. The bund wall shall contain 110% of the fuel, oil and water capacity of the generator. The bund wall shall not constrain the canopy doors from opening completely.

The contractor shall install an earthing system in the concrete plinth. The contractor shall install two (2) earth studs 1.8 meters long on opposite corners of the concrete plinth into the ground. The earth studs shall be connected by means of a 70mm2 bare copper earth wire to the main earth bar in the control panel. The earth conductor shall be connected to the earth bar, canopy, bass, skid and earth bar by means of suitably crimping lugs and brass bolts.

3.2. Site Information and Conditions

3.2.1. Location

The site is at Willowvale Town under Mbashe Municipality.

Location

Latitude: 31°57'46.00"Longitude: 28°45'42.00"

3.2.2. Site Conditions

The following site conditions will be applicable and equipment shall be suitably rated to develop their assigned rating and duty at these conditions.

a) Height above sea level
 b) Maximum ambient temperature
 c) Maximum ambient humidity at lowest temperature
 334 Meter
 29 °C
 16 %

3.3. Output and Voltage

After the de-rating factors for the engine and generator due to site conditions have been taken into account, the set must have a site output and voltage as follows: -

No load voltage : 400/230 Volt
Rating : 100 kVA
Power at 0.9 power factor : 85 kW
Frequency : 50Hz
Fault Level : 15kA

The generating set is required to feed the following electrical load:

Load 85 kva Power =76.5 KW Power factor=.0.9

- Security lighting
- Fluorescent lighting
- · Plugs, Geyser
- Computers & radios
- · Water Pump and Kitchen Equipment.
- Administration Office

3.4. Switchboard/Control Panel Unit

All switch- and control gear shall be rated for a fault current level of 15kA.

The switchboard/control panel unit shall be enclosed in the IP65 canopy/container.

3.5. Cables

The contractor will be responsible for all electrical cable connections associated with the complete generating set installation.

The following cables will be supplied, installed and terminated at the Switchboard by others. Adequate provision shall be made for the termination of these cables at the Switchboard:

DB fed PVC PVC SWA PVC Cable 1 x 70mm² 4-core PVC/SWA/PVC cable and 35mm² BCEW Core cable.

3.6. Engine

A sump drainpipe must be fitted with a shut-off valve placed in a convenient position outside the base frame to facilitate drainage.

Recommended oil types must be indicated on the engine, or base frames, by means of suitable labels.

All engine instruments shall have clear markings on the faceplates, indicating the normal operating zone(s), maximum and minimum allowable values/limits and danger zone(s).

The flywheel shall be covered by approved hoods.

3.7. Alternator

The Alternator shall be of the low harmonic type.

3.8. Load Acceptance

The generator set shall be capable of accepting 75% of the specified site electrical output 10 seconds after the starter motor is energised and the remaining 25%, 5 seconds thereafter, i.e. 100% load acceptance shall not exceed 15 seconds.

3.9. Enclosure

The standby set is a free-standing unit and shall be mounted in an enclosure as detailed below: -

3.9.1 General

The enclosure, shall be completely vermin-proof, powder coated and shall be constructed of 3CR12 stainless steel or within 50km from the coast with grade 316 steel housing of a minimum thickness of ±1.5 mm.

The enclosure shall allow easy access to the engine, alternator, radiator filler cap and control cubicle for maintenance purposes.

The door shall be flush with the rest of the canopy and of the side opening type. A minimum of four doors are required i.e. two on either side.

The door hinges and locking bars shall be of a heavy-duty type and be manufactured of 3CR12 stainless steel or within 50km from the coast with grade 316 steel and shall be fitted with a grease nipple.

The doors and panels shall be suitably braced and stiffened to ensure rigidity and to prevent bending and warping.

Suitable door restraints shall be fitted to all the doors, enclosure including the control panel to prevent wind damage. The restraint shall consist of a steel rod in a steel groove or slide with a spring-loaded catch, which is to be manually reset to close the door.

No flexible restraints will be accepted.

The diesel fuel level indicator and alternator rating plate shall be clearly visible with the doors open.

Unless specified the silencers shall be mounted within the enclosure.

Perforated sheeting shall be fitted over all the insulating material inside the canopy of all soundproof sets.

Rubber seals on doors shall be equal to or similar to rubber pinch weld, wind lace.

9.2 Design

The enclosure shall be designed to be weather-proof and sound-proofing as specified. Rivets or self-tapping screws will under no circumstances be allowed for fixing the various sections of the enclosure. Only cadmium coated nuts and bolts are acceptable.

9.3 Roof

The roof of the enclosure shall be constructed for proper drainage of water as per the drawing.

9.4 Lamp fitting

A lamp fitting and it's associated on/off door switch shall be provided inside the enclosure for illumination of the control panel. The power for the lamp shall be obtained from the starter battery.

9.5 Sound-proofing

The sound-proofing on canopy engine sets shall be such that the maximum noise level generated by the set under any load condition shall not exceed 65 dB measured in any direction at a distance of 5m from the centre of the set with the doors closed.

The supply and discharge air paths will require separate attenuators on soundproof sets.

9.6 Padlock and keys

The contractor shall supply padlocks and keys for all the doors of the enclosure. The padlock shall be off the "Viro A82 keyed alike with stainless steel shackles" type.

Suitable brass metal plates shall be installed behind each lock for the protection of the enclosure against scratching or damaging, where the locks are hanging.

3.10. Alarms

The successful tenderer must pay particular attention to the requirements of the alarms as described in the Equipment Requirements, Section 2.

One alarm hooter and red light shall be supplied and installed on the outside of the generator container in a position as indicated by the Department's Representative.

The hooter shall consist of an electronic unit similar and equal to a "Klaxon" - type SY2/725 hooter with a continuously rated output and 110 dB at a distance of 2 metres, and shall be IP55 weatherproof rated.

The warning light shall consist of a 40W flashing red light, which shall be mounted on a galvanised steel frame together with the hooter.

The hooter and light shall be switched on or off simultaneously after initiation or cancellation of an alarm condition. The supply and installation of the wiring between the control board and the alarm unit forms part of this contract.

The successful tenderer must ensure that the hooter control circuit resets automatically after cancellation due to a low fuel condition or battery charger failure, but the visible fault indication must remain, i.e. should the operator continue to run the set, the hooter must sound, should any other condition develop.

A remote alarm panel shall be supplied and installed by the contractor in the control room. This shall be of surface mounting, enamelled sheet metal (colour to approval), minimum depth construction, and shall incorporate a flashing red pilot alarm light, adjustable electronic sounder, and a silence push button. The silence button shall not switch off the pilot light - this shall only be switched off when the alarm is reset at the Generator Panel.

A 2,5mm² x 4-core PVC SWA PVC cable will be supplied, installed and terminated by others between the Generator Panel and the Charge Office. The Contractor shall connect this cable at both ends and shall supply and install all switch gear relays, etc. to ensure satisfactory operation of the Remote Alarm Panel.

3.11. Remote Control Generator Switch

A Remote-Control Generator "ON/OFF/AUTO" switch will be supplied and installed by others in the control room, and a 2,5mm² x 4-core PVC SWA PVC cable will be supplied and installed by others between the control room and the Generator Panel.

The contractor shall connect this cable at both ends, and shall supply and install all switch gear, relays, etc. to ensure satisfactory operation of the remote-control switch.

3.12. Fuel Drip Tray

A drip tray approximately 100mm deep shall be mounted below the generator and must be large enough to collect any fuel that drips from the generator fuel accessories. The drip tray shall be manufactured from black mild steel. The thickness of the drip tray sheet steel shall not be less than 2mm.

3.13. Completion Time

The Generator Set is required to be commissioned in conjunction with the building contract.

3.14. Inform

The successful tenderer shall inform the Engineer when the set is ready for installation.

3.15. Fuel Supply Tank

The fuel tank shall be an integral part of the base frame of the generator set. The tank shall have sufficient capacity to run the engine on full load for a period of 24 hours. The base tank shall be an open channel self-bund walled type that shall be of sufficient capacity to contain a spillage equivalent to 110% in volume of the base tank. The containment tank shall be manufactured from black mild steel with a thickness of not less than 2mm.

A float level alarm connected to the generator controller shall be incorporated into the bund area located such that the alarm will be activated when 50% of the volume of the bund area has been reached in the event of any diesel fuel leakage.

SECTION 4 – SCHEDULES OF TECHNICAL INFORMATION (TO BE FULLY COMPLETED BY TENDERER)

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4. SECTION 4 - SCHEDULES OF TECHNICAL INFORMATION

4.1. Engine

NO	ITEM	REMARKS		
1∞	Manufacturer's Name			
2.	Country of Origin			
3.	Manufacturer's model No. and year of manufacture			
4.	Continuous sea level rating after allowing for ancillary equipment : a) In b.h.p.			
	b) In kW			
5.	Percentage de-rating for site conditions, in accordance with SANS 8528			
	a) For altitudeb) For temperaturec) For humidityd) Total de-rating			
6.	Net output on site in kW			
7.	Nominal speed in r.p.m.			
8.	Number of cylinders			
9.	Strokes per working cycle			
10.	Stroke in mm			
11.	Cylinder bore in mm			
12.	Swept volume in cm ³			
13.	Mean piston speed in m/min			
14.	Compression ratio			
15.	Cyclic irregularity			
16.	Fuel consumption of the complete generating set on site in I/h of alternator output at :			
	a) Full load b) ¾ load c) ½ load			
	NOTE :			
	A tolerance of 5% shall be allowed above the stated value of fuel consumption.			
17.	Make of fuel injection system.			
18.	Capacity of fuel tank in litres			
19.	Is gauge glass fitted to tank?			
20.	Is electric pump for filling the fuel tank included?			

4.2. Alternator

NO	ITEM	REMARKS			
1.	Maker's name and model no.				
2.	Country of Origin and year of manufacture				
3.	Type of enclosure				
4.	Nominal speed in r.p.m.				
5.	Number of bearings				
6.	Terminal voltage				
7.	Sea level rating kVA at 0,9 power factor				
8.	De-rating for site conditions				
9.	Input required in kW				
10.	Method of excitation				
11.	a) Full load b) ¾ load c) ½ load				
12.	Maximum permanent voltage variation in %				
13.	Transient voltage dip on full load				
14.	Voltage recovery on full load application in milli- seconds				
15.	Is alternator brushless?				
16.	Class of insulation of windings				
17.	Is alternator tropicalised?				
18.	Symmetrical short circuit current at terminals n Ampere				
19.	Type of Coupling				

4.3. Switchboard

NO	ITEM	REMARKS
1.	Maker's Name	
2.	Country of Origin	
3.	Is board floor mounted?	
4.	Finish of board	
5.	Make of volt, amp, and frequency meters	
6.	Dial size of meters in mm	
7.	Scale range of voltmeter	
8.	Scale range of ammeters	
9.	Ration of current transformers	
10.	Make of hour meter	
11.	Range of cyclometer counter	
12.	Smallest unit shown on counter (Item 11)	
13.	Make of circuit breaker	
14.	Type of circuit breaker	
15.	Rating of circuit breaker in Amp and fault level in kA	
16.	Setting range of overload trips	
17.	Setting range of instantaneous trips	
18.	Make of change-over equipment	
19.	Make of voltage relay	
20.	Is control and protection equipment mounted on a small removable panel?	
21.	Type of control equipment	
22.	Make of mains isolator	
23.	Type of indicators for protective devices	
24.	Make of rectifier	
25.	Type of rectifier	
26.	Is battery charging	
27.	Are volt- and ammeters provided for charging circuit?	
28.	Is the alarm hooter of the continuous duty type?	
29.	Rating in Amps of : a. Change-over equipment b. Mains on load isolator c. By-pass switch d. Circuit breaker to outgoing feed	
30.	Is manufacture of switchboard/control panel to be sub-let?	

NO	ITEM	REMARKS
31.	If yes, state name and address of specialist manufacturer	

4.4. Battery

NO	ITEM	REMARKS
1	Maker's Name	
2.	Country of Origin	
3.	Type of battery	
4.	Voltage of battery	
5.	Number of cells	
6.	Capacity in cold crank amp	

4.5. Dimensions

NO	ITEM	REMARKS
1∞	Overall dimensions of set in mm	
2.	Overall mass	
3.	Is the canopy/container adequate for the installation of the set, switch board and fuel tank	

4.6. Deviation from the Specification as an Alternative (State Briefly)

NO	DESCRIPTION	

4.7. Spare Parts and Maintenance Facilities

NO	ITEM	REMARKS
1	Approximate value of spares carried in stock for this particular diesel engine and alternator	
2	Where are these spares held in stock	
3	What facilities exist for the servicing of the equipment offered	
4	Where are these facilities available	

SECTION 5 – PRICE SCHEDULES

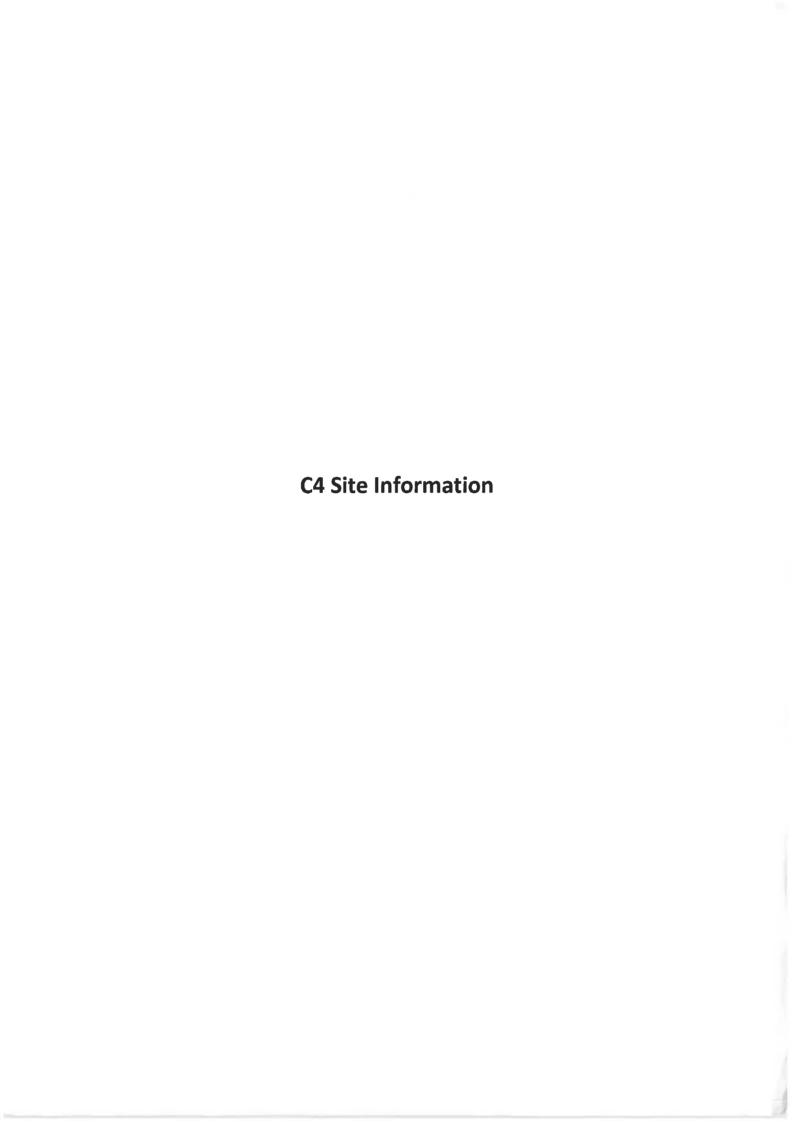
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5.3.	Summary of Schedules of Quantities	Error!	Bookmark	not d	efined.

5. SECTION 5 - PRICE SCHEDULES

5.1. General

- 1) The conditions of contract and the application of the Contract Price Adjustment Provisions shall be as set out in Part A: Section 1: Preliminaries.
- 2) The descriptions in this Price Schedule shall be read in conjunction with the specification.
- 3) The unit rate for each item in the Price Schedules shall include for all materials, labour, profit, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description.
- 4) The Price Schedules shall not be used for ordering purposes. The Contractor shall check the lengths of cables and overhead conductors on site before ordering any of the cables. Any allowance for off-cuts shall be made in the unit rates.
- 5) The rates shall <u>exclude</u> Value Added Tax and the total carried over to the final summary in PART A.
- 6) All material covered by this Specification shall, wherever possible, be of South African manufacture.





PG-03.1 (EC) SITE INFORMATION - GCC (2010) 2nd Edition 2010

Project title:	Willowvale prison: installation of standby generator				
Tender no:	MTH11/2022	WCS no:	049507	Reference no:	

C4 Site Information