

PA-03 (EC): NOTICE AND INVITATION FOR QUOTATION

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES QUOTATIONS FOR:

Project title: ATLANTIS LABORIA BUILDING INSTALLATION OF STANDBY GENERATOR				
Quotation no:	DPW09/25 Reference no: 6508/7642/1		6508/7642/1	
Advertising date:	03 July 2025 Closing date:		17 July 2025	
Closing time:	11:00	Validity period:	84 Calendar days	

1. REQUIRED CIDB GRADING

It is estimated that tenderers should have a CIDB contractor grading designation of **2 EB** or higher, or **2 EB** * or higher.

It is estimated that potentially emerging enterprises should have a CIDB contractor grading designation of **Not applicable Not applicable PE** or higher, or **Not applicable Not applicable PE*** or higher. *Select tender value range and select class of construction works" or select "Not applicable" where no or only one class of construction works is applicable.

2. FUNCTIONALITY CRITERIA APPLICABLE YES NO NO Note 1: Failure to meet minimum functionality score will result in the tenderer being disqualified.

Functionality criteria ¹ :	Weighting factor:
N/A	N/A
Total	100 Points

3. METHOD TO BE USED TO CALCULATE POINTS FOR SPECIFIC GOALS

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 8

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^{*}Select tender value range and select class of construction works" or select "Not applicable" where only one class of construction works is applicable.

¹The points allocated to each functionality criterion should not be generic but should be determined separately for each tender on a case by case basis.



3.1. For procurement transaction with rand value greater than R2 000, 00 and up to R1 Million (Inclusive of all applicable taxes) the specific goals listed in table 1 below are applicable.

Serial No	Specific Goals	Preference Points Allocated out of 20	Documentation to be submitted by bidders to validate their claim
1.	An EME or QSE which is at least 51% owned by black people (Mandatory)	10	SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area (Mandatory)	2	 Official Municipal Rates Statement which is in the name of the bidder. Or Any account or statement which is in the name of the bidder. Or Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder.
	A. FME as OOF which is at		Lease Agreement which is in the name of the bidder.
3.	An EME or QSE which is at least 51% owned by black women (Mandatory)	4	 SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
4.	An EME or QSE which is at least 51% owned by black people with disability (Mandatory)	2	SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. and
			 Medical Certificate indicating that the disability is permanent. Or
			 South African Social Security Agency (SASSA) Registration indicating that the disability is permanent.
			 National Council for Persons with Physical Disability in South Africa registration (NCPPDSA).
5.	An EME or QSE which is at least 51% owned by black youth (Mandatory)	2	 ID Copy and SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.

Black people mean Africans, Coloureds and Indians, who - (a) are citizens of the Republic of South Africa by birth or descent; or (b) became citizens of the Republic of South Africa by naturalisation - (i) before 27 April 1994; or (ii) on or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalisation prior to that date. (BROAD-BASED BLACK ECONOMIC EMPOWERMENT ACT No 25899, 2003 of

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9 JANUARY 2004).

4. RESPONSIVENESS CRITERIA

4.1. Indicate substantive responsiveness criteria applicable for this tender. Failure to comply with the criteria stated hereunder shall 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	\boxtimes	Tender offer must be properly received on the tender closing date and time specified on the invitation, 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		Submission of a signed bid offer as per the DPW-07 (EC).
5		Submission of DPW-09 (EC): Particulars of Tenderer's Projects.
6	\boxtimes	Bidders must comply with DPW-21 (EC): Record of Addenda to tender documents, if any.
7		Submission of DPW-16 signed by the authorised official and completion of bid briefing attendance register.
8	\boxtimes	The tenderer shall submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts) together with his tender.
9		The tenderer shall submit his fully priced and completed sectional summary- and final summary pages with the tender.
10		
11		
12		
13		
14		
15		

4.2. Indicate administrative responsiveness requirements applicable for this tender.

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 will disqualify the tender offer from further consideration.

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1	\boxtimes	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	\boxtimes	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		All parts of tender documents submitted must be fully completed in ink and signed where required.
4		Submission of (PA-11): Bidder's disclosure
5		Submission of PA-16.1 (EC): Ownership Particulars
6	\boxtimes	Submission of documentation relating to risk assessment criteria as contained in C 2.1 of DPW-03 Tender Data.
7		Submission of (PA 40): Declaration of Designated Groups.
8	\boxtimes	Submission of proof of Registration on National Treasury's Central Supplier Database (CSD). Insert the Supplier Registration Number on the form of offer, including proposed sub-contractors if any
9		Data provided by the tenderer in Part 2 of DPW-04 Contract Data (JBCC 2018) or DPW-05 Contract Data (GCC 2015) whichever applicable to be fully completed.
10	\boxtimes	The tenderer shall submit his fully priced Bills of Quantities (complete document inclusive of all parts) within 14 calendar days from request.
11		Upon request, submission of fingerprints obtainable from local SAPS including any other additional documentation and information required for vetting purposes.
12		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.
13		
14		
15		
16		
17		
18		

4.3. Indicate administrative requirements applicable for specific goals, Tenderers will not be required to submit the below documents if not provided in the original tender proposals, Failure to comply with the criteria stated hereunder shall result in the tenderer not allocated points for specific goals

1	\boxtimes	Submission of (PA-16): Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022
2		A trust, consortium or joint venture (including unincorporated consortia and joint ventures) must submit a consolidated B-BBEE Certificate issued by a SANAS accredited service provider



THE FOLLOWING EVALUATION METHOD FOR RESPONSIVE BIDS WILL BE APPLICABLE:

	Y
☐ Method 1 (Financial offer)	Method 2 (Financial and Preference offer)

5.1. This bid will be evaluated according to the 80/20 Preference points scoring system:

ELIGIBILITY IN RESPECT OF RISK TO THE EMPLOYER:

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

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

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

6.1 Technical risks:

Criterion 1: Experience on comparable projects during the past 10 years.

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

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

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

Adherence to contractual commitments and quality of performance of comparable current and previous projects performed by the Tenderer during the past 10 years as per the evaluation report prepared by the Consultant Team, based on its research and inspection of a representative sample of the Tenderer's current and previous work as reflected on form DPW-09 (EC), as well as, if necessary, of any additional work executed by the Tenderer.

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;

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- Quality of workmanship: extent of reworks and timeous attention to remedial works:
- 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;
- Sub-contractors: extent of turnover in subcontractors, general liaison and payment problems 8. experienced:
- Contract administration: contractual aspects such as complying to laws and regulations, insurances, 9. 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.
- Delays: extent of causing delays, submission of claims timeously, and abuse of or exaggerated delay
- 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.

6.2 Commercial risks:

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

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

7. COLLECTION OF QUOTATION DOCUMENTS

	Quotation documents are available for collection during working hours
\boxtimes	Alternatively; quotation documents may be collected during working hours at the following address Bid documents are available for free download on Public Works: www.publicworks.gov.za . A non-refundable bid deposit of R 0.0 payable (cash only) on collection of the bid documents.

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8. SITE INSPECTION MEETING

Compulsory briefing session will be held in respect of this quotation.

The particulars for compulsory briefing session or virtual briefing session are:

Venue:	N/A		
Virtual meeting Link:	N/A		
Date:	N/A	Starting time:	N/A

9. ENQUIRIES

9.1. Technical enquiries may be addressed to:

DPWI Project Manager	Patrick Phaswana	Telephone no:	072 449 2990
Cellular phone no	072 449 2990	Fax no:	N/A
E-mail Patrick.phaswana@dpw.gov.za			

9.2. SCM enquiries may be addressed to:

SCM Official	Telephone no:	
Cellular phone no	Fax no:	
E-mail	"	

10. DEPOSIT / RETURN OF QUOTATION 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).

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Tender documents may be posted to:

The Director-General Department of Public Works and Infrastructure Private Bag X N/A

N/A

N/A

Attention:

Procurement section: Room N/A

Deposited in the tender box at:

Hand Deliver Only at: Quotation Box Ground Floor Customs House Building

Heerengracht Street, Foreshore

Cape Town

OR

Ground Floor Securiy



PA-09 (EC): LIST OF RETURNABLE DOCUMENTS

Project title:	ATLANTIS LABORIA BUILDING INSTALLATION OF STANDBY GENERATOR			
Tender / Quote no:	DPW09/25	Reference no:	6508/7642/1	
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.

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

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



Tender no: DPW09/25

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

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

OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT (Insert a tick in the "Returnable document" column to indicate which documents must be returned with the tender)

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

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

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Tender no: DPW09/25

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

Legal	Status of Tendering Entity:	Documentation to be submitted with the tender, or which may be required during the tender evaluation:
If the	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



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

Project title: ATLANTIS LABORIA BUILDING INSTALLATION OF STANDBY GENERATOR				
Tender / Quotation no:	DPW09/25		Reference no:	6508/7642/1
OFFER				
The Employer, identified ir procurement of:	n the acceptance signature	e blocl	k, has solicited offers	to enter into a contract for the
INSTALLATION OF STANI	DBY GENERATOR IN ATL	ANTIS	LABORIA BUILDING	
The Tenderer, identified in the thereto as listed in the return				d in the tender data and addenda t the conditions of tender.
acceptance, the Tenderer of	offers to perform all of the Il its terms and conditions a	obligat accordi	ions and liabilities of th ing to their true intent a	s part of this form of offer and e Contractor under the contract and meaning for an amount to be a.
THE TOTAL OFFER INCLUS				des value- added tax, pay as you earn
Rand (in figures) R				
Rand (in words)				
		•••••		••••••
The amount in words takes precede the preferred tenderer(s). The neg				cted to further price negotiation with d final offer.
his offer may be accepted returning one copy of this de	by the Employer by signing ocument to the Tenderer be	g the a	cceptance part of this for ne end of the period of the pe	orm of offer and acceptance and validity stated in the tender data, ions of contract identified in the
THIS OFFER IS MADE BY		ENTIT		
Company or Close Corporation	on:		Natural Person or Partne	ersnip:
				32. 59
And: Whose Registration Num			Whose Identity Number(s) is/are:
		OR		
And: Whose Income Tax Refe	erence Number is:		Whose Income Tax Refe	rence Number is/are:
CSD supplier number:				
			CSD supplier number	

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

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		AN	ID WHO IS (if appl	icable):	
Trad	ing under	r the name and style of:			49.5
			AND WHO IS:		
Rep	resented l	herein, and who is duly authorised to d	o so, by:	Note:	
	Irs/Ms:			Directors / Members / F	Attorney, signed by all the Partners of the Legal Entity
In hi	s/her cap			Representative to make this offer.	
SIGN	ED FOR	THE TENDERER:			
A .					
	N	ame of representative	S	ignature	Date
WITN	IESSED	BY:			
		Name of witness	S	ignature	Date
The c	official do official alt	n respect of: (Please indicate with a cuments ernative ve (only if documentation makes pro			(N.B.: Separate Offer and Acceptance forms are to be completed for the main and for each alternative offer)
SECL	JRITY O	FFERED:			
(a) (ပ)	(exclud	enderer accepts that in respect of cording VAT) will be applicable and will be bect of contracts above R1 million, the	e deducted by the E	Employer in terms of the app	licable conditions of contract
(0)	(1)	cash deposit of 10 % of the Contrac			Yes No
	(2) variable construction guarantee of 10 % of the Contract Sum (excluding VAT) Yes No			Yes 🗌 No 🗌	
	(3)	payment reduction of 10% of the val	ue certified in the p	payment certificate (excludin	g VAT) Yes 🗌 No 🗌
	(4)	cash deposit of 5% of the Contract S of the value certified in the payment			of 5% Yes No
	(5)	fixed construction guarantee of 5% of reduction of 5% of the value certifie			went 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 proforma will be accepted.

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



The Tenderer elects as its <i>domicilium citandi et ex</i> notices may be served, as (physical address):	xecutandi in the Republic of South Africa, where any and all legal
Other Contact Details of the Tenderer are:	
Telephone No	ellular Phone No.
Fax No	
Postal address	
Banker	Branch
Registration No of Tenderer at Department of Labor	ur
CIDB Registration Number:	
ACCEPTANCE	
By signing this part of this form of offer and accepta	nce, 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 greement. No amendments to or deviations from said documents are valid unless contained in this schedule.

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

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

For the Employer:		
Name of signatory	Signature	Date

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



Name of Organisation:	Department of Public Works and Infrastructure			
Address of Organisation:				
WITNESSED BY:				
Name of witne	SS	Sign	ature	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:				
1.1.6. Subject:				
Detail:				

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

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

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

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

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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

	who is employed by the procuring institution?	YES / NO
2.2.1	If so, furnish particulars:	
2.3	Does the bidder or any of its directors / trustees / shareholders / members or any person having a controlling interest in the enterprise have any interest other related enterprise whether or not they are bidding for this contract?	•
0.0.4		TES/NO
2.3.1	If so, furnish particulars:	
		•••••••••
3 D	ECLARATION	
	I, the undersigned, (name)in submitting the accompanying bid, do hereby make the following staten certify to be true and complete in every respect:	

Do you, or any person connected with the bidder, have a relationship with any person

- 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 consortium 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.
- 3.5 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.
- 3.6 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.

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 5 July 2022

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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.



3.7 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.

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



PA-15.1: RESOLUTION OF BOARD OF DIRECTORS

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

(Lega	ally correct full name and registration numb	er, it applicable, of the Enterprise)			
Held	d at	(place)			
on		(date)	_ (date)		
RES	SOLVED that:				
1.	The Enterprise submits a Bid / Tender to the Department of Public Works in respect of the following project:				
13	(Project description as per Bid / Tender Do	cument)			
	Bid / Tender Number:	(Bid / Tend	der 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:				
	correspondence in connection with any and all documentation, result above.	n and relating to the Bid / Tender, as ing from the award of the Bid / Ten	well as to sign any Contract, and ider to the Enterprise mentioned		
	Name	Capacity	Signature		
	1				
	2				
	3				
4	4				
	5				
	6				
	7				
	8				
	9				
1	0				
1	1				
1	2				
1	3				
1	4				
1	5				
1	6				



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

No	te:	ENTERPRISE STAMP
1. 2.	* Delete which is not applicable. NB: This resolution must, where possible, be signed by <u>all</u> the Directors / Members / Partners of the Bidding Enterprise.	
3.	In the event that paragraph 2 cannot be complied with, the resolution must be signed by Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (attach proof of shareholding / ownership hereto).	
4.	Directors / Members / Partners of the Bidding Enterprise may alternatively appoint a person to sign this document on behalf of the Bidding Enterprise, which person must be so authorized by way of a duly completed power of attorney, signed by the Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (proof of shareholding / ownership and power of attorney are to be attached hereto).	
5.	Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.	



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

RE	ESOLUTION of a meeting of the Board of *Directo	rs / Members / Partners of:
(Le	egally correct full name and registration number, if applicable, o	f the Enterprise)
Не	eld at	(place)
on		(date)
RE	ESOLVED that:	
1.	The Enterprise submits a Bid /Tender, in consortiu	m/Joint Venture with the following Enterprises:
	(List all the legally correct full names and registration numbe Venture)	rs, if applicable, of the Enterprises forming the Consortium/Joint
	to the Department of Public Works in respect of	he 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 consortiuitem 1 above, and any and all other documents a the consortium/joint venture, in respect of the pro-	m/joint venture agreement with the parties listed under nd/or correspondence in connection with and relating to ject described under item 1 above.
3.	The Enterprise accepts joint and several liability with of the obligations of the joint venture deriving from, into with the Department in respect of the project of	n the parties listed under item 1 above for the due fulfilment and in any way connected with, the Contract to be entered escribed under item 1 above.
4.	The Enterprise chooses as its domicilium citandi en agreement and the Contract with the Department is	executandi for all purposes arising from this joint venture respect of the project under item 1 above:
	Physical address:	
	0 	
		(code)

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 20 September 2021

Version: 2021/01



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

Postal Address:			
-			
-	(code)		
Telephone number:			
Fax number;			

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

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

Note:

- 1. * Delete which is not applicable.
- NB: This resolution must, where possible, be signed by <u>all</u> 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

For external use

Effective date 20 September 2021

Version: 2021/01



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: (Jegally correct full names and registration numbers, if applicable, of the Enterprises forming a Consortium/Joint Venture)

	(Project description as per Bid /Tender Document) Bid / Tender Number: (Bid / Tender Number as per Bid /Tender D	
	Works in respect of the following project:	
	SOLVED that: The above-mentioned Enterprises submit a Bid in Consortium/Joint Venture to the Department of	of Public
DE	SOLVED that	
RE	SOLVED that:	
on .		_ (date)
Hel	d at	(place)
8.		
7.		
6.		
•		
5.		
4.		
3.		
۷.		
2.		
1≈		



PA-15.3: Special Resolution of Consortia or Joint Ventures

B.	*Mr/Mrs/Ms:			
	in *his/her Capacity	as:(Position in the Enterprise)		
	and who will sign as	follows:		
	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.	Any of the Enterprises to the Consortium/Joint Venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention Notwithstanding such decision to terminate, the Enterprises shall remain jointly and severally liable to the Department for the due fulfilment of the obligations of the Consortium/Joint Venture as mentioned under item D above.			
F.	Enterprises to the C	ne 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 the consortium/joint venture agreement in relation to the Contract with the to herein.		
G.	purposes arising fro	pose 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 cit under item A above:		
	Physical address:			
		(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:

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



PA- 4-J: DECLARATION OF DESIGNATED GRUUPS

Tender no: DPW09/25

Name of Tenderer						EME' QSE' [□ EME¹ □ QSE² □ Non EME/QSE (tick applicable box)	licable box)
1. LIST ALL PROP	LIST ALL PROPRIETORS, MEMBERS OR SHAREHOLDERS	R SHAREHOLD		BY NAME, IDENTITY NUMBER, CITIZENSHIP AND DESIGNATED GROUPS.	R, CITIZENSHIP	AND DESIGNATE	D GROUPS.	
Name and Surname #	Identity/ Passport number and Citizenship##	Percentage owned	Black	Indicate if youth	Indicate if woman	Indicate if person with disability	Indicate if living in Rural (R) / Under Developed Area (UD) / Township (T) / Urban (U).	Indicate if military veteran
,		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
2.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
Э		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
4.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
5.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
9.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
7.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
&		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
.6		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
10.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
11.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No		☐ Yes ☐ No
12.		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	□ R □ UD □ T □ U	☐ Yes ☐ No

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

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

PA- .0: DECLARATION OF DESIGNATED 6. OUPS

Tender no: DPW09/25

2. DECLARATION:

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;

Business Act 102 of 1996 as amended and all documents pertaining to this Tender were studied and understood and that the above form was completed according The Broad-based Black Economic Empowerment Act, 2003 (Act 53 of 2003), Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000), National Small 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

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 a less favourable tender as a result of any such disqualification due to misrepresentation or fraudulent information provided herein; be set by the latter;

Signed by the Tenderer

Date
Signature
Name of representative



DPW-05: (EC) CONTRACT DATA - GCC 2015: 3RD EDITION

Project title:	ATLANTIS L	ABORIA BUILDIN	IG INSTALLATION OF S	STANDBY GENERATOR
Tender no:	DPW09/25	WCS no:	Reference no:	6508/7642/1

The Conditions of Contract applicable to this Contract are clauses 1 to 10 and contract price adjustment schedule of the GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS, THIRD EDITION (2015) prepared by The South African Institution of Civil Engineering Private Bag X200, Halfway House, 1685.

Contractors are cautioned to read the GCC Third Edition (2015) and Contract Data [DPW-05 (EC)] together as some clauses in the GCC Third Edition (2015) have been amended in the Contract Data [DPW-05 (EC)]

Specific data, which together with these General Conditions of Contract, collectively describe the risks, liabilities and obligations of the contracting Parties and the procedures for the administration of the Contract. Clauses as amended in the Contract Data amends or replaces the corresponding clauses in the GCC Third Edition (2015).

Copies of these conditions of contract may be obtained through www.saice.org.za.

CONTRACT VARIABLES

THE SCHEDULE (Contract Data [1.1.1.8])

The schedule is the listed variables in this agreement and contains all variables referred to in this document including specific changes made to GCC Third Edition (2015) documentation. It is divided into part 1: contract data completed by the employer and part 2: contract data completed by the contractor. Part 1 must be completed in full and included in the tender documents. Both the part 1 and part 2 form part of this agreement

Spaces requiring information must be filled in, shown as 'not applicable' but not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross referenced to the applicable clause of the schedule. Key cross reference clauses are italicised in [] brackets

PART 1: CONTRACT DATA COMPLETED BY THE EMPLOYER:

PROJECT INFORMATION A

A 1.0 Works [1.1.1.35]

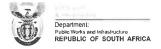
Works description Refer to document PG01.1 (EC) - Scope of Works for detailed description

INSTALLATION OF STANDBY GENERATOR IN ATLANTIS LABORIA BUILDING

For Internal & External Use

Effective date 4 August 2023

Version: 2023/04



A 2.0 Site [1.1.1.29]

Erf / stand number	
Site address	
Township / Suburb	Atlantis
City / Town	Cape Town
Province	Western Cape
Local authority	
GPS Coordinates	

A 3.0 EMPLOYER AND ITS REPRESENTATIVE

A 3.1 Employer:

Official Name of Organ of State / Public Sector Body	Government of the Republic of South & Infrastructure	vernment of the Republic of South Africa in its Department of Public Works of rastructure			
Business registration number	Not applicable	VAT number	Not applicable		
E-mail	Patrick.phaswana@dpw.gov.za	Telephone	(021) 402 2247		
Postal address	Private Bad X9027 Cape Town 8000				
Physical address	1328 Customs House Heerengracht Street Foreshore 8001				

A 3.2 Employer's Representative:

Name	N/A	Telephone number	N/A
E-mail	N/A	Mobile number	N/A
Postal address	N/A		
Physical address	N/A		



A 4.0	Employers Agen	t/s	
A 4.1	Principal Agent [1.1.1.16] Discipline	
Name			
Legal e	ntity of above		Contact person
	number		Telephone number
Country			Mobile number
E-mail			
Postal	address		
Physica	al address		
A 4.2	Agent [1.1.1.16]	Discipline	
Name			
	ntity of above		Contact person
	number		Telephone number
Country			Mobile number
E-mail		<u>.</u> = =	
Postal a	address		
Physica	l address		
A 4.3	Agent [1.1.1.16]	Discipline	
Name			
	ntity of above		Contact person
	number		Telephone number
Country	**		Mobile number
E-mail			
Postal a	address		
	I address		



Postal address

Physical address

Tender / Quotation no: DPW09/25

A 4.4	Agent [1.1.1.16]	Discipline		
Name				
Legal e	entity of above		Contact person	
	e number		Telephone number	
Countr	У		Mobile number	
E-mail				
Postal	address			
Physica	al address			
A 4.5	Agent [1.1.1.16]	Discipline		
Name				
Legal e	entity of above		Contact person	
	e number		Telephone number	
Countr	У		Mobile number	
E-mail				
Postal	address			
Physica	al address			
A 4.6	Agent [1.1.1.16]	Discipline		
Name				
	entity of above		Contact person	
	entity of above e number		Telephone number	
Country			Mobile number	
Calintr				



	Agent [1.1.1.16]	Discipline	
Name			
Legal e	ntity of above		Contact person
	e number		Telephone number
Country			Mobile number
E-mail			
Postal a	address		
Physica	ıl address		
A 4.8	Agent [1.1.1.16]	Discipline	
Name			
	ntity of above		Contact person
Legal entity of above Practice number			Telephone number
Country			Mobile number
Country E-mail			woolle number
Postal a	address		
Physic <i>a</i>	ıl address		
4.40	A 14 4 4 4 01	Disable	
A 4.9	Agent [1.1.1.16]	Discipline	
A 4.9 Name	Agent [1.1.1.16]	Discipline	
Name		Discipline	Contact person
Name Legal e	Agent [1.1.1.16]	Discipline	Contact person Telephone number
Name Legal e Practice	ntity of above e number	Discipline	Telephone number
Name Legal e Practice Country	ntity of above e number	Discipline	
Name Legal e Practice Country E-mail	ntity of above e number	Discipline	Telephone number
Name Legal e Practice Country	ntity of above e number	Discipline	Telephone number



В **CONTRACT INFORMATION**

B 1.0 **Definitions** [1.1.1.2]

Bills of quantities: System / Method of measurement **SANS 1200**

B 2.0 Law, regulations and notices [1.3.2]

Law applicable to the works [1.3.2] Law of the Republic of South Africa

B 3.0 Offer and acceptance [1.1.1.20]

Currency applicable to this agreement [1.1.1.20] South African Rand

Documents [1.1.1.7] B 4.0

The original signed agreement is to be held by the principal agent [1.1.1.7], if not, indicate by whom	Employer
Number of copies of construction information issued to the contractor at	
no cost. (3 Copies of all relevant construction documentation – this to	3
includes 1 priced Bills of Quantities and 2 unpriced Bills of Quantities)	

Documents comprising the agreement

GCC GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS, THIRD EDITION (2015)

DPW-05: (EC): GCC 2015: 3RD EDITION

The GCC General Preliminaries for use with the GCC 2015: 3RD **EDITION**

Contract participation goal documentation as further defined in clause 1.1.1.37 [CD] and B16 [CD]

Drawings as per drawing register issued with the tender

Specifications issued with the tender

Schedules issued with the tender

Bills of Quantities issued with the tender

Addenda as issued during tender stage, if applicable

As issued

Page numbers



B 5.0 Employer's agents [3.0]

Authority is delegated to the following agents to issue contract instructions and perform duties for specific aspects of the works [3.0] [3.2.3 [CD]] **Principal Agent**

Principal agent's and agents' interest or involvement in the works other than a professional interest

Insurances [8.6] **B** 6.0

Insurances by contractor

NB: Insurances 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 53 of 1998)] or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990). Insured amounts to include VAT.

	The Contract Price [8.6.1.1.1] New Works With a deductible not exceeding 5% of each and every claim [8.6.2]	Contract sum plus 10%	Select
Or	The Contract Price [8.6.1.1.1] Works with alterations and additions (reinstatement value of existing structures / works without or including new works) with a deductible not exceeding 5% of each and every claim [8.6.2]	Contract sum plus 10%	Select
Or	The Contract Price [8.6.1.1.1] Works with practical completion in sections with a deductible not exceeding 5% of each and every claim [8.6.2]	Contract sum plus 10%	Select
	Plant and materials supplied by the Employer [8.6.1.1.2]	R Eng / PQS to determine value	Select
	Professional fees not included in the Contract Price, payable in respect of the repair or reinstatement of damage to the Works or said movables, plus Escalation thereon (if not included above). Minimum R1m unless other amount indicated. [8.6.1.1.3]	R Eng / PQS to determine value	Select
	Direct contractors [8.6.1.1.2] where applicable, to be included in the contract works insurance	R Eng / PQS to determine value	Select
	Special Risks Insurance issued by Sasria [8.6.1.2]	R Eng / PQS to determine value	Select

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Public liability insurance [8.6.1.3]	R 5 000 000	Applicable
Ground support insurance [8.6.1.4]	R Eng / PQS to determine value	Select
Subcontractors insurance [8.6.3] where applicable, if not included in works insurance nor by sub-Contractors	R Eng / PQS to determine value	Select
Other insurances [8.6.1.5]		
Free issue where applicable, to be included in the contract works insurance	R Eng / PQS to determine value	Select
Hi Risk Insurance when the project is being executed in a geological area classified as a "High Risk Area" [8.6.8[CD]]	R Eng / PQS to determine value	Select
Other insurances: If applicable, description 1:	R Eng / PQS to determine value	Select
Other insurances; If applicable, description 2:	R Eng / PQS to determine value	Select

B 7.0 Obligations of the employer

Existing premises will be in use and occupied [5.4.1 & 5.4.2] If applicable, description:	Select
Restriction of working hours [5.8] If applicable, description:	Select
Natural features and known services to be preserved by the contractor [4.7] If applicable, description:	Select
Restrictions to the site or areas that the contractor may not occupy [5.4.1 & 5.4.2] If applicable, description:	Select



Supply of free issue of material and goods [8.6.1.1.2]	Amount	R	Select
If applicable, description:			

B 8.0 Subcontractors [4.4]

Select	If applicable, description of specialisation	
Specialisation 1		
Specialisation 2		
Specialisation 3		
Specialisation 4		
Specialisation 5		

B 9.0 Description of different portions of the works, if applicable [5.14.7, B10.3 [CD]]

Select	If applicable, description of sections
Section 1	
Section 2	
Section 3	
Section 4	
Section 5	
Section 6	
Remainder of th	e works.

B 10.0 Contract period [B18: 1.2], Construction period [B18: 1.1], Possession of site [5.4.1], Practical Completion [1.1.1.14, 5.14.1], Completion (Final Approval Certificate) [5.16.1] and Penalties [5.13]

B 10.1 Contract Period

Contract period: Period in **months** as indicated, include the time from the date of award (commencement date [5.2.1]) for submitting contractual obligatory documents, submission of Health & Safety Plan and approval, period for obtaining the Construction Permit (if applicable), the Construction Period and the Defect Liability Period up to and including Final Completion

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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The contract period is determined as follows (Period/s indicated in months):	
Period to submit contractual obligatory documents including submission and approval of health and safety plan by the appointed Health & Safety Agent	
Period to obtain Construction Permit from Department of Labour upon approval of the Health & Safety Plan by the appointed Health & Safety Agent	
Total construction period for the Works as a whole from date of Access to and Possession of the Site up to and including Practical Completion , as indicated below [1.1.1.14, 5.4.1, 5.14.1]	
Period to achieve Completion [5.14.4]	
Defect liability period up to and including issuing Final Approval Certificate in months [5.16.1]	Select
Total Contract Period	

B10.2 Construction Period for completion of the Works as a whole

Construction period [B18: 1.2] and Practical Completion for the Works as a whole [5.14.1] The time for achieving Practical Completion of the whole of the Works is measured from the date of Access to and Possession of the site (5.4.1) by the contractor inclusive of all public holidays, special non-working days and builders' holiday shut down periods.	Select
The date for practical completion for the works as a whole shall be the period in months as indicated, starting from the date of Access to and Possession of the site by the contractor inclusive of all special non-working days and builders' holiday shut down periods [1.1.1.14, 5.4.1, 5.14.1]	insert construction period as per B12.1 or N/A if Works in portions are applicable
Notification period for inspection in working days by the principal agent.	
Penalty amount per calendar day for late submission of contractual obligatory documents: Ten percent (10%) of the penalty amount per calendar day for late Practical Completion, excluding VAT. [5.13]	R
Penalty amount per calendar day for late Practical Completion , excluding VAT. [5.13].	R
Penalty amount per calendar day for late Completion [5.14.4, 5.13]: Thirty percent (30%) of penalty amount per calendar day for late Practical Completion, excluding VAT.	R
Penalty amount per calendar day for late Final Completion (Issuing of Final Approval Certificate) [5.16, 5.13]: Fifteen percent (15%) of penalty amount per calendar day for late Practical Completion, excluding VAT.	R



B10.3 Construction Period for completion of the Works in portions

Construction period and Practical complete [5.14.7]	ion for p	ortions of	the Wor	ks	Sel	ect
Portions of the Works in sections:	1	2	3	4	5	6
Notification period for inspection by the principal agent in working days.						
The date for practical completion shall be the period in months as indicated from the date of access and possession of the site by the contractor [1.1.1.14, 5.4.1, 5.14.1]						
The date for practical completion for the whol be the period in months as indicated from the of the Site by the contractor inclusive of all puworking days and builders' holiday shut do	date of a	Access to a days, spec	nd Poss ial non-	ession	ins constr period B12.1 c Works who applic	uction as per or N/A if s as a le is
Penalty for late Practical Completion, <i>if comp</i>	letion in	sections i	s requir	ed, exclu	ding VAT	[5.13]
The penalty amount per day for failing to comp	olete sec	tion 1 of th	e Works	is:	R	
The penalty amount per day for failing to comp	olete sec	tion 2 of th	e Works	is:	R	
The penalty amount per day for failing to comp	olete sec	tion 3 of th	e Works	is:	R	
The penalty amount per day for failing to comp	olete sec	tion 4 of th	e Works	is:	R	
The penalty amount per day for failing to comp	olete sec	tion 5 of th	e Works	is:	R	
The penalty amount per day for failing to comp	olete sec	tion 6 of th	e Works	is:	R	
The penalty amount per day for failing to compapplicable, is:	olete the	whole of the	ne Works	s, if	R	
Penalty amount per calendar day for late sucalculated at Ten percent (10%) of penalty / indicated above, excluding VAT.						
Penalty amount per calendar day for late Comp (30%) of penalty / calendar day to complete So				calculated	d at Thirty	percent
Penalty amount per calendar day for late Fin						

B 11.0 Criteria to achieve Practical Completion [1.1.1.14, 5.14.1]

excluding VAT

Criteria t	o achieve Practical Completion not covered in the definition of practical completion
13.1	Obtain Occupation Certificate from the relevant authority prior to issuing the Practical Completion certificate
13.2	All relevant CoCs
13.3	All guarantees

[5.16, 5.13]: To be calculated at Fifteen percent (15%) of penalty / calendar day to complete Select,

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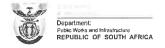


13.4	Training on electrical, security and mechanical installations if contractually required
13.5	Maintenance / operating manuals
13.6	CPG and cidb BUILD programme achievement certificates submitted with substatiating documentation
13.7	
13.8	
13.9	
13.10	

B 12.0 Defects liability period [5.16]

Defects liability period: Refer B10.1

Select	If applicable, description of applicable elements
14.1	All civil works (e.g. roads, storm water system, paving, sewer and water lines, etc.)
14.2	Mechanical equipment (e.g. pumps including switchgear, etc.)
14.3	Landscaping including automated systems (irrigation)
14.4	Electrical equipment (e.g. emergency generators, electronic switchgear,etc)
14.5	Security system/s (e.g. Access control, Intruder alarm, etc.)
14.6	Air conditioning system and plant
14.7	
14.8	
14.9	
14.10	



B 13.0 **Payment [6.10]**

Date of month for issue of regular payment certificates Refer [6.10.1]

Contract price adjustment / cost fluctuations [6.8.2]

Select

If yes, method to calculate [6.8.2 [CD]]

Employer shall pay the contractor within: Refer

[6.10.4 [CD]]

Contract price adjustment factor

Thirty (30) calendar days

B 14.0 Dispute resolution [10.5 [CD]]

Mediation	YES
Name of nominating body	Association of Arbitrators (Southern Africa)
Appointment of Mediator	State Attorney
Litigation	Court with Jurisdiction

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B 15.0 SPECIFIC CHANGES MADE TO GCC 2015: 3RD EDITION

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third

Edition (2015) 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.		
1,1.1.9	Add to Clause 1.1.1.9 the following:		
	"If the Contractor constitutes under the Law of the Republic of South Africa (B2.0) a joint venture, consortium or other unincorporated grouping of two or more persons:		
	 (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract; 		
	(b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and		
	(c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer."		
1,1,1.13	Amend Clause 1.1.1.13 as follows:		
	"Defects Liability Period" means the period stated in the Contract Data, commencing on the date indicated on the Certificate of Completion for the works as a whole 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.		
	The Defects Liability Period for the works shall commence on the calendar day following the date of the Certificate of Completion for the works as a whole or Certificates of Completion in the event of more than one Certificate of Completion is issued for different parts of the Works and end at midnight (00:00) three hundred and sixty five days (365) calendar days from the date of the Certificate of Completion.		
1,1,1.14	Amend Clause 1.1.1.14 as follows:		
	"Due Completion Date" means the date of expiry of the time stated in the Contract Data for achieving Practical Completion of the Works, calculated from the date of Access to and Possession of Site date (5.4.1) and as adjusted by such extensions of time or acceleration as may be allowed in terms of Contract (5.12).		
1.1.1.15	The name of the Employer: Refer to A 3.1 [CD]		
1.1.1.16	The name of the Employer's Representative: Refer to A 3.2 [CD]		
1.1.1.17	The name of the Employer's Agent: Refer to A 4.0 and B 5.0 [CD]		



1.1.1.20	Amend Clause 1.1.1.20 by inserting the following words at the end of this definition: "If the Acceptance section of the Form or Offer and Acceptance" contains conditional statements or a schedule of deviations is attached to the Form of Offer and Acceptance, then Form of Offer and Acceptance means the Contract Agreement, that shall be substantially in accordance with the form attached to the Scope of Works, and the date of signing the Contract Agreement shall be the date of the Form of Offer and Acceptance"
1.1,1.21.A	Add new Clause 1.1.1.21.A
	The interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999) as amended, calculated as simple interest, in respect of debts owing to the State, and will be the rate as published by the Minister of Justice and Correctional Services from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No 55 of 1975) as amended, calculated as simple interest, in respect of debts owing by the State.
1.1.1.27	This 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 Employer's Agent 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.
1.1.1.36	Insert the definition of "Latent and Patent Defects" as Clause 1.1.1.36:
	A 'latent defect' is a material defect, which was not visible after 'reasonable' inspection. The latent defect period commences at the date of Final Approval Certificate and ends 5 years [after that date [5.16.3].
	A patent defect is a flaw that is not hidden and ought to be easily identified upon reasonable inspection.
1.1.1.37	Add new Clause 1.1.1.37
	Contract participation goals applicable to this Contract are as indicated in B16 [D] and described in the following tender documents: DPW 03 (EC): TENDER DATA, PG 01.1 (EC) SCOPE OF WORK and PG 02.1 (EC) PRICING ASSUMPTIONS.
1.2.3.	Replace Clause 1.2.3. with the following:
	The Employer's Agent is as indicated in clause B 5.0 and shall have the authority to act on behalf of the employer as indicated in the contract document read with the contract data. [3.2.3].
1.2.6	Add new Clause 1.2.6
	The priority of the documents shall be in accordance with the following sequence:
	(a) The Form of Offer and Acceptance and the signed Schedule of Devia7ons,
	(b) Contract Data,
	(c) These General Conditions of Contract,
	(e) Scope of Work, and
	(f) Pricing Data

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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1.3.5	Replace Clause 1.3.5 with the following:
	(a) The Employer will become the owner of the information, documents, advice, recommendation and reports collected, furnished and/or compiled by the Contractor during the course of, and for the purposes of executing this Contract, all of which will be handed over to the Employer on request during the contract, but in any event on completion of contract, the termination and/or cancellation of this Contract for whatever reason. The Contractor relinquishes its lien / retention or any other rights thereon to which it may be entitled.
	(b) The copyright of all documents, recommendations and reports compiled by the Contractor during the course of and for the purposes of finalizing the Works will vest in the Employer, and may not be reproduced or distributed or made available to any person outside the Employer's service, or to any institution in any way, without the prior written consent of the Employer. The Employer shall have the right to use such material for any other purpose without the approval of information or payment to the Contractor.
	(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.
	(d) In case of the Contractor providing documents, electronic aids, software programs or like material to the Employer, the development of which has not been at the expense of the Employer, copyright shall not vest in the Employer. The Contractor shall be required to indicate to which documents, electronic aids, software programs or like material this provision applies.
	(e) The Contractor hereby indemnifies the Employer against any action, claim, damages or legal cost that may be instituted against the Employer on the grounds of an alleged infringement of any copyright, patents or any other intellectual property right in connection with the Works outlined in this Contract.
	(f) All information, documents, recommendations, programs and reports collected or compiled must be regarded as confidential and may not be communicated or made available to any person outside the Employer's service and may not be published either during the currency of this Contract or after termination thereof without the prior written consent of the Employer.
1.3.7	Replace Clause 1.3.7 with the following
	By entering into this contract, the Contractor waives any lien that he may have or acquire, notwithstanding any other condition/s in this contract.
3.2.3	Add to Clause 3.2.3 the following:
	 The Employer's Principal Agent's authority to act and/or to execute functions or duties or to issue instructions are expressly excluded in respect of the following, unless same has been approved by the employer:
	(a) Appointment of Subcontractors – clause 4.4.4;
	(b) Granting of an extension of time and/or ruling on claims associated with claims for extension of time – clauses 5.12, 10.1.5;
	(c) Acceleration of the rate of progress and determination of the cost for payment of such acceleration – clause 5.12.4; (c) Rulings on claims and disputes – clauses 10.1.5, 10.2.3 and 10.3.3;
	(d) Suspension of the Works – clause 5.11.2;
	(e) Final Payment Certificate – clause 6.10.9;



- (f) Issuing of *mora* notices to the Contractor clauses 9.1.1, 9.1.2.1 and 9.2.1;
- (g) Cancellation of the contract between the Employer and Contractor clauses 9.1.1, 9.1.2.1 and 9.2.1.
- (h) Any variation orders clause 6.3.1
- 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 Employer's Agent 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 Employer's Agent 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 Employer's Agent 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 Employer's Agent 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's Agent shall within 14 days issue to the Contractor a Final Payment Certificate the amount of which shall be paid to the Contractor within 30 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. If no ruling has been made within the 28 days, as referred to in clause 10.1.5. or any extension thereof as agreed to by the parties, the claim shall be regarded as rejected by the Employer.

5. Insert the following under 3.2.3:

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 Employer's Agent 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 Employer's Agent, 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 Employer's Agent and which has subsequently been rescinded.

3.3.2.1 Amend Clause 3.3.2.1 to insert the word "plant" to read as follows:

Observe how the Works are carried out, examine and test materials, plant and workmanship, and receive from the Contractor such information as he shall reasonably require.

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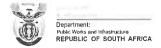
3.3.2.2.3	Add to Clause 3.3.2.2.3 the following:
	All oral communication must be reduced into writing to be binding on the parties.
3.3.2.2.4	Add to Clause 3.3.2.2.4 the following:
	All oral communication must be reduced into writing to be binding on the parties.
3.3.3.2	Amend Clause 3.3.3.2 to insert the word "plant" to reads as follows:
	Notwithstanding any authority assigned to him in terms of Clauses 3.3.2 and 3.3.4, failure by the Employer's Agent's Representative to disapprove of any work, workmanship, plant or materials shall not prejudice the power of the Employer's Agent's thereafter to disapprove thereof and exercise any of his powers in terms of the Contract in respect of thereof.
4.4.4	Ref Clause 3.2.3.
4.4.6	Not applicable to this Contract.
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
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,
4.12.3	Add to Clause 4.12.3 the following:
	All oral communication must be reduced into writing to be binding on the parties.
5.3.1	Add to Clause 5.3.1
	The documentation required before commencement with Works execution are:
	 Health and Safety Plan to be provided within 14 calendar days from award (Ref Clause 4.3) Initial programme to be provided within 21 calendar days of handing over the site to the contractor (Clause 5.6) Security (C1.0, Clause 6.2) Insurance/s (B6, Clause 8.6) insert other requirements insert other requirements insert other requirements
5.3.2	Add to Clause 5.3.2:
	The time to submit the documentation required before commencement with Works execution is: 21 calendar days.
5.4.2	Add to Clause 5.4.2:
	The access to, and possession of, the Site referred to in Clause 5.4.1 shall be exclusive to the Contractor. In the event of access to, and possession of, the Site is not exclusive to the Contractor, the following limitations apply:
	Insert an exposition of limitation or refer to separate attachement in specifications



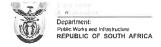
5.6.2.2	Replace Clause 5.6.2.2 with the following:
	The sequence, timing of activities and resources for carrying out the Works.
5.6.2.7	Add the following to Clause 5.6.2.7:
	Updated cash flows and construction programme/s to be submitted on a monthly basis to the Employer's Agent and the Employer.
5.8.1	Add the following to Clause 5.8.1:
	The non-working days are: Saturdays and Sundays
	The special non-working days are: Public Holidays and the year-end break annually published by the BCCEI (Bargaining Council for the Civil Engineering Industry)
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.
5.11.2	Ref Clause 3.2.3
5.12	Ref Clause 3.2.3
5.12.2.2	Amend Clause 5.12.2.2 as following:
	"Abnormal climatic conditions, therefore any weather conditions i.e. rain, wind (speed or dust), snow, frost, temperature (cold or heat) that have an adverse effect on the progress of the Works and during which no work is possible on site."
5.13.1	Add the following to Clause 5.13.1:
	The penalty for failing to complete the Works: Refer to B10 CD
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 Employer's Agent 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 Employer's Agent 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.
5.14.4	Add the following to Clause 5.14.4:
	Penalty for late Completion will be 30% of penalty applicable to late Practical Completion / calendar day.
	Penalty for late Final Completion will be 15% of penalty applicable to late Practical Completion / calendar day.
5.16.1	Amend Clause 5.16.1 by deleting the provision in the third paragraph of this clause.



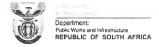
5.16.2	Amend Clause 5.16.2 as follows:
	No certificate other than the Final Approval Certificate referred to in Clause 5.16.1 shall be deemed to constitute approval of the Works or shall be taken as an admission of the due performance of the Contract or any part thereof, nor of the accuracy of any claim made by the Contractor, nor shall any other certificate exclude or prejudice any of the powers of the Employer's Agent 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.
6.3.1	Amend first paragraph to Clause 6.3.1 as follows:
	If, at any time before the issue of the Practical Completion , the Employer's Agent shall require any variation of the form, quality or quantity of the Works or any part thereof provided that such Variation Order shall not substantially alter the Scope of Work, he shall have power to order the Contractor to do any of the following subject to obtaining approval from the Employer (3.2.3):
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	When Contract Price Adjustment is applicable [B13] the value of payment certificates is to be adjusted by a Contract Price Adjustment Factor (CPAF):
	The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Factor with the following values:
	The value of "x" is 0.15.
	The values of the coefficients are: a = 0.25. (Labour) b = 0.3 (Contractor's equipment) c = 0.3 (Material) d = 0.15 (Fuel)
	The values of the coefficients for "Repair and Maintenance Project" (RAMP) contracts are: a = 0.35 (Labour) b = 0.20 (Contractor's equipment) c = 0.35 (Material) d = 0.10 (Fuel) The urban area nearest the Site is Atlantis . (Select urban area from Statistical News Release, P0141, Table A)
	The applicable industry for the Construction Material Price Index for materials / plant is <i>insert name of industry</i> .
	(Select the applicable industry from Statistical News Release, P0151.1, Tables 2,4,5)
	The area for the Producer Price Index for fuel is <i>insert name of area</i> . (Select the area from Statistical News Release, P0142.1, Table 1.)
	The base month is insert month insert 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.
6.9.1	Replace Clause 6.9.1 with the following:
	"Plant and materials will only be certified and paid for upon furnishing proof of ownership by the contractor. Once paid, material and goods shall become the property of the Employer and shall not be removed from site without the written authority of the Employers Agent.
6.10.1	Add at end of Clause 6.10.1
	The contractor shall provide the Employer's Agent every month, on dates as agreed between parties / instructed by the Principal Agent, with the following information:
	 (a) Monthly Local content report, (b) EPWP / NYS payment register, labour reports and certified ID document of EPWP/ NYS beneficiaries, Contract between Contractor and EPWP/ NYS beneficiaries, attendance register. (if applicable) (c) Tax Invoice (d) Labour intensive report (e) Contract participation goal reports (f) Updated construction programme (g) Revised cash flows
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.
6.10.4	Replace "28 days" with "30 days" provided all required documents including an invoice have been submitted and are correct in all respects.
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 Employer's Agent 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 Employer's Agent 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 Employer's Agent 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.



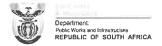
6.10.6.2	Replace Clause 6.10.6.2 with the following: "In the event of failure by the Employer to make the payment by the due date, he shall pay to the Contractor interest, at the rate as published by the Minister of Justice and Correctional Services from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No 55 of 1975) as amended, calculated as simple interest, in respect of debts owing by the State". (1.1.1.21.A).
6.10.9	Ref Clause 3.2.3.
7.2.1	The last sentence to read "Failing requirements or instructions, the Plant, workmanship and materials of the respective kinds shall be suitable for the intended purpose provided that materials procured for the works are 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 DPWI. Failing to comply, unless specified or approval granted will result in a ten percent (10%) penalty of the value of imported material used without approval.
7.5.3	Add the following to Clause 7.5.3
	"Should the work inspected by the Employer's Agent be rejected, all consultant's fees / costs pertaining to the unsuccessful inspection shall be recovered from the contractor".
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.
8.3.1.10	Replace Clause 8.3.1.10 with the following:
	"Ionising, radiation, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuels, excluding leakages of any radioactive material / gases / corrosive liquids/chemicals, which are harmful to the environment and biological life, brought on to site for installation or used in the Works prior to final approval".
8.4.3	Add the following as Clause 8.4.3:
	Where the Contractor has caused damage to property (moveable and immovable), of any person, the Employer or third parties, the Contractor shall on receiving a written instruction from the Employer's Agent 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	Replace Clause 8.6.1 with the following:
	Except if provided otherwise in the Contract Data, the Contractor, without limiting his obligations in terms of the Contract, shall effect and keep the respective insurances [CD] in force, in favour of the employer as beneficiary, from the date of possession of the site until the issue of the certificate of practical completion and with an extension to cover the contractors obligations after the date of practical completion [8.2.1]
8.6.1.1.1	Ref B6.0 CD for value of insurance.
0.0.1.1.1	



8.6.1.1.3	Ref B6.0 CD for value of insurance.
8.6.1.3	Amend Clause 8.6.1.3 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 fulfilment of the Contract, from the Commencement Date to the date of the end of the Defects Liability Period, if applicable, or otherwise to the issue of the Certificate of Completion.
8.6.4	Not applicable to this Contract.
8.6.6	Replace Clause 8.6.6 with the following:
	Without limiting the contractor's obligations in terms of the contract, the contractor shall, within twenty-one (21) calendar days of the date of letter of acceptance, but before commencement of the works, submit to the employer all the policies by which the insurances are effected and due proof of upfront payment of all premiums thereunder to keep the policies effective from the Commencement Date to the date of the end of the Defects Liability Period, if applicable, or otherwise to the issue of the Certificate of Completion.
8.6.7	Replace Clause 8.6.7 with the following:
	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	Add new Clause 8.6.8.
	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:
	(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 Employer's Agent, 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.
9.1.1	Ref Clause 3.2.3
9.1.2.1	Ref Clause 3.2.3
9.1.4	Replace the first paragraph of Clause 9.1.4 with the following:
	"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 on proof of 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; necessary changes"
9.1.5	Replace the first paragraph of Clause 9.1.5 with the following:
	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: "
9.1.5.5	Not applicable to this Contract.
9.1.6	Not applicable to this Contract.
9.2.1	Ref Clause 3.2.3
9.2.1.3.9	Add new Clause 9.2.1.3.9:
	Has failed to effect and keep in force any of the insurances referred to in Clause 8.6.1.
9.2.4	Add the following as Clause 9.2.4:
	In the case where a contract is terminated by the Employer by no fault by any party, the contractor shall be entitled to no other compensation than for work done and materials on site as certified by the Principal Agent at the date of termination.



9.3.2.2	Replace Clause 9.3.2.2 with the following:
	All Plant and Construction Equipment, Temporary Works and unused materials brought onto the Site by the Contractor, and where ownership has not been transferred to the Employer (see Clause 6.9.1), shall be removed from the Site on termination of the contract by any party.
9.3.2.3	Not applicable to this Contract.
9.3.3	Add 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.
	Nothing in this Clause shall prejudice the right of the Contractor to exercise, either in lieu of or in addition to the Contractor rights and remedies specified in this Clause, any other rights or remedies to which the Contractor may be entitled under the Contract or common law.
10.1.3.1	Replace Clause 10.1.3.1 with the following:
	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 Employer's Agent, records in a form approved by the Employer's Agent, 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, plant, labour, and materials relevant to each claim. Such records shall be submitted promptly after the occurrence of the event giving rise to the claim.
10.1.3.6	Replace Clause 10.1.3.6 with the following:
	The Employer, the Employer's Agent and the Contractor shall in any proceedings in accordance with Clauses 10.3 and 10.11 be entitled to give or lead evidence of or rely on any fact or circumstance not recorded in terms of this Clause, if other party to the dispute is prejudiced by such non-recording of the facts.
10.1.4	Ref Clause 3.2.3.
10.1.5	Ref Clause 3.2.3.
10.1.6	Add new Clause 10.1.6:
	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.
10.1.3.6	Replace Clause 10.1.3.6 with the following:
	The employer, the Employer's Agent and the Contractor shall in any proceedings in accordance with Clauses 10.3 and 10.11 be entitled to give or lead evidence oof or rely on any fact or circumstance not recorded in terms of the Clause, if the other party to the dispute in prejudiced by such nor-recording of the facts.
10.2.1	Replace Clause 10.2.1 with the following:
	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 Employer's Agent. This written claim shall be supported by particulars and substantiated.



10.2.2	Replace Clause 10.2.2 with the following:
	If, in respect of any matter arising out of or in connection with the Contract, which is not required to be dealt with in terms of Clause 10.1 or which does not require the decision or ruling of the Employer, the Contractor or the Employer fails to submit a claim within 28 days after the cause of dissatisfaction, he shall have no further right to raise any dissatisfaction on such matter.
10.2.3	Ref clause 3.2.3.
10.3.2	Replace Clause 10.3.2 with the following:
	If either party shall have given notice in compliance with Clause 10.3.1, the dispute shall be referred immediately to mediation under Clause 10.5, unless amicable settlement is contemplated.
10.3.3	Replace Clause 10.3.3with the following::
	In respect of a ruling given by the Employer (Ref clause 3.2.3), and although the parties may have
	delivered a Dispute Notice, the ruling shall be in full force and carried into effect unless and until
	otherwise agreed by both parties, or in terms of a mediation decision or court judgement.
10.4.2	Replace Clause 10.4.2 with the following:
	If the other party rejects the invitation to amicable settlement in writing, or does not respond in writing to the invitation within 14 days, or amicable settlement is unsuccessful, referral to mediation shall follow immediately. Should mediation be unsuccessful, the dispute shall be resolved by Litigation.
10.4.4	Replace Clause 10.4.4 with the following:
	Save for reference to any portion of any settlement, or decision which has been agreed to be final and binding on the parties, no reference shall be made by or on behalf of either party in any subsequent court proceedings, to any outcome of an amicable settlement, or to the fact that any particular evidence was given, or to any submission, statement or admission made in the course of the amicable settlement.
10.5	Replace Clause 10.5 with the following: The parties may, by agreement and at any time before Litigation, refer a dispute to mediation, in which event:
	10.5.1 The appointment of a mediator, the procedure, and the status of the outcome shall be agreed between the parties.
	10.5.2 Regardless of the outcome of a mediation the parties shall bear their own costs concerning the Mediation and equally share the costs of the mediator and related expenses.
10.6	Not applicable to this Contract.
10.7	Not applicable to this Contract.
10.10.3	Replace Clause 10.10.3 with the following:
	The court shall have full power to open up, review and revise any ruling, decision, order, instruction, certificate or valuation of the Employer's Agent and Employer and neither party shall be limited in such proceedings before such court to the evidence or arguments put before the Employer's Agent or Employer for the purpose of obtaining his ruling.



B 16.0 CONTRACT PARTICIPATION GOAL TARGETS AND CIDB B.U.I.L.D. PROGRAMME

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

(a)	Minimum Targeted Local Manufacturers of Material Contract Participation Goal, in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	N/A
(b)	Minimum Targeted Local Building Material Suppliers Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	N/A
(c)	Minimum Targeted Local Labour Skills Development Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	N/A
(d)	cidb BUILD Programme: Minimum Targeted Enterprise Development Contract Participation Goal in accordance with the cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	N/A
(e)	cidb BUILD Programme: Minimum Targeted Contract Skills Development Goal in accordance with the cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 48491 of 28 April 2023. and the cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	N/A
(f)	DPWI National Youth Service training and development programme (NYS) – Condition of Contract.	N/A
(g)	Labour Intensive Works – Condition of Contract.	N/A
(h)		
(i)		



PART 2: CONTRACT DATA COMPLETED BY THE TENDERER:

C TENDERER'S SELECTIONS

C 1.0 Securities [11.0]

In respect of contracts with a contract sum up to R1 million, the security to be provided by the contractor to the employer will be a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT).

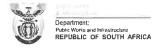
In respect of contracts with a contract sum more than R1 million, the security to be provided by the contractor to the employer will be selected by the Contractor as indicated below:

Guarantee for construction: Select Option A, B, C, D or E

Option A	cash deposit of 10 % of the contract sum (excluding VAT)
Option B	variable construction guarantee of 10 % of the contract sum (excluding VAT) (DPW-10.3 EC)
Option C	payment reduction of 10% of the value certified in the payment certificate (excluding VAT)
Option D	cash deposit of 5% of the contract sum (excluding, VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding, VAT)
Option E	fixed construction guarantee of 5% of the contract sum (excluding VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding VAT) (DPW-10.1 EC)]

NB: Insurances 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 53 of 1998)] or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the pro-forma referred to above. No alterations or amendments of the wording of the pro-forma will be accepted.

Guarantee for payment by employer [11.5.1; 11.10]	Not applicable
Advance payment, subject to a guarantee for advance payment [11.2.2; 11.3]	Not applicable



C 2.0 Payment of preliminaries [25.0]

Contractor's selection

Select Option A or B

Where the contractor does not select an option, Option A shall apply

Payment methods

Option A

The preliminaries shall be paid in accordance with an amount prorated to the value of the works executed in the same ratio as the amount of the preliminaries to the contract sum, which contract sum shall exclude the amount of preliminaries. Contingency sum(s) and any provision for cost fluctuations shall be excluded for the calculation of the aforesaid ratio

Option B

The preliminaries shall be paid in accordance with an amount agreed by the principal agent and the contractor in terms of the priced document to identify an initial establishment charge, a time-related charge and a final dis-establishment charge. Payment of the time-related charge shall be assessed by the principal agent and adjusted from time to time as may be necessary to take into account the rate of progress of the works

Lump sum contract

Where the amount of preliminaries is not provided it shall be taken as 7.5% (seven and a half per cent) of the contract sum, excluding contingency sum(s) and any provision for cost fluctuations.

C 3.0 Adjustment of preliminaries [26.9.4]

Lump sum contract

Where the amount of preliminaries is not provided it shall be taken as 7.5% (seven and a half per cent) of the contract sum, excluding contingency sum(s) and any provision for cost fluctuations.

Contractor's selection

Select Option A or B

Where the contractor does not select an option, Option A shall apply.

Provision of particulars

The contractor shall provide the particulars for the purpose of the adjustment of preliminaries in terms of his selection. Where completion in sections is required, the contractor shall provide an apportionment of preliminaries per section.

Option A

An allocation of the preliminaries amounts into Fixed, Value-related and Time-related amounts as defined for adjustment method Option A below, within fifteen (15) working days of the date of acceptance of the tender

Option B

A detailed breakdown of the preliminaries amounts within fifteen (15) working days of possession of the site. Such breakdown shall include, inter alia, the administrative and supervisory staff, the use of construction equipment, establishment and dis-establishment charges, insurances and guarantees, all in terms of the programme

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 29 of 30 Version: 2023/04

For Internal & External Use

Effective date 4 August 2023



Adjustment methods

The amount of preliminaries shall be adjusted to take account of the effect which changes in time and/or value have on preliminaries. Such adjustment shall be based on the particulars provided by the contractor for this purpose in terms of Options A or B, shall preclude any further adjustment of the amount of preliminaries and shall apply notwithstanding the actual employment of resources by the contractor in the execution of the works.

> The preliminaries shall be adjusted in accordance with the allocation of preliminaries amounts provided by the contractor, apportioned to sections where completion in sections is required

Fixed - An amount which shall not be varied.

Option A

Value-related - An amount varied in proportion to the contract value as compared to the contract sum. Both the contract sum and the contract value shall exclude the amount of preliminaries, contingency sum(s) and any provision for cost fluctuations.

Time-related - An amount varied in proportion to the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4].

Option B

The adjustment of preliminaries shall be based on the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4]. The adjustment shall take into account the resources as set out in the detailed breakdown of the preliminaries for the period of construction during which the delay occurred.

Failure to provide particulars within the period stated

Where the allocation of preliminaries amounts for Option A is not provided, the following allocation of preliminaries amounts shall apply:

Option A

Fixed - Ten per cent (10%) Value-related - Fifteen per cent (15%) Time-related - Seventy-five per cent (75%)

Where the apportionment of the preliminaries per section is not provided, the categorised amounts shall be prorated to the cost of each section within the contract sum as determined by the principal agent

Option B

Where the detailed breakdown of preliminaries amounts for Option B is not provided, Option A shall apply



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

Project title:	ATLANTIS LABORIA BUILDING INSTALLATION C	INSTALLATION OF STANDBY GENERATOR	
Tender / quotation no:	DPW09/25	Closing date:	17 July 2025
Advertising date:	03 July 2025	Validity period:	84 days

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

1.1. Current projects

			Contraction of	O the set of		_
Projects currently engaged in or Representative of Employer	Contact tel. no.	Contract sum	commence- ment date	completion date	Current percentage progress	
1						
2						
3						T
4						
5						_
9						_
						_
8						

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA TENDEREY'S projects

Tender no: DPW09/25

1.2. Completed projects

Proj (five	Projects completed in the previous 5 (five) years	Name of Employer or Representative of Employer	Contact tel. no.	Contract sum	Contractual commence-ment date	Contractual completion date	Date of Certificate of Practical Completion
_							
2							
3							
4							
5							
9							
7							
80							
0							

Date

Signature

Name of Tenderer



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

	ct title:		ROPIA RUU DING INSTALLATI	ON OF STANDBY GENERATOR
Tende		DPW09/25	Reference no:	6508/7642/1
Infr	astructure before the	submission of this	unications received from the Destender offer, amending the tended ditional pages if more space is	epartment of Public Works and der documents, have been taken required)
	Date		Title or Deta	ails
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.			_	
9.				
10.				
11.				
12.				
13.				
	Name of Tender	er	Signature	Date
			were received from the Departender offer, amending the tender	
	Name of Tender	er	Signature	Date

Effective date: 2 August 2021

Version: 2021/01

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE



Comprising of:

SECTION 1 - PRELIMINARIES AND GENERAL

SECTION 2 - GENERATOR INSTALLATION

SECTION 3 - MODIFICATIONS TO THE EXISTING METER AND ENCLOSURE

SECTION 4 - SERVICE AND MODIFICATIONS TO THE EXISTING DISTRIBUTION

SECTION 5 - CABLES, WIRING AND EARTHWIRE

SECTION 6 - CONCRETE PLINTH

SECTION 7 - TRENCHING AND BACKFILL FOR CABLE

SECTION 8 - ROAD WORKS

SECTION 9 - HOT DIPPED GALVANISED WELDED STEEL CAGE

SECTION 10 - SITE TESTING, COMMISSIONING & DOCUMENTATION

SECTION 11 - 1 YEAR MAINTENANCE PLAN

Note: This Bill of Quantity must be read in conjuction with the drawings and specification document supplied. The Bill must then be populated in accordance with the information contained therein.



TOTAL SECTION 1 CARRIED TO SUMMARY PAGE

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INSTALLATION OF BACKUP GENERATOR

DEPARTMENT OF EMPLOYMENT AND LABOUR: ATLANTIS DESCRIPTION RATE **AMOUNT** UNIT QTY ITEM NO Section 1 PRELIMINARIES & GENERAL 1 OCCUPATIONAL HEALTH AND SAFETY 1,1 Preparation of the Contractor's site specific Health and Safety Plan 1.1.1 Item 1 including Method Statement for COVID-19 Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations and Covid-19 Including 1.1.2 Item 1 all Personal Protective Equipment, masks, sanitiser, waste bin, thermometer, etc. MANAGEMENT OF WORKS 1,2 1 1.2.1 Allowance for all overhead costs relating to the project Item



TEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
tion 2					
	Teaure area were at arrest		T E		1
2	GENERATOR INSTALLATION				
2,1	100kVA 400V Generator Silent unit complete				
	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				1
	with BS5514 part 1-5 as 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: 150A, Integrated Automatic				
	change Over Switch Integrated into Generator panel. 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.				
	1. Starting Batteries and Leads. 2. 180L-210L Base mounted Fuel				
	Tank. 3. Set Mounted Exhaust System. 4. Set Mounted AMF control				
	panel with ATS with mains and Alternator MCB. 5. Weather and				
	Sound Proof Enclosure from 3CR12 Powder Coated Stainless Steel				
	6. Alternator and Engine Manuals. 7. Controler setup file with				
	settings on Flash Drive. 8. Electrical 8. Wiring Diagram				
	Supply	No	1 1		
	Install	No	1 1		
2,2	40kVA 400V Generator Silent unit complete				
	The manufacturing, supply, delivery and installation of a 40kVA (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 1-5 as 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: 45A, Integrated Automatic				
	change Over Switch Integrated into Generator panel. 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.				
	1. Starting Batteries and Leads. 2. 180L-210L Base mounted Fuel				
	Tank. 3. Set Mounted Exhaust System. 4. Set Mounted AMF control				
	panel with ATS with mains and Alternator MCB. 5. Weather and				
	Sound Proof Enclosure from 3CR12 Powder Coated Stainless Steel				
	6. Alternator and Engine Manuals. 7. Controler setup file with				
	settings on Flash Drive. 8. Electrical 8. Wiring Diagram				
	Security on Flash Drive. o. Electricar o. Willing Diagram				
	Supply	No	1		Rate only
	Install	No	1		Rate only
2,3	LUBRICATION, OILS AND DIESEL				
	Supply and fill up to 100% all required lubications to run generator	No	1		
	including diesel. Tank shall be a 180L capacity	NO	2 T		
2,4	PADLOCKS				
	Supply	No	3		
	Install	No	3		
			1 1		



ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
ection 3			101		
3	MODIFICATIONS TO THE EXISTING METER AND ENCLOSURE				
	Change the existing 50A circuit breaker in meter box to 45A 3Phase				
3,1	5kA Circuit breaker. Rate is to include the removal of the existing				
	50A breaker and repositioning of existing meter box as per site				
	lavout drawing Supply	No	1		
	Install	No	1		
2.2	Supply and Install 400mm X 300mm X 200mm IP 65 outdoor control				
3,2	board for incoming circuit breaker and a meter				
	Supply	No	1		Rate only
	install	No	1		Rate only
	TOTAL SECTION 3 CARRIED TO SUMMARY PAGE				



DEPARTMENT OF EMPLOYMENT AND LABOUR: ATLANTIS RATE AMOUNT DESCRIPTION UNIT QTY ITEM NO Section 4 SERVICE AND MODIFICATIONS TO THE EXISTING DISTRIBUTION 4 BOARDS 4.1 10kA surge arrestor for main distribution board Supply No 1 No Install 1 4,2 5kA surge arrestor for main distribution board Supply No Rate only Install No 1 Rate only Change the existing 50A circuit breaker in main distribution board 4,3 to 45A 3Phase 5kA Circuit breaker. Rate is to include the removal of the existing 50A breaker. Supply No 1 Install No 1 4,4 Trace circuits and balance the loads item 1 Work includes spray painting the DB faces plates and doors from 4,5 white to orange. 4.5.1 Main Distribution Panel No 1 Supply No Install 1 4.5.2 Sub Distribution Boards Nο 1 Supply No 1 Install Supply and Install warning notices labels and upgrade the legend. 4,6 Sum 1 Set of Warning Notices as per SANS and OHS specifications. TOTAL SECTION 4 CARRIED TO SUMMARY PAGE



Depa Putili	INSTALLATION OF BACKUP O				
ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Section 5	DESCRIPTION	Olvii	QII]	IVAIL	ANICOIN
5	CABLES, WIRING AND EARTHWIRE Supply and install the following armoured PVC sheathed copper LT cables including terminations, glands, shroud, lugs, clamping, supports and all accessories. NOTE: For ordering of cables, measurement shall NOT be taken from this bill. Actual cable lengths shall be measured on site for ordering and installation purposes.				
F 1					
5,1 5.1.1	CABLES 10mm² 4 core PVC insulated PVC bedded SWA PVC sheathed 600/1000V cables with copper conductors and manufactured to				
	SANS 1507-3. Supply Install	m m	45 45		
5.1.2	16mm² 4 core PVC insulated PVC bedded SWA PVC sheathed 600/1000V cables with copper conductors and manufactured to SANS 1507-3. Supply Install	m m	60 60		Rate only Rate only
5.1.3	25mm ² 4 core PVC insulated PVC bedded SWA PVC sheathed 600/1000V cables with copper conductors and manufactured to SANIS 1507-2 Supply	m	60		
5.1.4	Install 35mm² 4 core PVC insulated PVC bedded SWA PVC sheathed	m	60		
5.1.4	600/1000V cables with copper conductors and manufactured to SANS 1507-3. Supply Install	m m	60 60		Rate only Rate only
5.1.5	1,5mm² PVC 8 pair multicore SWA control cable Supply Install	m m	20 20		
5,2	BARE COPPER EARTH WIRE Supply and instell 600/1000V conductors and bare stranded copper conductors on wire ways or trenching including terminations for earthing in accordance with the specification and drawings of the following sizes:				
5.2.1	10 mm² Bare Copper Earth Wire Supply Install	m m	45 45		
5.2.2	16 mm ² Bare Copper Earth Wire Supply Install	m m	60 60		
5.2.3	25 mm ² Bare Copper Earth Wire Supply Install	m m	60 60		Rate only Rate only
5.2.4	70 mm² Bare Copper Earth Wire Supply Install	m m	30 30		Nate offin
5,3	EARTHING ACCESSORIES Supply and install 1.8 m long copper coated earthspike incl earth clamp and earth coupling on Distribution Board. Supply	m	1		
5,4	Install CABLE JOINTS	m	1		
-, .	10mm² 4 core PVC Supply Install	item item	2 2		
5,5	CABLE SLEEVES 50 mm dia plastic flexible conduit black Supply Install	m m	120 120		
	TOTAL SECTION 5 CARRIED TO SUMMARY PAGE				
	TOTAL SECTION S CANNED TO SUMMANT PAGE		1	Į.	



TOTAL SECTION 6 CARRIED TO SUMMARY PAGE

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INSTALLATION OF BACKUP GENERATOR

DEPARTMENT OF EMPLOYMENT AND LABOUR: ATLANTIS UNIT RATE **AMOUNT** DESCRIPTION QTY ITEM NO Section 6 CONCRETE PLINTH 6 Trenching in soil and grass (excluding Tar, Concrete and Paving). Supply and install of concrete plinth. Refer to drawing S.001/1 17 6.1.1 Soft excavation in reduce levels not exceeding 2m deep m3 17 6.1.2 Carting away excavated material m3 6.1.3 12 Risk of collapse to sides of trenches and holes not exceeding 1.5m m2 6.1.4 item 1 Keep excavation free from water 6.1.5 14 25mm sandbed filling m2 6.1.6 G5 filling compacted to 95% ModAASHTO density m3 5 5 6.1.7 G7 filling compacted to 95% ModAASHTO density m3 4 6.1.8 30Mpa/19mm concrete surface bed m3 30Mpa/19mm concrete in average 500 x 200mm high thickening to 6.1.9 m 13 edge of slab including excavation 14 6.1.10 Mesh Ref 395 mesh reinforcement m2 14 6.1.11 Smooth finish concrete slab with wooden float m2 Boxing in smooth formwork to form 20 x 20mm chamfer along top 5.1.12 14 m Smooth formwork to form 110mm diameter opening through 6.1.13 2 no 200mm slab



TOTAL SECTION 7 CARRIED TO SUMMARY PAGE

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INSTALLATION OF BACKUP GENERATOR

DEPARTMENT OF EMPLOYMENT AND LABOUR: ATLANTIS UNIT QTY RATE **AMOUNT** ITEM NO DESCRIPTION Section 7 7 TRENCHING AND BACKFILL FOR CABLE 7.1.1 2 m3 Excavation for trench not exceeding 2 meters deep 2 7.1.2 m3 Backfilling with excavated materials to trenches and holes 10 7.1.3 Danger tape placed 150mm above cable m m^2 6 7.1.4 Remove and re-install paving



ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
ection 8	120		· · · · · · · · · · · · · · · · · · ·		.v
8	ROAD WORKS		1 1		
8.1.1	Saw cut to tarmac surfaces for breaking up in strips (breaking up elsewhere)	m	14		
8.1.2	Breaking up tarmac surface approximately 30mm thick and 400mm wide	m2	3		
8.1.3	Excavation for trench not exceeding 2 meters deep	m3	2		
8.1.4	Risk of collapse to sides of trenches and holes not exceeding 1.5m	m3	6		
8.1.5	Keep excavation free from water	item	1		
8.1.6	Backfilling using excavated materials compacted to 93% Mad AASHTO density	m3	2		
8.1.7	Compaction of ground surfaces under road base layers including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93%		3		
8.1.8	Mod AASHTO densitv MC30 primer over ground or filling at a spread rate of 0.7litre per square meter	m3 m2	3		
8.1.9	30mm thick continous grade, 80/100 penetration bituminous premix road surfacing	m2	3		



Publi	Capartment Public Works and Infrastructure REPUBLIC OF SOUTH AFRICA DEPARTMENT OF EMPLOYMENT AND LABOUR: ATLANTIS						
ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT		
ection 9					10		
9	HOT DIPPED GALVANISED WELDED STEEL CAGE Supply and install cage with dimensions to allow for clearance of 300mm around generator, formed of 50 x 50 x 2mm hollow core square tubing with mitred edges welded including 16mm thread bares welded to frame at centres, with 75 x 75 x 4mm square hollow section corner posts splayed welded to 150 x 150 x 10mm thick baseplate, bottom rail 70 x 70 x5mm angle welded to frame and post pre-drilled at 500mm centres for chemical bolts, Vitex 20-						
9,1	3FH or similar approved medium duty 25 x 50mm (strand size 4.5 x 3.0mm thickness) expanded metal welded to frame. No 2 x Gates size 1800 x 1200 (in similar postion of generator doors) : formed of 40x40 x 5mm angle frame with mitred corners, with 50 x 5mm flat piece intermediate post at 450mm centres and Vitex 20-3FH or similar approved medium duty 25 x 50mm (strand size 4.5 x 3.0mm thickness) expanded metal welded to frame, once holed padlock plates and two 25mm diameter x 60mm long pin hinge welded on	item	1				
9,2	M12 chemical bolts with stainless steel anti-theft shear nuts (price to include drilling into concrete for bolts) TOTAL SECTION 9 CARRIED TO SUMMARY PAGE	item	32				

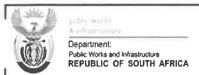


DEPARTMENT OF EMPLOYMENT AND LABOUR : ATLANTIS
DESCRIPTION UNIT

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Section 10					
10	SITE TESTING, COMMISSIONING & DOCUMENTATION "LOId-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: 1. Start and Stop Test				
10,1	Testing & commissioning of all above Equipment	Sum	1		
10,2	AS BUILT DRAWINGS				
,	Submit "As Built" drawings for approvals and carry out required changes for approval	Sum	1		
10,3	COMPLIANT CERTIFICATES				
10,5	Carry out required changes for approval submit Electrical Compliant	Sum	1		
10,4	DOCUMENTATION				
10.4.1	Submit completed Approval and Guarantees	Sum	1		
10.4.2	Hard and Electronic copy: O & M manuals	Sum	1		
10,5	CLEAN SITE AND REMOVE RUBBISH FROM SITE	Sum	1		
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RE	REPUBLIC OF SOUTH AFRICA DEPARTMENT OF EMPLOYMENT AND LABOUR: ATLANTIS							
ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT			
Section 11								
11	1 YEAR MAINTENANCE PLAN							
11,1	Quarterly service of the plant as per the manufacturers instructions	No.	4					
	TOTAL SECTION 11 CARRIED TO SUMMARY PAGE							



DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INSTALLATION OF BACKUP GENERATOR DEPARTMENT OF EMPLOYMENT AND LABOUR : ATLANTIS

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1	PRELIMINARIES AND GENERAL		
2	GENERATOR INSTALLATION		
3	MODIFICATIONS TO THE EXISTING METER AND ENCLOSURE		
4	SERVICE AND MODIFICATIONS TO THE EXISTING DISTRIBUTION BOARDS		
5	CABLES, WIRING AND EARTHWIRE		
6	CONCRETE PLINTH		
7	TRENCHING AND BACKFILL FOR CABLE		
8	ROAD WORKS		
9	HOT DIPPED GALVANISED WELDED STEEL CAGE		
10	SITE TESTING, COMMISSIONING & DOCUMENTATION		
11	1 YEAR MAINTENANCE PLAN		
	TOTAL TENDEDED VALUE EVOLUDING VAT		
	TOTAL TENDERED VALUE EXCLUDING. VAT.		
	15% VAT		
	TOTAL TENDERED VALUE INCLUDING VAT. CARRIED TO FORM OF OFFER AND ACCEPTANCE DPW-07(EC)		



NATIONAL DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

ELECTRICAL ENGINEERING SERVICES

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

Date: JUNE 2025

Department of Public Works and Infrastructure Heerengracht Street Foreshore Cape Town 8001 Tel. No. 021 402 2365

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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 SANS IEC 60947

Rotating electrical Machines 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 **100 kVA** outdoor 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 test 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 $10\%\pm$. 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. There shall be a sms sent to personnel to indicate low fuel or when there is a fault in the generator.

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 generator. 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 instruments 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 Atlantis Department of Employment and Labour.

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

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 located at Atlantis DOL (LATTITUDE 33°34'17.9"S LONGITUDE: 18°29'24.3"E)

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: 1641 Meter
- b) The highest average high temperature is 28°C and the lowest average temperature is 10°C
- c) Maximum ambient humidity at lowest temperature

The month with the highest relative humidity is 72, 03% and the lowest relative humidity is 41, 36%

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 0.8 power factor : 86 kW
Frequency : 50Hz
Fault Level : 15kA

The generating set is required to feed measured electrical load of 105A 3P

3.4. Switchboard/Control Panel Unit

All switch- and control gear shall be rated for a fault current level of 5kA.

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.

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 altitude b) For temperature c) For humidity d) 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?	

NO	ITEM	REMARKS
21.	Method of starting	
22.	Voltage of starting system	
23.	Method of cooling	
24.	Type of radiator if water-cooled	
25.	Type of heater for warming cylinder heads	
26.	Capacity of heater in kW	
27.	Method of protection against high temperature	
28.	Method of protection against low oil pressure	
29.	Type of governor	
30.	Speed variation in %	
	a. Temporary b. Permanent	
31.	Minimum time required for as assumption of full load in seconds	
32.	Recommended interval in running hours for : a. Lubricating oil change b. Oil filter element change c. Decarbonising	
33.	Type of base	
34.	Can plant be placed on solid concrete floor?	
35.	Are all accessories and ducts included?	
36.	Is engine naturally aspirated?	
37.	Are performance curves attached?	
38.	Diameter of exhaust pipe	
39.	Noise level in plant room in dBA	N/A
40.	Noise level at tail of exhaust pipe in dBA	
41.	BMEP (4 stroke) at continuous rating (kPa)	
42.	% Load acceptance to SANS 8528, with 10% transient speed drop	

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	
30.	d. Circuit breaker to outgoing feed 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	

EXISTING SCHEMATIC LAYOUT

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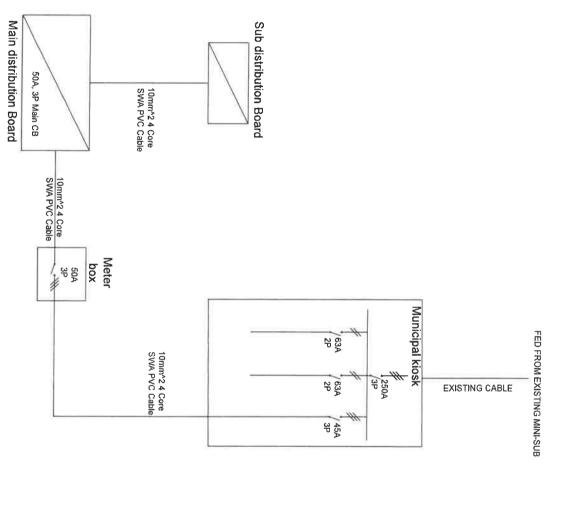
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EXISTING RETICULATION - NO STAND-BYE POWER

INSTALLATION OF BACK-UP GENERATOR

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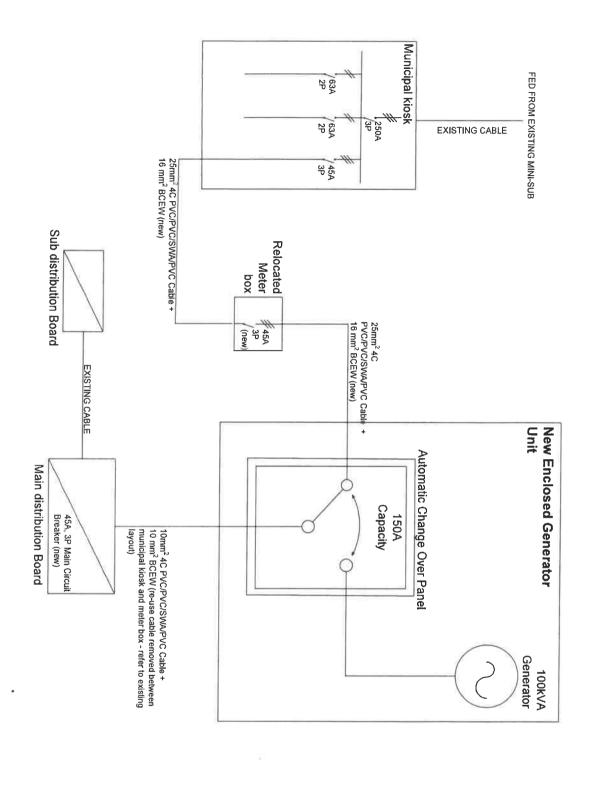
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JUNE 2025 PW:001-02 NTS

PROPOSED RETICULATION - WITH STAND-BYE POWER

INSTALLATION OF BACK-UP
GENERATOR

ATLANTIS :DOEL DEPARTMENT OF LABOUR

ELECTRICAL ENGINEERING

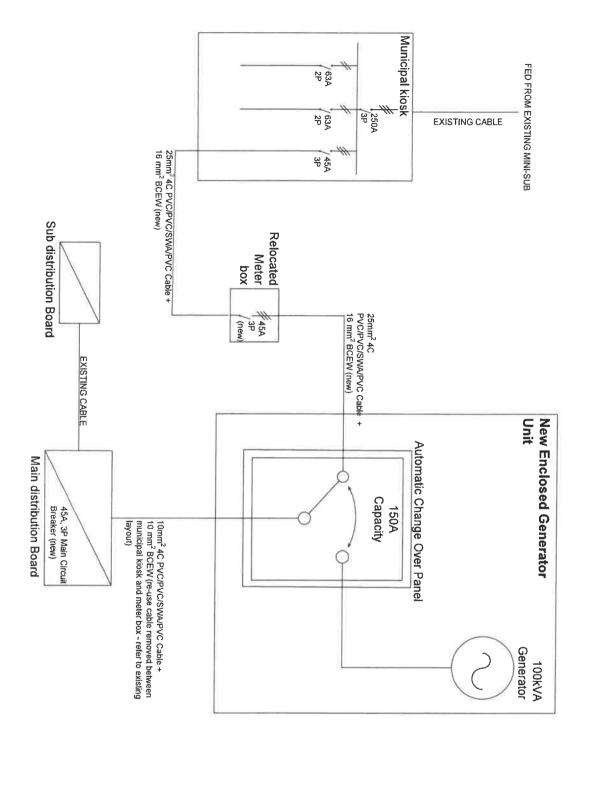
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PROPOSED SCHEMATIC LAYOUT

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