



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

Department of Public Works & Infrastructure; Private Bag X 229; Pretoria; 0001;
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PRETORIA CENTRAL HOME AFFAIRS PRETORIA REGIONAL OFFICE:
NEW BUILDING: REQUEST FOR REPLACEMENT OF 4 UPS'S

TENDER NO: PT24/064

BID DOCUMENT

APRIL 2025

ISSUED BY:



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

THE PROJECT MANAGER
DEPARTMENT OF PUBLIC WORKS INFRASTRUCTURE
PRIVATE BAG X229
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Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

VOLUME 1: TENDERING PROCEDURES

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

T1.1 Tender Notice and Invitation to Tender

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

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES TENDERS FOR:

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building: Request for Replacement of 4 UPS'S
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Tender no:	PT24/064	Reference no:	
Advertising date:	04 April 2025	Closing date:	06 May 2025
Closing time:	11h00	Validity period:	84 Calendar days

1. REQUIRED CIDB GRADING

It is estimated that tenderers should have a CIDB contractor grading designation of **6 EP** or **6 EP*** or higher.
* Delete "or select tender value range select class of construction works" where only one class of construction works is applicable

It is estimated that potentially emerging enterprises should have a CIDB contractor grading designation of **select tender value range select class of construction works PE** or **select tender value range select class of construction works PE*** or higher.
* Delete "or select tender value range select class of construction works PE" where only one class of construction works is applicable

2. FUNCTIONALITY CRITERIA APPLICABLE YES ☒ NO ☐

Note 1: Failure to meet minimum functionality score will result in the tenderer being disqualified.

Functionality criteria ¹ :	Weighting factor:												
<p>1. Work Experience on Projects Completed</p> <p>The bidder must submit with the tender the following:</p> <p>Appointment letter on a client letter head and Practical Completion Certificates or First Delivery Certificate and contactable references on the referenced projects. Comparable / relevant (similar in nature & value) Electrical Engineering / Installation works ranging from R 6 500 000, 00 and above.</p> <p>The referenced projects must have been successfully completed by the company within the past ten (10) years. (NB – References, contact details and completion certificates must be provided on similar works).</p> <table> <tr> <td>2.1). Five (5) or more successful completed projects</td><td>= 5 points</td></tr> <tr> <td>2.2). Four (4) successful completed projects</td><td>= 4 points</td></tr> <tr> <td>2.3). Three (3) successful completed projects</td><td>= 3 points</td></tr> <tr> <td>2.4). Two (2) successful completed projects</td><td>= 2 points</td></tr> <tr> <td>2.5). One (1) successful completed project</td><td>= 1 point</td></tr> <tr> <td>2.6). Zero completed projects</td><td>= 0 points</td></tr> </table>	2.1). Five (5) or more successful completed projects	= 5 points	2.2). Four (4) successful completed projects	= 4 points	2.3). Three (3) successful completed projects	= 3 points	2.4). Two (2) successful completed projects	= 2 points	2.5). One (1) successful completed project	= 1 point	2.6). Zero completed projects	= 0 points	30%
2.1). Five (5) or more successful completed projects	= 5 points												
2.2). Four (4) successful completed projects	= 4 points												
2.3). Three (3) successful completed projects	= 3 points												
2.4). Two (2) successful completed projects	= 2 points												
2.5). One (1) successful completed project	= 1 point												
2.6). Zero completed projects	= 0 points												

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.

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".

2. Key Personnel - Human Resource

The bidder must submit with the tender proof of the workforce to execute the project by attaching the following:

- a) CV's of the workforce to be involved on the project.
- b) Certified copies of their qualification certificates that are not older than six (6) months on the closing date of the tender.
- c) Certified ID copies that are not older than six (6) months on the closing date of the tender advert.

A company's project specific organogram must be submitted with the tender which reflects the key personnel to be permanently assigned to the project with their relevant experience in the built environment under the below mentioned key site staff members required.

The key personnel must be employees of the company, if not, an undertaking should be submitted with the tender from the person that he/she will be involved on the project for the duration of the project and will be permanently assigned to the project on a full time basis.

Please Note: the below will be evaluated as a cluster, any omission of any individual below will result in a zero score.

2.1). For a bidder to be allocated 5 points, the bidder must have the following:

- ☐ Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualifications having more than 5 years of experience (post registration).
- ☐ Site Agent with a National diploma in Electrical Engineering with more than 5 years of experience (post qualification).
- ☐ Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with a minimum of 5 years of experience or more (post registration).

30%

2.2). For a bidder to be allocated 4 points, the bidder must have the following:

- ☐ Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 4 years below 5 years of experience (post registration).
- ☐ Site Agent with a National diploma in Electrical Engineering with more than 4 years below 5 years of experience (post qualification).
- ☐ Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 4 years below 5 years of experience (post registration).

2.3). For a bidder to be allocated 3 points, the bidder must have the following:

- ☐ Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 3 years below 4 years of experience (post registration)
- ☐ Site Agent with a National diploma in Electrical Engineering with more than 3 years below 4 years of experience (post qualification).

<p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 3 years below 4 years of experience (post registration).</p> <p>2.4). For a bidder to be allocated 2 points, the bidder must have the following:</p> <p><input type="checkbox"/> Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 2 years below 3 years of experience (post registration).</p> <p><input type="checkbox"/> Site Agent with a National diploma in Electrical Engineering with more than 2 years below 3 years of experience (post qualification).</p> <p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 2 years below 3 years of experience (post registration).</p> <p>2.5). For a bidder to be allocated 1 point, the bidder must have the following:</p> <p><input type="checkbox"/> Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 1 year below 2 years of experience (post registration).</p> <p><input type="checkbox"/> Site Agent with a National diploma in Electrical Engineering with more than a minimum of 1 year below 2 years of experience (post qualification).</p> <p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 1 year below 2 years of experience (post registration).</p> <p>None submission of any of the above = zero points.</p>	
<p>3. Project Execution Plan (PEP), etc</p> <p>For the bidder to be allocated five (5) points, the bidder must submit with the tender the following :</p> <p>3.1 Project Specific PEP based on the contract duration in the contract data (22 months) reflecting the following:</p> <p>3.1.1) Key activities 3.1.2) Show critical path 3.1.3) Show logical sequencing of activities 3.1.4) Show duration of key activities</p> <p>3.2 Project Specific Method Statement - Replacement of UPS'S</p> <p>Please note: the above will be evaluated as a cluster any omission of the above will result in a zero score.</p>	<p>20%</p>

4. Bank Rating		
The bidder must submit with the tender an original stamped bank rating letter or certified copy of such a letter which is not older than six (6) months on the closing date of the tender.		
4.1) Rating A	= 5 Points	20%
4.2) Rating B	= 4 Points	
4.3) Rating C	= 3 Points	
4.4) Rating D	= 2 Points	
4.5) Rating E	= 1 Point	
None of the above the bidder will be allocated zero points.		
Total		100 Points

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

Minimum functionality score to qualify for further evaluation:	60
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(Total minimum qualifying score for functionality is 50 Percent, any deviation below or above the 50 Percent, provide motivation below)

The environment is a national key point and using sophisticated systems which are linked to the banks, boarders and high level organisations. It will be imperative to get company that will be able to execute the work successfully without fail or to avoid disruptions on the systems due to incompetency of the service provider.

3. THE FOLLOWING EVALUATION METHOD FOR RESPONSIVE BIDS WILL BE APPLICABLE:

<input type="checkbox"/> Method 1 (Financial offer)	<input checked="" type="checkbox"/> Method 2 (Financial and Preference offer)
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3.1. Indicate which preference points scoring system is applicable for this bid:

<input checked="" type="checkbox"/> 80/20 Preference points scoring system	<input type="checkbox"/> 90/10 Preference points scoring system	<input type="checkbox"/> Either 80/20 or 90/10 Preference points scoring system
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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	<input checked="" type="checkbox"/>	Only those tenderers who satisfy the eligibility criteria stated in the Tender Data may submit tenders.
2	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	Use of correction fluid is prohibited.
4	<input checked="" type="checkbox"/>	Submission of a signed bid offer as per the DPW-07 (EC).
5	<input checked="" type="checkbox"/>	Submission of DPW-09 (EC): Particulars of Tenderer's Projects.
6	<input checked="" type="checkbox"/>	Bidders must comply with DPW-21 (EC): Record of Addenda to tender documents, if any.
7	<input checked="" type="checkbox"/>	Submission of DPW-16 signed by the authorised official and completion of bid briefing attendance register. Bidders must familiarise themselves with the site to be able to complete and price the tender document.
8	<input checked="" type="checkbox"/>	The tenderer shall submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts) together with his tender.
9	<input type="checkbox"/>	The tenderer shall submit his fully priced and completed sectional summary- and final summary pages with the tender.
10	<input checked="" type="checkbox"/>	The bidder must submit with the tender, proof that they have an active CIDB Grading designation of 6 EP at the closing date of the tender, in case of a JV the bidder must submit a consolidated CIDB Certificate of 6 EP
11	<input type="checkbox"/>	
12	<input type="checkbox"/>	
13	<input type="checkbox"/>	
14	<input type="checkbox"/>	
15	<input type="checkbox"/>	

4.2. Indicate administrative requirements applicable for this tender. Tenderers may be required to submit the below documents where applicable.

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

1	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	Submission of applicable (PA-15.1, PA-15.2, PA-15.3): Resolution by the legal entity, or consortium / joint venture, authorising a dedicated person(s) to sign documents on behalf of the firm / consortium / joint venture.
3	<input checked="" type="checkbox"/>	All parts of tender documents submitted must be fully completed in ink and signed where required.
4	<input checked="" type="checkbox"/>	Submission of (PA-11): Bidder's disclosure
5	<input checked="" type="checkbox"/>	Submission of PA-16.1 (EC): Ownership Particulars
6	<input checked="" type="checkbox"/>	Submission of documentation relating to risk assessment criteria as contained in C 2.1 of DPW-03 Tender Data.
7	<input checked="" type="checkbox"/>	Submission of (PA 40): Declaration of Designated Groups.
8	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	The tenderer shall submit his fully priced Bills of Quantities (complete document inclusive of all parts) within 14 calendar days from request.
11	<input checked="" type="checkbox"/>	Upon request, submission of fingerprints obtainable from local SAPS including any other additional documentation and information required for vetting purposes.
12	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	In case of joint venture the bidders must complete a separate PA - 11
14	<input checked="" type="checkbox"/>	Submission of PA 16 (EC) form
15	<input checked="" type="checkbox"/>	In case of a joint venture the bidder must submit joint venture CSD
16	<input type="checkbox"/>	
17	<input type="checkbox"/>	
18	<input type="checkbox"/>	

4.3. Indicate administrative requirements applicable for specific goals, Tenderers will not be required to submit the below document 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	<input checked="" type="checkbox"/>	Submission of (PA-16): Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022
2	<input checked="" type="checkbox"/>	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



5. METHOD TO BE USED TO CALCULATE POINTS FOR SPECIFIC GOALS:



5.1. For procurement transaction with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals listed in table 1 below are applicable.

Table 1

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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Official Municipal Rates Statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Any account or statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Lease Agreement which is in the name of the bidder.
3.	An EME or QSE or any entity which is at least 51% owned by black women (Mandatory)	4	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
4.	An EME or QSE or any entity which is at least 51% owned by black people with disability (Mandatory)	2	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> <ul style="list-style-type: none"> Medical Certificate indicating that the disability is permanent. <p>Or</p> <ul style="list-style-type: none"> South African Social Security Agency (SASSA) Registration indicating that the disability is permanent. <p>Or</p> <p>National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).</p>

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Page 7 of



5.	An EME or QSE or any entity which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none"> ID Copy and SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
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☐ **8.2. For procurement transaction with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals listed in table 2 below are applicable.**

NB. The use of one of goal numbers' 4 or 5 is mandatory. The BSC must select either one of the two, but not both.

Table 2

Serial No	Specific Goals	Preference Points Allocated out of 10	Documentation to be submitted by bidders to validate their claim
1.	An EME or QSE or any entity which is at least 51% owned by black people (Mandatory)	4	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Official Municipal Rates Statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Any account or statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Lease Agreement which is in the name of the bidder.
3.	An EME or QSE or any entity which is at least 51% owned by black women (mandatory)	2	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
4. <input type="checkbox"/>	An EME or QSE or any entity which is at least 51% owned by black people with disability (Mandatory)	2	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> <ul style="list-style-type: none"> Medical Certificate indicating that the disability is permanent.

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".



	OR			Or <ul style="list-style-type: none"> South African Social Security Agency (SASSA) Registration indicating that the disability is permanent. Or National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).
		5. <input type="checkbox"/> An EME or QSE or any entity which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none"> 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 9 JANUARY 2004).

6. BID EVALUATION METHOD

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

<input checked="" type="checkbox"/> 80/20 Preference points scoring system	<input type="checkbox"/> 90/10 Preference points scoring system	<input type="checkbox"/> Either 80/20 or 90/10 Preference points scoring system
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In case where below/above R 50 000 000 is selected, the lowest acceptable tender will be used to determine the applicable preference point system.

7. 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.

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

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

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

Criterion 3: Suitably qualified and appropriately experienced human resources

Allocation of suitably qualified and appropriately experienced human resources, both in respect of principals and/or other staff (contract manager, site agent, site foreman including other professional, technical and/or administrative) of the tendering Service Provider to the project, as proof that the tendering Service Provider will be able to react/respond appropriately to the Services required herein. The Company Organogram with CV's and certified ID's of all principals and employed workforce as well as proof of Professional Registration

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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.

7.2 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.

8. 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.	Not applicable
(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.	Not applicable
(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.	Not applicable
(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.	Not applicable

(e)	cidb BUILD Programme: 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. 48491 of 28 April 2023 and the cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.– Condition of Contract	Not applicable
(f)	DPWI National Youth Service training and development programme (NYS) – Condition of Contract.	Not applicable
(g)	Labour Intensive Works – Condition of Contract.	Not applicable
(h)		Select
(i)		Select

9. COLLECTION OF TENDER DOCUMENTS

- ☒ Bid documents are available for free download on e-Tender portal www.etenders.gov.za
- ☒ Alternatively; Bid documents may be collected during working hours at the following address
Department of Public Works and Infrastructure: Private Bag X 229: AVN Building:
Nana Sita Street. A non-refundable bid deposit of R 500.00 is payable (cash only) on collection of the bid documents.

10. SITE INSPECTION MEETING

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

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

Venue:	BVR Building Home Affairs: Cnr Jacob Mare & Bosman Street		
Virtual meeting link:	N/A (Physical Meeting on Site).		
Date:	16 April 2025	Starting time:	10h00

11. ENQUIRIES

11.1. Technical enquiries may be addressed to:

DPWI Project Manager	Stanley Maahlo	Telephone no:	012 310 5159
Cellular phone no	079 509 8898	Fax no:	N/A
E-mail	Stanley.maahlo@dpw.gov.za		

11.2. SCM enquiries may be addressed to:

SCM Official	Vuyiswa Moyane	Telephone no:	012 310 5130
Cellular phone no	N/A	Fax no:	N/A
E-mail	Vuyiswa.moyane@dpw.gov.za		

12. DEPOSIT / RETURN OF TENDER DOCUMENTS

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

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

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

<p>Tender documents may be posted to:</p> <p>The Director-General Department of Public Works and Infrastructure Private Bag X 229 Pretoria 0001</p> <p>Attention: Procurement section: Room At Reception In the Bid Box</p>	<p>OR</p>	<p>Deposited in the tender box at:</p> <p>The Bid Box National Department of Public Works & Infrastructure AVN Building Nana Sita Street Pretoria 0001</p>
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Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

T1.2 Tender Data

DPW-03 (EC): TENDER DATA

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS
Reference no:	

Tender / Quotation no:	PT24/064	Closing date:	06 May 2025
Closing time:	11h00	Validity period:	12 Weeks (84 Calendar days)

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

Tender no: PT24/064

C.1.4	The Employer's agent is:
Name:	Department of Public Works
Capacity:	Departmental Project Manager
Address:	AVN Building, Nana Sita Street, Pretoria, 0001
Tel:	012 310 5110
Fax:	N/A
E-mail:	Stanley.maahlo@dpw.gov.za

C.2.1 C.3.11	<p>A. <u>ELIGIBILITY IN RESPECT OF CIDB REGISTRATION:</u></p> <p>The following tenderers who are registered with the CIDB, or are *capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated (* tenderers who are capable of being so registered, or who have applied for registration but have not yet received confirmation of such registration, must provide, <u>with this tender</u>, acceptable documentary proof thereof):</p> <ul style="list-style-type: none"> a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a 6 EP or 6 EP** class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above: Applicable <p>Joint ventures are eligible to submit tenders provided that:</p> <ul style="list-style-type: none"> 1. every member of the joint venture is registered with the CIDB; 2. the lead partner has a contractor grading designation in the 6 EP or 6 EP** class of construction work; and 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations for a 6 EP or 6 EP** class of construction work <p>** Delete "or select tender value range select class of construction works" where only one class of construction works is applicable</p> <p>A contract will be entered into with a tenderer who has in his employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for supervisory and management staff: Applicable</p>
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Tender no: PT24/064

C. FUNCTIONALITY WEIGHTING APPLICABLE TO THIS BID:

Note: Failure to meet minimum functionality score will result in the tenderer being disqualified.

Functionality Criteria	Weighting Factor
<p>1. Work Experience on Projects Completed</p> <p>The bidder must submit with the tender the following:</p> <p>Appointment letter on a client letter head and Practical Completion Certificates or First Delivery Certificate and contactable references on the referenced projects. Comparable / relevant (similar in nature & value) Electrical Engineering / Installation works ranging from R 6 500 000, 00 and above.</p> <p>The referenced projects must have been successfully completed by the company within the past ten (10) years. (NB – References, contact details and completion certificates must be provided on similar works).</p> <p>2.1). Five (5) or more successful completed projects = 5 points 2.2). Four (4) successful completed projects = 4 points 2.3). Three (3) successful completed projects = 3 points 2.4). Two (2) successful completed projects = 2 points 2.5). One (1) successful completed project = 1 point 2.6). Zero completed projects = 0 points</p>	30%
<p>2. Key Personnel - Human Resource</p> <p>The bidder must submit with the tender proof of the workforce to execute the project by attaching the following:</p> <p>a) CV's of the workforce to be involved on the project. b) Certified copies of their qualification certificates that are not older than six (6) months on the closing date of the tender. c) Certified ID copies that are not older than six (6) months on the closing date of the tender advert.</p> <p>A company's project specific organogram must be submitted with the tender which reflects the key personnel to be permanently assigned to the project with their relevant experience in the built environment under the below mentioned key site staff members required.</p> <p>The key personnel must be employees of the company, if not, an undertaking should be submitted with the tender from the person that he/she will be involved on the project for the duration of the project and will be permanently assigned to the project on a full time basis.</p> <p>Please Note: the below will be evaluated as a cluster, any omission of any individual below will result in a zero score.</p> <p>2.1). For a bidder to be allocated 5 points, the bidder must have the following:</p>	30%



	<p><input type="checkbox"/> Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualifications having more than 5 years of experience (post registration).</p> <p><input type="checkbox"/> Site Agent with a National diploma in Electrical Engineering with more than 5 years of experience (post qualification).</p> <p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with a minimum of 5 years of experience or more (post registration).</p> <p>2.2). For a bidder to be allocated 4 points, the bidder must have the following:</p> <p><input type="checkbox"/> Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 4 years below 5 years of experience (post registration).</p> <p><input type="checkbox"/> Site Agent with a National diploma in Electrical Engineering with more than 4 years below 5 years of experience (post qualification).</p> <p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 4 years below 5 years of experience (post registration).</p> <p>2.3). For a bidder to be allocated 3 points, the bidder must have the following:</p> <p><input type="checkbox"/> Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 3 years below 4 years of experience (post registration)</p> <p><input type="checkbox"/> Site Agent with a National diploma in Electrical Engineering with more than 3 years below 4 years of experience (post qualification).</p> <p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 3 years below 4 years of experience (post registration).</p> <p>2.4). For a bidder to be allocated 2 points, the bidder must have the following:</p> <p><input type="checkbox"/> Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 2 years below 3 years of experience (post registration).</p> <p><input type="checkbox"/> Site Agent with a National diploma in Electrical Engineering with more than 2 years below 3 years of experience (post qualification).</p> <p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 2 years below 3 years of experience (post registration).</p> <p>2.5). For a bidder to be allocated 1 point, the bidder must have the following:</p>	
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<p><input type="checkbox"/> Contract Manager - Electrical Engineer or Technologist, registered as a Professional with ECSA with relevant qualification having more than 1 year below 2 years of experience (post registration).</p> <p><input type="checkbox"/> Site Agent with a National diploma in Electrical Engineering with more than a minimum of 1 year below 2 years of experience (post qualification).</p> <p><input type="checkbox"/> Safety Officer with relevant built environment qualification, must be registered with SACPCMP as a Professional or a Candidate with more than 1 year below 2 years of experience (post registration).</p> <p>None submission of any of the above = zero points.</p>	
<p>3. Project Execution Plan (PEP), etc</p> <p>For the bidder to be allocated five (5) points, the bidder must submit with the tender the following :</p> <p>3.1 Project Specific PEP based on the contract duration in the contract data (22 months) reflecting the following:</p> <p>3.1.1) Key activities 3.1.2) Show critical path 3.1.3) Show logical sequencing of activities 3.1.4) Show duration of key activities</p> <p>3.2 Project Specific Method Statement - Replacement of UPS'S</p> <p>Please note: the above will be evaluated as a cluster any omission of the above will result in a zero score.</p>	20%
<p>4. Bank Rating</p> <p>The bidder must submit with the tender an original stamped bank rating letter or certified copy of such a letter which is not older than six (6) months on the closing date of the tender.</p> <p>4.1) Rating A = 5 Points 4.2) Rating B = 4 Points 4.3) Rating C = 3 Points 4.4) Rating D = 2 Points 4.5) Rating E = 1 Point</p> <p>None of the above the bidder will be allocated zero points.</p>	20%
Total	100 Points
<i>(Weightings will be multiplied by the scores allocated during the evaluation process to arrive at the total functionality points)</i>	
Minimum functionality score to qualify for further evaluation:	60%



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

D1. For procurement transaction with rand value greater than R2 000,00 and up to R1 Million (Inclusive of all applicable taxes) the specific goals listed below are applicable.

Table 1

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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Official Municipal Rates Statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Any account or statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> <ul style="list-style-type: none"> Medical Certificate indicating that the disability is permanent. <p>Or</p> <ul style="list-style-type: none"> South African Social Security Agency (SASSA) Registration indicating that the disability is permanent. <p>Or</p> <ul style="list-style-type: none"> National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).

<input checked="" type="checkbox"/>	5.	An EME or QSE which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none"> ID Copy and SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
	D2. For procurement transaction with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals listed in table 1 below are applicable.			
	Table 2			
	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 or any entity which is at least 51% owned by black people (Mandatory)	10	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 Or Lease Agreement which is in the name of the bidder.
	3.	An EME or QSE or any entity which is at least 51% owned by black women (Mandatory)	4	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
	4.	An EME or QSE or any entity which is at least 51% owned by black people with disability (Mandatory)	2	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> <ul style="list-style-type: none"> Medical Certificate indicating that the disability is permanent. Or South African Social Security Agency (SASSA) Registration indicating that the disability is permanent. Or National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).
	5.	An EME or QSE or any entity which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none"> ID Copy and SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.



D3. For procurement transaction with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals listed in table 2 below are applicable.

NB. The use of one of goal numbers' 4 or 5 is mandatory. The BSC must select either one of the two, but not both.

Table 3

Serial No	Specific Goals	Preference Points Allocated out of 10	Documentation to be submitted bidders to validate their claim
1.	An EME or QSE or any entity which is at least 51% owned by black people (Mandatory)	4	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Official Municipal Rates Statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Any account or statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Lease Agreement which is in the name of the bidder.
3.	An EME or QSE or any entity which is at least 51% owned by black women (mandatory)	2	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
4. <input type="checkbox"/>	An EME or QSE or any entity which is at least 51% owned by black people with disability (Mandatory)	2	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> <ul style="list-style-type: none"> Medical Certificate indicating that the disability is permanent <p>Or</p> <ul style="list-style-type: none"> South African Social Security Agency (SASSA) Registration

				indicating that the disability is permanent.	
	OR			Or	
	5. <input type="checkbox"/>			National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).	
		An EME or QSE or any entity which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none"> 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 9 JANUARY 2004).

Tender no: PT24/064

E. ELIGIBILITY IN RESPECT OF RISK TO 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.

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

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

1. The level of progress on current projects in relation to the project programme or, if such is not available/applicable, to the contractual construction period in general;
2. The degree to which previous projects have been completed within the contractual completion periods and/or extensions thereto, and the extend of penalties imposed;

Tender no: PT24/064

	<ol style="list-style-type: none"> 3. Project performance: time management & programming of works, timeous ordering of materials and appointment of subcontractors; 4. Financial management: payment to suppliers and cash flow problems; 5. Quality of workmanship: extent of reworks and timeous attention to remedial works; 6. Personnel resources: suitably qualified and experienced, turnover in site staff and labour force, specifically site manager and foreman; 7. Personnel management: extent of labour disputes and ability to resolving labour disputes amicably; 8. Sub-contractors: extent of turnover in subcontractors, general liaison and payment problems experienced; 9. Contract administration: contractual aspects such as complying to laws and regulations, insurances, security, submission of required documentation timeously, reaction to written contract instructions, appointments of subcontractors, etc. as can generally be expected in standard/normal conditions of contract. 10. Health & Safety: adherence to regulations and compliance, and number of transgressions & serious incidents. 11. Plant & equipment: sufficient resources on site and in time. 12. Delays: extent of causing delays, submission of claims timeously, and abuse of or exaggerated delay claims. 13. Final account: extent to which the contractor assisted in finalising the final account. <p>Criterion 3: Suitably qualified and appropriately experienced human resources</p> <p>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.</p> <p>Criterion 4: Attendance of compulsory bid clarification meeting, if applicable</p> <p>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.</p> <p>E.2 Commercial risks:</p> <p>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.</p> <p>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.</p>
C.2.7	For particulars regarding a pre-tender site inspection meeting, see Notice and Invitation to Tender T1.1

Tender no: PT24/064

C.2.12	<p>If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements. A tenderer may submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. Provided that the tenderer's main tender offer is according to specification and would under normal circumstances be recommended for acceptance, his alternative tender offer may also be considered for the purpose of the award of the contract.</p> <p>Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.</p> <p>Alternative tender offer permitted: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
C.2.13.2	<p>The list of Returnable Documents identifies which of the documents a tenderer must complete when submitting a tender offer. The tenderer must submit his tender offer by completing the Returnable Documents, signing the "Offer" section in the "Form of Offer and Acceptance" and delivering the Returnable Documents back to the Department.</p>
C.2.13.5	<p>The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are as per Notice and Invitation to Tender T1.1.</p>
C.2.13.6 C.3.5	<p>A two-envelope procedure will not be followed.</p>
C.2.15	<p>The closing time for submission of tender offers is as per Notice and Invitation to Tender T1.1.</p>
C.2.16	<p>The tender offer validity period is as per Notice and Invitation to Tender T1.1.</p>
C2.16.3	<p>Omit the wording of the last sentence for those projects which are subject to CPAP</p>
C.2.18	<p>The tenderer will be required to submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts):</p> <p><input checked="" type="checkbox"/> Together with his tender; or <input type="checkbox"/> The tenderer shall submit his fully priced and completed sectional summary- and final summary pages with the tender and thereafter submit the fully completed Bills of Quantities within fourteen (14) calendar days of the date requested to do so prior to the award of the contract.</p>
C.2.19	<p>Access shall be provided for inspections, tests and analysis as may be required by the Employer.</p>
C.3.4.1 C.3.4.2	<p>The location for opening of the tender offers, immediately after the closing time thereof shall be at: National Department of Public Works and Infrastructure AVN Building Nana Sita Street Pretoria 0001</p>
C.3.8	<p>The words "responsive tender" and "acceptable tender" shall be construed to have the same meaning.</p>

Tender no: PT24/064

C.3.9.3	Omit the wording and replace with the following: "Notify the tenderer of all errors, omissions and/or rate imbalances that are identified in the tender offer and request the tenderer to, within a stipulated time, accept the total of prices as corrected in accordance with C.3.9.4."
C.3.9.4	Omit the wording of the first sentence and replace with the following: "In cases where tender offers contain errors, omissions and/or rate imbalances, these are to be corrected as follows:"
C.3.9.4	Add sub paragraph c) to C.3.9.4, as follows: "c) If the tenderer does not accept the corrected tender offer, or cannot reach consensus with the Employer on a corrected tender offer, the tender is to be classified as not acceptable/non responsive and removed from further contention."
C.3.11.1	The procedure for the evaluation of responsive tenders is Method 2: Financial Offer and Preference.
C.3.13	Add the following to sub paragraph a), as follows: The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act, 2004 (Act No. 12 of 2004) as a person prohibited from doing business with the public sector;
C.3.17	Provide to the successful tenderer one copy of the signed contract document.

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

VOLUME 2: RETURNABLE DOCUMENTS

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

T2.1 List of Returnable Documents

PA-09 (EC): LIST OF RETURNABLE DOCUMENTS

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS		
Tender / Quote no:	PT24/064	Reference no:	
Receipt Number:			

1. RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

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

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

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

Tender no: **PT24/064**

2. ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

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

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

3. RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

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

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

4. OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

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

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

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

Tender no: **PT24/064**

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

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

C1.1 Form of Offer and Acceptance

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

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS		
Tender no:	PT24/064	Reference no:	

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS**

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

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

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

Rand (in words):	
Rand in figures:	R

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

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

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

Company or Close Corporation:

.....

.....

And: Whose Registration Number is:

.....

And: Whose Income Tax Reference Number is:

.....

CSD supplier number:.....

OR

Natural Person or Partnership:

.....

.....

Whose Identity Number(s) is/are:

.....

Whose Income Tax Reference Number is/are:

.....

CSD supplier number:.....

AND WHO IS (if applicable):

Trading under the name and style of:

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

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

Tender no: **PT24/064**

AND WHO IS:

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

SIGNED FOR THE TENDERER:

Name of representative	Signature	Date

WITNESSED BY:

Name of witness	Signature	Date

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

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

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

SECURITY OFFERED:

(a) the Tenderer accepts that in respect of contracts up to R1 million, a payment reduction** of 5% of the contract value (excluding VAT) will be applicable and will be deducted by the Employer in terms of the applicable conditions of contract

(b) in respect of contracts above R1 million, the Tenderer offers to provide security as indicated below:

- | | |
|--|--|
| (1) cash deposit of 10 % of the Contract Sum (excluding VAT) | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (2) variable construction guarantee of 10 % of the Contract Sum (excluding VAT) | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (3) payment reduction of 10% of the value certified in the payment certificate (excluding VAT) | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (4) cash deposit of 5% of the Contract Sum (excluding VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding VAT) | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (5) fixed construction guarantee of 5% of the Contract Sum (excluding VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding VAT) | Yes <input type="checkbox"/> No <input type="checkbox"/> |

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

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

.....

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

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

of Offer and Acceptance

Tender no: **PT24/064**

Other Contact Details of the Tenderer are:

Telephone No. Cellular Phone No.

Fax No.

Postal address

Banker Branch

Registration No of Tenderer at Department of Labour

CIDB Registration Number:

ACCEPTANCE

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

The terms of the contract are contained in:

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

Part C2 Pricing data

Part C3 Scope of work

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

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

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

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

For the Employer:

Name of signatory	Signature	Date

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

WITNESSED BY:

Name of witness	Signature	Date

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

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

For Internal & External Use

Tender no: **PT24/064**

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"

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

**C2.2 Bill of Quantities/ Lum Sum Document (If a returnable
document)**

BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs

SECTION 1: SERVICES BOQ

CONTENTS

ELECTRICAL, MECHANICAL AND OHS SERVICES BOQ

SERVICES BOQ SUMMARY

BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs

ELECTRICAL INSTALLATION BILL OF QUANTITIES

BILL No. 1: PRELIMINARIES & GENERAL

	Description	Unit	QTY	Rate	Amount
1,0	<u>PRELIMINARIES & GENERAL</u>				
	<u>FIXED CHARGE ITEMS</u>				
1.0.1	Contractual requirements.	Item	1,00		
1.0.2	Furnished offices. (In No.1)	Item	1,00		
1.0.3	Telephone.	Item	1,00		
1.0.4	Nameboards. (In No. 4).	Item	1,00		
1.0.5	Offices and storage sheds.	Item	1,00		
1.0.6	Workshops.	Item	1,00		
1.0.7	Laboratories.	Item	1,00		
1.0.8	Living accommodation.	Item	1,00		
1.0.9	Ablution and latrine facilities.	Item	1,00		
1.0.10	Tools and equipment.	Item	1,00		
1.0.11	Water supplies, electric power,	Item	1,00		
1.0.12	Plant.	Item	1,00		
1.0.13	Other fixed charge obligations.	Item	1,00		
1.0.14	SMME management	Item	1,00		
1.0.15	Removal of site establishment.	Item	1,00		
	<u>VALUE RELATED ITEMS</u>				
1.0.16	Contractual requirements.	Item	1,00		
1.0.17	Furnished offices. (In No. 1)	Item	1,00		
1.0.18	Telephone.	Item	1,00		
1.0.19	Nameboards.	Item	1,00		
1.0.20	Offices and storage sheds.	Item	1,00		
1.0.21	Workshops.	Item	1,00		
1.0.22	Laboratories.	Item	1,00		
1.0.23	Living accommodation.	Item	1,00		
1.0.24	Ablution and latrine facilities.	Item	1,00		
1.0.25	Tools and equipment.	Item	1,00		
1.0.26	Water supplies, electric power,	Item	1,00		
1.0.27	Plant.	Item	1,00		
1.0.28	Other value related obligations.	Item	1,00		
1.0.29	SMME management	Item	1,00		
1.0.30	Removal of site establishment.	Item	1,00		
	<u>TIME RELATED ITEMS</u>				
1.0.31	Contractual requirements.	Item	1,00		
1.0.32	Furnished offices. (In No. 1)	Item	1,00		
1.0.33	Telephone.	Item	1,00		
1.0.34	Nameboards. (In No. 4).	Item	1,00		
1.0.35	Survey assistants and materials.	Item	1,00		
1.0.36	Offices and storage sheds.	Item	1,00		
1.0.37	Workshops.	Item	1,00		
1.0.38	Laboratories.	Item	1,00		
1.0.39	Living accommodation.	Item	1,00		
1.0.40	Ablution and latrine facilities.	Item	1,00		
1.0.41	Tools and equipment.	Item	1,00		
1.0.42	Water supplies, electric power,	Item	1,00		
1.0.43	Plant.	Item	1,00		
1.0.44	Supervision for duration	Item	1,00		
	CARRIED FORWARD				

BILL No. 1: PRELIMINARIES & GENERAL

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
				R	R
	BROUGHT FORWARD				
1.0.45	Company overhead	Item	1,00		
1.0.46	Other time related obligations.	Item	1,00		
1.0.47	SMME management	Item	1,00		
	<u>PROVISIONAL SUMS FOR:</u>				
1.0.48	Training	Item	-		
1.0.49	Overheads	Item	-		
1.0.50	Specified activities	Item	-		
1.0.51	Enterprise development	Item	-		
1.0.52	Overheads	Item	-		
1.0.53	Specified activities	Item	-		
1.0.54	Community Liaison Officer.	Item	-		
1.0.55	Overheads	Item	1,00		
1.0.56	Specified activities	Item	-		
1.0.57	SMME Mentor	Item	-		
1.0.58	Overheads	Item	-		
1.0.59	Specified activities	Item	-		
1.0.60	Signage & Fire Signage.	Item	-		
1.0.61	Overheads	Item	-		
1.0.62	Specified activities	Item	-		
1.0.63	5-a-Side Soccerfields	Item	-		
1.0.64	Overheads	Item	-		
1.0.65	Specified activities	Item	-		
1.0.66	Repair Work to Existing Fencing	Item	-		
1.0.67	Overheads	Item	-		
1.0.68	Specified activities	Item	-		
	<u>TEMPORARY WORKS</u>		-		
1.0.69	Dealing with traffic	Item	-		
1.0.70	Temporary works	Item	-		
1.0.71	Hire equipment	Item	-		
1.0.72	use equipment	Item	-		
1.0.73	protect services	Item	-		
1.0.74	survey	Item	-		
1.0.75	compliance with ohs	Item	-		
1.0.76	Workmen's compensation act	Item	-		
	<u>SMME PRELIMINARY AND GENERAL</u>		-		
	<u>FIXED CHARGE ITEMS</u>		-		
1.0.77	Offices and storage sheds.	Item	-		
1.0.78	Tools and equipment.	Item	-		
1.0.79	Water supplies, etc.	Item	-		
1.0.80	Plant.	Item	-		
1.0.81	Other fixed charge obligations.	Item	-		
1.0.82	Removal of site establishment.	Item	-		
	<u>VALUE RELATED ITEMS</u>		-		
1.0.83	Offices and storage sheds.	Item	-		
1.0.84	Tools and equipment.	Item	-		
	CARRIED FORWARD				

[illegible][illegible]

BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs

ELECTRICAL INSTALLATION BILL OF QUANTITIES

BILL No. 2: UPS ROOM DECOMMISSIONING & BUILDING WORKS					
ITEM	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
2,0	UPS ROOM				
2.0.1	Allow for decommissioning, rigging out, and moving off off-site 200kVA UPS Units.	no.	4		
2.0.2	Allow for decommissioning, rigging out, and moving off-site UPS Battery Banks (3 Strings of 33 blocks per UPS) and steel stands.	no.	4		
2.0.3	Allow for decommissioning, rigging out, and moving off-site the battery monitoring system and all associated componets	no.	1		
2.0.4	Allow for normal building works in the room i.e. Painting of walls, Floor, Core drill for drain pipes, Vermin proof, etc)	PC sum	1		
2,1	EXISTING UPS DB ALTERATIONS				
	Supply and install the following switch gear in the existing distribution board including wiring and accessories as per the attached drawings				
2.1.1	Replace input 300A & 630A isolators with 300A, 20kA Triple pole circuit breaker	no.	4		
2.1.2	Replace output 300A & 630A isolators with 300A, Triple pole Isolator	no.	4		
2.1.3	Allow for DB covers (red and purple cover)	Sum	1		
2.1.4	Surge Arrestor protection (3P+N)	no.	1		
2.1.5	Label DB, Danger Warning Signs and New Legend Card	no.	1		
2.1.6	Testing and commisioning and issuing a COC	sum	1		
2,2	UPS				
2.2.1	Supply and install 200kVA Transformer based 0.9 pf rated, 3-phase 400 VAC input, 3-phase 400 VAC output, online double conversion 'UPS system that is parallel able', user friendly, network interface able, with full input and output and DC isolation and fuse protection as well as static and manual bypass switches. inclusive of NETMAN 208 SNMP,Parallel Cards, DC fused isolator protection, battery monitoring with GSM capabilities	no.	4		
	CARRIED FORWARD				

BILL No. 2: UPS ROOM DECOMMISSIONING & BUILDING WORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
				R	R
	BROUGHT FORWARD				
2.2.2	Supply and install 50kWh Lithium-Ion Phosphate Batteries. Battery bank system to ensure that 30-minutes backup time is achieved. (2x50kWh per UPS Module)	no.	8		
2.2.3	Humidity, security and temperature monitoring system with GSM capabilities	Sum	1		
2.2.4	Supply and install DC cabling between UPS and Battery Banks	Sum	1		
2.2.5	Supply operating & maintenance manuals, test & commissioning	copies	3		
2.2.6	Supply maintenance and warranty for 12 months	sum	1		
2.2.7	Supply Extended Warranty for 60 months	sum	1		
2.2.8	Supply Extended Maintenance for 60 Months	sum	1		
2.3	LV DISTRIBUTION CABLES				
	Supply and installation of 600/1000V PVC/SWA/PVC/PVC copper cables installed in ground, ducts, cable trays, and ceiling voids				
2.3.1	95mm ² x 4 core copper cable	m	160		
2.3.2	70mm ² bare copper earth wire (BCEW)	m	160		
2.4	CABLE TERMINATIONS				
	Supply and installation of 600/1000V PVC/SWA/PVC/PVC copper cable terminations complete with lugs and earthings as required and specified				
2.4.1	95mm ² x 4 core copper cable	no.	8		
2.4.2	70mm ² bare copper earth wire (BCEW)	no.	8		
2.5	TESTING AND COMISSIONING				
2.5.1	Testing and comissioning of the entire UPS network and lighting system including the provision of all test equipment and issuing of a certificate of compliance for the installation.	sum	1		
2.5.2	Provide as built drawings for the whole electrical installation to the engineer	set	3		
	CARRIED FORWARD				

BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs

ELECTRICAL INSTALLATION BILL OF QUANTITIES

BILL No. 3: LIGHTING AND POWER INSTALLATION					
ITEM	DESCRIPTION	UNIT	QTY	RATE R	AMOUNT R
3.0	CONDUITS AND ACCESSORIES Supply and install new PVC conduit chased in walls, installed into ceiling voids, cast into concrete as specified complete with accessories.				
3.0.1	20mm diameter PVC conduits complete with accessories	m	1		Rate Only
3.0.2	25mm diameter PVC conduits complete with accessories	m	1		Rate Only
3.0.3	25mm diameter bosal conduits complete with accessories	m	100		
3.0.4	25mm diameter bosal conduits complete with accessories	m	100		
3.0.5	32mm diameter bosal conduits complete with accessories	m	100		
3.1	CONDUCTORS Supply and installation of the following PVC insulated conductors with colours as specified, into trunking and conduit including terminations on both ends, to specification				
3.1.1	2,5mm ²	m	150		
3.1.2	4mm ²	m	150		
3.1.3	2,5mm ² bare copper earth wire	m	1500		
3.2	LIGHT SWITCHES Supply and install the following flush mounted light switches complete with wall boxes as specified and indicated on drawings				
3.2.1	1 Lever, 1 Way Light Switch	no.	1		
	CARRIED FORWARD				

BILL No. 3: LIGHTING AND POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
				R	R
	BROUGHT FORWARD				
3.2.	Dual technology occupancy sensor, 10A, 240V, 50Hz.	no.	1		
3.3	POWER SKIRTING. TRUNKING CABLE TRAY & WIRE MESH				
	Supply and install the following wire ways complete with mounting accessories, tees, bends, end caps etc				
3.3.1	230mm wide perforated galvanised steel cable tray complete with mounting and suspending accessories, medium duty	m	100		
3.3.2	230mm galvanised steel cable wire mesh basket complete with mounting, splicing and suspending accessories	m	100		
3.3.3	P9000 trunking complete with mounting and suspending accessories, tees, end caps, bends etc	m	100		
3.4	SOCKET OUTLETS AND ISOLATORS				
	Supply and install the following socket outlets and isolators as specified and as indicated on drawings.				
3.4.1	Normal, white single switched socket outlet mounted on power skirting	no.	1		Rate Only
3.4.2	Single, normal, switched socket outlet wall mounted	no.	2		
3.4.3	30A double pole isolator in weather proof box for AC units	no.	4		
3.4.4	5A unswitched socket outlets for light fittings	no.	4		
	Supply and installation of the following light fittings, complete with lamps and electronic control gear, mounting accessories as specified and as indicated on attached drawings.				
3.5.1	2x35W vapor-proof channel fluorescent luminaires with linear fluorescent lamps	no.	7		
3.5.	Same as above with 1 hour emergency battery back-up system	no.	1		
	TOTAL CARRIED FORWARD TO SUMMARY				

BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs

MECHANICAL INSTALLATIONS HVAC SYSTEMS BILL OF QUANTITIES

BILL No.4 :MECHANICAL INSTALLATIONS HVAC SYSTEMS					
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4.00	<u>HEATING, VENTILATION & AIR-CONDITIONING SYSTEM</u>				
4.01	Air Conditioning Units				
	.01 Supply and installation of new 14,1 kW cassette inverterbtype heating and cooling air-conditioning unit. Rate to be inclusive of all required building work, pipework and making good.	No.	4		
4.02	Fans and Ducting				
	01. Supply and install 315mm diameter in-line axial extraction air fan supplying 400 litres per second at 55 Pa complete with 2 sound attenuators, filter box and accessories.	No.	2		
4.03	<u>GENERAL</u>				
	Operating and Maintenance manuals:				
	.01 Prepare and supply three sets of detailed Operation and Maintenance Manuals including as-built drawings. An electronic version of the drawings shall also be supplied on compact disc in AutoCAD format. The manuals and compact disc shall be handed over to the Engineer.	-	-		
	Development of a syllabus for maintenance and operations training				
	02 HVAC Systems	-	-		
	Presentation of training course on HVAC Equipment Maintenance and Operations.				
	03 HVAC System	-	-		
	<u>COMMISSIONING</u>				
	Commissioning and testing of the installation				
	.01 HVAC Equipment	-	-		
TOTAL BILL NO 1 - CARRIED TO SUMMARY					

BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs

MECHANICAL INSTALLATIONS HVAC SYSTEMS BILL OF QUANTITIES

BILL No.5 :FIRE DETECTION						
	ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	5.	<u>FIRE DETECTION SYSTEM</u>				
	5.01	Supply, install,test and commission a complete fire detection and alarm system as per specification and local municipal by-laws. The fire detection and alarm system shall comprise of the following description and as per drawing.				
	5.02	Supply and install 25mm metal conduits for fire detection system wiring, including all round and square termination boxes and P8000 trunking.	m	200		
	5.03	Supply and install fire resistant type 1mm ² wire, interconnected between, the detectors, the break glass units, strobe light and audible alarm.	m	200		
	5.04	Supply and install 3 zone analogue addressable fire control panel complete with battery back-up system and printer as per specification. Wall mounted 1,5m above ground in area indicated on the Engineer's drawing.	No			
	5.05	Supply and install analogue addressable optical smoke detectors as per specification fixed to a 65mm diameter conduit box.	No	4		
	5.06	Supply and install analogue addressable rate-of rise heat detectors as per specification fixed to a 65mm diameter conduit box.	No			
	5.07	Supply and install optical smoke detectors or rate-of rise heat detectors with base siren/sounder warning unit as per specification fixed to a 65mm diameter conduit box, as shown on the drawing.	No	2		
	5.08	Supply and install fire signage and accessories.	-	-		
	5.09	Sigma SI Lamps with Mode Select and Manual Release	No	1		
	5.10	Supply and install Red "fire" manual call points (Breakglass Unit) as per specification fixed to a 65mm diameter conduit box.	No	1		
	5.11	Supply & Install Inert Gas Fire Supression System for enclosed rooms including all accessories required to make the system complete				
	CARRIED FORWARD					

BROUGHT FORWARD					
		The rooms shall have the following sizes: .01 Server Room 295 m³	-	-	Sum
	5.12 REMRAD System	Supply and install REMRAD system linked to fire panel and with wireless communication link to security and emergency management systems. Installation to include one year's licence including maintenance.	No	0	
	5.13 Operation and Maintenance Manuals	.01 Prepare and supply three sets of detailed and Operation and Maintenance manuals including as-built drawings. An electronic version of the drawings shall also be supplied on compact disc in AutoCAD format. The manuals and compact disc shall be handed over to the Engineer.	-	-	Sum
		Development of a syllabus for maintenance and operations training			
		.02 Complete Fire Detection and Suppression System	-	-	Sum
		Presentation of training course on Fire Detection and Suppression Equipment Maintenance and Operations			
		.03 Complete Fire Detection and Suppression System	-	-	Sum
	5.14 Commissioning	Testing and commissioning of the entire fire detection and suppression system including issuing relevant installation certificates.	-	-	Sum
	TOTAL BILL NO 2 - CARRIED TO SUMMARY				R

BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs

MECHANICAL INSTALLATIONS HVAC SYSTEMS BILL OF QUANTITIES

BILL No.6 : OHS SERVICES						
REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
SUPPLY OF PERSONAL PROTECTIVE CLOTHING & EQUIPMENT						
1	Steel toe cap boots with impact protection of 200 joules	no	8			
2	Poly cotton 2 piece Reflected Conti Suede-Orange	no	8			
3	One Size fits All Head Protection Hardhats - Orange	no	8			
4	200mm x 100mm Crayfish Protective Gloves -	no	8			
5	Ear protection Classic Ear Muffs - Red	no	10			
6	Welding Helmet	no	5			
7	Eye goggles Euro Anti scratch Spectacles	no	10			
8	Chrome Leather Gloves	no	10			
9	Safety Gumboots	no	10			
10	Respiratory Protective equipment- Dust Mask FFP1,2,3	no	10			
11	High visibility Reflective safety vests with zip & ID - Lime	no	8			
BARRICADING, EDGE PROTECTION, SIGNAGE						
12	Supply, installation & removal of barricading net (Minimum 1,8m x 0.002m x 50m Orange & Yellow)	m	200			
13	Hard Solid barricading Guardrail (Excavations>1m depth) also allow for Dermacation	m	6			
14	Temporary Edge Protection Equipment	m	6			
15	Mandatory Health and Safety Signage	no	4			
16	Notices/Posters	no	3			
OHS TRAINING						
17	First Aid Training	no	2			
18	OH&S Representative training	no	2			
19	Emergency Rescue training	no	2			
20	Hazard identification & risk assessment training	no	2			
21	Induction training	no	2			
22	OHS Training of Personnel working in Substations, LT, and HT voltages	no	2			
23	Electrical Safety training	no	4			
RESPONSIBILITY STRUCTURE						
24	Construction Health Safety Officer/Manager (SACPCMP Professional Registration required)	no	1			
SHE SYSTEM						
25	Development of a Health and Safety Plan & File	no	1			
26	Development of Fall Protection Plan plus a Rescue Plan	no	1			
27	Development of an Emergency Plan (Comprehensive plan that includes project scope specific	no	1			

[illegible]**TOTAL CARRIED FORWARD TO SUMMARY**

SUMMARY

**BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS - REPLACEMENT OF 4 UPSs
ELECTRICAL, MECHANICAL AND OHS INSTALLATION BILL OF QUANTITIES**

1	BILL NO. 1: PRELIMINARIES & GENERAL	
2	BILL NO. 2 : UPS ROOM DECOMMISSIONING & BUILDING WORKS	
3	BILL NO. 3 : LIGHTING AND POWER INSTALLATION	
4	BILL NO. 4 : MECHANICAL INSTALLATIONS HVAC SYSTEMS	
5	BILL NO. 5 : FIRE DETECTION	
6	BILL NO. 6 : OHS SERVICES	
	SUB TOTAL	
7	VAT @ 15%	
	TOTAL CARRIED TO SERVICES SUMMARY (EX VAT)	

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

T.2.2 Returnable Documents required for Tender evaluation purposes

PA-11: BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

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

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

2. Bidder's declaration

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

YES / NO

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

Full Name	Identity Number	Name of State institution

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

- 2.2 Do you, or any person connected with the bidder, have a relationship with any person 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 / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?

YES / NO

- 2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, the undersigned, (name).....
in submitting the accompanying bid, do hereby make the following statements that I
certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
3.5 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.

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

This form has been aligned with SBD4

PA-29: CERTIFICATION OF INDEPENDENT BID DETERMINATION

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS's		
Tender no:	PT24/064	Reference no:	

INTRODUCTION

1. This PA-29 [Certificate of Independent Bid Determination] must form part of all tenders¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act, 1998(Act 89 of 1998) as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive tendering (or tender rigging)². Collusive tendering is a *per se* prohibition meaning that it cannot be justified under any grounds.
3. Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the tender of any tenderer if that tenderer, or any of its directors, have abused the institution's supply chain management system and/or committed fraud or any other improper conduct in relation to such system;
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the tendering process or the execution of that contract.
4. This form (PA-29) serves as a certificate of declaration that would be used by institutions to ensure that, when tenders are considered, reasonable steps are taken to prevent any form of tender rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (PA-29) must be completed and submitted with the tender.

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

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

PA-29: CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying tender:

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS's
Tender no:	PT24/064

in response to the invitation for the tender made by:

The Government of the Republic of South Africa in its Department of Public Works,

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

I certify, on behalf of:

that:

(Name of tenderer)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying tender will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the tenderer to sign this Certificate, and to submit the accompanying tender, on behalf of the tenderer;
4. Each person whose signature appears on the accompanying tender has been authorized by the tenderer to determine the terms of and to sign the tender on behalf of the tenderer;
5. For the purposes of this Certificate and the accompanying tender, I understand that the word "competitor" shall include any individual or organization, other than the tenderer, whether or not affiliated with the tenderer, who:
 - (a) has been requested to submit a tender in response to this tender invitation;
 - (b) could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer;
6. The tenderer has arrived at the accompanying tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive tendering.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation);
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit a tender;
 - (e) the submission of a tender which does not meet the specifications and conditions of the tender;or
 - (f) tendering with the intention not to win the tender.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this tender invitation relates.

9. The terms of the accompanying tender have not been, and will not be, disclosed by the tenderer, directly or indirectly, to any competitor prior to the date and time of the official tender opening or of the awarding of the contract.

I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders 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, 1998(Act 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, 2004 (Act 12 of 2004) or any other applicable legislation.

Name of Tenderer	Signature	Date	Position

PA-15.1: RESOLUTION OF BOARD OF DIRECTORS

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

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

Held at _____ (place)

on _____ (date)

RESOLVED that:

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

(Project description as per Bid / Tender Document)

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

- *Mr/Mrs/Ms: _____

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

and who will sign as follows: _____

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

	Name	Capacity	Signature
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15			
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20			

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

Note:

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

ENTERPRISE STAMP

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

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

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

Held at _____ (place)

on _____ (date)

RESOLVED that:

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

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

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

(Project description as per Bid /Tender Document)

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

2. *Mr/Mrs/Ms: _____

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

and who will sign as follows: _____

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

3. The Enterprise accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the Department in respect of the project described under item 1 above.

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

Physical address: _____

_____ (code)



Postal Address: _____

_____ (code)

Telephone number: _____

Fax number: _____

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

Note:

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

ENTERPRISE STAMP

PA-15.3: SPECIAL RESOLUTION OF CONSORTIA OR JOINT VENTURES

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

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

Held at _____ (place)

on _____ (date)

RESOLVED that:

RESOLVED that:

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

(Project description as per Bid /Tender Document)

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

PA-15.3: Special Resolution of Consortia or Joint Ventures

B. *Mr/Mrs/Ms: _____

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

and who will sign as follows: _____

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

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

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

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

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

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

Physical address: _____

_____ (Postal code) _____

Postal Address: _____

_____ (Postal code) _____

Telephone number: _____

Fax number: _____

PA-15.3: Special Resolution of Consortia or Joint Ventures

	Name	Capacity	Signature
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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 all the Duly Authorised Representatives of the Legal Entities to the consortium/joint venture submitting this tender, as named in item 2 of Resolution PA-15.2.
3. Should the number of the Duly Authorised Representatives of the Legal Entities joining forces in this tender exceed the space available above, additional names, capacity and signatures must be supplied on a separate page.
4. Resolution PA-15.2, duly completed and signed, from the separate Enterprises who participate in this consortium/joint venture, must be attached to this Special Resolution (PA-15.3).



DPW-16 (EC): SITE INSPECTION MEETING CERTIFICATE

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS		
Tender / Quotation no:	PT24/064	Reference no:	
Closing date:	06/05/2025		

This is to certify that I, _____ representing

_____ in the capacity of

_____ visited the site on: **16/04/2025**

I have made myself familiar with all local conditions likely to influence the work and the cost thereof. I further certify that I am satisfied with the description of the work and explanations given at the site inspection meeting and that I understand perfectly the work to be done, as specified and implied, in the execution of this contract.

Name of Tenderer	Signature	Date

Name of DPW Representative	Signature	Date

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

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

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

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 Preference Points System to be applied

(tick whichever is applicable).

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

1.3 Points for this tender shall be awarded for:

1.3.1 Price; and

1.3.2 Specific Goals

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

CHOOSE APPLICABLE PREFERENCE POINT SCORING SYSTEM	<input checked="" type="checkbox"/> 80/20	<input type="checkbox"/> 90/10
PRICE	80	90
SPECIFIC GOALS	20	10
Total points for Price and Specific Goals	100	100

1.5 Breakdown Allocation of Specific Goals Points

☐ **1.5.1. 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.**

Table 1

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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Official Municipal Rates Statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Any account or statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.

			<p>and</p> <ul style="list-style-type: none"> • Medical Certificate indicating that the disability is permanent. <p>Or</p> <ul style="list-style-type: none"> • South African Social Security Agency (SASSA) Registration indicating that the disability is permanent. <p>Or</p> <ul style="list-style-type: none"> • National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).
5.	An EME or QSE which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none"> • ID Copy and SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.



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

Table 2

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 or any entity which is at least 51% owned by black people (Mandatory)	10	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Official Municipal Rates Statement which is in the name of the bidder. <p>Or</p>

			<ul style="list-style-type: none"> Any account or statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none"> Lease Agreement which is in the name of the bidder.
3.	An EME or QSE or any entity which is at least 51% owned by black women (Mandatory)	4	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
4.	An EME or QSE or any entity which is at least 51% owned by black people with disability (Mandatory)	2	<ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> <ul style="list-style-type: none"> Medical Certificate indicating that the disability is permanent. <p>Or</p> <ul style="list-style-type: none"> South African Social Security Agency (SASSA) Registration indicating that the disability is permanent. <p>Or</p> <p>National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).</p>

5.	An EME or QSE or any entity which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none">ID Copy and SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.
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1.5.3. For procurement transaction with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals listed in table 3 below are applicable.

NB. The use of one of goal numbers' 4 or 5 is mandatory. The BSC must select either one of the two, but not both.

Table 3

Serial No	Specific Goals	Preference Points Allocated out of 10	Documentation to be submitted by bidders to validate their claim
1.	An EME or QSE or any entity which is at least 51% owned by black people (Mandatory)	4	<ul style="list-style-type: none">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	<ul style="list-style-type: none">Official Municipal Rates Statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none">Any account or statement which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none">Permission to Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. <p>Or</p> <ul style="list-style-type: none">Lease Agreement which is in the name of the bidder.
3.	An EME or QSE or any entity which is at least 51%	2	<ul style="list-style-type: none">SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable.

		owned by black women (mandatory)		
	4. <input type="checkbox"/>	An EME or QSE or any entity which is at least 51% owned by black people with disability (Mandatory)	2	<ul style="list-style-type: none"> • SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> <ul style="list-style-type: none"> • Medical Certificate indicating that the disability is permanent. <p>Or</p> <ul style="list-style-type: none"> • South African Social Security Agency (SASSA) Registration indicating that the disability is permanent. <p>Or</p> <p>National Council for Persons with Physical Disability in South Africa registration (NCPDSA).</p>
	OR			
	5. <input type="checkbox"/>	An EME or QSE or any entity which is at least 51% owned by black youth (Mandatory)	2	<ul style="list-style-type: none"> • 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 9 JANUARY 2004).

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

2. DEFINITIONS

- (a) **"tender"** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations,

competitive tendering process or any other method envisaged in legislation;

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

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

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{min} = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

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

Table 4: Specific goals for the tender and points claimed are indicated per the table below.

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

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

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
1. An EME or QSE (or any entity for procurement transaction with rand value greater than R1 Million) which is at least 51% owned by black people	4	10		
2. Located in a specific Local Municipality or District Municipality or Metro or	2	2		

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Province area for work to be done or services to be rendered in that area				
3. An EME or QSE (or any entity for procurement transaction with rand value greater than R1 Million) which is at least 51% owned by black women	2	4		
4. An EME or QSE (or any entity for procurement transaction with rand value greater than R1 Million) which is at least 51% owned by black people with disability	2	2		
5. An EME or QSE (or any entity for procurement transaction with rand value greater than R1 Million) which is at least 51% owned by black youth.*	2	2		

DECLARATION WITH REGARD TO COMPANY/FIRM

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

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company

☐ State Owned Company
[TICK APPLICABLE BOX]

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

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

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

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

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS			
Tender / quotation no:	PT24/064	Closing date:	06 May 2025	
Advertising date:	04 April 2025	Validity period:	84 Calendar days	

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

1.1. Current projects

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

1.2. Completed projects

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

Name of Tenderer	Signature	Date

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

**T.2.2 Returnable Documents : Other Documents that will be
incorporated into the contract**

PA- 40: DECLARATION OF DESIGNATED GROUPS

Tender no: **PT24/064**

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

Name of Tenderer

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

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

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

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

PA- 40: DECLARATION OF DESIGNATED GROUPS

Tender no: **PT24/064**

2. DECLARATION:

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

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

Signed by the Tenderer

Name of representative	Signature	Date

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

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS		
Tender no:	PT24/064	Reference no:	

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

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

Name of Tenderer	Signature	Date

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

Name of Tenderer	Signature	Date



DPW-15 (EC): SCHEDULE OF PROPOSED SUBCONTRACTORS

Project title:	<i>Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS</i>		
Tender no:	PT24/064	Reference no:	

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

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

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

Name of representative	Signature	Capacity	Date

Name of organisation:	
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DPW-22 (EC): PARTICULARS OF ELECTRICAL CONTRACTOR

Project title:	Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS		
Tender no:	PT24/064	Reference no:	

Name of Electrical Contractor:	
Address:	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Electrical Contractor registration number at the Department of Labour	<hr/>

Name of Tenderer	Signature	Date

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

Project title:	<i>Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS</i>		
Tender no:	<i>PT24/064</i>	Reference no:	

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

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

Provide additional list if space provided is insufficient.

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

These net amounts will be adjusted as follows:

FORMULA:

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

$$A = V \left(\frac{Z}{Y} - 1 \right)$$

A = the amount (R) of adjustment

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

Y = exchange rate at the closing date of tender submission

Z = exchange rate on the date of payment.

Name of Tenderer	Signature	Date

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

VOLUME 3: CONTRACT

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

Part C1: Agreement and Contract Data

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

C1.2 Contract Data

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

Project title:	<i>Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building: Request for Replacement of 4 UPS'S</i>				
Tender no:	PT24/064	WCS no:		Reference no:	

	<p>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.</p> <p>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)]</p> <p>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).</p> <p>Copies of these conditions of contract may be obtained through www.saice.org.za.</p>
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	<p>CONTRACT VARIABLES</p> <p>THE SCHEDULE (Contract Data [1.1.1.8])</p> <p>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</p> <p>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</p>
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PART 1: CONTRACT DATA COMPLETED BY THE EMPLOYER:

A PROJECT INFORMATION

A 1.0 Works [1.1.1.35]

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

Tender / Quotation no: PT24/064

A 2.0 Site [1.1.1.29]

Erf / stand number	184 Jeff Masemola
Site address	BVR Building Home Affairs, Cnr Jacob Mare & Bosman Street
Township / Suburb	Pretoria
City / Town	Pretoria
Province	Gauteng
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 Africa in its Department of Public Works & Infrastructure		
Business registration number	Not applicable	VAT number	Not applicable
E-mail	Stanley.maahlo@dpw.gov.za	Telephone	012 310 5159
Postal address	Department of Public Works Private Bag X 229 Pretoria, 0001		
Physical address	National Department of Public Works AVN Building, Nana Sita Street Pretoria 0001		

A 3.2 Employer's Representative:

Name	Stanley Maahlo	Telephone number	012 310 5159
E-mail	Stanley.maahlo@dpw.gov.za	Mobile number	079 509 8898
Postal address	Department of Public Works Private Bag X 229 Pretoria, 0001		
Physical address	National Department of Public Works AVN Building, Nana Sita Street Pretoria 0001		

Tender / Quotation no: Error! Reference source not found.

A 4.0	Employers Agent/s		MMT Consulting Engineers
A 4.1	Principal Agent [1.1.1.16]	Discipline	Electrical

Name	Mphilisi Sigonya		
Legal entity of above	MMT Consulting Engineers	Contact person	Mphilisi Sigonya
Practice number	201770109	Telephone number	011 540 0121
Country	South Africa	Mobile number	072 512 0383
E-mail	mphilisi@mmtce.co.za		
Postal address	P.O Box 68383 Bryanston Johannesburg 2021		
Physical address	17 Muswell Road South, Block A, Wedgefield Office Park Bryanston Johannesburg 2021		

A 4.2	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			

A 4.3	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			



Tender / Quotation no: PT24/064

A 4.4	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			

A 4.5	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			

A 4.6	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			

Tender / Quotation no: PT24/064

A 4.7	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			

A 4.8	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			

A 4.9	Agent [1.1.1.16]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
Country		Mobile number	
E-mail			
Postal address			
Physical address			



Tender / Quotation no: PT24/064

B CONTRACT INFORMATION

B 1.0 Definitions [1.1.1.2]

Bills of quantities: System / Method of measurement	SANS 1200
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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
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B 3.0 Offer and acceptance [1.1.1.20]

Currency applicable to this agreement [1.1.1.20]	South African Rand
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B 4.0 Documents [1.1.1.7]

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 includes 1 priced Bills of Quantities and 2 unpriced Bills of Quantities)	3

Documents comprising the agreement	Page numbers
GCC GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS, THIRD EDITION (2015)	1-30
DPW-05: (EC): GCC 2015: 3RD EDITION	1-31
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	6
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

Tender / Quotation no: PT24/064

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
MMT – Mr. Mphilisi Singonya

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

N/A

B 6.0 Insurances [8.6]

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%	Applicable
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%	Not Applicable
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%	Not Applicable
	Plant and materials supplied by the Employer [8.6.1.1.2]	R Eng / PQS to determine value	Not Applicable
	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	Not Applicable
	Direct contractors [8.6.1.1.2] where applicable, to be included in the contract works insurance	R Eng / PQS to determine value	Not Applicable
	Special Risks Insurance issued by Sasria [8.6.1.2]	R Eng / PQS to determine value	Not Applicable

Tender / Quotation no: PT24/064

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	Not Applicable
Subcontractors insurance [8.6.3] where applicable, if not included in works insurance nor by sub-Contractors	R Eng / PQS to determine value	Not Applicable
Other insurances [8.6.1.5]		
Free issue where applicable, to be included in the contract works insurance	R Eng / PQS to determine value	Not Applicable
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	Not Applicable
Other insurances: If applicable, description 1:	R Eng / PQS to determine value	Not Applicable
Other insurances; If applicable, description 2:	R Eng / PQS to determine value	Not Applicable

B 7.0 Obligations of the employer

Existing premises will be in use and occupied [5.4.1 & 5.4.2]	Applicable
If applicable, description: Personel will be working in the building during the project	
Restriction of working hours [5.8]	Applicable
If applicable, description: 07h30 till 17h00 unless arrangement is made to work outside the allocated time schedule	
Natural features and known services to be preserved by the contractor [4.7]	Not Applicable
If applicable, description:	
Restrictions to the site or areas that the contractor may not occupy [5.4.1 & 5.4.2]	Applicable
If applicable, description: The premises is classified as National Key Point, contractor should be at their designated area as directed by the client	

Tender / Quotation no: PT24/064

Supply of free issue of material and goods [8.6.1.1.2]	Amount	R	Not Applicable
If applicable, description:			

B 8.0 Subcontractors [4.4]

Not Applicable	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]]

Not Applicable	If applicable, description of sections
Section 1	
Section 2	
Section 3	
Section 4	
Section 5	
Section 6	
Remainder of the 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

Tender / Quotation no: PT24/064

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	1 month
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]	9 Months
Period to achieve Completion [5.14.4]	9 Months
Defect liability period up to and including issuing Final Approval Certificate in months [5.16.1]	12 Months
Total Contract Period	22 Months

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.	9 Months
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]	9 Months
Notification period for inspection in working days by the principal agent.	2 days
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]	
Penalty amount per calendar day for late Practical Completion , excluding VAT. [5.13].	
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.	
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.	

Tender / Quotation no: PT24/064

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

Construction period and Practical completion for portions of the Works [5.14.7]					Not Applicable	
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 whole of the Works, if applicable shall be the period in months as indicated from the date of Access to and Possession of the Site by the contractor inclusive of all public holidays, special non-working days and builders' holiday shut down periods [5.4.1, 12.2.7; 24.1]					9 Months	
Penalty for late Practical Completion, if completion in sections is required , excluding VAT [5.13]						
The penalty amount per day for failing to complete section 1 of the Works is:						R
The penalty amount per day for failing to complete section 2 of the Works is:						R
The penalty amount per day for failing to complete section 3 of the Works is:						R
The penalty amount per day for failing to complete section 4 of the Works is:						R
The penalty amount per day for failing to complete section 5 of the Works is:						R
The penalty amount per day for failing to complete section 6 of the Works is:						R
The penalty amount per day for failing to complete the whole of the Works, if applicable, is:						R 4300
Penalty amount per calendar day for late submission of contractual obligatory documents: To be calculated at Ten percent (10%) of penalty / calendar day to complete the whole of the Works as indicated above, excluding VAT.						
Penalty amount per calendar day for late Completion [5.14.4, 5.13]: To be calculated at Thirty percent (30%) of penalty / calendar day to complete the whole of the Works , excluding VAT						
Penalty amount per calendar day for late Final Completion (Issuing of Final Approval Certificate) [5.16, 5.13]: To be calculated at Fifteen percent (15%) of penalty / calendar day to complete the whole of the Works , excluding VAT						

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

Criteria to 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



Tender / Quotation no: PT24/064

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 substantiating documentation
13.7	
13.8	
13.9	
13.10	

B 12.0 Defects liability period [5.16]

Defects liability period: Refer B10.1

Applicable	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	



Tender / Quotation no: PT24/064

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]	Not Applicable
If yes, method to calculate [6.8.2 [CD]]	Contract price adjustment factor
Employer shall pay the contractor within: Refer [6.10.4 [CD]]	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

Tender / Quotation no: PT24/064
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]

Tender / Quotation no: Error! Reference source not found.

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 of 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 Deviations, (b) Contract Data, (c) These General Conditions of Contract, (e) Scope of Work, and (f) Pricing Data
1.3.4	Not applicable to this Contract.

Tender / Quotation no: PT24/064

1.3.5	<p>Replace Clause 1.3.5 with the following:</p> <ul style="list-style-type: none"> (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	<p>Replace Clause 1.3.7 with the following</p> <p>By entering into this contract, the Contractor waives any lien that he may have or acquire, notwithstanding any other condition/s in this contract.</p>
3.2.3	<p>Add to Clause 3.2.3 the following:</p> <ul style="list-style-type: none"> 1. 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: <ul style="list-style-type: none"> (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;



Tender / Quotation no: PT24/064

	<p>(f) Issuing of <i>mora</i> notices to the Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1;</p> <p>(g) Cancellation of the contract between the Employer and Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1.</p> <p>(h) Any variation orders – clause 6.3.1</p> <p>2. In order to be legally binding and have legal bearing and consequence, any ruling in respect of the above matters (a) to (h) must be on an official document, signed and issued by the Employer to the Contractor.</p> <p>3. The Contractor must submit claims, demands, notices, notifications, updated particulars and reports in writing, as well as any other supporting documentation pertaining thereto, in respect of any of the above listed matters (a) to (h), to the 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 <i>mutatis mutandis</i> be as stated in clause 10.1.4.</p> <p>4. Clauses 6.10.9 and 10.1.5 shall be amended as follows to indicate the limitation on the Employer's Agent authority in respect thereof:</p> <p>Clause 6.10.9 – Amend to read as follows:</p> <p>Within 14 days of the date of final approval as stated in the Final Approval Certificate, the Contractor shall deliver to the 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).</p> <p>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).</p> <p>Clause 10.1.5 – Amend to read as follows:</p> <p>Unless otherwise provided in the Contract, the Employer shall, within 28 days after the Contractor has delivered his claim in terms of Clause 10.1.1 as read with Clause 10.1.2, deliver to the Contractor his written and adequately reasoned ruling on the claim (referring specifically to this Clause). The amount thereof, if any, allowed by the Employer shall be included to the credit of the Contractor in the next payment certificate. 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.</p> <p>5. Insert the following under 3.2.3:</p> <p>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.</p>
3.3.2.1	<p>Amend Clause 3.3.2.1 to insert the word "plant" to read as follows:</p> <p>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.</p>

Tender / Quotation no: PT24/064

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: <ul style="list-style-type: none"> • 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) • <i>insert other requirements</i> • 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 Inclusive to the Contractor. In the event of access to, and possession of, the Site is not exclusive to the Contractor, the following limitations apply: The contractor will have limited access to site – only to designated areas as indicated by the client or employer

Tender / Quotation no: Error! Reference source not found.

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.

Tender / Quotation no: PT24/064

5.16.2	<p>Amend Clause 5.16.2 as follows:</p> <p>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.</p>
5.16.3	<p>The latent defect period for all works is: 5 years</p>
6.2.1	<p>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.</p>
6.2.3	<p>Amend Clause 6.2.3 as follows:</p> <p>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.</p>
6.3.1	<p>Amend first paragraph to Clause 6.3.1 as follows:</p> <p>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):</p>
6.5.1.2.3	<p>The percentage allowance to cover overhead charges is 33%, except on material cost where the percentage allowance is 10%.</p>
6.8.2	<p>When Contract Price Adjustment is applicable [B13] the value of payment certificates is to be adjusted by a Contract Price Adjustment Factor (CPAF):</p> <p>The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Factor with the following values:</p> <p>The value of "x" is 0.15.</p> <p>The values of the coefficients are: a = 0.25. (Labour) b = 0.3 (Contractor's equipment) c = 0.3 (Material) d = 0.15 (Fuel)</p> <p>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)</p> <p>The urban area nearest the Site is Pretoria (Select urban area from Statistical News Release, P0141, Table A)</p> <p>The applicable industry for the Construction Material Price Index for materials / plant is insert name of industry. (Select the applicable industry from Statistical News Release, P0151.1, Tables 2,4,5)</p> <p>The area for the Producer Price Index for fuel is insert name of area. (Select the area from Statistical News Release, P0142.1, Table 1.)</p> <p>The base month is insert month insert year. (The month prior to the closing of the tender.)</p>

Tender / Quotation no: PT24/064

6.8.3	Price adjustments for variations in the costs of special materials are not allowed.
6.9.1	<p>Replace Clause 6.9.1 with the following:</p> <p>"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.</p>
6.10.1	<p>Add at end of Clause 6.10.1</p> <p>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:</p> <ul style="list-style-type: none"> (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	<p>Replace Clause 6.10.5 with the following:</p> <p><u>In respect of contracts up to R2 million and in respect of contracts above R2 million where the Contractor elects a security by means of a 10% retention</u>, 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.</p> <p><u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or fixed guarantee of 5% of the Contract Sum (excl. VAT) and a 5% retention of the Value of the Works (excl. VAT)</u>, 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.</p> <p><u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or a variable guarantee of 10% of the Contract Sum (excl. VAT)</u>, 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.</p>



Tender / Quotation no: PT24/064

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.
8.6.1.1.2	Ref B6.0 CD for value of insurance.

Tender / Quotation no: PT24/064

8.6.1.1.3	Ref B6.0 CD for value of insurance.
8.6.1.3	<p>Amend Clause 8.6.1.3 as follows:</p> <p>Liability insurance that covers the Contractor against liability for the death of, or injury to any person, or loss of, or damage to any property (other than property while it is insured in terms of Clause 8.6.1.1) arising from or in the course of the 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.</p>
8.6.4	Not applicable to this Contract.
8.6.6	<p>Replace Clause 8.6.6 with the following:</p> <p>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.</p>
8.6.7	<p>Replace Clause 8.6.7 with the following:</p> <p>If the Contractor fails to effect and keep in force any of the insurances referred to in Clause 8.6.1, the Employer may cancel the Contract in terms of Clause 9.2.</p>
8.6.8	<p>Add new Clause 8.6.8.</p> <p>HIGH RISK INSURANCE</p> <p>In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:</p> <p>(1) Damage to the Works</p> <p>The Contractor shall, from the date of Commencement of the Works until the date of the Certificate of Completion, bear the full risk of and hereby indemnifies and holds harmless the Employer against any damage to and/or destruction of the Works consequent upon a catastrophic ground movement as mentioned above. The Contractor shall take such precautions and security measures and other steps for the protection of the Works as he may deem necessary.</p> <p>When so instructed to do so by the 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.</p> <p>(2) Injury to Persons or Loss of or damage to Properties</p> <p>The Contractor shall be liable for and hereby indemnifies and holds harmless the Employer against any liability, loss, claim or proceeding arising during the Contract Period whether arising in common law or by Statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above.</p> <p>The Contractor shall be liable for and hereby indemnifies the Employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or</p>



Tender / Quotation no: PT24/064

	<p>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.</p> <p>(3) It is the responsibility of the Contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in Clauses 8.6.8(1) and 8.6.8 (2) above. Without limiting his obligations in terms of the Contract, the Contractor shall, within 21 days of the Commencement Date and before Commencement of the Works, submit to the Employer proof of such insurance policy, if requested to do so.</p> <p>(4) The Employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the Contractor's default of his obligations as set out in Clauses 8.6.8 (1), 8.6.8 (2) and 8.6.8 (3). Provided that, should the Contractor on demand not pay the amount of such costs to the Employer, such amount may be determined and deducted by the Employer from any amount due to or that may become due to the Contractor under this or any other existing or subsequent contract between the Contractor and the Employer.</p>
9.1.1	Ref Clause 3.2.3
9.1.2.1	Ref Clause 3.2.3
9.1.4	<p>Replace the first paragraph of Clause 9.1.4 with the following:</p> <p>"In the circumstances referred to in Clauses 9.1.1, 9.1.2 or 9.1.3 (provided that the circumstances in 9.1.3 is not due to the fault of the Contractor, his employees, contractors or agents), and whether or not the Contract is terminated under the provisions of this Clause, the Contractor shall be entitled 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"</p>
9.1.5	<p>Replace the first paragraph of Clause 9.1.5 with the following:</p> <p>If the Contract is terminated on any account in terms of this Clause (provided that the circumstances in 9.1.3 is not due to the fault of the Contractor, his employees, contractors or agents) , the Contractor shall be paid by the Employer (insofar as such amounts or items have not already been covered by payments on account made to the Contractor) for all measured work executed prior to the date of termination, the amount (without retention), payable in terms of the Contract and, in addition: "</p>
9.1.5.5	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	<p>Add new Clause 9.2.1.3.9:</p> <p>Has failed to effect and keep in force any of the insurances referred to in Clause 8.6.1.</p>
9.2.4	<p>Add the following as Clause 9.2.4:</p> <p>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.</p>

Tender / Quotation no: PT24/064

9.3.2.2	<p>Replace Clause 9.3.2.2 with the following:</p> <p>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.</p>
9.3.2.3	Not applicable to this Contract.
9.3.3	<p>Add the following at the end of Clause 9.3.3</p> <p>After cancellation of the Contract by the Contractor, the Contractor, when requested by the Employer to do so, shall not be entitled to refuse to withdraw from the Works on the grounds of any lien or a right of retention or on the grounds of any other right whatsoever.</p> <p>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.</p>
10.1.3.1	<p>Replace Clause 10.1.3.1 with the following:</p> <p>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.</p>
10.1.3.6	<p>Replace Clause 10.1.3.6 with the following:</p> <p>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.</p>
10.1.4	Ref Clause 3.2.3.
10.1.5	Ref Clause 3.2.3.
10.1.6	<p>Add new Clause 10.1.6:</p> <p>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.</p>
10.1.3.6	<p>Replace Clause 10.1.3.6 with the following:</p> <p>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.</p>
10.2.1	<p>Replace Clause 10.2.1 with the following:</p> <p>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.</p>

Tender / Quotation no: PT24/064

10.2.2	<p>Replace Clause 10.2.2 with the following:</p> <p>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.</p>
10.2.3	Ref clause 3.2.3.
10.3.2	<p>Replace Clause 10.3.2 with the following:</p> <p>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.</p>
10.3.3	<p>Replace Clause 10.3.3 with the following:</p> <p>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.</p>
10.4.2	<p>Replace Clause 10.4.2 with the following:</p> <p>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.</p>
10.4.4	<p>Replace Clause 10.4.4 with the following:</p> <p>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.</p>
10.5	<p>Replace Clause 10.5 with the following:</p> <p>The parties may, by agreement and at any time before Litigation, refer a dispute to mediation, in which event:</p> <p>10.5.1 The appointment of a mediator, the procedure, and the status of the outcome shall be agreed between the parties.</p> <p>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.</p>
10.6	Not applicable to this Contract.
10.7	Not applicable to this Contract.
10.10.3	<p>Replace Clause 10.10.3 with the following:</p> <p>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.</p>

Tender / Quotation no: PT24/064

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.	Not applicable
(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.	Not applicable
(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.	Not applicable
(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.	Not applicable
(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.	Not applicable
(f)	DPWI National Youth Service training and development programme (NYS) – Condition of Contract.	Not applicable
(g)	Labour Intensive Works – Condition of Contract.	Not applicable
(h)		Select
(i)		Select

Tender / Quotation no: PT24/064

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

Tender / Quotation no: PT24/064

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

Tender / Quotation no: PT24/064

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**.

Option A	<p>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</p> <p>Fixed - An amount which shall not be varied.</p> <p>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.</p> <p>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].</p>
Option B	<p>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.</p>

Failure to provide particulars within the period stated

Option A	<p>Where the allocation of preliminaries amounts for Option A is not provided, the following allocation of preliminaries amounts shall apply:</p> <p>Fixed - Ten per cent (10%) Value-related - Fifteen per cent (15%) Time-related - Seventy-five per cent (75%)</p> <p>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</p>
Option B	<p>Where the detailed breakdown of preliminaries amounts for Option B is not provided, Option A shall apply</p>

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

C.1.3 Form of Guarantee



DPW-10.2 (EC): VARIABLE CONSTRUCTION GUARANTEE GCC 3rd Edition (2015)

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

FOR ATTENTION

Department of Public Works
Private Bag X229
Pretoria
0001

Sir,

VARIABLE CONSTRUCTION GUARANTEE FOR THE EXECUTION OF A CONTRACT IN TERMS OF GCC 3rd Edition (2015)

1. With reference to the contract between _____
_____ (hereinafter referred to as the "**contractor**") and the Government of the Republic of South Africa in its Department of Public Works and Infrastructure (hereinafter referred to as the "**employer**"), Contract/Tender No: **PT24/064**, for the **Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS** (hereinafter referred to as the "**contract**") for the sum of R **insert amount, (insert amount in words)**, (hereinafter referred to as the "**contract sum**").

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

Tender no: *(Insert Tender Number)*

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

SIGNED AT _____ ON THIS _____ DAY OF _____ 20____

AS WITNESS

1. _____

2. _____

By and on behalf of

(insert the name and physical address of the guarantor)

NAME: _____

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

DATE: _____

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

DPW-10.4 (EC): FIXED CONSTRUCTION GUARANTEE GCC 3rd Edition (2015)

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

FOR ATTENTION

Department of Public Works
Private Bag 229
Pretoria
0001

Sir,

FIXED CONSTRUCTION GUARANTEE FOR THE EXECUTION OF A CONTRACT IN TERMS OF GCC 3rd Edition (2015)

1. With reference to the contract between _____ (hereinafter referred to as the "**contractor**") and the Government of the Republic of South Africa in its Department of Public Works and Infrastructure (hereinafter referred to as the "**employer**"), Contract/Tender No: **PT24/064**, for the **Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS** (hereinafter referred to as the "**contract**"), for the sum of R _____, (hereinafter referred to as the "**contract sum**").

I / We, _____
in my/our capacity as _____ and hereby
representing _____ (hereinafter referred to as the "**guarantor**") advise that the **guarantor** holds at the **employer's** disposal the sum of R _____, (being 5% of the **contract sum** (excluding VAT), for the due fulfillment of the **contract**.
2. The **guarantor** hereby renounces the benefits of the exceptions *non numeratae pecunia; non causa debiti; excussionis et divisionis*; and *de duobus vel pluribus reis debendi* which could be pleaded against the enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves to be conversant, and undertake to pay the **employer** the amount guaranteed on receipt of a written demand from the **employer** to do so, stating that (in the **employer's** opinion and sole discretion):
 - (a) the **contractor** has failed or neglected to comply with the terms and/or conditions of the **contract**;
or
 - (b) the **contractor's** estate is sequestered; liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa.
3. Subject to the above, but without in any way detracting from the **employer's** rights to adopt any of the procedures provided for in the **contract**, the said demand can be made by the **employer** at any stage prior to the expiry of this guarantee.
4. The amount paid by the **guarantor** in terms of this guarantee may be retained by the **employer** on condition that upon the issue of the last **final approval certificate**, the **employer** shall account to the **guarantor** showing how this amount has been expended and refund any balance due to the **guarantor**.

Contract/Tender No: **PT24/064**

5. The **employer** shall have the absolute right to arrange his affairs with the **contractor** in any manner which the **employer** deems fit and the **guarantor** shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the **guarantor**. Without derogating from the foregoing, any compromise, extension of the construction period, indulgence, release or variation of the **contractor's** obligation shall not affect the validity of this guarantee.
6. The **guarantor** reserves the right to withdraw from this guarantee at any time by depositing the guaranteed amount with the **employer**, whereupon the **guarantor's** liability ceases.
7. This guarantee is neither negotiable nor transferable, and
 - (a) must be surrendered to the **guarantor** at the time when the **employer** accounts to the **guarantor** in terms of clause 4 above, or
 - (b) shall lapse on the date of the last **certificate of completion** of works.
8. This guarantee shall not be interpreted as extending the **guarantor's** liability to anything more than the payment of the amount guaranteed.

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

AS WITNESS

1. _____

2. _____

By and on behalf of

(insert the name and physical address of the guarantor)

NAME: _____

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

DATE: _____

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

DPW-10.4 (EC): FIXED CONSTRUCTION GUARANTEE GCC 3rd Edition (2015)

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

FOR ATTENTION

Department of Public Works
Private X229
Pretoria
0001

Sir,

FIXED CONSTRUCTION GUARANTEE FOR THE EXECUTION OF A CONTRACT IN TERMS OF GCC 3rd Edition (2015)

1. With reference to the contract between _____
_____ (hereinafter referred to as the "**contractor**") and the Government of the Republic of South Africa in its Department of Public Works and Infrastructure (hereinafter referred to as the "**Department of Public Works**"), Contract/Tender No: **PT24/064**, for the **Pretoria Central Home Affairs Pretoria Regional Office : New Cooperation (BVR) Building: Request for Replacement of 4 UPS's** (hereinafter referred to as the "**contract**"), for the sum of R _____ **insert amount, (insert amount in words)**, (hereinafter referred to as the "**contract sum**").

I / We, _____
in my/our capacity as _____ and hereby
representing _____ (hereinafter referred to as the "**guarantor**") advise that the **guarantor** holds at the **employer's** disposal the sum of R _____ **insert amount, (insert amount in words)** being 5% of the **contract sum** (excluding VAT), for the due fulfillment of the **contract**.
2. The **guarantor** hereby renounces the benefits of the exceptions *non numeratae pecunia; non causa debiti; excussionis et divisionis*; and *de duobus vel pluribus reis debendi* which could be pleaded against the enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves to be conversant, and undertake to pay the **employer** the amount guaranteed on receipt of a written demand from the **employer** to do so, stating that (in the **employer's** opinion and sole discretion):
 - (a) the **contractor** has failed or neglected to comply with the terms and/or conditions of the **contract**;
or
 - (b) the **contractor's** estate is sequestered; liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa.
3. Subject to the above, but without in any way detracting from the **employer's** rights to adopt any of the procedures provided for in the **contract**, the said demand can be made by the **employer** at any stage prior to the expiry of this guarantee.
4. The amount paid by the **guarantor** in terms of this guarantee may be retained by the **employer** on condition that upon the issue of the last **final approval certificate**, the **employer** shall account to the **guarantor** showing how this amount has been expended and refund any balance due to the **guarantor**.

Contract/Tender No: **PT24/064**

5. The **employer** shall have the absolute right to arrange his affairs with the **contractor** in any manner which the **employer** deems fit and the **guarantor** shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the **guarantor**. Without derogating from the foregoing, any compromise, extension of the construction period, indulgence, release or variation of the **contractor's** obligation shall not affect the validity of this guarantee.
6. The **guarantor** reserves the right to withdraw from this guarantee at any time by depositing the guaranteed amount with the **employer**, whereupon the **guarantor's** liability ceases.
7. This guarantee is neither negotiable nor transferable, and
 - (a) must be surrendered to the **guarantor** at the time when the **employer** accounts to the **guarantor** in terms of clause 4 above, or
 - (b) shall lapse on the date of the last **certificate of completion** of works.
8. This guarantee shall not be interpreted as extending the **guarantor's** liability to anything more than the payment of the amount guaranteed.

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

AS WITNESS

1. _____

2. _____

By and on behalf of

(insert the name and physical address of the guarantor)

NAME: _____

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

DATE: _____

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

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

Part C2: Pricing Data

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

C2.1 Pricing Instruction

PG-02.1 (EC) PRICING ASSUMPTIONS – GCC 3rd Edition (2015)

Project title:	<i>Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS</i>		
Tender / Quotation no:	PT24/064	Reference no:	

C2.1 Pricing Assumptions

C2.1.1 GENERAL

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

C2.1.2 DESCRIPTION OF ITEMS IN THE SCHEDULE

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

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

C2.1.3 QUANTITIES REFLECTED IN THE SCHEDULE

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

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

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

C2.1.4 PROVISIONAL SUMS

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 45 of the General Conditions of Contract 2004. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

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

C2.1.5 PRICING OF THE BILL OF QUANTITIES

The bills of quantities / lump sum document forms part of and must be read and priced in conjunction with all the other documents forming part of the contract documents, the Standard Conditions of Tender, Conditions of Contract, Specifications, Drawings and all other relevant documentation.

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

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

The Tenderer is required to check the Bills of Quantities and the numbers of the pages and should any be found to be missing or in duplicate, or should any of the typing be indistinct, or any doubt of obscurity arise as to the meaning of any description or particulars of any item, or if this Tender Enquiry contains any obvious errors, then the Tenderer must immediately inform the Principal Agent and have them rectified or explained in writing as the case may be. No liability whatsoever will be admitted by reason of the Contractor having failed to comply with the foregoing instruction.

No alterations, erasures, omissions or additions is to be made in the text and/or conditions of these Bills of Quantities. Should any such alterations, amendments, note/s or addition be made, the same will not be recognized, but reading of these Bills of Quantities as originally prepared by the Quantity Surveyor will be adhered to.

The contractor is cautioned that the use of any quantities appearing in these Bills of Quantities for the purpose of ordering material, it is done at own risk and no liability whatsoever will be admitted by the Employer or Quantity Surveyor for the correctness of such Quantities. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.

The prices and rates to be inserted by the Tenderer in the Bills of Quantities shall be the full inclusive prices to be paid by the Employer for the work described. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Market related prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out. The Employer reserves the right to balance the Bill rates where deemed necessary within the Tendered Amount.

A price or rate is to be entered against each item in the Bills of Quantities, whether the quantities are stated or not. An item against which no rate is/are entered, or if anything other than a rate or a nil rate (for example, a zero, a dash or the word "included" or abbreviations thereof) is entered against an item, it will also be regarded as a nil rate having been entered against that item, i.e. that there is no charge for that item. The Tenderer may be requested to clarify nil rates, or items regarded as having nil rates; and the Employer may also perform a risk analysis with regard to the reasonableness of such rates.

Should the full intent and meaning of any description not be clear, the bidder shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of National Best Practice.

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

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

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

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

Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the "PW 371" and the principles contained in the latest version of the SANS 1200 in South Africa. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the bidder shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of National Best Practice.

The price quoted against each item of this Bills of Quantities shall cover the full inclusive cost of the complete work to which it refers, as described in the Conditions of Contract and Specifications and as shown on the Drawings and shall allow for labour, material, transporting, loading, storage, supervision, commissioning, wastage, as well as the builders profit and attendance.

The Tenderer must ensure that he fully completes all columns of the Bill of Quantities including the Final Summary. The fully priced bill of quantities must be submitted with the tender or The Final Summary and the Section Summary pages MUST be returned with the tender document as indicated the PA-03 Notice and Invitation to Tender / PA-04 Notice and Invitation for quotation.

The tenderers are to ensure that they have read and understood the project specifications included in C3: Scope of Work. All the information provided in the Scope of Works form part of the work and must be included in the rates.

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

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

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

C2.1.6 VALUE ADDED TAX

The **contract sum** must include for Value Added Tax (VAT). All rates, provisional sums, etc. in the **bills of quantities / lump sum document** shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities. The rates must however be net (exclusive of VAT) with VAT calculated and added to the total value thereof in the Final Summary. All rates and amounts quoted in the Bill of Quantities

C2.1.7 CORRECTION OF ENTRIES

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

C2.1.8 ARITHMETICAL ERRORS

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

C2.1.9 CONTRACT DOCUMENTS

The Tenderers are advised to examine the bills of quantities, drawings and specifications including all other contract documents and make themselves thoroughly acquainted with the nature and requirements of the work, as no claim for extra payment in this regard will be entertained. Should any parts of the drawings not be clearly intelligible to the Tender, he must, before submitting his tender, obtain clarification from the Principal Agent.

C2.1.10 UNITS OF MEASUREMENT

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

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

C2.1.11 TRADE NAMES

Tenderers attention is drawn to the fact that wherever trade names or references to any catalogue have been made in these Bills of Quantities, it is purely to establish a standard for the required material. If use is made of any other equally approved material in lieu of the prescribed trade name or catalogue, the necessary price adjustments will be made.

C2.1.12 CONTRACT DOCUMENTS

The Tenderers are advised to examine the bills of quantities, drawings and specifications including all other contract documents and make themselves thoroughly acquainted with the nature and requirements of the work, as no claim for extra payment in this regard will be entertained. Should any parts of the drawings not be clearly intelligible to the Tender, he must, before submitting his tender, obtain clarification from the Principal Agent.

C2.1.13 PAYMENTS

Interim valuations and payments will be prepared on a monthly basis, all in terms of the conditions of contract.

The contractor is to note that no payment will be made for materials stored off site and in the case of materials being stored on site, payment will only be made for such materials on condition that they have not been delivered to the site prematurely, a tax invoice and proof of payment (ownership) is submitted by the Contractor.

C2.1.14 ACCOMMODATION ON SITE

It is imperative to note that no living quarters for construction workers on site will not be permitted for the full duration of the contract unless otherwise stated in the contract data or permission be granted by the Employer.

C2.1.15 LOCAL MATERIAL UTILISATION REPORT (LOCAL CONTENT)

Submission of Local Material Utilisation Reports is *insert "applicable" or "not applicable"* to this project.

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

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

C2.1.16 CONTRACT PARTICIPATION GOALS

The contractor shall achieve in the performance of this contract the following Contract Participation Goals (CPGs) as indicated below:

Provision for pricing of compliance with the achieving the CPGs is made in the Contract Participation Goal Section of the Bills of Quantities and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced thereunder and no additional claims in this regard shall be entertained

Monthly progressive reports to be submitted to the Employer's representative indicating the percentage targets achieved which must be reconciled upon completion of the project and to form part of the final account.

C2.1.16.1 MINIMUM TARGETED LOCAL BUILDING MATERIAL MANUFACTURERS CONTRACT PARTICIPATION GOAL

The Minimum Targeted Local Building Material Manufacturers CPG is *applicable* to this project.

Provision is made within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Local Building Material Manufacturers CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.7.1. Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.2 MINIMUM TARGETED LOCAL BUILDING MATERIAL SUPPLIERS CONTRACT PARTICIPATION GOAL

The Minimum Targeted Local Building Material Suppliers CPG is *applicable* to this project.

Provision is made within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Local Building Material Suppliers CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.7.2. Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports

to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.3 MINIMUM TARGETED LOCAL LABOUR CONTRACT PARTICIPATION GOAL

The Minimum Targeted Local Labour Skills Development CPG is *applicable* to this project.

Provision is made within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Local Labour CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.7.3. T Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.4 MINIMUM TARGETED ENTERPRISE DEVELOPMENT: CONTRACT PARTICIPATION GOALS (CPG)

The Minimum Targeted Enterprise Development Contract Participation Goal is *applicable* to this project.

A provisional amount has been allowed for within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Enterprise Development CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.7.4. The provisional amount allowed is for the appointment of training coordinator, mentor, training service providers and training of the beneficiary enterprises. The provisional amount will be adjusted in accordance with the actual Contract Amount (Awarded tender amount excluding allowance, provisional amounts and VAT) of the awarded bid.

Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

The contractor shall complete a separate bill of quantities upon the award of the project and identification of the respective beneficiaries and the appointment of the training coordinator, mentor, training service providers of which the cost will be offset against the provisional amount allowed in the Bills of Quantities.

C2.1.16.5 MINIMUM TARGETED TARGETED CONTRACT SKILLS DEVELOPMENT GOALS (CSDG)

The Minimum Targeted Contract Skills Development CPG is *applicable* to this project.

A provisional amount has been allowed for within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Skills Development CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.7.5. The provisional amount allowed is for:

- stipends payable to the beneficiaries
- appointment of training coordinator
- appointment of mentor (where applicable)
- appointment of training service providers
- other additional costs as per Table 3 of the Standard

The provisional amount will be adjusted in accordance with the actual Contract Amount (Awarded tender amount excluding allowance, provisional amounts and VAT) of the awarded bid.

Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

The contractor shall complete a separate bill of quantities upon the award of the project and identification of the respective beneficiaries. The CPG value to be achieved will be based on the actual contract amount which will be offset against the provisional amount allowed for within the Contract Participation Goal section in the Bill of Quantities.

Payment

The contractor shall upon the appointment of beneficiaries, provide a breakdown of all the associated costs. The contractor shall provide a payment schedule as to how the CPG costs will be claimed against for inclusion in the monthly payment certificates.

(a) Payment to the contractor to accommodate Part/Full Occupational qualification and Trade qualifications:

Should the contractor select Part/Full Occupational qualification and Trade qualifications learners, then the employer shall make provision for payment to the contractor as indicated in Table 3 of the Standard.

The contract skills participation goal, expressed in Rand, shall not be less than the contract amount multiplied by a percentage (%) factor given in Table 2 in the Standard for the applicable class of construction works. Should the contractor select Part/Full Occupational qualification and Trade qualifications learners, then the employer shall make provision for payment to the contractor as indicated in Table 3 of the Standard.

Table 1: Contracting skills development goals for different classes of engineering and construction works contracts

Source: cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No 48491 Government Gazette, 23 April 2023 (Table 2, Page 7)

Class of construction works as identified in terms of Regulation 25 (3) of the Construction Industry Regulations 2004		Construction skills development goal (CSDG) (%)
Designation	Description	
CE	Civil Engineering	0.25
CE and GB	Civil engineering and General Building	0.375
EE	Electrical Engineering works (buildings)	0.25
EP	Electrical Engineering works (infrastructure)	0.25
GB	General Building	0.5
ME	Mechanical Engineering works	0.25
SB	Specialist	0.25

No provision for an additional payment item for the payment of the supervisor and/or mentors for the provision of training as provided for in the Contract Participation Goal section in the Bill of Quantities for the training of part/full time occupational learners and/or trade qualification learners. The associated cost is deemed to be included in general supervision on site.

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

(b) Payment to the contractor to accommodate Work Integrated Learners and Candidates for professional registration:



Should the contractor select Work Integrated Learners and/or Candidates for professional registration, then the employer shall make provision for payment to the contractor as indicated in Table 3 of the Standard.

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

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

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

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

Table 3: The notional cost pf providing training opportunities per quarter

Source: cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 48491 Government Gazette, 23 April 2023 (table 3, Page 9)

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

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

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

Contract amount R65 700 000
Contract duration 12 Months
CSDG 0,50%
Minimum CSDG target $0,50\% \times R65\,700\,000 = R328\,500$ (Minimum requirement)

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

C2.1.16.6 NATIONAL YOUTH SERVICE TRAINING AND DEVELOPMENT PROGRAMME

The National Youth Service Training and Development Programme is *not applicable* to this project.

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

Provision has been made within the Contract Participation Goal section in the Bill of Quantities for the National Youth Service Training and Development Programme CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.7.6.

Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.7 LABOUR-INTENSIVE WORKS

Labour Intensive Works is *applicable* to this project.

Where labour intensive work is specified in the Bill of Qualities and indicated by "LI" the contractor must price for and include in rates. Contractors are expected to use their initiative to identify additional activities that can be done labour-intensively to comply with the set minimum labour intensity target. Provision has been made within the Contract Participation Goal section in the Bill of Quantities for the monthly reporting illustrating the value of the works executed under Labour Intensive Works CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.7.7 and any other supplementary specifications.

Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.2 Submission of Accrual Reports

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

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

Part C3: Scope of Work

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

C3 Scope of Work

PG-01.1 (EC) SCOPE OF WORKS – GCC 3rd Edition (2015)

Project title:	<i>Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS</i>		
Tender no:	PT24/064	Reference no:	

C3. Scope of Works

CONTENTS

C3.1 STANDARD SPECIFICATIONS

C3.2 PROJECT SPECIFICATIONS

A: GENERAL

- PS-1 PROJECT DESCRIPTION
- PS-2 DESCRIPTION OF SITE AND ACCESS
- PS-3 DETAILS OF CONTRACT
- PS-4 CONSTRUCTION AND MANAGEMENT REQUIREMENTS
- PS-5 CONSTRUCTION PROGRAMME
- PS-6 SITE FACILITIES AVAILABLE
- PS-7 SITE FACILITIES REQUIRED
- PS-8 REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC
- PS-9 OCCUPATIONAL HEALTH AND SAFETY
- PS-10 ADVERSE WEATHER CONDITIONS

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

B: AMENDMENTS TO THE PARTICULAR SPECIFICATIONS Insert amendments to particular specifications

C3.3 PARTICULAR SPECIFICATIONS List particular specifications

C3.4 STANDARD SPECIFICATIONS:

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

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

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

3.5 PROJECT SPECIFICATIONS:

Status

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

Part 1 A contains a general description of the works, the site and the requirements to be met.

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

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

3.5.1 GENERAL

PS-1 PROJECT DESCRIPTION:

**Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS**

3.5.2 AMENDMENTS TO THE STANDARD AND PARTICULAR SPECIFICATION:

Attached

C3.5.3 PARTICULAR SPECIFICATIONS:

Attached

C3.6 STANDARD MINIMUM REQUIREMENTS

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

- C3.6.1 cidb Best Practice: Green Building Certification, No. 34158 Government Gazette, 1 April 2011
- C3.6.2 cidb Standard for Developing Skills through Infrastructure Contracts, No. 36760 Government Gazette, 23 August 2013
- C3.6.3 cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013
- C3.6.4 Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017, No. 40553 Government Gazette, 20 January 2017
- C3.6.5 cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts, No. 41237 Government Gazette, 10 November 2017
- C3.6.6 cidb Standard for Minimum Requirements for Engaging Contractors and Sub-Contractors on Construction Works Contracts, No. 41237 Government Gazette, 10 November 2017
- C3.6.7 cidb Standard for Minimum Requirements for Engaging Contractors and Sub- Contractors on Construction Works Contracts, No. 42021 Government Gazette, 9 November 2018



C3.6.8 cidb Standard for Developing Skills through Infrastructure Contracts, No 48491 Government Gazette, 23 April 2023

C3.7 CONTRACT PARTICIPATION GOALS AND CIDB BUILD PROGRAMME

Provision has been made within the Contract Participation Goal section in the Bill of Quantities for the respective CPGs. Prescribed Profit and Attendance percentages have been stipulated, all inclusive of associated costs to the contractor for implementation and allowance for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

Monthly progressive reports to be submitted to the Employer's representative indicating the percentage targets achieved which must be reconciled upon completion of the project and to form part of the final account.

The contractor shall achieve in the performance of this contract the following Contract Participation Goals (CPGs) as indicated below:

C3.7.1 Minimum Targeted Local Material Manufacturer Contract Participation Goal

The Minimum Targeted Local Building Material Manufacturers CPG is *applicable*.

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

The Minimum Targeted Local Manufacturers of Material Contract Participation Goal, 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.

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

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

Preference shall be given to the Targeted Local Material Manufacturer where feasible in _____, and provided that:

- (a) Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- (b) The non-availability of such materials shall not adversely affect the desired progress of the specific works,
- (c) The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof,
- (d) Materials of at least _____ of the total value of materials purchased excluding VAT to be sourced from within _____ km radius of the project site,
- (e) Material of at least _____ insert applicable percentage, both in words and figures of the total value of materials purchased excluding VAT to be sourced from within _____ insert applicable kilometers km radius of the project site.

Failure to achieve the minimum specified value as indicated in the CPG Bill of Quantity Section for Targeted Local Material Manufacturer participation will result in a **thirty percent (30%)** penalty of the prorated targeted value of materials not complied with unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

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

C3.7.2 Minimum Targeted-Local Building Material Suppliers Contract Participation Goal

The Minimum Targeted Local Building Material Suppliers CPG is *applicable* to this project.

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

The Minimum Targeted Local Manufacturers of Material Contract Participation Goal shall be achieved in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract..

A targeted supplier is a targeted enterprise that

- owns, operates or maintains a store, warehouse or other establishment in which goods are bought, kept in stock and regularly sold to wholesalers, retailers or the public in the usual course of business; and
- engages, as its principal business and in its own name, in the purchase and sale of goods.

Note: Adapted from SANS 10845-7:2015, definition 2.14

Preference shall be given to the local material suppliers where feasible in the _____ insert applicable Ward/s, Municipal

District, Town, City, Province, and provided that:

- Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- The none availability of such materials shall not adversely affect the desired progress of the specific works,
- The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof,
- Materials of at least _____ insert applicable percentage, both in words and figures of the total value of materials purchased excluding VAT to be sourced from within _____ insert applicable kilometerskm of the project site,
- Material _____ of _____ at _____ least _____ insert applicable percentage, both in words and figures of the total value of materials purchased excluding VAT to be sourced from within _____ insert applicable kilometerskm of the project site.

Failure to achieve the minimum specified value as indicated in the CPG Bill of Quantity Section for Targeted Local Material Manufacturer participation will result in a **thirty percent (30%)** penalty of the prorate targeted value of materials not complied with, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

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

C3.7.3 Minimum Targeted Local Labour Skills Development Contract Participation Goal

The Minimum Targeted Local Labour Skills Development CPG is *insert "applicable" or "not applicable"* to this project.

It is the requirement of the employer that the contractor enhances the use of local labour in executing this contract. This is required to be done through the use of both traditional building techniques and labour-intensive construction techniques careful and considered construction planning and implemented in the project irrespective whether a minimum percentage Participation Goal is applicable or not.

The Minimum Targeted Local Skills Development Contract Participation Goal shall be achieved in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. No. 48491 of 28 April 2023 and the cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract..

Targeted labour: individuals who:

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

Adapted from SANS 10845-7:2015, definition 2.12

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

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

Beneficiaries will be sourced from the _____ **insert applicable Ward/s, Municipal District, Town, City, Province** for the full duration of the Construction Period, employed by either the principal contractor, sub-contractors or targeted enterprises. The total number of working days to complete the Works amount to _____ **insert number of working days as determined by the Construction Period** working days. The minimum CPG participation for Targeted Local Labour Skills Development is _____ **insert applicable percentage, both in words and figures**, expressed as a percentage of the total number of working days required to complete the Works. The contractor shall attain or exceed the CPG in the performance of the contract. Failure to achieve the minimum Targeted Local Labour Skills Development CPG will result in a payment reduction of **R5 000** (Excluding VAT), per working day which training has not been provided to the workforce in attendance, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

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

C3.7.4 CIDB BUILD PROGRAMME: Minimum Targeted Enterprise Development Contract Participation Goal

The Minimum Targeted Enterprise Development CPG is *applicable* to this project.

The aim of this best practice standard for indirect targeting for enterprise development in accordance with the Standard for Indirect Targeting for Enterprise Development (published in Government Gazette 36190 of 25 February 2013), as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract. is to promote enterprise development by providing for a minimum Contract Participation Goal (CPG) of ***insert percentage Min 5% and Max 30%*** _____ of the contract amount as defined in the Standard (Tender amount, excluding allowances and VAT) on selected contracts to be undertaken by joint-venture partners or to be sub-contracted to developing contractors that are also to be beneficiaries of enterprise development support from the main contractor.

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



The lead partner or main contractor shall dedicate a **minimum insert percentage Min 5% and Max 30%** of the tender value at the time of award, excluding allowances and VAT, to provide developmental support to targeted subcontractor or joint venture partner applicable to contracts in Grades 7 to 9, General Building and Civil Engineering contracts. Preference will be given to insert type of enterprises, e.g. General Building, Electrical, Mechanical, Plumbing, etc. It could be either or any combination of all Enterprises.

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

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

C3.7.4.1 Criteria

The main or lead partner of the successful bidder shall:

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

C3.7.4.2 Management

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

C3.7.4.3 Competence Criteria for an Enterprise Development Co-ordinator

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

- Minimum experience of 5 years in the construction industry at Managerial level as a Site Agent, Contracts Manager, Site Manager, Construction Manager, Business Development Manager or Enterprise Development Manager.



- Minimum experience of 2 years in training and development in Building or Construction; and
- National Diploma or B Degree in the Built Environment or Business Management

C3.7.4.4 Format of Communications

The contractor shall submit to the Employer's Representative:

- *Project interim reports* in the specified format (**ED105P**) detailing interim values of the CPG that was achieved together with an assessment of the enterprise development support provided should be tabled and discussed at least monthly at progress meetings between employer's representative and the contractor;
- *Project completion report* in the specified format (**ED101P**) to the Employer's Representative for acceptance within 15 days of achieving practical completion. The report shall include the value of the CPG that was certified in accordance with the contract, cidb registration numbers of each and every targeted enterprise, and the value of the subcontracted works or of the joint venture entered into; and the participation parameter
- *Enterprise development declaration* (**ED104P**).

C3.7.4.5 The Key Personal

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

C3.7.4.6 Management Meetings

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

C3.7.4.7 Forms for contract administration

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

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

C3.7.4.8 Records

The contractor shall:

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

C3.7.4.9 Payment Certificates

The contractor shall:

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

C3.7.4.10 Compliance requirements

Non-compliance with the Best Practice Project Assessment Scheme

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

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

3.7.5 **CIDB BUILD PROGRAMME: Minimum Targeted Contract Skills Development Goal (CSDG)**

The Minimum Targeted Contract Skills Development CPG is *applicable* to this project.

The contractor shall achieve or exceed in the performance of the contract the Contract Skills Development Goal (CSDG) established in the Standard for Developing Skills through Infrastructure Contracts (published in Government Gazette No. 48491 of 23 April 2023 and the cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.

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

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

C3.7.5.1 Methodology

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

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

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

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

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

The contract skills participation goals, expressed in Rand, shall not be less than the contract amount multiplied by a percentage (%) factor given in Table 1 in the Standard for the applicable class of construction works.

Table 1: Contracting skills development goals for different classes of engineering and construction works contracts

Class of construction works as identified in terms of Regulation 25 (3) of the Construction Industry Regulations 2004		Construction skills development goal (CSDG) (%)
Designation	Description	
CE	Civil Engineering	0.25
CE and GB	Civil engineering and General Building	0.375
EE	Electrical Engineering works (buildings)	0.25
EP	Electrical Engineering works (infrastructure)	0.25
GB	General Building	0.5
ME	Mechanical Engineering works	0.25
SB	Specialist	0.25

The contractor shall apportion the learners in the different construction activities based on the scope of work. The cost of accommodating learners will be determined by using Table 2 in the Standard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.

Table 2: Notional Cost of Training per Headcount

Source: cidb Standard for Skills Development

Source: cidb Standard for Skills Development

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

Note: the required CPG will be recalculated based on the awarded tender amount and "Contract amount" once the beneficiaries have been appointed and actual costs are known. The notional cost of providing training opportunities will increase by CPI on an annual basis based on April CPI. Should the rates increase after bid award or during construction the rates will be adjusted as a remeasuarble item.

- (a) (a) The successful contractor may employ part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) directly or through a Skills Development Agency (SDA), (A1 - List of cidb accredited SDAs).
- (b) The successful contractor must employ at least sixty percent (60%) of the learners from an FET / TVET college should the contractor select to have part/full occupational qualification learners and trade qualification learners contributing to the CSDG.
- (c) The successful contractor shall employ at least **insert applicable percentage, both in words and figures** from eligible part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates in the employment of the employer.

- (d) The successful contractor shall ensure that no single method shall contribute more than seventy five percent (75%) of the CSDG for the contract.
- (e) The successful contractor may only place thirty three percent (33%) employed employees or that of his subcontractors contributing to the CSDG.
- (f) The contractor shall employ at least sixty percent (60%) of the learners from a Public FET / TVET college should the contractor select to have trade qualification learners (Method 2) contributing to the CSDG.
- (g) One of the objectives of the project is to train **insert applicable number, both in words and figures** Occupational qualifications, trade qualification, work integrated learners – P1 and P2 learners, professional candidates.

C3.7.5.2 Management

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

development facilitator (Form A1 - List of cidb accredited SDAs). The contractor shall ensure that no more than one Method shall be applied to any individual concurrently in the calculation of the CSDG for the contract.

C3.7.6 NATIONAL YOUTH SERVICE TRAINING AND DEVELOPMENT PROGRAMME (NYS)

The National Youth Service Training and Development Programme is *Applicable*.

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

Failure by the contractors to achieve the specified number to be trained in the NYS section of the CPG section within the Bills of quantities will result in a payment reduction as per bill of quantities per person, excluding VAT unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

C3.7.7 LABOUR-INTENSIVE WORKS

Labour Intensive Works is *Applicable* to this project.

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

Failure by the contractor to achieve the specified value of the Labour Intensive Participation Goal as stipulated within the Bills of Quantities will result in a **thirty percent (30%)** penalty of the value of the works not done by means of labour intensive methods, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

Employer's objectives:

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

Labour-intensive works:

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work.

Labour-intensive competencies of supervisory and management staff:

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Appendix C) at NQF outlined in Table 1

C3.7.7.1 GENERIC LABOUR-INTENSIVE SPECIFICATION

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

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

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

Precedence

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

Hand excavateable material

Hand excavateable material is:

a) granular materials:

- i) whose consistency when profiled may in terms of Table 3 be classified as very loose, loose, medium dense, or dense; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) cohesive materials:

- i) whose consistency when profiled may in terms of Table 3 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note

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

Table 3: Consistency of materials when profiled			
GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of a geological pick; requires many blows for excavation.	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.



Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point.
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Trench excavation

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

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

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

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

Excavation

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

Clearing and grubbing

Grass and bushes shall be cleared by hand.

Shaping

All shaping shall be undertaken by hand.

Loading

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

Haul

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

Offloading

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

Spreading

All material shall be spread by hand.

Compaction

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

Grassing

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

Stone pitching and rubble concrete masonry

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

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

Grout shall be mixed and placed by hand.

Manufactured Elements

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

C3.8 Submission of Accrual Reports

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

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

Submission of Monthly Local Material Utilisation Report (Local Content) is *applicable*.

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

Failure by the contractors to achieve the specified percentage of local content per designated industry/sector/sub-sector as listed will result in a thirty percent thirty percent (30%) penalty of the value not achieved, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control. Allowance must be made for submitting monthly reports illustrating the value of local material utilisation report.

PW 1544



DEPARTMENT OF PUBLIC WORKS

HIV/AIDS

SPECIFICATION

OCTOBER 2004

SECTION

HIV/AIDS SPECIFICATION

HIV/AIDS REQUIREMENTS

1 SCOPE

This specification contains all requirements applicable to the Contractor for creating HIV/AIDS awareness amongst all of the Workers involved in this project for the duration of the construction period, through the following strategies:

- Raising awareness about HIV/AIDS through education and information on the nature of the disease, how it is transmitted, safe sexual behaviour, attitudes towards people affected and people living with HIV/AIDS, how to live a healthy lifestyle with HIV/AIDS, the importance of voluntary testing and counselling, the diagnosis and treatment of Sexually Transmitted Infections and the closest health Service Providers;
- Informing Workers of their rights with regard to HIV/AIDS in the workplace;
- Providing Workers with access to condoms and other awareness material that will enable them to make informed decisions about sexual practices.

2 DEFINITIONS AND ABBREVIATIONS

2.1 Definitions

Service Provider: The natural or juristic person recognised and approved by the Department of Public Works as a specialist in conducting HIV/AIDS awareness programmes.

Service Provider Workshop Plan: A plan outlining the content, process and schedule of the training and education workshops, presented by a Service Provider which has been approved by the Representative/Agent.

Worker: Person in the employ of the Contractor or under the direction or supervision of the Contractor or any of his Sub-contractors, who is on site for a minimum period of 30 days in all.

2.2 Abbreviations

- HIV : Human Immunodeficiency Virus.
- AIDS : Acquired Immune Deficiency Syndrome.
- STI : Sexually Transmitted Infection.

3 BASIC METHOD REQUIREMENT

- 3.1 The Contractor shall, through a Service Provider, conduct onsite workshops with the Workers.

The Service Provider shall develop and compile a Service Provider Workshop Plan to be presented at the workshops and which will be best suited for this project to achieve the specified objectives with regard to HIV/AIDS awareness.

The Service Provider Workshop Plan shall be based on the following information provided by the Contractor:

- Number of Workers and Sub-contractors on site;
- When new Workers or Sub-contractors will join the construction project;
- Duration of Workers and Sub-contractors on site;
- How the maximum number of Workers can be targeted with workshops;
- How the Contractor prefers workshops to be scheduled, e.g. three hourly sessions per Worker, or one 2.5 hour workshop per Worker;
- Profile of Workers, including educational level, age and gender (if available);
- Preferred time of day or month to conduct workshops;
- A Gantt chart reflecting the construction programme, for scheduling of workshops;
- Suitable venues for workshops.

The Contractor shall submit the Service Provider Workshop Plan for approval within 21 days after the tender acceptance date. After approval by the Representative/Agent, the Contractor shall make available a suitable venue that will be conducive to education and training.

3.2 The Service Provider Workshop Plan shall address, but will not be limited to the following:

- 3.2.1 The nature of the disease;
- 3.2.2 How it is transmitted;
- 3.2.3 Safe sexual behaviour;
- 3.2.4 Post exposure services such as voluntary counselling and testing (VCT) and nutritional plans for people living with HIV/AIDS;
- 3.2.5 Attitudes towards other people with HIV/AIDS;
- 3.2.6 Rights of the Worker in the workplace;
- 3.2.7 How the Awareness Champion will be equipped prior to commencement of the HIV/AIDS awareness programme with basic HIV/AIDS information and the necessary skills to handle questions regarding the HIV/AIDS awareness programme on site sensitively and confidentially;
- 3.2.8 How the Service Provider will support the Awareness Champion;
- 3.2.9 Location and contact numbers of the closest clinics, VCT facilities, counselling services and referral systems;
- 3.2.10 How the workshops will be presented, including frequency and duration;
- 3.2.11 How the workshops will fit in with the construction programme;
- 3.2.12 How the Service Provider will assess the knowledge and attitude levels of attendees to structure workshops accordingly;
- 3.2.13 How the video will be used;
- 3.2.14 How the Service Provider will elicit maximum participation from the Workers;
- 3.2.15 A questions and answers slot (interactive session).

The Service Provider Workshop Plan shall encompass the Specific Learning Outcomes (SLO) as stipulated.

4 HIV/ AIDS AWARENESS EDUCATION AND TRAINING

4.1 Workshops

The Contractor shall ensure that all Workers attend the workshops.

The workshops shall adequately deal with all the aspects contained in the Service Provider Workshop Plan. A video of HIV/AIDS in the construction industry, which can be obtained from all Regional Offices of the Department of Public Works, is to be screened to Workers at workshops. In order to enhance the

learning experience, groups of not exceeding 25 people shall attend the interactive sessions of the workshops.

4.2 Recommended practice

4.2.1 Workshop Schedule

Presenting information contained in the Service Provider Workshop Plan can be divided in as many workshop sessions as deemed practicable by the Contractor, provided that all Workers are exposed to all aspects of the workshops as outlined in the Service Provider Workshop Plan.

Breaking down the content of information to be presented to Workers into more than one workshop session however, has the added advantage that messages are reinforced over time while providing opportunity between workshop sessions for Workers to reflect and test information. Workers will also have an opportunity to ask questions at a following session.

4.2.2 Service Providers

A database of recommended Service Providers is available from all Regional Offices of the Department of Public Works.

4.2.3 HIV/AIDS Specific Learning Outcomes and Assessment Criteria

Workers shall be exposed to workshops for a minimum duration of two-and-a-half hours. In order to set a minimum standard requirement, the following specific learning outcomes and assessment criteria shall be met.

4.2.3.1 UNIT 1: The nature of HIV/AIDS

After studying and understanding this unit, the Worker will be able to differentiate between HIV and AIDS and comprehend whether or not it is curable. The Worker will also be able to explain how the HI virus operates once a person is infected and identify the symptoms associated with the progression of HIV/AIDS.

Assessment Criteria:

1. Define and describe HIV and AIDS;
2. List and describe the progression of HIV/AIDS.

4.2.3.2 UNIT 2: Transmission of the HI virus

After studying and understanding this unit, the Worker will be able to identify bodily fluids that carry the HI virus. The Worker will be able to recognise how HIV/AIDS is transmitted and how it is not transmitted.

Assessment Criteria:

1. Record in what bodily fluids the HI virus can be found;
2. Describe how HIV/AIDS can be transmitted;
3. Demonstrate the ability to distinguish between how HIV/AIDS is transmitted and misconceptions around transmittance of HIV/AIDS.

4.2.3.3 UNIT 3: HIV/AIDS preventative measures

After studying and understanding this unit, the Worker will comprehend how to act in a way that would minimise the risk of HIV/AIDS infection and to use measures to prevent the HI virus from entering the bloodstream.

Assessment Criteria:

1. Report on how to minimise the risk of HIV/AIDS infection;
2. Report on precautions that can be taken to prevent HIV/AIDS infection;
3. Explain or demonstrate how to use a male and female condom;
4. List the factors that could jeopardize the safety of condoms provided against HIV/AIDS Transmission.

4.2.3.4 UNIT 4: Voluntary HIV/AIDS counselling and testing

After studying and understanding this unit, the Worker will be able to recognise methods of testing for HIV/AIDS infection. The Worker will be able to understand the purpose of voluntary HIV/AIDS testing and pre- and post-test counseling.

Assessment Criteria:

1. Describe methods of testing for HIV/AIDS infection;
2. Report on why voluntary testing is important;
3. Report on why pre- and post-test counselling is important.

4.2.3.5 UNIT 5: Living with HIV/AIDS

After studying and understanding this unit, the Worker will be able to recognise the importance of caring for people living with HIV/AIDS and be able to manage HIV/AIDS.

Assessment Criteria:

1. List and describe ways to manage HIV/AIDS;
2. Describe nutritional needs of people living with HIV/AIDS;
3. Describe ways to embrace a healthy lifestyle as a person living with HIV/AIDS;
4. Explain the need for counselling and support to people living with HIV/AIDS.

4.2.3.6 UNIT 6: Treatment options for people with HIV/AIDS

After studying and understanding this unit, the Worker will be familiar with the various treatments available to HIV/AIDS infected or potentially HIV/AIDS infected people.

Assessment Criteria:

1. Discuss anti-retroviral therapy;
2. List methods of treatment to prevent HIV/AIDS transmission from mother-to-child;
3. Describe the need for treatment of opportunistic diseases for people living with HIV/AIDS;
4. Describe post exposure prophylactics.

4.2.3.7 UNIT 7: The rights and responsibilities of Workers in the workplace with regard to HIV/AIDS

After studying and understanding this unit, the Worker will be able to identify the rights and responsibilities of the Worker living with HIV/AIDS in the workplace. The Worker will recognise the importance of accepting colleagues living with HIV/AIDS and treating them in a non-discriminative way.

Assessment Criteria:

1. Discuss the rights of a person living with HIV/AIDS in the workplace;
2. Discuss the responsibilities of a person living with HIV/AIDS in the workplace;
3. Report on why acceptance and non-discrimination of colleagues living with HIV/AIDS is important.

4.3 Displaying of plastic laminated posters and distribution of information booklets

The Contractor shall obtain a set of four laminated posters conveying different key messages and information booklets. The contractor should include the costs of posters and information booklets in his/her tender price.

The above-mentioned posters and information booklets have been prepared to raise awareness and to share information about HIV/AIDS and STI's.

Posters or display stands shall be displayed on site as soon as possible, but not later than 14 days after the date of site handover.

Posters shall be displayed in areas highly trafficked by Workers, including toilets, rest areas, the site office and compounds.

The posters on display must always be intact, clear and readable.

Information booklets must be distributed to all Workers as soon as possible, but not later than 14 days after site handover, or as soon as the Worker joins the site.

5 PROVIDING WORKERS WITH ACCESS TO CONDOMS

The Contractor shall provide and maintain condom dispensers and make both male and female condoms, complying with the requirements of SABS ISO 4074, available at all times to all Workers at readily accessible points on site, for the duration of the contract. The Contractor may obtain condom dispensers from the Department of Health and condoms may be obtained from the Local Clinic or the Department of Health.

At least one male and one female condom dispenser and a sufficient supply of condoms, all to the approval of the Representative/Agent, shall be made available on site within 14 days of site hand over. Contractors should note that arrangements to obtain condoms from the Department of Health Clinics prior to site hand over may be necessary, to ensure that condoms are available within 14 days of site handover.

Condoms shall be made available in areas highly trafficked by Workers, including toilets, the site office and compounds.

6 ENSURING ACCESS TO HIV/AIDS TESTING AND COUNSELLING FACILITIES AND TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS (STI)

The Contractor shall provide Workers with the names of the closest Service Providers that provide HIV/AIDS testing and counselling and Clinics providing Sexually Transmitted Infection (STI) diagnosis and treatment. Information on these Service Providers and Clinics must be displayed on a poster of a size not smaller than A1 in an area highly trafficked by Workers.

7 APPOINTMENT OF AN HIV/AIDS AWARENESS CHAMPION

- 7.1 Within 14 days of site handover the Contractor shall appoint an Awareness Champion from amongst the Workers, who speaks, reads and writes English, who speaks and understands all the local languages spoken by the Workers and who shall be on site during all stages of the construction period. The Contractor shall ensure that the Awareness Champion has been trained by the Service Provider on basic HIV/AIDS information, the support services available and the necessary skills to handle questions regarding the HIV/AIDS programme in a sensitive and confidential manner.

7.2 The Awareness Champion shall be responsible for:

- 7.2.1 Liaising with the Service Provider on organising awareness workshops;
- 7.2.2 Filling condom dispensers and monitoring condom distribution;
- 7.2.3 Handing out information booklets;
- 7.2.4 Placing and maintaining posters.

8 MONITORING

The Contractor shall grant to the Representative/Agent reasonable access to the construction site, in order to establish that the Contractor complies with his obligations regarding HIV/AIDS awareness under this contract.

The Contractor must report problems experienced in implementing the HIV/AIDS requirements to the Representative/Agent.

The attached SITE CHECKLIST (SCHEDULE A) shall be completed and submitted at every construction progress inspection to the Representative/Agent.

The attached SERVICE PROVIDER REPORT (SCHEDULE B) shall be completed and submitted on a monthly basis to the Department's Project Manager, through the Representative/Agent.

The attached CONTRACTOR HIV/AIDS PROGRAMME REPORT (SCHEDULE C), a close out programme report, shall be completed by the Contractor at the end of the contract.

SCHEDULE A

HIV/AIDS PROGRAMME: SITE CHECKLIST

When did construction commence: _____

Name of Departmental Project Manager: _____

Please refer to HIV/AIDS Programme activities during the reporting period

DATE	PI			PI			PI			PI			PI			PI		
	D	D	M	D	D	M	D	D	M	D	D	M	D	D	M	D	D	M
Programme implemented within 14 days of site handover																		
Awareness champion on site																		
HIV/AIDS awareness service provider report																		
Male condom dispenser																		
Sufficient male condoms available																		
Male condom dispenser in a highly trafficked area																		
Female condom dispenser																		
Sufficient female condoms available																		
Female condom dispenser in a highly trafficked area																		
All four types of posters displayed																		
Posters in a good condition																		
Posters in a highly trafficked area																		
Posters displayed on local support services: clinic & VCT centre																		
Support service poster/s in highly trafficked area																		
Support service poster/s in a good condition																		

Date of progress inspection: (ccyy/mm/dd)

Reporting period: (ccyy/mm/dd) _____ to (ccyy/mm/dd) _____

Deviations from HIV/AIDS awareness programme plan:

--

Corrective actions:

--

Representative/Agent

Departmental Project Manager

Date

Date

SCHEDULE B

HIV/AIDS AWARENESS PROGRAMME: SERVICE PROVIDER REPORT

Reporting period: (ccyy/mm/dd) _____ to (ccyy/mm/dd) _____

Number of workshops conducted in reporting period: _____

Number of scheduled workshops according to approved workshop plan: _____

Deviations from workshop plan:

State reasons for deviating from workshop plan:

Corrective actions:

Service Provider

Date

Date

SCHEDULE C

CONTRACTOR HIV/AIDS PROGRAMME REPORT

Project name: _____

Project Location: _____

Contract value of project: R_____

Department of Public Works Project Manager: _____

HIV/AIDS Programme duration: (ccyy/mm/dd) _____ to (ccyy/mm/dd) _____

AWARENESS MATERIAL

Describe location of posters displayed during the programme: _____

Comments on posters: _____

Indicate total number of booklets distributed: _____

Comments on booklets: _____

CONDOMS

Indicate total number of male condoms distributed: _____

Indicate total number of female condoms distributed: _____

Describe where male condom dispenser was placed: _____

Describe where female condom dispenser was placed: _____

HIV/AIDS WORKSHOPS

Indicate the total number of HIV/AIDS workshops conducted: _____

Indicate the duration of workshops: _____

Indicate the total number of Workers that participated in the HIV/AIDS workshops: _____

Indicate the total number of Workers that were exposed to the video on HIV/AIDS in the Construction Industry: _____

Comments on HIV/AIDS workshops on site: _____

GENERAL

Briefly describe programme activities and satisfaction with outcome: _____

Additional comments, suggestions or needs with regard to the HIV/AIDS awareness programmes on site:

Please indicate if your company has a formal HIV/AIDS policy focussing on HIV/AIDS awareness raising and care and support of HIV/AIDS Workers:

Yes	No	Currently developing one
-----	----	--------------------------

Please indicate if, to your knowledge, you have lost any workers during the duration of the project to HIV/AIDS related sicknesses. One or more of the following might indicate an HIV/AIDS related death:

Excessive weight loss
Reactive TB
Hair loss
Severe tiredness

Coughing or chest pain
Pain when swallowing
Persistent fever
Diarrhoea

Vomiting
Meningitis
Memory loss
Pneumonia

Number of HIV/AIDS-related deaths: _____

Contractor

Date

Departmental Project Manager

Date



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

HEALTH AND SAFETY SPECIFICATION

FOR PROJECT

**PRETORIA CENTRAL HOME AFFAIRS
PRETORIA REGIONAL OFFICE : NEW COOPERATION (BVR)
BUILDING: REQUEST FOR REPLACEMENT OF 4 UPS**

TABLE OF CONTENTS

1.	LIST OF ABBREVIATIONS	3
2.	PREAMBLE	4
3.	SITE SPECIFIC OHS REQUIREMENTS	5
	Construction Project Environment.....	5
	Project Lifecycle OHS Document Requirements	6
	OHS File Contents	6
	Required OHS File Contents.....	6
	General Aspects.....	8
	OHS Policy.....	9
	Client.....	9
	Contractor Responsibilities:	9
	Appointments and Competencies	10
	Designers (Electrical Engineers) Responsibilities:	10
4.	RISK MANAGEMENT	10
	Site Establishment	11
	Site Facilities	11
	Hazardous Chemical Substances.....	11
	Ergonomics and Occupational Health.....	12
	General Items.....	12
5.	MANAGEMENT OF ALCOHOL AND SUBSTANCE ABUSE	16
6.	COMPLIANCE	16
	Legal Compliance	17
	Non Conformances / Work Stoppage	17
7.	TRAINING	18
	General Training	18
	Ongoing, Pre-Task Training	18
	Site Induction	18
	Training Requirements Table	19
	Visitors to Site	19
8.	SITE FACILITIES	20
	Temporary Facility Layout Plan.....	20
9.	ACCESS CONTROL TO THE CONSTRUCTION SITE	20
10.	COMPENSATION ISSUES.....	21
11.	OCCUPATIONAL HYGIENE MONITORING.....	21
12.	EMERGENCY PREPAREDNESS AND RESPONSE.....	22
13.	ENVIRONMENTAL MANAGEMENT	22
14.	FORUMS FOR OHS COMMUNICATION.....	22
15.	OHS AUDITS AND INSPECTIONS	22
16.	OHS INCIDENT MANAGEMENT (PC AND CONTRACTORS).....	23
17.	STATISTICAL AND GENERAL REPORTING	23
18.	OPERATIONAL CONTROL REQUIREMENTS	23
19.	APPOINTMENTS AND COMPETENCIES	24
20.	SAFE WORK PROCEDURES AND PRACTICES.....	25
21.	EMERGENCY PREPAREDNESS AND RESPONSE.....	26
22.	ENVIRONMENTAL MANAGEMENT	26
23.	OHS INCIDENT MANAGEMENT (PRINCIPAL CONTRACTOR AND SUB- CONTRACTORS).....	27
24.	OPERATIONAL CONTROL REQUIREMENTS	30
	Lock-out Procedure.....	36
	Ergonomics	37
	Demarcation & Colour Coding	37
	Portable & Bench Grinders	37
	Battery Storage & Charging	37
	Ancillary Lifting Equipment.....	37
	Presses/Guillotines/	37
	Shears	37

Annexure 1: Baseline Risk Assessment

1. LIST OF ABBREVIATIONS

AIA	Approved Inspection Authority
BOQ	Bill of Quantities
BRA	Baseline Risk Assessment
CC	Compensation Commissioner
CHS	Construction Health and Safety
CHSA	Construction Health and Safety Agent
CHSM	Construction Health and Safety Manager
CHSO	Construction Health and Safety Officer
CM	Construction Manager
CPM	Construction Project Manager (Client)
CR	Construction Regulations (Gazette 10113 of 7/02/2014)
CWP	Construction Work Permit
DMR	Driven Machinery Regulations
DOEL	Department of Employment and Labour
DRA	Design Risk Assessment
ECSA	Engineering Council of South Africa
ER	Engineer's Representative
FEMA	Federated Employers Mutual Association
GAR	General Administration Regulations
GSR	General Safety Regulations
HIRA	Hazard Identification Risk Assessment
OHS	Safety, Health and Environment
EIR	Electrical Installation Regulation
OH	Occupational Health
OHSA	Occupational Health and Safety Act No. 85 of 1993 (as amended)
OHS PLAN	Project Specific OHS Plan
OHS SPEC	Occupational Health and Safety Specification
PC	Principal Contractor
PM	Programme Manager
Pr. Eng	Professional Engineer
PPE	Personal Protective Equipment
RHCS	Regulations for Hazardous Chemical Substances
RE	Resident Engineer
NDPW	The National Department of Public Works
DHA	The Department of Home Affairs
SABS	South African Bureau of Standards (Authority)
SACPCMP	South African Council for the Construction and Project Management Professions
SANS	South African National Standards (Authority)
SMME	Small, Micro, Medium Enterprise
SWP	Safe Work Procedure
UPS	Uninterruptible Power Supply

2. PREAMBLE

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

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

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

Due to the wide scope and definition of construction work, every construction activity will be different, and circumstances and conditions may change even on a daily basis. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. *This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan.* The Health and Safety Plan shall include documented 'Method Statements' (see definitions under Construction Regulations) detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the Risk Assessment.

3. SITE SPECIFIC OHS REQUIREMENTS

Construction Project Environment

The project is located within an existing functional building that houses the Department of Home affairs office operations. The building is identified as a National Key Point, and therefore compliance with the National Key Points Act (Act 102 of 1980) is required in all project planning and execution.

The existing UPS room where the majority of the works will be conducted is located in the basement floor of the building. Access control will be facilitated with the client. No unauthorized persons will be granted access. The PC is required to allow time for security vetting processes.

Project Scope of Works (See detailed scope of works section)

NB! Health and Safety Planning and Safe Work Procedures must allow for both Public and Occupational health and safety measures, emergency works and odd hours shifts Supervision, including unplanned work.

Key Considerations

No person may authorise, design, install, permit or require the installation of an electrical installation, other than in accordance with a health and safety standard incorporated into regulations under section 44 of the Act.

No person may do electrical installation work as an electrical contractor unless that person has been registered as an electrical contractor in terms of these Regulations.

Proof of competence be provided and attached in the Safety File before commencement of any electrical work which include working in substation, UPS room and HT and LT electrical installation and all personal protective equipment be worn all times. All safety measures be adhered to including safe working procedures, lock out procedures and risk assessment

Test report and electrical certificate of compliance be issued for the whole electrical installation before the installation can be used

No person other than a registered person may issue a certificate of compliance. A registered person may issue a certificate of compliance accompanied by the required test report only after having satisfied himself or herself by means of an inspection and test that-

- o A new electrical installation complies with all requirements of SANS 10142, OHS Act and regulations and was carried out under his or her general control; or
- o An electrical installation which existed prior to the publication of the current edition of the health and safety standard incorporated complies with the general safety principles of such standard; or
- o An electrical installation referred to in OHS Act EIR, to which extensions or alterations have been effected, that- (i) the existing part of the electrical installation complies with the general safety principles of such standard and is reasonably safe, and (ii) the extensions or alterations effected comply with the provisions of OHS Act EIR and were carried out under his or her general control.

The incorporated health and safety standard referred to is the SANS10142-1 Code of practice for the wiring of premises as published in Government Notice No. R.243 of 6 March 2009 or any updated revision of the standard.

No person may use components within an electrical installation unless those components comply with the standards referred to in the relevant incorporated standard and proof of compliance shall be identifiable on the components or certification shall be available from the manufacturer or supplier of the materials or components in terms of the National Regulator for Compulsory Specifications Act, 2008 (Act No. 5 of 2008).

Where the voltage exceeds 1 kV, a person deemed competent in terms of electrical installation regulations of OHS Act the definition of a competent person in regulation1 of the General Machinery Regulations, 1988, or a person registered in a professional category in terms of the Engineering Profession Act, 2000, shall approve the design of that part of an electrical installation.

Project Lifecycle OHS Document Requirements

Documents Required at					
Evaluation stages		Awarding	Site establishment	Construction	Project Closeout
Commercial (Part A)	Functional (Part B)				
<ul style="list-style-type: none"> Complete pricing schedule for Health & Safety Letter of Good standing – COID Act 	<ul style="list-style-type: none"> Letter of Good standing – COID Act Health and Safety Plan OHS Policy Appointment of Construction health and Safety Officer Risk Assessments Preliminary OHS File Company Profile - Projects Profile 	<ul style="list-style-type: none"> Risk Assessments Site specific health & safety plan Comprehensive OHS File Appointments of CM, SO and other key roles as per CR. Method Statements / Safe Work Procedures Written agreements between Client & contractor (Section 37.2) including (CR 5k) appointment Applicable permits and licences 	<ul style="list-style-type: none"> Medicals for all site employees (CoF) – Annexure 3 Operational Legal Appointments with certificate of competencies. This also is dependent on Works to be undertaken i.e. submissions to Client before start date of activity on site. Safe Working Procedures as per Risk Assessment Inductions Activity based HIRA. Staff list with ID Copies for each employee) / Valid Passports with work permits Medicals/ Induction Training Proof Security Clearance 	<ul style="list-style-type: none"> Maintained detailed OHS File Operational Legal Appointments s- submissions to Client before start date of activity on site Method Statements/ Activity based HIRA Contractor weekly and monthly reports 	Detailed OHS File

OHS File Contents

The Contractor is required by law to keep an OHS file on site, and ensure it is available for audits and inspection purposes. All information required in the specification and OHS plan, for the duration of the Principal Contractor and sub-contractors contract, is to be recorded in the file.

The completed OHS file shall be handed over to the Client at the end of the Principal Contractor's contract

Required OHS File Contents

Description
Site Personnel Detailed list, Organogram, Plus Contacts
Company OHS Policy, signed by CEO
Emergency Contact Numbers
Project Scope of Works

OHS Specification & Baseline Risk Assessment	
Contractors Programme of works – Up to date	
OHS Plan (Include UPS Installations Plan and Methodology) plus OHS Plan Approval Memorandum	
Workman Compensation COID: Letter of Good Standing	
Public Liability Insurance	
Legal Permits: Notification to Department of Labour/ or Construction Work Permit	
37.2: Contractors Written Agreement	
Detailed List of Sub-Contractors plus Mandatory Agreements between Principal Contractor and Subcontractors	
Subcontractor's relevant Certificates of Competencies	
Medical Fitness Certificates for all site employees (Detailed information as per CR Annexure 3)	
Staff List with Copies of valid certified ID/Passport Documents & Work permits	
Client Induction Registers (OHS/Security Risk Control)	
Contractor Induction Registers (OHS/Risk Control)	
Contractors Tools and Equipment Inventory	
OHS Plans: OHS Management System aligned to the OHS Spec to be implemented on site. Include specific operational requirements as stated below.	
<i>Public Safety Plan (Includes Plan for works conducted in occupied Facilities plus the general public)</i>	
<i>On Site Traffic/Pedestrian Movement Plan (Indicate clear route separation of vehicles/pedestrians)</i>	
<i>Fall Protection Plan</i>	
<i>Emergency Plan (Critical: Integration of Contractors Emergency plan with Existing Facility Emergency Plan)</i>	
<i>Construction Vehicles/Mobile Plant Operations/Movement/Maintenance Plan</i>	
<i>Switching and Lock out Procedures (HT and LT)</i>	
<i>Safe Working Procedures</i>	
<i>Housekeeping and Waste Management plan</i>	
<i>Stacking and Storage plan</i>	
<i>Fire Precautions –Fire Risk Assessment</i>	
<i>Construction Welfare Facilities</i>	
	Appointments: (Note: Activity based appointments must be in place 7days before start of such activity)
Section 16(1)	Executive Management (company CEO)
Section 16(2)	Assistant to Chief Executive Officer
Section 17	Health and Safety Representative
Section 19	Health and Safety Committee Member(s) and Co-opted Members
GSR 3 (4)	First Aiders
GSR (2) ER9(1)	Fire Marshalls / Emergency coordinators
GSR 5(1)	Confined space Inspector
GAR 9 (2)	Incident/Accident Investigator
DMR18 (11)	Lifting Machinery Operator (Appointment or Permit)
DMR18 (5)	Lifting Machinery Inspector
DMR 18 (10) (e)	Lifting Tackle Inspector
GMR 2(1)	Supervision of Machinery
EMR 9	Portable Electrical Equipment Inspector
VUP 10	Portable Gas Container Inspector
VUP 13 (1) (b)	Pressure Vessels Inspector
HCS 3 (3)	Hazardous Chemical Substances Co-coordinator
CR 5(1)(k)	Principal contractor
CR 7(1)(c)(v)	Contractor
CR 8(1)	Construction Manager
CR 8(2)	Assistant Construction Manager
CR 8(7)	Construction supervisor
CR 8(8)	Construction supervisor sub-ordinates
CR 8(5)	Construction Health and Safety Officer
CR 9(1)	Person to carry out risk assessment
CR 10(1)(a)	Fall protection planner
CR 16(1)	Scaffold supervisor
SANS 10085 (14.5)	
SANS 10085 (10.1)	Scaffold Erector
SANS 10085 (10.1)	Scaffold Team Leader
SANS 10085 (10.1)	Scaffold Inspector
CR 23(1)(d)(i)/(k)	Construction vehicle and mobile plant operator/Inspector.
CR 24(c)(d)	Temporary electrical installations Controller / Inspector

CR 28 (a)	Stacking and storage supervisor
CR 29 (h)	Fire equipment inspector
Good Practice	Ladder Inspector
Risk Assessments – Baseline and activity based HIRA	
Safe Work Procedures and Method Statements	
Calibration Certificates	
Load Test & Inspection Test Certificates (e.g. Lifting equipment and Tackle)	
	Incident recording Register
	Principal Contractor OHS Induction Register
	First Aid Box Inspection Register
	PPE Issue Register
	Risk Assessment Communications Register
Fall Protection Inspection Register	
Scaffolding Inspection Register	
Temporary Electrical Installations Inspection Register	
Flammable Liquids Inspection register	
Water Environments Inspection register	
Hazardous Chemicals Inspection register	
Ladder Inspection Register	
Compressor register	
Electrical Machinery Inspection register	
Construction Vehicles and Mobile Plant Inspection Register Plant	
Gas Equipment Register	
Stacking and Storage Register	
Fire Precaution Register	
General Housekeeping Register	
Incident Management	
Emergency Response and evacuation Procedures (Critical: Integration of Contractors Emergency procedures with Existing Facility Emergency Procedures)	
Emergency Drill Schedule	
Minutes of OHS meeting	
OHS Toolbox Talks/DSTI's	
Job Observations	
Material Safety Data Sheets	
Training Records	
OHS Rep Monthly Inspection Reports	
Monthly Inspection /Audit Reports	
Non-conformance Reports (Work Stoppages & Penalties /Spot fines)	
Client OHS Audit and Inspection Reports	
Contractor OHS Reports i.e. Contractor weekly report, Monthly Statistics	
Site Clearance Certificate	
Temporary Site Closure Checklist	
Copy of the Occupational Health and Safety Act No. 85 of 1993 and Regulations	
Copy of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and Regulations	

General Aspects

The OHS PLAN requires demonstrating management's commitment to OHS and shall include the following elements as support documentation and references to where the information can be found for verification:

- The OHS Policy;
- Competent supervision on site (CV's, training certificates and appointments);
- Section 37.2 appointments and appointments of Contractors;
- Duties and safety responsibilities of all appointed persons on the project;
- Method Statements / Safe Work Procedures, Induction training, Toolbox talks, and on-going OHS training arrangements for employees;
- Occupational Health and Safety communications and meeting arrangements, including daily safe task instructions and project safety meetings;
- Safety awareness promotions;
- Nomination of personnel to carry out OHS audit and inspections. The task may be shared with other duties;
- Contractor Senior Management involvement with Company's staff in consultative processes and daily management OHS walkabouts;

- Occupational Health and Safety Workplace Environment, including provision for monitoring employee exposures to noise, dust, etc.;
- Rules and regulations including safe work procedures the Contractor has in place for recurring work activities;
- Fall protection plan (where applicable);
- Control of dangerous and hazardous substances;
- System of hazard identification and risk control, such as Risk assessments, Daily Safe Task Instructions and communication;
- Design control and design interaction arrangements;
- Inspection of plant, tools and equipment prior to introduction to site and regularly thereafter;
- Accident incident reporting, recording, investigation and analysis, which ensure that corrective and preventative actions are taken;
- Medical and first aid arrangements;
- Evacuation and emergency planning;
- Substance abuse programme;
- Record keeping, including details of what is to be kept and for how long;
- Detailed financial allocation for OHS;
- Personal Protective equipment rules and arrangements;
- Selection, procurement and management of other Contractors;
- Maintenance arrangements of machinery and equipment;
- Designer interaction arrangements;
- Workers welfare facilities, and
- Letters of good standing with a compensation insurer.

The PC shall amend the OHS PLAN as required by the Client, where amendments and updates are provided.

OHS Policy

The PC shall have a OHS Policy authorised by their OHSA Section 16(1) appointee that clearly states overall OHS objectives and commitment to improving health and safety performance in the Project specific OHS plan. A copy shall be in the site office and included in induction programmes.

The OHS file must be kept on site and must be available on request for audit and inspection purposes. Regular scanning of documents and records is required as a form of archiving for inclusion in the consolidated OHS file at the end of the project.

A list of critical information to be included in the OHS file on completion of the project will be provided. On completion of the project, all records including the project information should include:

- Information about removal or dismantling of installed plant and equipment;
- OHS information about equipment needing cleaning and maintenance, for O&M management;
- As-built drawings, including nature, location and markings of services.

The OHS file (i.e. hard and soft copy) is to be handed over to the NDPW PM, and include all the close out OHS files for Contractors. Further requirements regarding the content of the consolidated OHS files will be provided to PCs during the project.

Client

The Client for this project is The National Department of Public Works.

Client OHS Representative/ CHSA: Construction Health and Safety Consultants by the name of Rev2Light Services.

The Project's Professional Team Organogram will be provided by the PM and updated from time to time. The project and site records will be kept up to date and referenced in correspondence between parties.

Contractor Responsibilities:

- a) A Construction Manager shall be appointed by the contractor for the management of the single construction / project works site and alternate must be appointed whenever he is to be absent from site.
- b) A Construction Manager shall appoint Competent Construction Supervisors who may not leave the site unless there are a sufficient number of appointed competent alternate supervisors on site to assist with supervision.
- c) Employees who perform work identified by the councils for the professions must register with the relevant council as a professional. Alternatively, an employee must perform such work under the direction, control, supervision of or

in association with a person, registered as a professional with respect to that category of work and who must assume responsibility for the work performed.

- d) The Contractor' Site Manager/Supervisor shall keep in the SHE file, update and maintain name-list and contact telephone numbers of all his employees as well as the subcontractors employees on site. This info may be accompanied by any other relevant information such as CVs, licences, date of induction, etc.
- e) The Contractor shall ensure that its managers and supervisors give clear and unambiguous instructions for the work in hand to the personnel for whom they are responsible for. The instructions shall include, but not necessarily be limited to:
 - description of the objective/scope of work
 - sequence of work/method statements
 - hazard identification and risk assessment (prior to commencement of work)
 - Precautionary/preventative measures that are to be taken.
 - Identification of sensitive features that may be impacted upon by the project.

The Principal Contractor must ensure that proper access control is in place and functional at all times on and off the construction site. The Principal Contractor and its contractors shall adhere to the site traffic plan to ensure the safe movement of all construction related mobile plant – *attach/refer to the traffic plan*. This plan is to be reviewed at the monthly safety meeting to ensure its applicability. Contractors must adhere to the pedestrian and vehicle routings

Appointments and Competencies

The PCs shall appoint adequately, resourced, competent persons as per Construction Regulations.

Designers (Electrical Engineers) Responsibilities:

Designers are required to ensure that applicable standards incorporated in the construction regulations are complied with in the designs.

Take into consideration the specification submitted by the client. Make available to the client, and the client's safety agent all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered.

Refrain from including anything in the design that of the structure necessitating the use of dangerous procedures or material hazardous to the health and safety of persons which can be avoided by modifying the design or by substituting materials.

The Designers are required to carry out all necessary inspections at appropriate stages to verify that the construction of the relevant structure is carried out in accordance with his design. The designer is required to stop any contractor from executing any construction work which is not in accordance with the relevant design's health and safety aspects.

In the final inspection of completion (in accordance with the National Building Regulations), The designer is required to include the health and safety aspects of the structure, declare the structure safe for use and issue a completion certificate to the client, and a copy thereof to the contractor.

4. RISK MANAGEMENT

The aim of this section is to:

- Highlight the construction site OHS risks and hazards (Reference must be made to Client's baseline risk assessment).
- Request the Principal Contractor/s and his/her subcontractors to identify hazardous and potentially hazardous work operations. The principal contractor needs to demonstrate that the site hazards and the contractor's activity risks and the mitigating measure have been considered in his risk assessments.
- There must be method statements and written safe work procedures for all the project's high-risk activities. Method statements and Risk Assessments should refer to the SWPs. SWPs are to be used in all DSTI's. Records for all activities are to be kept as they are required to be verified during auditing processes.
- Emerging risks and hazards must be managed during construction work.

Activity based risk assessments must be conducted by an appointed and competent person of the Principal Contractor.

Preliminary hazard identification shall be conducted by the Principal Contractor prior to work beginning on site.

Site Specific Health and Safety Hazards

The Baseline Project Risk Assessment is attached to this OHS specification in order to make potential Contractors aware of the hazards:

It is however pointed out to the Principal Contractor that the list may not be totally comprehensive and it is the duty of each Principal Contractor to ensure that all the hazards are identified, before and during the project, and the necessary activity-based risk assessments are carried out. These risk assessments shall form part of the OHS Plan which will be passed on for scrutiny and approval by both the Client's representative and/or the Relevant Site Risk Control/OHS team.

During construction work, the Principal Contractor, his sub-contractors, the CHSA or the National Department of Public Works Representative may identify emerging hazards and risks. For each such newly identified hazard or risk, the National Department of Public Works Project Manager/OHS Representative shall review the baseline Project Risk Assessment and the relevant section(s) of the OHS specification. The revised OHS specification and baseline Project Risk Assessment shall be submitted to the Principal Contractor who will review his own risk assessments and relevant sections of the OHS plan, as well as those of the sub-contractors. The Principal Contractor will prepare and submit to the National Department of Public Works Project Manager/OHS Representative, both documents for approval.

The Principal Contractor and his subcontractors shall not proceed with the work/operation in hazardous areas until the Client's representative has reviewed the Risk Assessment and has approved and signed the revised OHS plan and issued a valid permit to work.

The Contractor shall on a daily basis and for every task to be performed, conduct a pre-task risk assessment with all employees involved with the task(s). The pre-task risk assessment will form the basis of the daily pre-job brief/toolbox talks prior to the start of work. Proof of communication as well as confirmation that it was received and understood by all will be noted on a standard form, which will be kept at the job site during the job execution. The completed signed pre-task risk assessment form will be filed in the Principal Contractor's OHS file.

Additionally, Principal Contractor must review relevant risk assessment when an incident has occurred

NB!! All works that are likely to impact the office environment adversely MUST be conducted outside office operation hours/days. This includes work interruptions and the Health and Safety hazards.

Site Establishment

Aesthetics, Security and Cleanliness are of High importance for this facility. Therefore, all site establishment plans must be approved by the NDPW project manager. Site establishment method statements and detailed risk assessments are required for Safety Agent's Approval before Site establishment commence.

Site Facilities

Where temporary structures are put up during site establishment; Temporary works are to be managed by a competent person, all designs will be signed off by the designer and erected and maintained by competent appointed persons. The SANS 10085 is to be applied for all access scaffolding and any other Standards where appropriate.

Temporary ablution facilities are not to include formaldehyde products). It is preferable that a bacterial product is used, where chemical toilets are being used, risk assessments, taking into consideration the MSDSs.

Hazardous Chemical Substances

The following list of substances is likely to be used, but each PC is to compile a list from the specifications provided by their Designers and Contractors and ensure the Safety Data Sheets (SDSs) are obtained and included in all HIRAs. The link to medical surveillance or health risks is to be included, and included in OREPS and the Annexure 3.

PRODUCT	POTENTIAL HEALTH OR OTHER RISKS
Cement	Hand mixing may occur, will be used for structures, stabilizing. 50kg bags delivered on pallets, ergonomic risk from handling, dust exposure, chromates. Eye, skin and respiratory irritant
Shutter Oil	Usually hand application prior to placing formwork in position. Volatiles present. Skin and respiratory irritant.
Asphalt	Inhalation will cause headaches, nausea, respiratory, eye and skin irritation. Carcinogen. Burns from hot mix. Hydrogen sulphide and carbon monoxide emitted as by-product. Breaking or cutting will release silica (crystalline)
Retro-reflective Road paint	High levels of volatiles, Products have narcotic effect

<i>Petrol/diesel/lubricants</i>	<i>Storage tanks/ bowsters on site. Fire, spillage, fumes</i>
<i>Creosote (pre-treated poles)</i>	<i>Eye and skin irritation and minor burns, carcinogen</i>
<i>Herbicides and ant poison</i>	<i>Type not specified, but will be used. Principal Contractor to ensure use of MSDSs and appropriate protection measures</i>
<i>Epoxies and epoxy resins</i>	<i>Type not specified, but will be used. Principal Contractor to ensure use of MSDSs and appropriate protection measures</i>
<i>Coatings</i>	<i>Type not specified, but will be used. Principal Contractor to ensure use of MSDSs and appropriate protection measures</i>
<i>Grouts</i>	<i>Will be determined by the Principal Contractor; various grouts will be required, cementitious or other, may contain silica (crystalline - quartz), hexavalent chromium, respiratory, skin and eye irritant</i>

Ergonomics and Occupational Health

Ergonomic factors need to be considered during all stages of construction. Lifting heavy loads, and repetitive work, while synonymous with construction, are to be considered a high risk and mechanical aids and the hierarchy of control are to be considered and applied. Heavy componentry, confined working spaces and installation requirements are to be considered and mitigated where possible. Where a design issue exists, the client is to be approached to consider alternatives. Method statements, HIRA and DSTIs are to include ergonomic and health issues.

General Items

- Planning for access needs to coincide with the induction programmes and requirements for medical certification of fitness;
- Access to site will involve routes through residential areas, industrial area, mining area and the protection of the public and private assets is to be considered at all times, including dust suppression and traffic controls according to the SARTSM;
- Weather extremes may be experienced in winter and summer. Humidity levels are unlikely to be a concern, but the Discomfort Index (DI) is to be calculated and taken into consideration. A weather device is to be installed by the PC. Indicate in a procedure how workers will be protected from such extremes; Wind speeds typical range from light to moderate breezes, and this factor must be taken into consideration during crane operation.
- Working hours are to be within the labour relations legislative confines. Procedures for working overtime are to be available, and where extended concrete pours are likely or other such activities, these must be well planned, incorporate shift changes and any other aspects that will keep workers safe;
- Project interfacing. Each PC is expected to ensure that their activities do not overly impact on other PCs. Co-ordination of activities is to be discussed with the Engineers and PM to ensure limiting the risks;
- No key staff may be removed during the decommissioning stages of work, snagging or site de-establishment. Competent supervision will be required until the site is handed back to the client.
- On-going Contractor's Baseline and design risk assessments is required to be conducted as the work progresses.

Scope Inherent Risk

Electrical Safety	All electrical work must be carried out by competent personnel in accordance with all legal requirements, codes, design criteria and safety standards applicable to the project. Each contractor carrying out electrical work on the project site(s) must develop, document and implement Safe Work Procedures that are aligned with the requirements of this standard.
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	<p>All persons who will be carrying out electrical work must be certified against the requirements of job and equipment-specific electrical competency standards for the project, which must address job and equipment-specific Safe Work Procedures. Each person potentially exposed to electrical hazards must receive electrical hazard training at the commencement of his employment on site and thereafter on an annual basis. The training must address the equipment and conditions specific to the area where the individual will be working. The training material must be documented and training records must be kept.</p>
Electrical Installations	<p>Each electrical installation (temporary or permanent) installed or worked on by a contractor must be inspected by a nominated project management representative to ensure that the installation complies with all statutory requirements, codes, design criteria and safety standards applicable to the project.</p> <p>A nominated project management representative must approve all electrical work before the installation is energised. Any installation deemed unsatisfactory by a nominated project management representative must be removed, repaired or modified by the contractor at his expense.</p> <p>For every permanent or temporary electrical installation, a certificate of compliance must be issued by a competent and appropriately qualified electrician. These certificates must be available for inspection.</p> <p>Single line diagrams (with supporting documentation) must be produced and maintained for all electrical installations. This information must include system fault calculations, equipment details, electrical protection discrimination curves, and cable ratings.</p> <p>Work on electrical installations (new installations, and modifications or repairs to existing installations) may only be carried out by qualified and authorised personnel (i.e. electricians).</p> <p>Electrical safety devices (specifically, earth leakage protection and overcurrent protection) must be installed on all distribution circuits and the settings must be established by suitably qualified personnel.</p> <p>A suitable numbering and / or labelling system must be used so that each circuit breaker or earth leakage device can be clearly and readily matched with the outlet or equipment that it protects.</p> <p>To ensure the safety of the user, each distribution panel must be completely enclosed, must be of the dead-front type, and must be properly constructed and earthed.</p> <p>All electrical cabling must be covered (e.g. in cable trenches) or elevated (in cable trays) to protect it from damage and to eliminate tripping hazards.</p> <p>All permanent and temporary electrical installations (cabling, sockets, distribution panels, transformers, switchgear, etc.) must be inspected and tested by a competent and suitably qualified electrician on a monthly basis. The testing must include a grounding (earthing) continuity test and testing of the electrical safety devices. Details of these inspections and tests must be recorded in a register which must be made available to the nominated project management representative for inspection.</p> <p>A rigorous Isolation, Lockout and Permit to Work system must be applied to all electrical work (i.e. work on electrical installations, machinery or equipment). All personnel must comply with the system and procedures applicable to the project.</p> <p>Before any work on an electrical installation or equipment is carried out, the installation or equipment must be de-energised.</p> <p>No electrical work may be performed live, regardless of the voltage, unless written approval is obtained from the nominated project management representative (a justification as to why it is necessary for the work to be carried out with the equipment in an energised state must be provided).</p> <p>For all energised electrical work, a Safe Work Procedure must be in place and, with the exception of voltage testing and where no tools are used, a Permit to Work (specifically authorising energised electrical work) must be issued.</p> <p>When carrying out any energised electrical work, approved electrically insulated gloves, blankets, mats and other protective equipment must be used.</p> <p>Control centres, switchgear rooms, substations, generators, transformers, capacitor banks, and other similar electrical plant and equipment must be appropriately guarded and labelled and, with the exception of emergency shut-off mechanisms, must be made inaccessible to unauthorised personnel (i.e. plant or equipment of this nature must be positioned within rooms or fenced enclosures which must be kept locked).</p>

	<p>Appropriate warning signage must be prominently displayed within, and at all entrances to, these rooms or enclosures. The signage must indicate that unauthorised persons are prohibited from entering, that unauthorised persons are prohibited from handling or interfering with any electrical plant or equipment, the procedure to be followed in the event of a fire, and the first aid procedure to be followed should a person suffer electric shock. Suitable fire-fighting equipment must be provided in all such rooms or enclosures.</p> <p>All electrical panels must be kept locked (using keyed-alike padlocks). Keys may only be issued to authorised personnel.</p> <p>All un-insulated (bare) or partially insulated conductors must be enclosed and protected to prevent accidental contact therewith. Measures must be taken to prevent unauthorised access and appropriate warning signage must be conspicuously displayed.</p> <p>Only authorised persons may enter rooms or enclosures housing electrical plant or equipment, and only authorised persons may access electrical panels or cabinets, and cable ducts or trenches. If any work must be carried out in such an area or on such equipment, a Permit to Work must first be obtained from the nominated project management representative.</p> <p>No connection to any electrical system may be made without prior approval and a valid Permit to Work from the nominated project management representative.</p> <p>No electrical equipment or apparatus may be modified without written authorisation from the nominated project management representative.</p> <p>Conductive ladders may not be used in proximity to non-insulated electrically energised lines or equipment.</p> <p>All permanent and temporary electrical cables, whether energised or not, must at all times be handled as if they are energised.</p> <p>Only appropriately certified intrinsically safe electrical equipment may be used in flammable or potentially explosive atmospheres such as in confined spaces.</p> <p>Any equipment or structure on which electric charges may accumulate (such as storage tanks) must be grounded (earthed).</p> <p>Lightning protection must be provided on all tall structures and buildings.</p> <p>Grounding (earthing) and lightning protection systems and devices must be designed, engineered, selected and installed based on site-specific requirements.</p> <p>Before carrying out any excavation work, a Permit to Work (specifically authorising the excavation activities) must be obtained from the nominated project management representative. Such a permit must not be issued until it has been verified that no buried hazards or services exist where the excavation work is to be carried out</p>
Arc Flash Safety	<p>A documented arc flash protection programme must be in place that specifies:</p> <ul style="list-style-type: none"> • The methodology for calculating incident energies and determining flash protection boundaries; and • The PPE required (specific to a task and the equipment on which the task is performed) and associated procedures to mitigate the hazard. <p>The method of calculation must be based on regional electrical code requirements, or if none exist, the Institute of Electrical and Electronics Engineers (IEEE) Standard 1584, or the United States National Fire Protection Association "Standard for Electrical Safety in the Workplace" (NFPA 70E), or published equivalent.</p> <p>An Arc Flash Hazard Assessment must be carried out based on accurate and current data. All electrical cabinets where the potential for an arc flash hazard exists must be labelled in accordance with the hazard assessment and the potential incident energies calculated.</p> <p>A process must be in place for updating the Arc Flash Hazard Assessment and labelling as changes and electrical upgrades occur that might affect the available short circuit current on the system.</p> <p>In order to mitigate the hazard, Safe Work Procedures must be in place and all persons potentially exposed to arc flash hazards must be trained in these Safe Work Procedures and must be supplied with appropriate arc flash PPE.</p>

High Voltage Power Line	<p>Before any mobile equipment (such as a crane, bulldozer, back-actor, boom truck or drill rig) is mobilised to a work site, an assessment must be carried out (including a thorough inspection of the work site and the access route) in order to clearly identify any overhead or underground power lines.</p> <p>A system must be in place to mitigate the risks associated with working in close proximity to power lines and suitable measures must be taken to prevent personnel or equipment from coming into contact with power lines. Extreme caution must be exercised.</p> <p>Where possible, exclusion zones (based on minimum clearance distances specified by the electrical power utility or the nominated project management representative) must be created with rigid barriers and warning signs.</p> <p>Only in exceptional circumstances, and then only after a detailed method statement and risk assessment has been approved, all necessary mitigation or control measures are in place (including the use of a spotter), and a Permit to Work has been issued by the nominated project management representative, may equipment be operated within one boom length of energised overhead power lines. Suitable protective insulating barriers may need to be used.</p> <p>If possible, the power lines must be de-energised and isolated while the work is carried out.</p> <p>All equipment operators and rigging personnel must be trained in the hazards and the applicable safe approach distances (exclusions zones) associated with overhead power lines.</p> <p>A procedure must be in place for the evacuation of mobile equipment or a vehicle in the event of accidental contact with power lines. All operators must be trained in this procedure and must follow it implicitly.</p> <p>Scaffolding may not be erected within 5 metres of power lines or overhead track equipment.</p>
Electrical Protective Equipment	<p>To reduce the risk of electric shock, electrical insulating equipment appropriate for the voltage that may be encountered must be worn when working on energised electrical installations and when working within two metres of exposed energised conductors.</p> <p>All rubber electrical insulating equipment (including gloves, sleeves, matting, covers, blankets, and line hoses) must be inspected for damage prior to and after each use, and immediately following any incident that can reasonably be suspected of having caused damage.</p> <p>Rubber insulating equipment with any of the following defects and / or damage may not be used:</p> <ul style="list-style-type: none"> • A cut, rip, tear, hole, or puncture; • Ozone cutting or ozone checking (i.e. the cutting action of ozone on rubber under mechanical stress causing a series of interlacing cracks); • An embedded foreign object; • Chemical deterioration (texture changes) such as swelling, softening, hardening, or becoming sticky or inelastic; or • Any other defect that damages the insulating properties. <p>Rubber insulating gloves must be electrically tested before first issue and every 12 months thereafter as a minimum. Insulating gloves must also be given an air test along with the daily inspection. Essentially, this involves filling a glove with air and checking for any holes or leakage.</p> <p>Insulating equipment that fails an inspection or electrical test may be repaired only as follows:</p> <ul style="list-style-type: none"> ○ Rubber insulating line hose may be used in shorter lengths with the defective

	<p>portion(s) cut off;</p> <ul style="list-style-type: none"> ○ A rubber insulating blanket may be repaired using a compatible patch that results in the patched area having electrical and physical properties equal to those of the blanket; ○ A rubber insulating blanket may be salvaged by cutting the defective area off the undamaged portion of the blanket; ○ Rubber insulating gloves and sleeves with minor physical defects, such as small cuts, tears, or punctures, may be repaired by applying compatible patches. The patched areas must have electrical and physical properties equal to those of the surrounding material. Repairs to gloves are permitted only in the area between the wrist and the reinforced edge of the opening. Repaired insulating equipment must be retested before it is put back into use. Insulating equipment must be cleaned as required to remove foreign substances (using a mild detergent). Insulating equipment must be stored in such a location and in such a manner so as to protect it from light, temperature extremes, excessive humidity, ozone, and other damaging substances and conditions. <p>Leather protective gloves must be worn over rubber insulating gloves to provide mechanical protection against cuts, abrasions, and punctures.</p> <p>Suitable arc flash PPE (e.g. voltage rated gloves, fire retardant clothing, arc rated face shield, arc flash hood, arc flash suit, etc.) must be worn whenever an employee is potentially exposed to an arc flash hazard. The appropriate level of PPE must be worn depending on the task and the potential energy exposure. These PPE requirements must be clearly specified as part of a project-specific arc flash protection programme (refer to the Electrical Safety Standard).</p>
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5. MANAGEMENT OF ALCOHOL AND SUBSTANCE ABUSE

No person (employees, Contractors, consultants, visitors) shall report for duty or continue with his/her duties, if under the influence. No person may consume or have in possession alcohol or drugs/controlled substances while on the project site. Employees, Contractors, consultants or visitors shall comply with any reasonable request to undergo random or specific alcohol testing.

6. COMPLIANCE

All parties on site are to comply with legal and other requirements as part of the contract. Expenses which result from compliance with this legislation as well as other requirements specific to the site, will be for the PC or Contractors account. Where there are major and / or repeat OHS deviations, the Client or OHS Representative will impose the necessary penalties as per the contract document and/ or the OHS SPEC as described.

Should the Principal Contractor appoint a sub-contractor, the Principal Contractor would then have the same role and responsibility in relation to the sub-contractors, in a similar way as the Client has in relation to the Principal Contractor.

The requirements within this specification should not be considered to be exhaustive and the Client reserves the right to add, delete or modify conditions where it is considered to be appropriate.

No claim will be accepted as a result of any costs or delays being incurred due to the Principal Contractor or his sub-contractors not complying with legislation, this OHS specification or their OHS plan approved by the Client. Additionally, no claim will be accepted as a result of any costs or delays being incurred due to pending Client permit approvals from DOL or other government bodies.

Legal Compliance

The following applicable legislation And Standards have been identified:

- Occupational Health and Safety Act (Act 85 of 1993) and its Regulations; (emphasis on ;Construction Regulations, General Machinery Regulations, Electrical Installations Regulations, Electrical Machinery Regulations and Environmental Regulations for Workplace)
- Basic Conditions of Employment Act No. 75 of 1997 (as amended);
- COID Act 130 of 1993;
- Disaster Management Act (Act 57 of 2002);
- Employment Equity Act No. 55 of 1998 (as amended);
- Hazardous Substances (Act Act 15 of 1973);
- Health Act (Act 63 Of 1977);
- Labour Relations Act No.66 of 1995 (as amended);
- National Building Regulations and Building Standards Act 103 of 1977;
- National Environmental Management Act (Act 107 of 1998);
- National Environmental Management: Waste Act 59 of 2008;
- National Environmental Management: Air Quality Act 39 of 2004;
- National Water Act (Act 36 of 1998);
- Any other applicable South African legislation at a national, provincial and local authority level;
- All Applicable South African National Standards (SANS); (emphasis on SANS 10142, OHSAS 18001:2007 – Occupational Health and Safety Management Systems Requirements)
- National Key Points Act (Act 102 of 1980), and
- Applicable By-laws.
- Agricultural Pests Act 36 Of 1993;

The PCs shall compile their own lists of all applicable legislation and standards that may have an impact on the scope of work that they are performing on the construction project. The list shall be updated on a regular basis.

Non Conformances / Work Stoppage

The Client's representative reserves the right to stop work and issue a work stoppage non-conformance report whenever safety, health or environmental violations are observed for both Principal Contractors and/or their sub-contractors. Expenses incurred as a result of such work stoppage and standing time shall be for the Principal Contractors account. Any non-conformances/findings/observations found in these audits/inspections on sub-contractors shall be raised and discussed with the relevant Principal Contractor (with whom the sub-contractor is contracted with).

The conditions that lead to work stoppages are based on:

- Management of change – this is when there are changes to the work environment (e.g.: climatic changes) and/construction work (e.g.: modifications to the design), in any phase of the construction project, and/or amendments with regards to The National Department of Public Works rules and regulations and/or legislative amendments;
- Unsafe acts/behaviours;
- Unsafe conditions;

The process to be followed to ensure the worksite is rendered safe:

- The relevant activity must be stopped;
- The Principal Contractor and his subcontractors shall immediately remove the workforce from the work area and correct the health and safety or environmental deficiencies by allowing only the people in the area that are competent to make the area safe.
- Principal Contractor and his subcontractors shall ensure that no other work is being performed during this time. Should the estimated time from the outset to make the area safe where life threatening/imminent danger situations exist, then the area will be barricaded and a sign placed with the wording "Unsafe Area – Authorized Access Only".
- The National Department of Public Works Safety Representative shall review the affected parts/sections of the OHS specification with the purpose of providing sufficient OHS information to the principal contractor when necessary.
- The principal contractor shall then revise the relevant sections in the OHS plan to accommodate the changes.

- The National Department of Public Works Safety Representative must ensure that the revised provisions in the OHS plan are adequate and must approve it before the work activity is commenced.

Before the workforce is allowed back in the area, Principal Contractor and his subcontractors shall ensure:

- Investigation of the work stoppage and the area is to re-inspected by Contractor Safety Officer and supervisor and corrective actions taken documented on the work stoppage form;
- Sign off of the "Work Stoppage report" issued by the National Department of Public Works Safety Representative/CHSA to declare the area/activity/person/plant/or equipment safe for work.

Refer to requirements of Construction Regulation 5(q) of the OHS Act.

7. TRAINING

Training of site personnel in OHS is to be on-going, and where formal training is deemed required, is to be provided, where possible, by accredited training service providers. The CHSM / CHSO is to determine training requirements and to report on needs or completed training in their reports and audits. For appointees that are strategically required on site, but do not meet the minimum competencies, a training plan must be submitted on a monthly basis to reflect progress of meeting the minimum training requirements.

Records of all training, and acknowledgement of such training by attendees must be kept. Comprehensive records of all employees under the PCs control attending induction or any other training throughout the project shall be included. Amendments to statutes, the OHS SPEC, OHS PLAN, policies, procedures, method statements etc. shall require that all those affected shall undergo the relevant re-training.

General Training

All site personnel (at all levels) shall be adequately trained in the type of work/tasks to be performed. The training shall extend to, but not be limited to include relevant method statements, hazard identification and risk assessments, procedures, rules and regulations, and other related aspects. The induction should also include identification of high risk areas or rules. The CHSM or CHSO is expected to use discretion and apply their minds to what is appropriate.

Ongoing, Pre-Task Training

The PCs are required to ensure that Daily Site Task instructions (DSTIs) are to be completed daily by supervisors and team leaders for each team. DSTIs could be done multiple times during the day if different tasks or activities are done. The CHSMs / CHSOs are to ensure that records are kept of each team and DSTIs completed. The DSTIs are to include relevant method statements, HIRAs, SWPs and Tool box talks as they apply to the activities or tasks.

Site Induction

The PCs shall ensure that all employees, OHS Representatives and Contractors have undergone the Project OHS induction programme including a competency test prior to commencing work on site. On-site training will be completed by PC.

All employees and visitors on site shall carry the proof of induction training in form of an induction card. Client Induction is valid for a year from the date it was conducted and thereafter a refresher induction shall be re-scheduled at least one month before the induction period expires.

The relevant Training Officer shall keep a database of all records pertaining to induction and will inform sub contractors of pending expiry though the overall responsibility of maintaining current induction cards still lies with the principal contractor. All induction cards issued must be returned on completion of the project to the Issuer.

Note:

- No work shall commence without the required inductions, and
- The Training officer will rearrange for inductions for Contractor employees and re-approve OHS File where Contractor is not on site for more than 1 month.

Training Requirements Table

Training	Training Applicable To:
Health and Safety Induction	All employees
Safety Observations and Coaching (Safety Interactions)	All employees
Risk Assessment	All managers and supervisors
Incident Investigation	All managers and supervisors
Health and Safety Rep	All elected Health and Safety Representatives
First Aid Levels 1, 2 and 3*	All nominated First Aiders
Fire Fighting Extinguisher Use)*	All employees
Working at Height*	All employees using a safety harness
Confined Spaces	All Confined Space Entry Officers and Standby Persons
Permit to Work	All Authorised Persons (i.e. Permit issuers) and all Applicants (i.e. Employees who will be applying for permits)
Isolation and Lockout	All Authorised Persons (i.e. Persons who authorise work that requires Isolation and Lockout), all Isolation Officers, and all Applicants (i.e. Persons who request permission to work on systems or equipment requiring Isolation and Lockout)
Mobile Equipment Site Access	All mobile equipment operators

Other Training

All Operators and Users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training.

All employees in jobs requiring training in terms of the Act and Regulations must be in possession of valid proof of training as follows:

Occupational Health and Safety Training Requirements: (as required by the Construction Regulations and as indicated by the OHS Specification Document & the Risk Assessment/s and recommendations by the Health and Safety Committee):

- General Induction (Section 8 of the Act)
- Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- OHS Representatives (Section 18 (3) of the Act)
- Training of the Appointees indicated above
- Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 27)
- As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3)
- Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- Emergency, Security and Fire Co-ordinator

Visitors to Site

Visitors to the site shall be required to undergo and comply with Principal Contractor construction site OHS induction requirement(s) prior to being allowed access to site.

All visitors accessing the site for duration of less than 8 hours will undergo a short induction for which they are expected to sign for and be issued with a Temporary Visitors card. All visitors accessing the site for more than one day will undergo a full OHS induction. The parents of children (minors) visiting the site will need to sign a consent form issued by the contractor, prior to them being granted access to the site.

Visitors are to be made of aware of any legal environmental authorisations that exist on site and any relevant aspects that relate to the nature of the visit.

All visitors must remain in the care and custody of a person (Host) who has been properly inducted. No visitors are permitted to undertake any construction work, of any nature.

8. SITE FACILITIES

All personnel are to be afforded decent, clean, hygienic facilities at all times. Respect for people irrespective of status is to be afforded to all at all times. General housekeeping, stacking and storage are to be the responsibility of each team supervisor for indicated areas, which are to be noted on a site map or the drawings for the facilities. The responsibilities are to be updated as necessary.

Fixed ablution facilities are to be in accordance with statutory or generally acceptable standards. Separate facilities (sanitary and changing) are required for each gender. All facilities to be kept clean, hygienic and in a good state of repair. Temporary toilets moved around site are not to use formaldehyde, and alternative bacterial products are to be used. Temporary toilets are further to be available with each team, and for each gender. Ratio of worker to chemical toilet is 1:10.

Eating Facilities are to be made available, accessible to all, be kept clean, hygienic and in a good state of repair. Where work is on site, away from the fixed site facilities, temporary facilities that are hygienic, clean and in good repair shall be available for all to use.

No living quarters will be allowed within the site. Suitable living quarters are to be arranged for those who are required to be accommodated. Such sites could be inspected by the CHSMs / CHSOs for hygienic assessment.

Temporary Facility Layout Plan

A drawing indicating all facilities at the site camp and potential remote sites must be provided with the OHS PLAN. This must include the waste management plan requirements

Such drawings are to include the following but are not limited to:

- Eating facilities;
- Change rooms (indicating gender);
- Ablution facilities (indicating gender);
- Site Offices and Amenities;
- Adequate Storage facilities;
- Site Access, and
- Temporary Site Services.

9. ACCESS CONTROL TO THE CONSTRUCTION SITE

• Site Access

All Contractors are to strictly adhere and are subjected to all security requirements on the premises, as laid down by the the Client Department.

Security requirements, including the Client's requirements must be highlighted at the induction given by the PC's Site Risk Personnel.

After induction, Contractor employees are registered on the site access system and are issued with access certificates. Access certificates to be kept with the Contractor/Workers at all times within the site.

All personnel/Contractor items to be declared at entry and pass-out to be obtained for non-declared items by Site personnel are required when exiting the premises.

Upon completion of a job, firing or leaving the site, the induction cards issued where applicable to a specific site must be returned to the PC's Site Risk Personnel. Under no circumstances is the card allowed to be used by another person other than the person issued with the card.

All those who access site are required to strictly adhere to all security requirements on the premises, as laid down by the PC.

• Security and Site Access

Security requirements shall be included at PCs induction training. Following induction, all employees are registered on the site access system and depending on the clients system at the time, access certificates / cards might be issued.

Access certificates to be kept with each contractor and their workers at all times within the site. Under no circumstances are access cards allowed to be used by any other person other than the person issued with the card.

Outsourced security services are to be treated as Contractors and all safety requirements apply.

The security guards should be fully trained and knowledgeable about the company and its assets. Security guards on site to be accredited with the Private Security Industry Regulatory Authority (PSIRA) and hold an identification card from PSIRA at all times.

The project/site security arrangements that are to be included in the OHS PLAN include, but are not limited to:

- The provision of shelter, with access to ablution facilities;
- The management of the Visitor's register and Occurrence book;
- The provision and maintenance of an appropriate communication system between patrols and to contact the relevant authorities in an emergency;
- Professional uniform that is neat and clean at all times;
- Ensuring that Personal Protective Equipment is to be provided for patrolling guards, and all other CHS activities appropriate to limit their exposure.

• **Traffic Access and Routes**

A Site traffic plan to accommodate movement of traffic and pedestrians is required, and is to be included in the OHS PLAN for specific work areas in the control of the PC.

The PCs shall provide a one way traffic plan to the satisfaction of the Engineer, and liaise with other PCs where routes or work overlap. Access to the site from the public roads needs to be co-ordinated and managed in accordance with the by-laws, and traffic standards (SA Road Traffic Signs Manual (SARTSM), Chapter 13, Volume 2).

Under no circumstances may workers be transported on the rear of vehicles or with plant and materials. The Road Traffic Safety Act is to be applied, as well as the PC doing risk assessments to determine risks.

Failure to comply with the requirements will be regarded as a serious offence.

10. COMPENSATION ISSUES

The PCs must submit proof of registration and letter of good standing (LoGS) with the compensation fund or with a licensed compensation insurer for his company and each of his Contractors. Record of validity must be maintained. Work is to be stopped where Contractors are identified with expired LoGS's).

The Letter of Good Standing must reflect the name of the Principal Contractor and/or Contractor Company and the nature of business. No one organization may carry the liability or cover for another.

Failure to comply with the requirements will be regarded as a serious offence.

11. OCCUPATIONAL HYGIENE MONITORING

The requirement to measure and monitor levels of hazards that affect the health of workers. PCs are to identify the occupational hygiene monitoring requirements that is relative to the products and processes, and risks created by work. Monitoring is to be in line with the legal framework, and use the Approved Inspection Authority (AIA) as defined, and the CHSMs / CHSOs will be required to co-ordinate the measuring and monitoring.

Each PC shall monitor dust, noise, vibration, lighting, and any other risks caused by mobile equipment, generators and other equipment used during construction. Factors such as weather can affect the intensity to which these impacts are experienced. The use of dampening of noise and vibration produced by equipment or processes is to be applied. Other appropriate mitigation measures are to be implemented as required / agreed upon with the CHSA.

All plant and equipment is to come to site pre monitored, irrespective of source. Evidence of the use of an AIA to have done the measuring is to be available.

Dust suppression measures must be in place to reduce the dust caused by the movement of heavy vehicles and plant. Gravel roads in use are to be watered a minimum of twice a day in the working strip.

12. EMERGENCY PREPAREDNESS AND RESPONSE

The Principal Contractor will provide and co-ordinate an overall emergency plan plus applicable rescue plans, submit this plan in the OHS plan as an addendum. The PC will ensure that employees and Sub Contractor employees are trained on the emergency plan on a regular basis. The plan is to detail how emergencies will be managed, taking into account the risk of the works, task based emergency planning and responses. All emergency preparedness staff members (First aiders, fire marshals, emergency co coordinators, security) must be appointed in writing. Appointment letters must detail key roles and responsibilities, also indicate specific work stations details where applicable.

Periodic emergency drills will be undertaken by the PC that will include all Contractors.

- **Fire hazards and Management**

No open fires are allowed on site. The PC must conduct a site specific risk assessment and also ensure that operations are in compliance with statutory requirements at all times. The emergency plan is to ensure fire management is included. Workers are to be trained in fire fighting, and appropriate equipment must be available for the work being done at the various stages of the project. The designation and organization of site personnel to carry out fire safety duties, including fire watch service if applicable.

High risk equipment and processes such as the use of gas, activities such as cutting, grinding, welding or any other activity with a possibility of explosions or fire are to utilise a system of hot work permits and appropriate controls.

13. ENVIRONMENTAL MANAGEMENT

The principal contractor is required to develop a project specific Environmental Management Plan that includes a Waste Management Plan.

All hazardous waste must be disposed of at a registered waste site and records kept. The Principal Contractor must ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period and stored in the appropriate manner in a bunded area with adequate containment for potential spills and leaks. Contractors must ensure that sufficient waste bins / containers are made available for waste control.

14. FORUMS FOR OHS COMMUNICATION

The PC must provide a communication strategy outlining how they intend to communicate OHS issues to their staff, the mediums they will employ and how they will measure the effectiveness of their OHS communication.

OHS will be included as an agenda item at every meeting conducted on site. Attendance registers, Agendas and Minutes of all meetings shall be available. Outcomes and decisions made regarding OHS are to be followed through and evidence of same available.

Other OHS meetings may be held as required by The National Department of Public Works.

15. OHS AUDITS AND INSPECTIONS

The department of Public Works, Roads and Transport authorities and the Project CHSA, reserve the right to conduct unannounced audits and inspections on the PC or their Contractors. Generally, audits and inspections will be done as follows: One compliance audit per month plus one site inspection per month; but more frequently if deemed required. Results will be available within 5 days of the audit or inspection, but critical issues will be recorded immediately and non-conformances issued.

- **Approval of OHS Plans**

The PC OHS plan will be audited against the OHS spec, construction activities and the programme of works; to verify compliance to the requirements in the OHS spec, The Occupational Health and Safety Act and Regulations and other relevant legislations. The OHS plan will be approved by the Project CHSA

- **Contractor OHS Performance Evaluation**

The Principal Contractor shall evaluate it's sub-contractors performance on an on-going basis against the legislative requirements, the OHS plan and the project's OHS spec as appropriate to the activities and the level of risk.

- **Contractor Internal Audits**

PCs are required to conduct internal audits and do audits on their Contractors on at least a monthly basis, or more frequently if high risk activities, or when the scope of work changes. An executive summary of the findings that includes the proposed corrective actions shall be submitted to the Project CHSA within 5 days of completion. Regular site inspections are required, and at least daily site visits to ensure compliance, including unannounced 'spot checks' on activities are to be done. A diary and evidence of such are to be kept indicating dates and type of audits/inspections completed.

16. OHS INCIDENT MANAGEMENT (PC AND CONTRACTORS)

A procedure for reporting, investigation and record keeping of incidents and accidents is to be provided. The PC shall report all incidents/accidents including near miss incidents, fatalities, shall be reviewed by the H&S committee and the members of the Project Progress meeting notified of corrective actions taken. All corrective action must be closed out within 3 months. If this is not practicable within the time frame, then it is to be submitted at a later date agreed to by the Project's CHSA.

Note: Providing the accident/incident investigation report does not exempt the PC from providing accident reports required by Statutory Authorities, in particular, the PCs responsibility for reporting accidents in accordance with the requirements of the OHS and COID Act. The Client's OHS Representative shall participate in any accident/incident investigation if the accident/incident is directly linked to any activity within the scope of the construction project. NDPW further reserves the right to conduct an independent investigation in any incident and the NDPW OHS Representative should be included on the team.

17. STATISTICAL AND GENERAL REPORTING

The Principal Contractor must submit a monthly report, on a NDPW template, or similar by the 6th of each month to the NDPW OHS Representative. The focus of the reports is on leading indicators. A summary of the reports submitted are to be reported, recorded and discussed on at OHS Committee meetings, site progress meetings and the OHS Steering Committee.

18. OPERATIONAL CONTROL REQUIREMENTS

The PCS are to ensure that all operational aspects are controlled according to policies and procedures, PM standards where required. All records, registers, appointments and other applicable aspects are to be kept up to date in the OHS file. Filing is to be kept current.

• Notices and Signage

All symbolic safety signage is to conform to the requirements of SANS 1186, and be appropriate to the risks and activities on site and at the site camp. Equipment is to include the measured noise levels that are completed by an AIA.

• Plant and Equipment

All plant and equipment on site is to include specific markers that identifies the PCs organisation. Appropriate forms of plant and equipment is to be used, with appropriate registers and maintenance programmes. Registers of all plant and equipment on site are to be kept. Stores and storage to be properly controlled, with competent supervision and in good repair. Maintenance to be completed by the appropriately competent person and operated by trained workers.

Identification is required on all of site vehicles entering the site. The speed limit within the bounds of the construction site is 30 km/h, and is weather dependent. No drivers or operator may talk on cell phones or two way radios whilst driving, unless a hands free kit is used, and carry no passengers unless so designed.

PM reserves the right to search any vehicle on the premises or when entering or leaving the premises. Each PC shall be solely responsible for the safety and security of any of his vehicles (including private vehicles) on the premises.

• Housekeeping, Stacking and Storage

The PCs shall maintain a high standard of housekeeping within the site. Lay down areas agreed upon and on plan are to be maintained. Excessive material, plant and equipment is discouraged. Materials/objects shall not be left unsecured in elevated areas and shall be managed by site supervision at all times. A 'Clean as you go' approach is required, and will be monitored daily by the CHSMs / CHSOs.

• Fall Protection

A fall protection plan is required to indicate all controls pertaining to fall hazards and all work at heights activities.

The fall protection plan must be kept up to date where appropriate. Fall protection equipment to be implemented where fall prevention is not possible and shall comply with SANS Standards, SANS 503&508, and 10085 Series or other recognised international standards are to be strictly implemented.

It is preferable that cognizance of life cycle is taken into account and the where maintenance will be required, that built in attachment points are provided by the designers.

- **Lifting Devices and Cranes**

All lifting/crane machine operators shall be competent to operate such machines with valid permits and training certificates. Load testing certificates for lifting devices, slings and chains in line with the statutory requirements are to be kept on record.

No person is to walk or work under suspended loads, including excavators, and between a load and a solid object where they might be crushed if the load should swing or fall. Guide ropes and banks men to be used to prevent loads from swinging.

Rigger requirements are to conform with the statutory and industry standards.

19. APPOINTMENTS AND COMPETENCIES

OHS ACT AND ASSOCIATED REGULATION APPOINTMENTS:

NO	REGULATION	APPOINTMENT/COMPETENCIES
1.	Section 16(1)	Chief Executive Officer (only the details of Chief Executive required)
2.	Section 16(2)	Assistant to Chief Executive Officer.
3.	Section 17	Health and Safety Representative <u>Requirement:</u> One trained Health and Safety Representative for every 20 employees, site location or part thereof. To be elected and appointed per work area and discipline and comply with OHS Act Section 17 and 18 and GAR Section 6. <u>Competencies:</u> General Health and Safety Training Health and Safety Representative Training Hazard Identification, Risk Assessment Training and Incident Investigation Training
4.	Section 19	Health and Safety Committee Member(s) and Co-opted Members <u>Requirement:</u> Health and Safety Committee Member (if there are 2 or more Health and Safety Representatives then there will be a Health and Safety committee)
5.	Section 19	Chairperson of Health and Safety Committee
6.	GSR 3	First Aider <u>Requirement :</u> as per OHS Act or project risk profile of workers <u>Competencies:</u> Possession of a valid level 1 or 2 first aid certificates issued by any one of the following: The SA Red Cross Society; the St John's Ambulance; the SA First Aid League; or a person or organisation approved by the Chief Inspector for this purpose.
7.	GSR(2) & ER 9(1)	Fire Fighter <u>Requirements/Competencies:</u> Relevant Training
8.	GSR 5(1)	Person that pronounces and certifies a confined space safe for the duration of work being conducted (applicable for only confined spaces). <u>Competencies:</u> Competent on the use of gas monitoring device, First Aid Certificate, Confined Space Training on emergency procedures.
9.	GAR 9 (2)	Incident/Accident Investigator
10.	EMR 8(8)	Appointment for electrical installation in hazardous location- Master Electrician (Inspector)
11.	EIR 9	Installation Electrician appointment
12.	GMR 2 (1)	Supervisor of Machinery
13.	GMR 2 (7)	Assistant Supervisor of Machinery
14.	DMR18 (11)	Lifting Machinery Operator (Appointment or Permit) <u>Requirements/Competencies:</u> Relevant Training
15.	DMR18 (5)	Lifting Machinery Inspector <u>Requirements/Competencies:</u> Relevant Training
16.	DMR 18 (10) (e)	Lifting Tackle Inspector <u>Requirements/Competencies:</u> Relevant Training
17.	EMR 9	Portable Electrical Equipment Inspector <u>Requirements/Competencies:</u> Trained Electrician
18.	VUP 10	Portable Gas Container Inspector
19.	VUP 13 (1) (b)	Pressure Vessels Inspector

		Requirements/Competencies: AIA Approved
20.	Lifting Regulation(6) (1)	Competent person to examine and maintain lift, escalator or passenger conveyer Requirements/Competencies: AIA Approved
Written Agreements: OHS Act Section 37(2) Agreement between Client and Principal Contractor		
18.	CR 8(1)	Construction Manager Requirements/Competencies: To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken. Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000.
19.	CR 8(2)	Assistant Construction Manager Requirements/Competencies: To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken. Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000.
18.	CR 8(7)	Construction supervisor Requirements/Competencies: To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken. Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000.
19.	8(8)	Construction supervisor sub-ordinates i.e. assistant construction supervisors Requirements/Competencies: To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken. Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000.
20.	8(5)	Construction Health and Safety Officer(CHSO) Requirements/Competencies: CHSO is registered with SACPM/ or provide proof of submission to the SACPCMP
21.	9(1)	Risk Assessor Requirements/Competencies: Person to carry out risk assessment, Competency based on exposure and experience level but preferably with the following :HIRA, a recognised safety certification (minimum: of 2 weeks training) (e.g. SAMTRAC / Modern OHS Management course) and OHS Act and Regulations (latest version of the Act and regulations)
22.	10(1)(a)	Fall protection planner Requirements/Competencies: Person that compiles the fall protection plan. Ensures fall protection plan implementation, amendments when/where necessary and maintenance.
23.	16(1)	Scaffold supervisor Competencies: Competency based on exposure and experience but preferably with the following: Scaffolding Erector and Inspector Certificate, HIRA and OHS Act and Regulations (latest version of the Act and regulations).SANS 10085
24.	16(1)	Scaffold erector Competencies: Competency based on exposure and experience but preferably with the following: Scaffolding Erector and Inspector Certificate, HIRA and OHS Act and Regulations (latest version of the Act and regulations)
25.	16(1)	Scaffold inspector Competencies: Competency based on exposure and experience but preferably with the following: Scaffolding Erector and Inspector Certificate, HIRA and OHS Act and Regulations (latest version of the Act and regulations)
26.	23(1)(d)(i)/(k)	Construction vehicle and mobile plant Operator/Inspector
27.	24 (c)	Temporary electrical installations Controller
28.	24 (d)	Temporary electrical installations Inspector
29.	28 (a)	Stacking and storage supervisor
30.	27 (h)	Fire equipment inspector

NB: All other relevant appointments not specified will be identified by the contractor and the necessary appointments to be put in place.

20. SAFE WORK PROCEDURES AND PRACTICES

The aim of this section is to provide an indication of the activities that require safe work procedures and practices to mitigate the identified risks. There must be written safe work procedures for all activities. Risk Assessments should refer to the safe work procedures.

A safe working procedure should be written when:

- Designing a new job or task;
- Changing a job or task;
- Introducing new equipment or substances; and
- Reviewing a procedure when problems have been identified, e.g. from near miss incidents or an accident/incident investigation.

The safe working procedure should identify:

- The supervisor for the task or job and the employees who will undertake the task;
- The tasks that are to be undertaken that pose risks;
- The equipment and substances that are used in these tasks;
- The control measures that have been built into these tasks;
- Any training or qualification needed to undertake the task;
- The personal protective equipment to be worn;
- Actions to be undertaken to address safety issues that may arise while undertaking the task.

21. EMERGENCY PREPAREDNESS AND RESPONSE

The aim of this section is to remind the Principal Contractors and his sub-contractors about the importance of developing a site specific emergency response plan.

The Principal Contractor, together with his sub-contractors, will develop their own emergency response plan (as a guideline) for both site and offices and submit this plan to the National Department of Public Works Risk Manager for approval. It may be decided that one site specific emergency response plan be used for all contractors. Principal Contractor will ensure that employees and sub-contractor employees are trained on this plan.

Periodic emergency drills will be undertaken by The National Department of Public Works; however, the principal contractor must initiate his own emergency drills annually with permission from the National Department of Public Works Risk Manager. This must be recorded and provided on request.

Emergency Care

- A list of emergency numbers must be posted at phones and in every office. Principal Contractor must ensure that his employees and sub-contractor employees are familiar with the emergency numbers and also are provided with stickers, with the emergency numbers printed on, to place inside their hardhats if working in remote areas.
- Contractors shall have one first aid box for the first 5 persons and thereafter one for every 50 or team of workers on site or part thereof.
- More first aid boxes shall be provided if the risks, distance between work teams or workplace requirements require it (it should be available and accessible for the treatment of injured persons at that workplace).
- Minimum contents of a first aid box as per OHS Act as per (OHS ACT-GSR 3)
- A prominent notice or sign in a conspicuous place at a workplace (SABS 1186 approved signs to indicate location of first aid boxes), indicating where the first aid box or boxes are kept as well as the name and contact details of the First Aider of such first aid box or boxes.
- The First Aider must be familiar with the material safety data sheets (MSDS) kept on site.
- The First Aider with a valid certificate will manage the first aid box and will update the contents accordingly.
- The Principal Contractor and sub-contractor shall ensure that alternative arrangements shall be made for possible incidents occurring after normal working hours.
- Where services are not available from the medical centre or where there is no medical centre, the Principal Contractor shall make alternative arrangements for any medical assistance. Proof of this must be made available in the Principal contractors OHS Plan.
- Emergency hospital care must be accessed preferably in a private hospital, but at the nearest hospital.
- The Principal Contractor shall create a 'mock' emergency drill schedule for the duration of the project. The emergency plan shall be tested at least once during the first 90 days of the project, and thereafter annually.

22. ENVIRONMENTAL MANAGEMENT

Spillage of Hazardous Chemical Substances and Battery Acids

A register of Hazardous Chemical Substances and Material Safety Data sheets should be kept on site.

Herbicide usage

Herbicide register for usage to be compiled and maintained, and a copy handed to the Project Manager / environmental advisor on completion of the project / contract. The application of herbicides to be in accordance with the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947. Only approved and tested herbicides with a low environmental risk shall be used.

Only registered pest control operators may apply herbicides on a commercial basis. All staff applying herbicides must be trained in the application of herbicides.

Fire hazard

The Contractor shall ensure that staff are educated in fire prevention and will be held responsible to avoid the risk of fire. No area is to be denuded of vegetation to create firebreaks, to prevent or make fires. No open fires are allowed on site. The contractor must ensure that operations are in compliance with statutory requirements at all times.

Waste

- A wasteplan is to be compiled before commencing of work.
- A register of hazardous and non-hazardous waste to be kept on-site.
- All waste to be disposed of at a registered waste site and records kept. The contractor should identify this site prior to commencement for all waste streams.
- No waste, whether it be biodegradable or not, is to be left on site once work has ended.
- Domestic and hazardous waste generated will not be burned, buried, or disposed of on The National Department of Public Works or other Landowners' property but will be controlled and removed to a registered waste site on a regular basis (Daily/Weekly/Monthly).
- The contractor and sub-contractor working on site must ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period.
- These materials must be stored in a bunded area with adequate containment for potential spills and leaks.
- Contractors must ensure that sufficient waste bins / containers are made available for waste control.

Material requirement

The use of any material or property belonging to a specific Landowner will not be undertaken prior to arrangements with the applicable Landowner. Written proof of such agreement to be handed to Project Manager for record keeping

Dust and Noise

The Contractor shall monitor dust and noise caused by mobile equipment, generators and other equipment during construction. Factors such as wind can often affect the intensity to which these impacts are experienced.

To ensure that noise does not constitute a disturbance during construction activities, all construction works shall occur between specific working hours. This must be stipulated in the contract.

Mitigation measures to be implemented as required / agreed upon with the CHSA and Project Manager.

23. OHS INCIDENT MANAGEMENT (PRINCIPAL CONTRACTOR AND SUB- CONTRACTORS)

The Contractor shall compile and implement procedure for Reporting and investigation of incidents – This document sets out the procedures to be followed when reporting, recording and investigating incidents that occur on a construction site.

The Principal Contractor shall report all incidents/accidents as required in terms of legislation including near miss incidents, first aid, medical treatment, lost time incidents (lost time injuries and fatalities); Section 24 and 25 incidents; electrical contact; property damage; crime, chemical spillage and other environmental incidents immediately.

Where a fatality or permanent disabling injury occurs at a construction site, Contractor must provide the Provincial director with a report contemplated in section 24 of the Act, in accordance with regulations 8 and 9 of the General Administrative Regulations and that the reports included measures that the contractor intends to implement to ensure a safe construction site as far as is reasonably practicable.

All fatal incidents, employee and contractor incidents, shall be reviewed by the committee within one week after the incident and the members of the Project Progress meeting notified of corrective actions taken. Preliminary investigation information shall be shared.

An incident portfolio of evidence and a comprehensive and detailed investigation report shall be submitted to the Client and the client's CHSA within 7 days after the incident which shall include: Date, time and place of incident; Description

of incident; Root cause of incident/accident; Type of injury (if any); Medical treatment provided (if any); Persons involved; Names of witness/s; Corrective action to prevent recurrence (with clear deadlines and responsible persons). It is required that all corrective action is closed out within 3 months. If this is not practicable within the time frame, then it is to be submitted at a later date agreed to by the National Department of Public Works Project Manager.

The Principal Contractor shall ensure that all accidents/incidents are investigated by him/her and are discussed at the OHS committee meeting held on site. Accidents/incidents shall be investigated and recorded in terms of the requirements of the Occupational Health and Safety Act, the National Environmental Management Act and National Water Act as applicable.

Please note that providing the Accident/incident investigation report does not exempt the Principal Contractor from providing accident reports required by Statutory Authorities, in particular, the Contractors' responsibility for reporting accidents in accordance with the requirements of the OHS Act and COIDA Act.

The Client shall be allowed to participate in any accident/incident investigation if the accident/incident is directly linked to any activity within the scope of the construction project

The Principal Contractor shall keep on site/workplace a record of all accidents and incidents reported in the form of the OHS Act Annexure 1 investigation form as referenced in the OHS Act. (Incident Investigation Report)

The National Department of Public Works reserves the right to conduct an independent investigation in any incident

Investigation Teams below are expected as a minimum for the Principal Contractor to establish for incidents and accidents. In addition to the Principal Contractor and his sub-contractor investigations, The National Department of Public Works will also, separately, conduct its own separate investigation especially for disabling injuries, fatalities, serious environmental legal contraventions and damages to The National Department of Public Works property. The principal contractor and sub-contractor would be required to co-operate with the National Department of Public Works investigation Team.

Parties to be involved in the investigation are as follows:

Incident Type	Definition	Chairman:	Attendees:
First Aid Injuries	An incident in which an injured person is treated at the incident scene by the first Aider and released back for duty	Supervisor of Injured Person / Principal Contractor: Relevant Supervisor	Principal Contractor/s and their sub-contractor/s <ul style="list-style-type: none"> • OHS representative • Construction Safety Officer • Injured
Medical Treatment Injuries	An incident in which an injured person is treated by the OHP/Medical doctor and released back for duty	Principal Contractor's OHS Act Section 16(2) appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • OHS representative • Construction Safety Officer and Manager • Injured (if possible) • Witness (if any) • Supervisor of the injured • CHSA
Disabling Injuries Including Occupational Diseases	Incident which arises in the course of duty which results in any occupational illness/ injury/ diseases, and giving rise to any related temporary or permanent disablement as determined by the Medical practitioner. The DI will be further classified as disabling in the event of one or more of the following criteria are applicable: <ul style="list-style-type: none"> – The injured person is unable to continue performing his normal duties and tasks for which he/OHS was employed for 14 days or more, 	Principal Contractor's OHS Act Section 16(2) appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • OHS Representative • Construction Safety Officer • Injured (if possible) • Witness (if any) • Supervisor of the injured • OHS Act Section 16(2) of the injured <u>The National Department of Public Works</u> <ul style="list-style-type: none"> • Engineers • CHSA • Client Project Manager

	<ul style="list-style-type: none"> - The loss or more than one day or shift following the day or shift during which an incident occurred, inclusive of weekends, and schedule off-duty days, - All fractures and amputations - A person becomes unconscious, irrespective of the duration, as the results of workplace exposure or any incident, - An occupational illness which necessitates medical treatment and or restricted work and /or days/shifts off-duty, - Compensable occupational diseases recorded as a single DI on the day of diagnosis. - Any damage to the bone such as closed fracture, amputation of the fingertip etc. 		
Fatalities	An incident that occurs at work or arising out of, or in connection with the activities of persons at work, or in connection with the use of plant or machinery, in which, or in consequence of which a person dies,	Principal Contractor's OHS Act Section 16(2) appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • OHS Representative • Construction Safety Officer • Injured (if possible) • Witness (if any) • Supervisor of the injured • OHS Act Section 16(2) of the injured <u>The National Department of Public Works</u> <ul style="list-style-type: none"> • Engineers • CHSA • Client Project Manager/Risk Manager
Near Miss Incidents	An incident that has the potential of causing an injury or negative impact to the environment	Principal Contractor/s Construction Supervisor 6.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • Person/s affected by near miss • OHS representative • Construction Safety Officer • Supervisor of the area • Principal Contractor 's OHS Act Section 16(2) appointee
Damage To The National Department of Public Works/ Third Party Property	Property damage is damage to or the destruction of The National Department of Public Works property, caused either by a person or by natural phenomena.	Principal Contractor/s Construction Supervisor 6.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • OHS representative • Construction Safety Officer • Witness (if any) <u>The National Department of Public Works</u> <ul style="list-style-type: none"> • Engineers • CHSA • Client Project Manager/Risk Manager •

Crime	An action or omission that constitutes an offense that may be prosecuted by the state and is punishable by law	Principal Contractor/s Construction Supervisor 6.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> OHS representative where applicable Construction Safety Officer Witness (if any) <u>The National Department of Public Works (Where applicable)</u> <ul style="list-style-type: none"> Client Project Manager/Risk Manager Detective (SAPS) Suspect(s) Witness (if any) Protective Services Official (if possible) Principal contractor and / or their sub-contractor
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- All investigation teams must include at least 1 person (from both the National Department of Public Works and Principal Contractor) that is competent in Incident Investigation.
- Contractors shall ensure the incident/accident scene is not disturbed until after the investigation unless it is done to prevent further injury or for rescue purposes (OHS Act, Section 24(2) applies). Investigation shall begin promptly after the incident/accident. Where applicable and with proper authorization, photographs may be taken of the scene of the incident as well as any equipment involved in the incident. The investigation report shall be submitted to the National Department of Public Works Project Manager, within 3 days after the incident occurred unless proof can be given that due to technical or other difficulties, more time is needed.
- It is essential that the Principal Contractor demonstrate that corrective action has been taken and that correction action is communicated to all Contractors staff affected.
- Feedback on the status of close out of corrective actions must be communicated at the following forums: Site Progress Meeting, Project Progress Meeting and at Contractor OHS Meeting.

24. OPERATIONAL CONTROL REQUIREMENTS

Education and Training

Subject	Requirement
*Company OH&S Policy Section 7(1)	Policy signed by CEO and published/Circulated to Employees Policy displayed on Employee Notice Boards Management and employees committed.
*Company/Site OH&S Rules (Section 13(a))	Rules published Rules displayed on Employee Notice Boards Rules issued and employees effectively informed or trained: written proof Follow-up to ensure employees understand/adhere to the policy and rules.
*Induction & Task Safety Training (Section 13(a))	All new employees receive OH&S Induction Training. Training includes Task Safety Instructions. Employees acknowledge receipt of training. Follow-up to ensure employees understand/adhere to instructions.
*General OH&S Training (Section 13(a))	All current employees receive specified OH&S training: written proof Operators of Plant & Equipment receive specified training Follow-up to ensure employees understand/adhere to instructions.
*Occupational Health & Safety Promotion	<u>Incident Experience Board indicating e.g.</u> * No. of hours worked without an Injury * No. of days worked without an Injury Mission, Vision and Goal Star Grading - Board kept up to date. Safety Posters displayed & changed regularly Employee Notice Board for OH&S Notices.

	Site OH&S Competition. Company OH&S Competition. Participation in Regional OH&S Competition Suggestion scheme.
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Public Safety, Security Measures and Emergency Preparedness

*Notices & Signs	Notices & Signs at entrances / along perimeters indicating "No Unauthorised Entry" . Notices & Signs at entrance instructing visitors and non - employees what to do, where to go and where to report on entering the site/yard with directional signs. e.g. "Visitors to report to Office" Notices & Signs posted to warn of overhead work and other hazardous activities. e.g. General Warning Signs
Site Safeguarding	Nets, Canopies, Platforms, Fans etc. to protect members of the public passing / entering the site.
*Security Measures	Access control measures/register in operation Security patrols after hours during weekends and holidays Sufficient lighting after dark Guard has access to telephone/ mobile/other means of emergency communication
*Emergency Preparedness	Emergency contact numbers displayed and made available to Security & Guard Emergency Evacuation instructions posted up on all notice boards (including employees' notice boards) Emergency contingency plan available on site/in yard Doors open outwards/unobstructed Emergency alarm audible all over (including in toilets)

Personal Protective Equipment

*PPE needs analysis	Need for PPE identified and prescribed in writing. PPE remain property of Employer, not to be removed from premises GSR 2(4)
*Head Protection	All persons on site wearing Safety Helmets including Sub-contractors and Visitors (where prescribed)
*Foot Protection	All employees on site wearing Safety Footwear including Gumboots for concrete / wet work and non-slip shoes for roof work. Visitors to wear same upon request or where prescribed
*Eye and Face Protection	<u>Eye and Face (also Hand and Body) Protection</u> (Goggles, Face Shields, Welding Helmets etc.) used when operating the following: * Jack/ Kango Hammers * Angle / Bench Grinders * Electric Drills (Overhead work into concrete / cement / bricks) * Explosive Powered tools * Concrete Vibrators / Pokers * Hammers & Chisels * Cutting / Welding Torches * Cutting Tools and Equipment * Guillotines and Benders * Shears * Sanders and Sanding Machines * CO2 and Arc Welding Equipment * Skill / Bench Saws * Spray Painting Equipment etc.
*Hearing Protection	<u>Hearing Protectors</u> (Muffs, Plugs etc.) used when operating the following: * Jack / Kango Hammers * Explosive Powered Tools * Wood/Aluminium Working Machines e.g. saws, planers, routers
*Hand Protection	<u>Protective Gloves</u> worn by employees handling / using: * Cement / Bricks / Steel / Chemicals * Welding Equipment * Hammers & Chisels * Jack / Kango Hammers etc.
*Respiratory Protection	Suitable/efficient prescribed <u>Respirators</u> worn correctly by employees handling / using: * Dry cement * Dusty areas * Hazardous chemicals

	<ul style="list-style-type: none"> * Angle Grinders * Spray Painting etc.
*Fall Prevention Equipment	<p>Suitable <u>Safety Belts</u> / Fall Arrest Equipment correctly used by persons working on / in unguarded, elevated positions e.g.:</p> <ul style="list-style-type: none"> * Scaffolding * Riggers * Lift shafts * Edge work * Ring beam edges etc. <p>Other methods of fall prevention applied e.g. catch nets</p>
*Protective Clothing	All jobs requiring protective clothing (Overalls, Rain Wear, Welding Aprons etc.) Identified and clothing worn.
*PPE Issue & Control	<p>Identified Equipment issued free of charge.</p> <p>All PPE maintained in good condition. (Regular checks).</p> <p>Workers instructed in the proper use & maintenance of PPE.</p> <p>Commitment obtained from wearer accepting conditions and to wear the PPE.</p> <p>Record of PPE issued kept on H&S File.</p> <p>PPE remain property of Employer, not to be removed from premises GSR 2(4)</p>

Housekeeping

*Scrap Removal System	<p>All items of Scrap/Unusable Off-cuts/Rubble and redundant material removed from working areas on a regular basis. (Daily)</p> <p>Scrap/Waste removal from heights by chute/hoist/crane.</p> <p>Nothing thrown/swept over sides.</p> <p>Scrap disposed of in designated containers/areas</p> <p>Removal from site/yard on a regular basis.</p>
Stacking & Storage (See Section 1 for Designation & Register)	<p><u>Stacking:</u></p> <ul style="list-style-type: none"> * Stable, on firm level surface/base. * Prevent leaning/collapsing * Irregular shapes bonded * Not exceeding 3x the base * Stacks accessible * Removal from top only. <p><u>Storage:</u></p> <ul style="list-style-type: none"> * Adequate storage areas provided. * Functional – e.g. demarcated storage areas/racks/bins etc. * Special areas identified and demarcated e.g. flammable gas, cement etc. * Neat, safe, stable and square. * Store/storage areas clear of superfluous material. * Storage behind sheds etc. neat/under control. * Storage areas free from weeds, litter etc.
*Waste Control/Reclamation	<p>Re-usable off-cuts and other re-usable material removed daily and kept to a minimum in the work areas.</p> <p>All re-usable materials neatly stacked/stored in designated areas. (Nails removed/bent over in re-usable timber).</p> <p>Issue of hardware/nails/screws/cartridges etc. controlled and return of unused items monitored.</p>
Sub-contractors (Housekeeping)	Sub-contractors required to comply with Housekeeping requirements.

Work at Heights

Openings	Unprotected openings adequately guarded/fenced/barricaded/catch nets installed
	<p>Roof work discontinued when bad/hazardous weather</p> <p>Fall protection measures (including warning notices) when working close to edges or on fragile roofing material</p> <p>Covers over openings in roof of robust construction/secured against displacement</p>

Scaffolding / Support Work

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Access/System Scaffolding	Foundation firm / stable Sufficient bracing. Tied to Structure/prevented from side or cross movement Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs Complying with OH&S Act/SABS 085
Free Standing Scaffolding	Foundation firm / stable Sufficient bracing. Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs Height to base ratio correct Outriggers used /tied to structure where necessary Complying with OH&S Act/SABS 085
*Mobile Scaffolding	Foundation firm / stable Sufficient bracing. Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs
*Mobile Scaffolding	Wheels / swivels in good condition Brakes working and applied. Height to base ratio correct. Outriggers used where necessary Complying with OH&S Act/SABS 085
Formwork / Support Work	All components in good condition. Foundation firm / stable. Adequate bracing / stability ensured. Good workmanship / uprights straight and plumb. Good cantilever construction. Safe access provided. Areas under support work tidy. Same standards as for system scaffolding.
Special Scaffolding	Special Scaffolding e.g. Cantilever, Jib and Truss-out scaffolds erected to an acceptable standard and inspected by specialists.
Edges & Openings	Edges barricaded to acceptable standards. Manhole openings covered / barricaded. Openings in floor / other openings covered, barricaded/fenced. Stairs provided with handrails. Lift shafts barricaded / fenced off.

Ladders

*Physical Condition / Use & Storage	Stepladders - hinges/stays/braces/stiles in order. Extension ladders - ropes/rungs/stiles/safety latch/hook in order. Extension / Straight ladders secured or tied at the bottom / top. No joined ladders used Wooden ladders are never painted except with varnish Aluminium ladders NOT to be used with electrical work All ladders stored on hooks / racks and not on ground. Ladders protrude 900 mm above landings / platforms / roof. Fixed ladders higher than 5 m have cages/Fall arrest system
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Electricity

*Electrical Distribution Boards & Earth Leakage	Colour coded / numbered / symbolic sign displayed. Area in front kept clear and unobstructed. Fitted with inside cover plate / openings blanked off / no exposed "live" conductors / terminals/Door kept close
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	<p>Switches / circuit breakers identified.</p> <p>Earth leakage protection unit fitted and operating.</p> <p>Tested with instrument: Test results within 15 – 30 milliamps</p> <p>Aperture/Opening/s provided for the plugging in and removal of extension leads without the need to open the door</p> <p>Apertures and openings used for extension leads to be protected against the elements and especially rain</p>
*Electrical Installations & Wiring	<p>Temporary wiring / extension leads in good condition / no bare or exposed wires.</p> <p>Earthing continuity / polarity correct:</p> <p>Looking at the open connectors to connect the wiring, the word “Brown” has the letter ‘R’ in it, so the <u>b’R’own</u> wire connects to the ‘R’ight hand connector. “Blue” has the letter ‘L’ in it, so the <u>b’L’ue</u> wire connects to the ‘L’eft hand connector.</p> <p>Cables protected from mechanical damage and moisture.</p> <p>Correct loading observed e.g. no heating appliance used from lighting circuit etc.</p> <p>Light fittings/lamps protected from mechanical damage/moisture.</p> <p>Cable arrestors in place and used inside plugs</p>
*Physical condition of Electrical Appliances & Tools	<p><u>Electrical Equipment and Tools:</u> (includes all items plugging in to a 16 Amp supply socket)</p> <p>Insulation / casing in good condition.</p> <p>Earth wire connected/intact where not of double insulated design</p> <p>Double insulation mark indicates that no earth wire is to be connected.</p> <p>Cord in good condition/no bare wires/secured to machine & plug.</p> <p>Plug in good condition, connected correctly and correct polarity.</p>

Emergency, Fire Prevention and Protection.

*Fire Extinguishing Equipment	<p>Fire Risks Identified and on record</p> <p><u>The correct and adequate Fire Extinguishing Equipment available for:</u></p> <ul style="list-style-type: none"> * Offices * General Stores * Flammable Store * Fuel Storage Tank/s and catchment well * Gas Welding / Cutting operations * Where flammable substances are being used / applied. * Equipment Easily Accessible
*Maintenance	Fire equipment checked minimum monthly, serviced yearly
*Location & Signs	<p><u>Fire Extinguishing Equipment:</u></p> <ul style="list-style-type: none"> * Clearly visible * Unobstructed * Signs posted including “No Smoking” / “No Naked Lights” where required. (Flammable store, Gas store, Fuel tanks etc.)
* Storage Issue & Control of Flammables (incl. Gas cylinders)	<p>Storage Area provided for flammables with suitable doors, ventilation, bund etc.</p> <p>Flammable store neat / tidy and no Class A combustibles. Decanting of flammable substances carried out in ignition free and adequately ventilated area. Container bonding principles applied</p> <p>Only sufficient quantities issued for one task or one day's usage</p> <p>Separate, special gas cylinder store/storage area.</p> <p>Gas Cylinders stored / used / transported upright and secured in trolley/cradle/structure and ventilated.</p> <p>Types of Gas Cylinders clearly identified as well as the storage area and stored separately.</p> <p>Full cylinders stored separately from empty cylinders.</p> <p>All valves, gauges, connections, threads of all vessels to be checked regularly for leaks.</p> <p>Leaking acetylene vessels to be returned to the supplier and not kept on site.</p>
*Storage, Issue & Control of Hazardous Chemical Substances (HCS)	<p>HCS storage principles applied: products segregated</p> <p>Only approved, non-expired HCS to be used</p> <p>Only the prescribed PPE shall be used as the minimum protection</p> <p>Provision made for leakage/spillage containment and ventilation</p> <p>Emergency showers/eye wash facilities provided</p> <p>HCS under lock & key controlled by designated person</p> <p>Decanted/issued in containers as prescribed with information/warning labels</p> <p>Disposal of unwanted HCS by accredited disposal agent</p> <p>No dumping or disposal of any HCS on or inside the storage area or anywhere else on the project site</p> <p>All vessels or containers to be regularly checked for leaks</p>

Tools

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*Hand Tools	<u>Shovels / Spades / Picks:</u> * Handles free from cracks and splinters * Handles fit securely * Working end sharp and true <u>Hammers:</u> * Good quality handles, no pipe or reinforcing steel handles. * Handles free from cracks and splinters Handles fit securely <u>Chisels:</u> * No mushroomed heads / heads chamfered * Not hardened * Cutting edge sharp and square <u>Saws:</u> * Teeth sharp and set correctly * Correct saw used for the job
*Explosive Powered Tools.	Only used by trained / authorised personnel. Prescribed warning signs placed / displayed where tool is in use. Work area must be properly isolated/demarcated during use of tool. Inspected at least monthly by competent person and results recorded. Issue and return recorded including cartridges / nails and unused cartridges / nails / empty shells recorded. Cleaned daily after use.

Cranes

Tower Crane	Only operated by trained authorised operator with valid certificate of training Structure - no visible defects Electrical installation good/safe Crane hook: Throat pop marked/safety latch fitted/functional SWL/MML displayed Limit switches with backup switches fitted/operational Access Ladder fitted with backrests/Fall arrest system installed Lifting tackle in good condition/inspection colour coding Lifting tackle checked daily
*Mobile Crane	Only operated by trained authorised operator with valid certificate of training Rear view mirrors Windscreen visibility good Windscreen wipers operating effectively Indicators operational Hooter working Tyres safe/sufficient tread/pressure visibly sufficient No missing Wheel nuts Headlights, taillights operational Reverse alarm working and audible and known by all employees
*Mobile Crane continued	Grease nipples and grease on all joints No Oil leaks Hydraulic pipes visibly sound/no leaks No corrosion on Battery terminals Boom visibly in good condition/no apparent damage Cable/sheaves greased/no visible damage/split wires/corrosion and checked daily Brakes working properly Crane hook: Throat pop marked/safety latch fitted/functional SWL/MML displayed By-pass valves operational Deflection chart displayed/visible to operator/driver Outriggers functional used
*Gantry Crane	Only operated by trained authorised persons Correct slinging techniques used Recognised/displayed on chart signals used Log book kept/up to date Prescribed inspections conducted on crane & lifting tackle and checked daily "Crane overhead" signage, where applicable Crane hook: Throat pop marked/safety latch fitted/functional SWL/MML displayed/load limiting switches fitted/operational

Transport and Materials Handling Equipment

*Site Vehicles	All Site Vehicles, Dumpers, Bobcats, Loaders etc; checked daily before use by driver / operator. Inventory of vehicles used/operated on site Inspection by means of a checklist / results recorded. No persons riding on equipment not designed or designated for passengers. Site speed limit posted, enforced and not exceeded. Drivers / Operators trained / licensed and carrying proof. No unauthorised persons allowed to drive / operate equipment.
Conveyors	Conveyor belt nip points and drive gear guarded. Emergency stop/lever/brake fitted, clearly marked & accessible and tested to be functional under full load.

Site Plant and Machinery

Brick Cutting Machine	Operator Trained. Only authorised persons use the machine. Emergency stop switch clearly marked and accessible. Area around the machine dry and slip/trip free/clear of off-cuts All moving drive parts guarded/electrical supply cable protected Operator using correct PPE - eye/face/hearing/foot/hands/body.
*Electric Arc Welder	Welder Trained. Only authorised / trained persons use welder. Earth cable adequately earthed to work. Electrode holder in good condition/safe Cables, clamps & lugs/connectors in good condition. Area in which welding machine is used is dry/protected from wet. Welder using correct PPE - eye/ face/foot/body/respirator. Correct transparent screens & warning signs placed
*Compressors	Relief valves correctly set and locked / sealed. Maximum Safe Working Pressure (MSWP) indicated on face of pressure gauge: not on glass cover. All drives adequately guarded. Receiver/lines drained daily Hoses good condition/clamped, not wired Compressed air NEITHER used to dust off clothing/PPE/ and work areas NOR on bare skin
*Gas Welding / Flame Cutting Equipment	Only authorised/trained persons use the equipment. Torches and gauges in good condition. Flashback arrestors fitted at cylinders and gauges. Hoses in good condition/correct type/all connections with clamps Cylinders stored, used and transported in upright position, secured in trolley / cradle / to structure. All cylinders regularly checked for leaks, leaking cylinders returned immediately Fire prevention/control methods applied/hot work permits

Plant and Storage Yards / Site Workshops Specific

Section 8(2)(1) General Machinery Regulation 2(1): Supervision of the Use & Maintenance of Machinery	Person/s with specific knowledge and experience designated in writing to Supervise the Use & Maintenance of Machinery Critical items of Machinery identified/numbered/placed on register/inventory Inspection/maintenance schedules for abovementioned Inspections/maintenance carried out to above schedules Results recorded
General Machinery Regulation 9(2): Notices re. Operation of Machinery	Schedule D Notice posted in Work areas
Vessels under Pressure Regulation 13(1)(b): Supervision of the Use & Maintenance of Vessels under Pressure (VuP)	Person/s with specific knowledge and experience designated in writing to Supervise the Use & Maintenance of VuP's VuP's identified/numbered/placed on register/Manufacturers plate intact Inspection/maintenance schedules for abovementioned Inspections/maintenance carried out to above schedules Results recorded/Test certificates available
Lock-out Procedure	Lock-out procedure in operation

Ergonomics	Ergonomics survey conducted – results on record Survey results applied
Demarcation & Colour Coding	Demarcation principles applied All services, pipes, electrical installation, stop-start controls, emergency controls etc. colour coded to own published or SABS standard Employees trained to identify colour coding
Portable & Bench Grinders	Area around grinder clear/trip/slip free Bench grinders mounted securely/grinder generally in good condition/No excessive vibration On/Off switch/button clearly demarcated/accessible Adequate guards in place Tool rest – secure/square/max. 2 mm gap, perpendicular to drive shaft Stone/disk - correct type and size/mounted correctly/dressed Use of Eye protection enforced
Battery Storage & Charging	Adequately ventilated, ignition free room/area/no smoking sign/s Batteries placed on rubber/wooden surface Emergency shower/eye wash provided No acid storage in area Prescribed methods in place and adhered to when charging batteries
Ancillary Lifting Equipment	Chain Blocks/Tirfors/jacks/mobile gantries etc. identified/ numbered on register Chains in good condition/links no excessive wear/checked daily Lifting hooks – throat pop marked/safety latch fitted SWL/MML marked/displayed
Presses/Guillotines/ Shears	Only operated by trained/authorised persons Interlocks/lock-outs fitted/PPE worn or used at all times

Workplace Environment, Health and Hygiene

*Lighting	Adequate lighting in places where work is being executed e.g. stairwells and basements. Light fittings placed / installed causing no irritating/blinding glare. Stroboscopic effect eliminated (not only reduced) where moving objects or machinery is used
*Ventilation	Adequate ventilation / extraction / exhausting in hazardous areas e.g. chemicals / adhesives / welding / petrol or diesel/ motors running and in confined spaces / basements.
*Noise	Tasks identified where noise levels exceeds 85 dB at any one time. All reasonable steps taken to reduce noise levels at the source. Hearing protection used where noise levels could not be reduced to below 85 dB
*Heat Stress	Measures in place to prevent heat exhaustion in heat stress problem areas e.g. steel decks, when the WBGT index reaches 30. (See Environmental Regulation 4) Cold drinking water readily available at all times.
*Ablutions	Sufficient hygiene facilities provided - 1 toilet per 30 employees (National Building Regulations prescribe chemical toilets for Construction sites) Toilet paper available. Sufficient showers provided. Facilities for washing hands provided Soap/cleaning agent available for washing hands Means of drying hands available Lock-up changing facilities / area provided. Ablution facilities kept hygienic and clean.
*Eating / Cooking Facilities	Adequate storage facilities provided. Weather protected eating area provided, separate from changing area Refuse bins with lids provided. Facilities kept clean and hygienic.
*Pollution of Environment	Measures in place to minimize dust generation. Accumulation or littering of empty cement pockets, plastic wrapping / bags, packing materials etc. prevented. Spillage / discarding of oil, chemicals and diesel into storm water and other drains or into existing or newly dug holes/cavities on site expressly prohibited.
*Hazardous Chemical Substances	All substances identified and list available e.g. acids, flammables, poisons etc. Material Safety Data Sheets (MSDS) indicating hazardous properties and emergency procedures in case of incident on file and readily available. Substances stored safely. Expiry dates meticulously checked where applicable

NOTE TO PRINCIPAL CONTRACTORS AND THEIR SUB-CONTRACTORS

The OHS specifications are The National Department of Public Works minimum requirements. The contractor is expected to develop a OHS plan which meets these requirements contained herein, as well as all the relevant applicable legislation and methods to be used in the execution of the works. The National Department of Public Works in no way assumes the Contractors legal responsibilities. The Contractor is and remains accountable for the quality and the execution of his Safety, Health and Environmental programme, and that of any Contractors and Suppliers. This OHS specification reflects minimum requirements and should not be construed as all-encompassing or fixed in terms of this or other amendments made during the project.



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ANNEXURE 1: BASELINE RISK ASSESSMENT

PRETORIA CENTRAL HOME AFFAIRS: PRETORIA REGIONAL OFFICE : NEW COOPERATION (BVR) BUILDING:
REQUEST FOR REPLACEMENT OF 4 UPS

RISK RATING LEGEND

SEVERITY				LIKELIHOOD/ PROBABILITY		FREQUENCY
Health		Safety (People, Property & Equipment)	Environment			
1	No Health Effect	No Injury / No Damage	No Impact	1	Improbable / Not likely	Once per 100 Years
2	Minor/Acute Effect	First Aid / Slight Damage	Small Scale Impact	2	Probable / Likely	Once per 10 Years
3	Major / Chronic Effect	Serious Injury/ Major Damage	Serious Impact	3	Even Chance	Once per Year
4	Disability /Serious Illness	Loss of Limb / Some Loss of Property or Equipment	Major Impact	4	Very Likely	Once per Month
5	Death	Fatality / Property or Equipment Destroyed	Catastrophic	5	Almost Certain	Once per Week

RISK RATING	RISK LEVEL	GUIDELINES FOR RISK MATRIX AND MANAGEMENT PRACTICES
13 – 25		Eliminate, avoid, implement specific action plans / procedure to manage and monitor
7-12	(M) – Medium	Actively manage
1 – 6	(L) - Low	Monitor and manage as appropriate

Persons at Risk Legend		Risk Rating Legend	
W	Worker	P	Probability
V	Visitor	S/F	Severity / Frequency
P	Member of the Public	RR	Risk Rating



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ITEM	HAZARD	POTENTIAL INCIDENT A brief description of what could be reasonably expected to cause significant harm and how that harm may arise.	PERSON AT RISK			CONSEQUENCE/EFFECT The effect that the hazard may have on the health and safety of persons or on the environment	RISK RATING			CONTROL MEASURES
			W	V	P		UNCONTROLLED	SIF	RR	
1	Construction Vehicles / Plant	<p>Collision with pedestrians</p> <p>A person Struck by Plant moving parts</p> <p>Exhaust Fumes, Dust and Noise emission</p> <p>Collision with other vehicles</p> <p>People falling from vehicles</p> <p>People hit by objects falling from vehicles</p> <p>Overtaking of Plant/Vehicles</p> <p>Operating/Driving at unsafe speed,</p> <p>Reversing vehicles</p> <p>Overloading or hazardous loading of trucks/vehicles</p> <p>Contact with Overhead / underground services</p> <p>Damage to infrastructure and the environment</p> <p>Slippery road surfaces (e.g. Chemical spillages)</p> <p>Electrical short circuit / fire</p> <p>High - jacking</p> <p>Carbon Monoxide Fumes from exhaust gas</p> <p>Lack of signaling and proper communication between vehicle operators, workers, and the general public</p> <p>Operating vehicles on rough ground or steep gradients</p> <p>Vibration</p>	X	X	X	Serious injury/Fatality	4	5	20	<p>Standard controls (Compliance with Legislative requirements, Safe Work Procedures, Training, Adequate PPE, Code of Practice/Work Instructions, Demarcation and Barricading of works, Hazard Warning/Information signs)</p> <p>Traffic Control and Monitoring. Develop a Traffic Management Plan</p> <p>Risk Assessment and Safe Work Procedures (Cover on site and outside site controls) : (Training and Supervision)</p> <p>Vehicle Selection and Maintenance / On site vehicle licensing/ National vehicle licensing.</p> <p>Daily checks, Safety compliance checks, prestart checks and roadworthiness inspections.</p> <p>Safe Work Procedures / Construction vehicles movement/Route planning/ Loading and Storage areas designation.</p> <p>Ongoing Monitoring of plant operators wellbeing, Medical Fitness/ sobriety/fatigue</p> <p>Appointment of competent supervisors/inspectors/plant Operators and Drivers</p> <p>Vehicles fire extinguishers.</p> <p>Use of Edge Blocks at excavations and for vehicle movement/rolling control</p> <p>Appointment of competent Flag persons for traffic control</p> <p>Training on Risk Assessment</p> <p>Physical speed control and monitoring</p> <p>Indicate and physically demarcate areas near electrical and gas services</p> <p>Ensure adequate ventilation when vehicles engines are running</p> <p>Vehicular audible warnings</p> <p>High visibility Clothing</p> <p>Enforcement of site rules</p> <p>One Way traffic systems</p> <p>Medical Fitness Assessments on all plant operators</p>
2	Work at Heights / Elevated work/ Height Access Equipment and Platforms	<p>Fall from height to a lower level</p> <p>Overloading of Platforms</p>	X	X	X	Serious injury/Fatality	3	5	20	<p>Risk Assessment and Safe Work Procedures. (Training)</p> <p>Comprehensive Fall Protection plan.</p>



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Public Works and Infrastructure
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ITEM	HAZARD	POTENTIAL INCIDENT	PERSON AT RISK			CONSEQUENCE/EFFECT	RISK RATING			CONTROL MEASURES	
		A brief description of what could be reasonably expected to cause significant harm and how that harm may arise.	W	V	P	The effect that the hazard may have on the health and Safety of persons or on the environment	UNCONTROLLED	P	SIF	RR	
		Trip, Slip Drop tools/ material to lower level Falling objects/people being struck by falling, flying and moving object Vertigo Taking unsafe position. Contact with Electricity Collapses due to Overloading or unstable loads Collapses/Falls due to height access equipment faults plus inadequate edge protection Falls due to poor manual handling such as overreaching, stretching and incorrect form Falls due to poor fall restraints and fall arrest systems Fall of materials during movement on site and during erection and dismantle. Fall of persons during erection and dismantle Access to height access equipment/platform during erection, prior to formal inspection, handover and during dismantle. Collapse when erected and during erect/dismantle.				Injuries to limbs, Multiple Fractures Electrical burns/Heart fibrillations/ Fatality Falls (To Same level, To lower level) Damage to property and equipment.					
3	Electricity (Sub-stations, Transformers and UPS Rooms) and Switching	Contact with electrical energy Electric arc / flash. Interruption of electrical supply.	X	X	X	Serious injury/Fatality Electrocution Contusion.		4	5	20	Standard controls (Compliance with Legislative requirements, Safe Work Procedures, Training, Adequate PPE, Code of Practice/Work Instructions, Demarcation and Barricading of works, Hazard Warning/Information signs) Emergency Plan, including Rescue plans Adequate PPE (including safety harness with double lanyard) Working at heights Training Harnesses to be registered and inspected regularly. Good housekeeping on walkways, platforms and works areas. Appointment of competent supervisors/inspectors of fall protection material Workers correctly medically assessed on ability to work at heights. Cordon off barricade areas where work is to be conducted at heights. Constant supervision by competent persons All height access equipment and platforms must be handled and erected as per applicable standards. All workers must be competent to work on height. Medical fitness testing must be conducted. Training specifically on height and applicable equipment used is required. Provide Shoots Adequate maintenance of all access equipment and all fall protection equipment Provide Fall Arrest Equipment Use of Non-Skid Devices Risk Assessment. Safe work procedures for all activities within / near electrical energy and all electrical installations and handling of electrical equipment and tools. Employee Training Permits for access and work Permit to work system



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Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

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			W	V	I	P		UNCONTROLLED	SIF	RR	
		Overloading.					Burns.				Use of correct PPE (eye/ face/body/ hand protection) and proper training i.e. such PPE.
		Short circuits.					Cardiac arrest				Provision of Protective Systems (Fuses, Isolation, Isolation, Residual current devices, Reduced low voltage systems, Protection against contact with buried power lines)
		Static.					Plant trips.				Registers of P.E.E. and regular inspections.
		Fire.					Damage to sensitive electronic equipment				Temporary electrical distribution boards to be checked regularly.
		Inadequate Earthing / Bonding					Damage to property and equipment.				Proper and correct earthing.
		Unauthorized interference and/or Tampering.					Interruption of power / down time.				Earth Leakage Units to be tested by appointed person.
		Illegal bridging of electrical devices.									Restriction of metal ladders, and scaffolding tubes near overhead electrical lines
		Road damage									Only authorize, competent persons to work on or with electrical equipment.
		Tampering with safety devices or rendering them inoperative.									Only appointed persons permitted into sub-stations.
		Electrical short circuit / fire									
4	Mechanical Lifting and Suspended Loads	Overloading and Load instability: On ground; In transit; Whilst lifting.	X	X	X	X	Serious injury/Fatality	3	5	15	Risk Assessment / Rigging study of work to be carried out.
		Failure of lifting equipment.					Sprains, Strains Cuts and lacerations				Safe Work Procedures for tasks. (Training given to work team)
		Falling load.					Injuries to limbs, Multiple Fractures				Constant supervision.
		Damage.					Crush				Correct PPE:
		Unauthorized persons / spectators entering area.					Falling objects May injure people, Damage to property, vehicles and equipment.				Lifeline to be installed if exposed work at heights is required.
		Use of unauthorized / substandard / damaged lifting gear and equipment.					Swinging loads.				Competent person operating lifting machine / crane / hoist.
		Use of incorrectly rated lifting gear and equipment.					Electrocution / shock / damage to equipment				Competent person doing the rigging work.
		Unauthorized persons carrying out lifting process.					Stoppage or retardation of work/job.				Inspection of lifting gear and equipment by competent person (register)
		Damage to lifting gear and equipment whilst lifting in progress.					Slip, trip, fall to same or lower level.				Barrier / hazard tape and or safety netting
		Contact with overhead electric cables / wiring.					Disruption of traffic flow in works.				Safety watch to prevent persons entering areas where load is to be lifted.
		Adverse weather – High wind, lightning or rain, whilst lifting load with crane.									Put Only one signalman for control
		Blocking off of roadways.									Color codes on lifting gear and equipment.



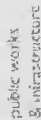
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Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

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ITEM	HAZARD	POTENTIAL INCIDENT A brief description of what could be reasonably expected to cause significant harm and how that harm may arise.	PERSON AT RISK			CONSEQUENCE/EFFECT The effect that the hazard may have on the health and safety of persons or on the environment	RISK RATING			CONTROL MEASURES Standard controls (Compliance with Legislative requirements, Safe Work Procedures, Training, Adequate PPE, Code of Practice/Work Instructions, Demarcation and Barricading of works, Hazard Warning/Information signs)
			W	V	P		UNCONTROLLED	SIF	RR	
5	Working with Power tools	Inhalation of hazardous dust, including Respirable crystalline silica; Skin Contact; Ingestion	X				4	3	12	A detailed task specific risk assessment and a safe work procedure which include the most effective and reliable control measures aimed at minimising emission, release and spread of substances hazardous to health such as the Use of: Encapsulation/ Water suppression sprays or atomising/foggingsystems/ Extraction systems; Local Exhaust Ventilation (LEV)/ Screen hoods. Hot work permits.
	Drilling					Silicosis (lung disease) Chronic obstructive pulmonary disease Lung Cancer Dermatitis				
	Disc Cutting and grinding	Sharp or hot materials / Surfaces Sparks / Fire				Shock / electrocution Contusion				All equipment registered and checked prior to issue from store.
		Hot surfaces burning the cables				Laceration				Compliance audits of Portable Electrical Equipment.
		Poor connecting / disconnecting of electrical equipment.				Fracture				
		Tripping Hazards				Muscular Stresses / strains.				All precautions in Hot work:
		High Noise Levels				Over exertion				Fire blankets
		Contact with drill while still in motion				Pinch / crush,				Welding curtains
		Flying particles				Back strain,				Wetting down of area (where applicable).
		Disc/drill bit disintegration				Foreign bodies in eye,				Correct PPE: (Face/eye protection; Gloves (leather; Cotton drill overall; Safety foot wear; Hearing protection)
		Changing the grinder disc unsafely – whilst still plugged in / not switched off				Trip/fall – contusions/abrasion/ fractures				Safe placement of cables in works areas (housekeeping)
		Disc not installed correctly – loose / cracked.				Noise induced hearing loss,				Only authorized / trained persons to use portable electric equipment.
		Using incorrect disc for application or damaged discs.				Work stoppages / down time.				Health Surveillance records for all involved
		Power failure – causing disc to bite or stick in the material being cut.				Gas inhalation and Poisoning				Locate and mark all services; Consult the services drawings or Get instruction from the project engineer; If the services have been moved, or the location of services is unclear. Use specialist equipment (eg a cable locator) to accurately determine where the services are now located prior to any cuts being made;
		Unauthorized use of portable electrical equipment.				Damage to property				Disconnect any services that need to be cut through; Ensure disconnections are confirmed and tagged by the relevant service personnel before the work begins
		Damage to Services; Cutting through gas, electricity or water service								; After the work has finished the service personnel should reconnect the service



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Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

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ANNEXURE 1: BASELINE RISK ASSESSMENT

PRETORIA CENTRAL HOME AFFAIRS: PRETORIA REGIONAL OFFICE : NEW COOPERATION (BVR) BUILDING: REQUEST FOR REPLACEMENT OF 4 UPS

ITEM	HAZARD	POTENTIAL INCIDENT <i>A brief description of what could be reasonably expected to cause significant harm and how that harm may arise.</i>	PERSON AT RISK			CONSEQUENCE/EFFECT <i>The effect that the hazard may have on the health and safety of persons or on the environment</i>	RISK RATING				CONTROL MEASURES
			W	V	P		UNCONTROLLED	P	SIF	RR	
		Overheating. Hot surfaces. Spontaneous combustion. Hot work.									Standard controls (Compliance with Legislative requirements, Safe Work Procedures, Training, Adequate PPE, Code of Practice/Work Instructions, Demarcation and Barricading of works, Hazard Warning/Information signs) Proper storage facilities of combustible and explosive chemicals (ensuring separation of reactive components) Supervisions and inspections by competent person
9	Hot Work: (Flame cutting and gas cylinders)	Inadequately ventilated storage areas. Substandard methods of portaging / handling cylinders. Uncontrolled falling slag, flying sparks, hot surfaces or open flames. Damage to cylinders, hoses from sparks and / or hot slag. Pressurised hoses left unattended. Gas leaks at valve / regulator and hose connections Hose connections failing / coming apart.	X		X	Cylinders could Fall over and get damaged, be stored in wrong area creating confusion between full / empty. Gas leaks and cylinder damage if mishandled. Fires Injuries: Pinch / crush Back strain, Burns (dry). Ionizing radiation burns and arc eye	3	4		12	Cylinders are stored upright in trolleys or in racks suitably marked 'MT' or 'Full' Proper signage is placed at gas storage areas – 'no smoking', 'no open flames', and type of gas. Correct transporting (use of safe carrier) and handling of cylinders. All precautions i.e. Hot work: Hot work permits; Fire extinguishers; Fire blanket; Welding curtains; Wetting down of area; Correct PPE Safe placement of hoses in works areas (housekeeping) Hoses only joined with crimped females and flash back arrestors positioned at both ends of hose. Hoses to be tied/held together with correct hose clips.
10	Hot Work:(Welding and grinding)	Substandard welding & grinding equipment (i.e. exposed wiring / damaged electrode holders/ etc.) Unauthorized use of welding & grinding equipment. Tripping hazards. Substandard methods of portaging / handling welding machines. Hot surfaces burning the cables. Poor connecting / disconnecting of electrical equipment High levels of Noise. Changing the grinder disc unsafely – whilst still plugged in / not switched off.	X		X	Shock / electrocution Fires. Injuries: Pinch / crush, Back strain, Burns (dry). Ionizing radiation burns and arc eye, Foreign bodies in eye, Lung irritation from smoke / fumes.	4	3		12	Risk Assessment and Safe Work Procedures. (Training) Hot work permits. All equipment registered and checked prior to issue from store. Compliance audits of Portable Electrical Equipment. All precautions i.e. Hot work: Hot work permits; Fire extinguishers; Fire blanket; Welding curtains; Wetting down of area; Correct PPE Safe placement of hoses in works areas (housekeeping) Only authorized / trained persons to use welding and grinding equipment. Ventilation; The use of local exhaust ventilation systems



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Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

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ITEM	HAZARD	POTENTIAL INCIDENT	PERSON AT RISK			CONSEQUENCE/EFFECT	RISK RATING			CONTROL MEASURES
			W	V	P		UNCONTROLLED	P	SIF	
		A brief description of what could be reasonably expected to cause significant harm and how that harm may arise.				The effect that the hazard may have on the health and safety of persons or on the environment				Standard controls (Compliance with Legislative requirements, Safe Work Procedures, Training, Adequate PPE, Code of Practical/Work Instructions, Demarcation and Barricading of works, Hazard Warning/Information signs)
		Disc not installed correctly – loose / cracked.				Trip/fall – contusions/abrasion/ fractures				
		Power failure – causing disc to bite or stick in the material being cut.				Noise induced hearing loss.				
		Grinder guard loose or missing. Contact with moving parts								
11	Working with pneumatic tools and compressed air lines	Air hoses coming apart	X	X		Injuries: Contusion; Laceration; Fracture; Muscular Stresses / strains; Over exertion; Pinch / crush, Back strain	4	3	12	Risk Assessment and Safe Work Procedures. (Training)
		Inadequate air points				Foreign bodies in eye,				Parker air hoses to be used
		Hose connections failing / coming apart				Trip/fall – contusions/abrasion/ fractures				Additional air take-off points may be required
		Hoses causing tripping hazard.				Noise Induced hearing loss. Acute tinnitus				Hoses to be tied/held together.
		Use of substandard equipment.				Respiratory irritation				Good housekeeping.
		Unauthorized use of equipment.				Whipping hose ends - Injury/damage				Cordon off/ barricade areas where sandblasting.
		Hot surfaces burning the hoses.				Work stoppage if inadequate air points				Correct use of PPE.
		Taking unsafe position.				Injury to persons not authorized into construction area				Supervision and safety officers to control onlookers.
		Pressurised hoses left unattended.				Work stoppages / down time.				
		Sandblasting dust and Flying particles								
		Noise								
12	Explosives / Blasting	High levels of noise	X	X	X	Serious Injuries / Fatality	2	5	10	Risk Assessment and Safe Work Procedures. (Training)
		High levels of Dust				Asphyxiation				Blasting Management Plan
		Vibrations				Permanent Disability				Isolation and lockout procedures.
		Fly rock may be projected outside the declared danger zone.				Fracture				Permit to work system
		Abrasive material and the surface being blasted may contain toxic materials/ respirable crystalline (e.g. silica)				Muscular Stresses / strains				Only Licensed Blasters must be used. Obtain all required permits (Blasting permit, Transport permit, Blasters certificate) Obtain blasting permission from the Inspectorate Transport explosives in explosive vehicle as per regulation. Ensure inspections by competent persons for misfires
		Contents blasted may contain hazardous substances such as Lead				Noise induced hearing loss				Correct use of PPE.
										Knowledge of first aid measures



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Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

ANNEXURE 1: BASELINE RISK ASSESSMENT

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ITEM	HAZARD	POTENTIAL INCIDENT A brief description of what could be reasonably expected to cause significant harm and how that harm may arise.	PERSON AT RISK				CONSEQUENCE/EFFECT		RISK RATING			CONTROL MEASURES	
			W	V	P		The effect that the hazard may have on the health and safety of persons or on the environment		P	S/F	RR	Standard controls (Compliance with Legislative requirements, Safe Work Procedures, Training, Adequate PPE, Code of Practice/Work Instructions, Demarcation and Barricading of works, Hazard Warning/Information signs)	
		Tripping hazards.					Lung diseases like silicosis					Supervision available at all times.	
		Substandard methods of operation					chronic obstructive pulmonary disease (COPD) and even lung cancer						
		Substandard methods of transporting blasting material					Dermatitis						
		Explosions.											
		Damage to structures and equipment											
		Engulfment											
13	Confined Space Entry	Fumes and / or vapors; oxygen depletion.	X	X			Fatality		3	4	12	Risk Assessment and Safe Work Procedures. (Training). Competence, training, supervision and suitability of all involved Permit to work system, Switching and lock out procedures, Electrical and process isolation	
	Closed tanks	Electrical cables and trucking					Electrocution, damage to property and fatalities					Gas purging and forced ventilation required	
	Sub-stations, UPS Rooms	Unauthorized use electrical equipment and lights that might create sparks					Poisoning from toxic fumes					Man riding winch to be used	
	Vessels	Insufficient light					Burns					Life line to be worn	
	Trenches	Engulfment					Drowning					Emergency and Rescue arrangements; A rescue Team is required, provide suitable rescue equipment	
	Closed unventilated rooms	Extreme temperatures; Heat Stress					Infections and Disease					A two way communication is required	
		Methane gas flooding										Provide safe access and exit	
		Explosions										Provide suitable Fire extinguishers and First aid equipment	
		Flooding										Provide adequate PPE and Breathing apparatus	
		Dust											
		Restricted work area											
14	Manual Handling	Incorrect method of work	X				Work Related Upper Limb Disorders		4	3	12	Limit heavy lifting and handling - Use of Mechanical Aids	
		Unsuitable body posture					Cuts, Bruising and Abrasions					Risk Assessment	
		Loss of grip					Muscular sprain and strains					Load Assessments and Safe Work Procedures	
		Foul Play					Back Injuries					Load handling – team lifting	
		Lifting of load which is too heavy					Vibration					Mechanical devices	
		Repetitive movements / manual lift, carry and pulling					Cramps and muscle fatigue/ tiredness					Task specific Manual Handling Training plus Work Instructions	
		Taking unsafe position.					Burns					Skilled and trained workers for the task	
		Environmental constraints/ space constraints					Trapped Nerve					Condition of all tools checked prior use.	



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Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

ANNEXURE 1: BASELINE RISK ASSESSMENT

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ITEM	HAZARD	POTENTIAL INCIDENT A brief description of what could be reasonably expected to cause significant harm and how that harm may arise.	PERSON AT RISK			CONSEQUENCE/EFFECT The effect that the hazard may have on the health and safety of persons or on the environment	RISK RATING			CONTROL MEASURES		
			W	V	P		P	SIF	RR			
		Lifting sharp edged or hot loads				Hernia					Correct PPE use	
		Damaged tools				Rheumatism					Constant Supervision	
15	Unusual working conditions: Wet floor surface / Hot Environment / Cold Environment		X				3	4	12			
		Inadequate cleaning.				Shock / electrocution						Risk Assessment and Safe Work Procedures. (Training)
		Heat stress.				Irritation						Isolation and lockout procedures.
		Slip				Asphyxiation						Hot work permits.
		Trip				Chemical burns						Disciplinary action for non-adherence to lockout procedure.
		Fall				Poisoning						Correct use of PPE.
		Noise.				Burns						Workers correctly assessed i.e. ability to work in hot / damp environment.
		Engulfment				Contusion						Knowledge of first aid measures i.e. heat stress.
						Laceration						Supervision available at all times.
						Fracture						
						Muscular Stresses / strains.						
						Noise induced hearing loss.						
						Work stoppages / down time.						
16	Demolition and Alterations		X	X	X		4	3	12			Risk Assessment and Safe Work Procedures. (Training)
		Airborne Fibre exposure (Asbestos)				Serious Injuries.						Demolition Plan
		Wearing loose or tattered clothing near moving machinery.				Multiple Injuries: Crush; Fracture; Contusion; Amputation						
		Contact / entanglement with rotating or moving parts.				Strains						Competent Supervision and Inspection.
		Failure to implement lockout / isolation process.				Sprains						Demarcation and adequate barricading of works
		Exposure to hazardous material				Laceration.						Area to be examined before demolition
		Demolition on or near energized electrical services and other services				Puncture.						Obtain current information on existing services prior to demolition
		Flying particles				Damage to property and equipment						All electrical, water, gas services within the affected area must be isolated
		Equipment / parts / tools left inside machinery.				Asphyxiation						Exclusion zones and approach distances to the overhead electric lines at the locations and distances specified on the demolition plan are to be clearly identifiable and enforced by a competent supervisor
		Tampering with safety devices or rendering them inoperative.				Shock / electrocution						Asbestos Management plans; compliance with Occupational Health and Safety Act No 85 of 1993 and Asbestos Regulations
		Machine guarding removed and not replaced or replaced incorrectly				Asbestosis						



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REPUBLIC OF SOUTH AFRICA

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			W	V	P		UNCONTROLLED	SIF	RR	
		Failure of equipment resulting in flying / falling parts. Friction / fires. Noise.				Lung cancers				Standard controls (Compliance with Legislative requirements, Safe Work Procedures, Training, Adequate PPE, Code of Practice/Work Instructions, Demarcation and Barricading of works, Hazard Warning/Information signs)
17	Social Impact /Community/Public Safety	Unauthorized access to site by members of the community, including senior citizens and children. Exposure to construction hazards Construction activities outside the building Construction vehicles/Plants travelling to and from site compounds via public roads will add extra hazard on the road for all road users especially children and the elderly Workers social behavior Community/people occupying the building social behavior Community protests: Direct and indirect towards the project	X	X	X	Injuries/Fatalities/Health effects from hazardous works/ excavations/ construction vehicles/equipment/plant and chemical substances. Electrification due to contact with electrical hazards Psychological problems such as stress emanation from unpleasant social engagements amongst workers, particularly amongst contractor's skilled workers and local workers)	4	3	12	Systems of control and notices to be placed at all the entrances and exits to the site compound to protect and warn all persons approaching or in the vicinity. All hazards information / signs must be available Ensure designated routes are used. Traffic management plan must be in place The use of flagman for all reversing activities Fencing, Hazard Warning signs, Security Patrols, Demarcation and Hoarding of work areas where the public is exposed Provide site security and adequate access control Community Liaisons Education on social behaviors, the local culture/horns, relationship and communication skills Ensure that the community leaders are informed of the projects hazards, and that communication of project hazards reaches the general public. Ongoing facilitation with the project's community liaison officer is required. Supervision staff to control onlookers. Adequate Demarcation of hazardous works
18	Out Door Work	Exposure to Ultraviolet Radiation	X			Skin Sunburn Eye Sunburns Skin Cancer Fatigue Dehydration Heat syncope (Light headedness and Fainting) Heat Stroke Heat Exhaustion	5	3	15	Provide Adequate PPE (Wearing long sleeve or loose clothing with a close weave; Wearing hats with a wide Brim; Use of high factor sunscreen) Provide suitable education and training for outdoor workers Safe systems of work and suitable supervision of works Relocate works to indoor or shaded areas where reasonably practicable Medical Fitness Assessments Emergency Procedures Provision of drinking Water, Rest and Shade



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19	Hazardous Waste Fluorescent Bulbs (Mercury Content)	X	5	2	15
	Person been exposed to mercury during the handling of such fluorescent tubes and or globes which could lead to an injury and /or ill health		Mercury exposure has toxic effects on the nervous, digestive and immune systems and on lung, kidney, skin and eyes		Adhere and follow set guidance for the disposal of fluorescent tubes and or globes. Clearly marked disposal bins to indicate fluorescent tubes/globes Assigned approved/licensed waste disposal vendor for the removal of such tubes and or globes
			Infections		Designated waste disposal area
			Mercury released to the environment		Safe systems of work and suitable supervision of works
					Wear prescribed PPE during the handling of such fluorescent tubes and or globes
			Cuts		



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SPECIFICATION

FOR THE

**SUPPLY, DELIVERY, INSTALLATION, AND COMMISSIONING OF
UNINTERRUPTED POWER SUPPLY**

AT

**PRETORIA CENTRAL HOME AFFAIRS PRETORIA REGIONAL OFFICE:
NEW COOPERATION (BVR) BUILDING**

ELECTRICAL ENGINEER

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ADDRESS Wedgefield Office Park
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CONTACT PERSON: MPHILISI SIGONYA
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DEPARTMENT OF PUBLIC WORKS

Building AVN Building,
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DATE March 2025

TABLE OF CONTENTS

	<u>PAGES</u>
Specification for the UPS	
Section 1 – General	1.1 – 1.4
Section 2 – Equipment Requirements	2.1 – 2.11
Section 3 – Schedule of Technical Information	3.1 – 3.*
Section 4 – Schedules of Quantities	4.1 – 4.*
Annexure A – Schedule of Imported Materials and Equipment	A1

**SPECIFICATION FOR THE SUPPLY, DELIVERY, INSTALLATION AND
COMMISSIONING OF UNINTERRUPTED POWER SUPPLY**

SECTION 1 – GENERAL

TABLE OF CONTENTS

<u>Clause</u>		<u>Page</u>
1.	Intent of Specification.....	1.1
2.	Standards and Codes.....	1.1
3.	Scope of Work.....	1.1
4.	Ambient Operating conditions.....	1.1
5.	Site Information.....	1.1
6.	Co-ordination.....	1.1
7.	Test Certificates and Inspections.....	1.1
8.	Guarantee and Maintenance.....	1.2
9.	Materials and Workmanship.....	1.2
10.	Brochures.....	1.3
11.	Submittals.....	1.3

SECTION 1 – GENERAL

1. Intent of Document

The specification is intended to cover the complete installation of the uninterrupted power supply. 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.

In all cases where a device or part of the equipment is referred to in the singular, it is intended that such reference shall apply to as many devices as are required to complete the installation.

2. Standards and Codes

Refer to clause 1 of Section 2 of this document for the relevant standards and codes.

All equipment shall be Y2K compliant.

3. Scope of Work

Supply, delivery, installation and commissioning of the complete uninterrupted power supply specified in this document.

The plant room will be provided by other trades and the contractor shall ensure that the space allowed is sufficient for the installation of the UPS and that the ventilation of the plant room is adequate. If any changes to the design have to be made the contractor must inform the consulting engineer in writing.

Consultant to include Particulars of this contract

4. Ambient Operating Conditions

- a) Ambient Temperature
- b) Relative Humidity
- c) Altitude
- d) Dust
- e) Corrosion

Consultant to include information a – e particular to this project

5. Site Information

Consultant to include Particulars of this contract

6. Co-ordination

Due to the nature of the installation, a fixed sequence of operation is required to properly install the complete uninterrupted power supply. The work shall be closely scheduled in order not to delay the entire project.

The contractor shall familiarise himself with the requirements of the other trades and shall examine the plant and specification covering each of these sections.

The space requirements shall be carefully checked with the other trades to ensure that the equipment can be installed in the proper sequence in the space allocated.

7. Test Certificates and Inspections

The following tests are to be carried out :

- (a) After completion of the works and before first delivery 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.

- (b) 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.
- (c) Test reports of both tests as specified under (a) and (b) are to be submitted to the Department.

8. Guarantee and Maintenance

The Contractor shall guarantee the complete plant for a period of twelfth months after first delivery has taken place.

If during this period the plant is not in working order, or not working satisfactorily owing to faulty material, design or workmanship, the Contractor will be notified and immediate steps shall be taken by him to rectify the defects and/or replace the affected parts on site at his own expense.

The Contractor shall maintain the plant in good working condition for the full twelfth month period to the final delivery of the installation. However, should the Contractor fail to hand over the plant in good working order on the expiry of the specified twelfth months, the Contractor shall be responsible for further monthly maintenance until final delivery is taken.

During this period the contractor will undertake to arrange that the plant be inspected at regular intervals (whatever number of visits the contractor deems necessary to fully maintain the equipment) by a qualified member of his staff who shall: -

- (a) Check the mechanical soundness of all parts
- (b) Check and adjust all the output and control values of the system (voltage, frequency, control voltages, etc.)
- (c) Take control measurements on the major system components and record these measurements.
- (d) Replace all defective components.
- (e) Service batteries.
- (f) Check ventilation UPS equipment.
- (g) Clean all equipment and/or rooms as required.
- (h) Provide 24 hour standby maintenance and repair service at all times, including statutory holidays.

Note: At each visit, which shall be arranged in advance with the client's representative, a record of maintenance carried out shall be kept. The time and date of visits shall be entered in a logbook, which shall be kept in the plant room.

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 Engineer.
- (b) All work shall be executed in a first-class manner by qualified tradesman.

- (c) 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.
- (d) The Contractor shall thoroughly acquaint himself with the work involved and shall verify on site all measurements necessary for proper installation 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 co-ordinate the work of others as may be applicable.
- (e) 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.
- (f) All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.
- (g) The Contractor shall make sure that all safety regulations and measures are applied and enforced during the installation and guarantee periods to ensure the safety of the public and the User Client.
- (h) The Contractor is to include for all scaffolding required to complete the work required.

10. Brochures

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

11. Submittals

The following information must accompany the tender documents

- (a) The information requested in the schedule of information.
- (b) A paragraph by paragraph schedule of compliance with detailed description of any deviations from this specification.
- (c) If alternative systems are offered, a clear description of the operating characteristics and special features of the equipment along with a motivation for offering the alternative.
- (d) Descriptive and illustrated brochures and other information pertaining to the inverter and ventilation equipment and switchgear.
- (e) The proposed layout as stated.
- (f) Arrangement of batteries.
- (g) A sample test report as stated.
- (h) The circuit diagram requested.
- (i) The information requested.
- (j) Tenderers shall submit a list of successful installations completed in the Republic of South Africa.

**SPECIFICATION FOR THE SUPPLY, DELIVERY, INSTALLATION AND
COMMISSIONING OF UNINTERRUPTED POWER SUPPLY**

SECTION 2 – EQUIPMENT REQUIREMENTS

TABLE OF CONTENTS

<u>Clause</u>		<u>Page</u>
1.	Quality, Standards and Regulations.....	2.1
2.	Uninterrupted Power Supply (UPS).....	2.1
3.	Construction Of Cubicles And Switchboards.....	2.7
4.	Instrumentation And Controls.....	2.8
5.	Alarms.....	2.8
6.	Ventilation.....	2.8
7.	Quality Assurance.....	2.9
8.	Drawings.....	2.9
9.	Instruction Of Operator And Manuals.....	2.9
10.	Tests.....	2.9
11.	Cabinet.....	2.11
12.	Schematic Diagram.....	2.11
13.	Auxiliary Equipment.....	2.11
14.	Ups Power Plug Outlet.....	2.11
15.	Distribution Wiring.....	2.11

1. QUALITY, STANDARDS AND REGULATIONS

All material and equipment supplied for this contract shall be new and the best of their respective kind. All new materials and equipment supplied, shall comply fully with the requirements laid down in the specification. The whole of the works shall be executed in accordance with best practice and to approval of the engineer. The equipment shall comply with the latest issues of the following standard specifications:

1.1 South African Bureau of Standards

SABS 150	Insulated wire.
SANS 1091	Colour standards for paint.
SANS 0142	Wiring code of practice.
SANS 1474	UPS units.

1.2 Regulations and Rights of Engineer

Apart from any other authority, which the engineer may have in terms of the contract, he shall have the right to set the standard and to accept or reject part of the specified equipment depending on the quality of material and workmanship offered.

The contractor shall be notified if the quality of such materials and/or workmanship is not acceptable. In such an event, the contractor shall replace the specific part or repair it to the satisfaction of the engineer, all at the cost of the contractor. Such an instruction shall not exempt the contractor from any of his obligations in terms of the contract.

The installation shall be erected and carried out in accordance with:

- a) The Basic Conditions of Employment Act and the Machinery and Occupational Safety Act of 1983, as amended.
- b) The local Municipality by-laws and Regulations as well as the regulations of the local Supply Authority.
- c) The local Fire regulations.
- d) The Regulations of the Department of Posts and Telecommunications.
- e) The Standard Regulations of any Government Department or public service company where applicable.

In addition the contractor shall at his cost issue all notices in respect of the installation to the local authorities, and shall exempt the client from all losses, costs or expenditures which may arise as a result of the contractor's failure to comply with the requirements of the regulations enumerated above.

It shall be assumed that the contractor is conversant with the above-mentioned requirements. Should any requirements, by-law or regulation, which contradicts the requirements of this document, apply or become applicable during erection of the installation, the contractor shall immediately inform the engineer of such a contradiction. Under no circumstances shall the contractor carry out variations to the installation in terms of such contradictions without obtaining the written permission to do so from the engineer.

2. UNINTERRUPTED POWER SUPPLY (UPS)

2.1 Definitions

- (a) **UPS** shall denote the complete UPS unit with associated controls, remote alarm panel and batteries, and any accessories required by the system for its successful operation.

- (b) **Power Converter Module** shall denote a rectifier, battery charger, inverter, electromechanical by-pass switch and manually operated by-pass switch.
- (c) **Rectifier** shall denote that portion of the converter module containing the equipment and controls to convert the incoming AC power to regulated DC power required by the inverter.
- (d) **Inverter** shall denote that part that converts the DC supplied by the rectifier to AC satisfying the load requirements.
- (e) **Electro-mechanical** by-pass static switch shall denote a by-pass system provided break free switching from inverter to mains operation and vice versa.
- (f) **Battery charger** shall denote that portion of the power converter module containing the equipment and controls to convert the incoming AC power to precisely regulated DC power required for battery charging.
- (g) **Critical load** denotes the load as presented to the UPS by the computer or other load requiring constant supply and associated circuits and apparatus.
- (h) **Mean-Time-Between-Failure (MTBF)** shall denote an overall MTBF of the UPS as a complete system.
- (i) **A system failure** shall denote any interruption to, or degradation of the critical load bus voltage or frequency beyond the limits set forth herein.
- (j) **Efficiency** shall denote the ratio of real output power (kW) to real input power (kW) with the UPS operating at a defined load power at the defined power factor, the battery fully charged and with nominal input voltage.

2.2 System Requirements (The Required Input and Output Voltages Are Detailed In Part 2 Of This Specification)

(A) Input to the UPS

- (a) Input voltage : 400/231V \pm 10% or 231V \pm 5%
- (b) Frequency : 50Hz \pm 4%
- (c) System : 1 phase 2 wire or 3 phase 4 wire with operative earth conductor, supplied from utility network or standby generator set. Refer to detail specification.
- (d) Power factor : Not less than 0,8 lagging.
- (e) Max starting current: 10 times full load current for not more than ½ a cycle with rectifier soft starting facility.

(B) Output to Load

- (a) Rating : Refer to detail specification.
- (b) Output voltage : Refer to detail specification.
- (c) Frequency : 50 Hz \pm 0,5 Hz.
- (d) System : 1 phase 2 wire or 3 phase 4 wire with operative earth conductor. Refer to detail specification.
- (e) Voltage regulator : \pm 10% maximum deviation of steady state voltage recovering to within 5% in less than 50 ms and to within 1% less in that 100 ms.

(f) Frequency stability : Normally automatically synchronised to mains frequency if the latter is within 50 Hz \pm 2% (adjustable window) Runs free at 50 Hz \pm 0,5 Hz at any load when mains is out of limits.

(g) Harmonic content : Less than 4% total distortion.

(h) Amplitude modulation : Less than 2%

(C) Overall Performance

Efficiency (overall) : 80 - 85%

(D) Ambient Operating Conditions

Refer to Section 1, General – Clause 5

(E) System Description

The system shall consist of a static UPS complete with the following components:

- (a) Rectifier/charger.
- (b) Inverter.
- (c) Battery.
- (d) Automatic electronic no-break bypass circuit and switch.
- (e) Separate manual bypass switch.
- (f) Protective devices and measuring equipment.
- (g) The required controls and necessary equipment.
- (h) A self-monitoring system with digital readout by means of which all critical functions can be checked.

Note: Requirement (h) is Only For Ups Systems Above 200 kVA

The system shall be capable of providing an uninterrupted supply to the load with the output characteristics as specified for a minimum period of **30 minutes** during a total mains failure (i.e. normal mains and standby generator supply failure). The batteries shall be rated at an AC load power factor of 0,8 lagging.

The complete system, including all controls shall be designed in such a way that the failure of any one vital central component will **NOT** cause a complete system failure. If necessary such a failure must be avoided by connecting the load directly to the mains by means of the bypass switch.

The UPS shall operate satisfactorily synchronous with the mains supply even under severe conditions of up to 100% unbalanced load.

The UPS shall be amply rated to carry the stated full load current. The UPS shall furthermore be capable of withstanding the following overloads.

Static Overloads: 100% of full load continuously.
125% of full load for 5 minutes.
150% of full load for 2 minutes.
165% of full load for 1 second with inductive decay after initial equipment switch on surge current.

Dynamic Overload : 300% for less than 5 msec.
1000% for less than 1 msec.

All component parts, cables, and other connections shall be amply rated to withstand the overloads stated and maintain the input voltage at the load within the tolerances stated.

The equipment shall be designed for the maximum operating efficiency. The efficiency shall be determined when the system is delivering full load at 0,8 power factor with the batteries fully charged. The load required by the auxiliary equipment (controls, alarms, etc). electronic switches and cabinet fan shall be included in the determination of overall efficiency. A typical test report clearly showing how the efficiencies are calculated, shall be submitted with the tender.

It shall be the responsibility of the successful tenderer to ensure satisfactory operation of the complete system for the load to be supplied. It is, therefore, essential that the tenderer acquaint himself fully with typical load conditions before the tender closing date.

All cabinets containing thyristors shall be adequately screened and earthed to prevent direct radio frequency radiation.

Tenderers shall submit with their tenders a schematic diagram showing :

- Input circuit breakers.
- System busbars.
- Rectifiers.
- Batteries.
- Inverters.
- Electronic switches.
- Bypass circuit.
- Detour circuit.
- Fuse protection.
- Output circuit breakers.
- Oscillator.
- Power supply circuits to oscillator, alarms, controls, etc.
- Battery isolator.

The diagram shall also show the relative phase displacement of the rectifier transformers.
NOTE: This Is Not Applicable To Systems Below 200kVA.

(F) Inverter Oscillator

The inverter shall contain an oscillator capable of operating and maintaining the inverter output frequency as specified. The inverter oscillator shall be capable of frequency synchronisation and phase locking to the mains (or standby generator) power source frequency. When operating as a slave to the mains or standby power and a failure occurs in the slaving signal, the inverter oscillator shall automatically revert to a free running state and maintain the specified limits. All changes in output frequency to free run or synchronise shall be gradual to suit the load requirements.

(G) Rectifier

The UPS shall have its own rectifier and rectifier transformer which shall operate satisfactorily from the mains or standby supply.

The rectifier shall be of the solid state type providing full wave rectification of the input voltage suitably regulated to suit the input requirements of the inverter. Where necessary, a high grade DC filter shall be utilised to limit the output ripple to within acceptable levels for the inverter input. Current limiting features shall be provided to protect the rectifier. The current limiting settings shall be variable for final adjustment on site.

Voltage free contacts shall be provided for the malfunction alarms of the rectifier.

An input monitoring circuit shall be provided for the rectifier. This circuit shall switch off the rectifier when the r.m.s. value or frequency of the input voltage falls below present values.

The necessary protection circuitry shall be provided to switch off the rectifier if any one of the rectifier phases should fail, thus presenting an unbalanced load to the incoming supply.

The output of the rectifier shall be connected in parallel to the battery and inverter.

The rectifier shall have over temperature protection. Temperature sensing probes shall be placed on the thyristor housing, thyristor mounting, or on the heat sink close to the thyristor. The sensing of the off coming air temperature alone is not acceptable.

Tenderers shall take into account the possible effects of harmonics that may be present on the input supply due to non-sinusoidal waveforms at the rectifier input, phase commutation, the effect of reactance during phase commutation etc. The input voltage monitoring circuits of the rectifiers shall be adequately filtered and buffered to ensure reliable load control and to prevent continuous on-off switching of the rectifiers.

For three phase units each of the three rectifier transformers shall have a different primary to secondary phase displacement in order to minimise the harmonics generated by the rectifiers.

NOTE: This Is Not Applicable For Systems Below 200 kVA

(H) Inverter

The inverter shall be adequately protected against any excessive overload or short circuits that occur in the load. Reactive current limiting or other methods shall be employed to render the thyristors short circuit proof. The successful tenderer shall replace any thyristors or any inverter components at his own expense if these should be damaged.

The necessary feedback and control circuits shall be incorporated to ensure satisfactory operation separately or in synchronisation with the mains supply under all conditions of dynamic load variations, stated overloads, severe unbalanced conditions and high operating temperatures. The thyristor bridge shall contain the necessary auxiliary circuitry to ensure satisfactory operation.

The output of the inverter shall be connected in parallel with the thyristor switch output.

Each inverter shall have over temperature protection similar to the over temperature protection for the rectifier.

A discharge device shall be provided across the D.C. input to the inverter, which will discharge any capacitors in the inverter module when it is switched off.

(I) Battery charger

The battery charger shall be a solid state, constant voltage type providing full wave rectification of the input voltage with the output regulated to an accuracy as specified. A high grade D.C. filter shall be utilised to limit the output ripple to the stated tolerance. Current limiting features shall be provided. The value of the current limit setting, shall be in accordance with the maximum allowable charging current that the batteries can withstand.

The maintained voltage on float charge shall be such as to give maximum life to the batteries whilst maintaining the maximum charge conservation and minimising gas formation and water loss. The optimum float charge voltage shall be specified by the battery manufacturer but is expected to be approximately 2,23 volts per cell. The voltage shall be kept within $\pm 0,5\%$ of the nominal value for all loads from no load to the full rated battery charger current when supplying the full output with batteries discharged.

(J) Computer rooms/office UPS installation

The rectifier shall be equipped with **2 independent** over voltage shutdown contacts for maximum charger security.

The battery charger shall be designed to charge the batteries to 90% of its fully charged capacity within 14 hours and to 100% capacity within 20 hours.

The battery charger shall be capable of boost charging the batteries to 2,6 volt per cell. The boost facility shall be manually operated.

The battery charger shall be provided with a current limiting circuit.

The current limit setting shall be variable for easy adjustment on site.

The necessary voltage free contacts for the alarms and battery charger failures shall be allowed for in the tender price.

The battery charger shall have over temperature protection similar to the protection specified for the rectifier.

The battery charger shall have circuitry to inhibit the charging of batteries from the standby generator. This circuitry shall be activated by normally open contacts on the generator control panel. The interconnecting cables will be supplied and installed as part of this contract.

NOTE: This requirement is only applicable for UPS systems above 200kVA

(K) Battery

The battery capacity shall be sufficient to provide full load for the specified time. The capacity shall be rated at a maximum specific gravity of 1,245 at 25 C and correctly filled.

Tenderers shall state the discharge capacity of the battery after 10 hours of charge and the battery voltage at its terminals under various conditions. The inverter shall switch off on low battery voltage.

The battery cells shall be of the maintenance free type.

The batteries shall give satisfactory service for a minimum period of **3 years**. Tenderers shall state the maximum expected lifetime of the batteries and motivate their statement, and provide a statement by the battery manufacturer supporting this and stating that the charger offered is suitable for the battery.

The cells must be mounted in a matching steel cabinet or in the same cabinet as the control equipment. The vented type cells should be mounted on a wooden stand, consecutively, numbered with positive and negative terminals clearly marked in a ventilated battery room.

The batteries shall be complete with cell inter-connectors and row inter-connectors. The output terminals shall be robust and adequately dimensioned for the output cable terminations.

The inter-connectors between cells and shall be made in a manner giving the lowest volt drop and maximum resistance to corrosion.

All connections to cells must consist of flexible cable to avoid mechanical stress at the cell terminals.

The tenderer shall describe the method of removal and replacement of a faulty cell.

The battery shall be complete with a battery fuse isolator capable of breaking the full load current drawn by the inverter. These battery fuse isolators shall be installed in the inverter unit room or cabinet.

Terminal posts should be effective for the expected lifetime of the battery and should be effective even if the cell is overfilled.

The battery may be resistance grounded through 5000 ohm to 10000 ohm for the purpose of ground fault.

Tenderers shall submit full details with dimensioned drawings of the batteries offered.

Tenderers shall submit the calculations and motivations complete with curves supporting the selection of a specific battery cell.

All cabling for the battery shall be installed on PVC cable trays and fitted to the satisfaction of the engineer.

(L) Automatic by-pass switch

An integral automatic bypass switch shall be provided to transfer the critical load without break to the mains should the UPS unit fail. The latter unit shall simultaneously be disconnected from the critical load bus. This transfer shall, however, be inhibited if the mains is out of synchronism with the UPS output. Retransfer to the UPS output shall be on a manual or automatic command. This switch must have a cover fitted screwed to the panel so as to make the operating of this switch impossible without having first removed the cover. This switch cover must also have the following words etched in white with a red background mounted on or adjacent the cover: **CAUTION : BYPASS SWITCH ONLY : ONLY TO BE OPERATED BY QUALIFIED PERSONNEL**

The static switch should prevent "hunting" and after trying unsuccessfully to switch a maximum of three times the static switch should be inhibited from further switching.

3. CONSTRUCTION OF CUBICLES AND SWITCHBOARDS

All the converter equipment shall be housed in totally enclosed, free standing, floor mounted cubicles, designed to provide adequate ventilation for the equipment.

All cubicles shall be rigid with suitably braced doors providing front access.

All cubicles shall be vermin proof.

All equipment shall be mounted on the metal framework suitably arranged to provide safe operation and ease of access. Fuses and switchgear in particular should be safely accessible even under load conditions.

All power bridges, filters and other major components both in the inverter and rectifier, shall be completely withdrawable to facilitate rapid repair and/or replacement. The method of withdrawal shall be such that a complete module can be extracted in the operating condition so that checks and measurements may be made while in operation and access to all components facilitated.

All electronic printed circuit cards shall be of a good quality and shall be easy and simple to interchange.

All auxiliary power supplies shall be duplicated and shall be connected so as to operate in parallel redundancy. At least two primary sources of power shall be provided for each of the power supplies in the system.

Flexible wires shall not be soldered directly onto terminals but shall have a crimped tab, which is soldered onto a terminal or post. The wire wrapping technique shall be employed for electronic circuits where possible.

The front panel alarms shall be clearly and adequately marked in both official languages. A single line mimic layout of the switchgear shall be provided on the front of the cubicles providing a graphic display of the circuitry of the equipment involved.

All input and output power cables shall be terminated using approved cable glands, onto a cable gland support bracket. The cable conductors shall terminate at the connecting busbars or shall be connected directly to the appropriate switchgear. All power cables

shall be properly numbered with wrap around cable markers with punched figures to identify cables at each termination point.

4. INSTRUMENTATION AND CONTROLS

All the required instrumentation as indicated on the drawings shall be provided.

Supply and install all the necessary controls for the operation of the system. Facilities shall be provided for controlling the rectifier, switching the inverter on, switching the inverter output to the synchronous motor/alternator and controlling the bypass thyristor switch circuit.

All control switching of the rectifier and inverter as well as the bypass operation shall be pushbutton initiated.

Standard electronic equipment from overseas manufactures shall **not be accepted** if not duly protected with transsorb and metal oxide varistors in power supplies and external communication lines. Standard electronic equipment not internally protected with transsorb or MOV's may be protected externally by means of transsorb and MOV's mounted on klippon type terminals. All external communication and remote power supply lines shall be protected by means of transsorb and MOV's of sufficient rating mounted on klippon type terminals.

5. ALARMS

All alarms shall be of the tell tale type with memory features e.g. a flashing light indicates a fault coupled with an audible alarm. The pressing of the appropriate button shall cancel the audible alarm and allow the alarm lamp to burn continuously until the fault is removed.

The following minimum alarm conditions shall be monitored on the equipment:

- (1) Normal
- (2) Mains failure
- (3) Inverter failure
- (4) Shutdown imminent
- (5) Load on mains
- (6) Overload
- (7) Charger fails

Where required a remote panel must be supplied and installed. The alarms indicated must duplicate all the alarms indicated on the UPS control panel. In addition a buzzer must be provided. Any alarm occurring must sound the buzzer to draw attention. An alarm accept pushbutton to silence the buzzer must be provided.

Provision shall be made on all the alarms mentioned above to be remotely monitored. Normally open contacts shall be supplied at the converter for each alarm for this purpose. The contacts shall close under an alarm condition.

6. VENTILATION

All equipment racks shall be positioned in logical fashion on the floor in a configuration, which will ensure proper ventilation

Each cubicle containing heat-generating equipment (thyristors, transformers electronic circuitry, filters, etc) shall, where necessary, have extraction ventilation fans mounted on the top of the cubicle to assist air circulation. These fans shall be fed from the output distribution panel of the uninterrupted power supply.

7. QUALITY ASSURANCE

The manufacturer shall be responsible for the performance as specified herein and to prove such performances to the satisfaction of the engineer. Except as otherwise specified, the supplier must utilise facilities acceptable to the engineer.

8. DRAWINGS

As soon as possible after the awarding of the contract, the successful tenderer shall at his expense submit to the engineer for approval, three prints of:

- (1) All general arrangement drawings.
- (2) Detailed dimensioned drawings of all plant and equipment.
- (3) Complete wiring diagrams and block schematic diagrams.

At the same time a list of all equipment designations, labels, etc. in both official languages shall be submitted for approval.

The approval of drawings shall not relieve the successful tenderer of his liability to carry out work in accordance with the terms of the contract.

On completion of the contract, a complete set of transparencies of all drawings of a quality acceptable to the engineer shall be handed to the engineer at the expense of the successful tenderer. These final drawings shall include:

- (1) A proper and accurate as-made wiring diagram of the complete installation showing circuit numbers, terminal strip numbers and conductor colours.
- (2) A schematic diagram clearly showing functions and component values. A material list showing make, model and characteristics of all components of the control equipment and switchgear is to be included.
- (3) Fully dimensioned as-made physical layout drawing of the equipment, batteries and ventilation equipment.
- (4) A detailed schedule of all wiring.

The contract shall be deemed incomplete until all drawings have been received by the client.

9. INSTRUCTION OF OPERATOR AND MANUALS

After completion of the installation, and when the plant is in running order, the successful tenderer will be required to instruct an attendant in the operation of the plant, until he is fully conversant with the equipment and handling thereof.

Three (3) copies of maintenance, fault-localising and operating manuals together with the drawings required shall be handed over to the engineer.

10. TESTS

The complete testing including the provision of test facilities, instruments, dummy loads and switchgear at the manufacturer's premises in the Republic of South Africa shall form part of this contract. If the factory tests cannot be performed in the RSA, the client may, at his discretion and own cost, decide to attend tests at the supplier's overseas factory. Tenderers shall not allow for this.

For the test in the manufacture's premises the client shall be notified four weeks in advance in order that a representative can be sent to witness these tests.

10.1 Battery tests

- (1) The output voltage of the battery unit (i.e. all the cells making up one battery) shall be tested with the incoming supply removed.
- (2) The full rated load for the battery shall then be connected to it. The voltage shall be measured at 5 minute intervals for the duration discharge period.
- (3) The batteries shall be left to recharge. The voltage shall be checked after 14 hours with the load and incoming supply removed as well as with the load connected but incoming supply removed.
- (4) When fully recharged, the voltage and specific gravity of every cell shall be measured with the incoming supply removed.
- (5) The circulating A.C. current through and the A.C. voltage across the batteries shall be measured when the rectifiers are on with the battery discharged and fully charged.

10.2 Oscillator tests

- (1) Frequency within tolerances at all loads.
- (2) Parallel redundancy.
- (3) Auto automatic synchronisation for connection of the synchronous motor/alternator to mains via the thyristor switch.

An electronic frequency counter shall be used to measure the frequency.

10.3 Rectifier tests

- (1) Output voltage of rectifiers at no load and full load with batteries charged and not charged.
- (2) Current limit, both for mains failure and return to mains.
- (3) Switch off value mains input monitor.
- (4) Sequential switch on for return to mains.
- (5) Soft start circuits.

10.4 General

Ammeters will not be acceptable to prove the above items. A wave analyser and a recording oscilloscope will be required. Photographs shall be taken of the oscillograms by the contractor in the presence of the engineer.

The overall efficiency of the complete uninterrupted power supply shall be proved to be within the specified limit at full load and at no load.

The overcurrent protection mechanisms of the A.C.B. shall be proved by current injection (either primary or secondary)

The bypass and detour circuits shall be proved.

All alarms, indications and control functions shall be proved.

The test instruments provided shall in all cases be of high quality and suitable to be able to adequately assess the quantities being measured and the equipment being tested. All instruments shall be calibrated by a testing laboratory approved by the National Calibration Service of the CSIR. The test equipment remains the property of the successful tenderer.

At the completion of the tests, a full test report shall be submitted by the contractor to the engineer in triplicate.

Continuously adjustable dummy loads of a rating suitable to comprehensively test the UPS shall be provided by the contractor as well as any temporary cables required for the connection of the dummy load to the UPS on site.

11. CABINET

The contractor shall supply and install a metal cabinet with lockable doors of sufficient size to house all operating and maintenance instructions, drawings, spares, tools, etc.

12. SCHEMATIC DIAGRAM

A schematic diagram of the complete system shall be mounted in a suitable place and shall be resin encapsulated.

13. AUXILIARY EQUIPMENT

Tenderers shall make all allowances for plant required (i.e. hoists, cranes, trolleys, etc.) ensuring positioning of the equipment in the UPS room.

14. UPS POWER PLUG OUTLET

All UPS power plug outlets must be of the red non-standard 3-pin type with the earth pin not earthed to the plug baseplate to facilitate the installation of a single earth connection earthing system. Each socket outlet must be provided with a red plug top.

Each socket outlet must be labelled with an engraved label indicating the power circuit number to which it is connected.

15. DISTRIBUTION WIRING

All sub-distribution wiring circuits must be wired as follows:

15.1 Mains power plug circuits

4 mm² PVC/copper in red and black conductors and a 2,5mm² bare copper earth.

15.2 UPS power plug circuit

4 mm² PVC/copper in blue and black and a green PVC insulated 2,5mm² earth wire.

The black neutral conductors must be clearly labelled at each end as follows: "UPS" or "OKT"

15.3 UPS Earthing

The main earth bar must be connected to the insulated earth bar of the UPS via a removable copper link bar.

All UPS boards must have insulated earth bars, separately earthed to a clean 1,2m earth spike by means of 70mm² insulated earth to obtain at least one ohm at the UPS board.

**SPECIFICATION FOR THE SUPPLY, DELIVERY, INSTALLATION AND
COMMISSIONING OF UNINTERRUPTED POWER SUPPLY**

SECTION 3 – SCHEDULES OF TECHNICAL INFORMATION

TABLE OF CONTENTS

<u>Clause</u>		<u>Page</u>
1.	System Parameters.....	3.1
2.	Battery Charger.....	3.4
3.	Oscillator.....	3.5
4.	Inverter.....	3.5
5.	Static Switch.....	3.6
6.	Batteries.....	3.6
7.	Systems Above 200kVA.....	3.7
8.	Details Of Manufacture Of UPS.....	3.8

TECHNICAL SPECIFICATION**IG AUTOMATIC FIRE DETECTION SYSTEMS****CONTENTS**

IG 01	SCOPE
IG 02	STANDARD SPECIFICATIONS
IG 03	DEFINITIONS
IG 04	OPERATION AND MAINTENANCE MANUALS
IG 05	DETAIL OF REPAIR WORK
IG 06	MAINTENANCE
IG 07	RECORD KEEPING AND LABELLING

IG 01 SCOPE

IG 01.01 This standard specification covers the installation, repair and maintenance of the complete fire detection installation including the following (this list is not intended to be complete):

- ☐ Fire alarm panels and remote indicators.
- ☐ Battery chargers and batteries.
- ☐ Links to the fire brigade.
- ☐ All wiring, cables and antennas connected to the fire detection system.
- ☐ Detectors, break glass units and other initiating devices.
- ☐ Alarms, flashing beacons, warning lights and other notification devices.
- ☐ Gas control units, evacuation lights, sirens and associated devices.
- ☐ Door closers and hold open magnets controlled by the fire detection system.
Door sequencers on these doors also forms part of the fire detection system.
- ☐ Door locks monitored by the fire detection system.
- ☐ Relays and other interface equipment.
- ☐ Wiring to interfaces such as telephone connections, modems, dialling units, optic fibre converters, etc.
- ☐ Warning signs, labels, blocked plans, drawings and manuals.

IG 01.02 The following does not form part of the scope of this technical standard:

- ☐ Fire and smoke dampers and their release mechanisms.
- ☐ Associated equipment forming part of another system e.g.
 - Fire relays in an air-conditioning control panel.
 - Detonators installed on gas cylinders.
 - Gas release solenoids forming part of the gas cylinders.
- ☐ SCADA, computers and other monitoring systems.
- ☐ Monitoring equipment at the fire brigade.
- ☐ Gas or other extinguishing systems.
- ☐ Modems, line drivers, optic fibre converters, etc. that forms part of a link to a

IG.2

remote panel or a monitoring station such as the fire brigade.

IG 01.03 A summary inventory of the existing systems is given in PIG – Particular Specification for the Fire Detection System.

IG 02 STANDARD SPECIFICATIONS

IG 02.01 SANS standards and codes

The latest revisions of the following SANS standards and codes shall apply:

- *SANS 10139: The prevention, automatic detection, and extinguishing of fire in buildings.*
- *SANS 10142: The wiring of premises.*
- *SANS EN 54: Components of automatic fire detection systems.*

IG 02.02 Department of Public Works Specifications

The following standard specifications of the Department of Public Works, and the standards referred to in these standard specifications shall apply:

- *Standard Specification for an Automatic Fire Alarm Installation, reference FPO/82/5E as revised.*

IG 02.03 Occupational Health and Safety Act of 1993

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

IG 02.04 Manufacturers' specifications, codes of practice and instructions

All the wiring, installation, maintenance, testing and other specifications of the manufacturer of the equipment shall be adhered to.

IG 02.05 Municipal regulations, laws and by-laws

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

IG 03 DEFINITIONS

The following definitions shall apply:

Class A wiring: Circuits capable of transmitting an alarm signal during a single open or non-simultaneous single ground fault on a circuit conductor shall be designated as

Class A.

Class B wiring: Circuits not capable of transmitting an alarm beyond the location of the fault conditions specified for Class A above shall be designated as Class B.

Addressable system: A system in which signals from each detector and/or call point are individually identified at the control panel.

Conventional system: A system that is not addressable.

Ring system: A wiring system where a return loop with no spurs (T-offs) is used. This normally provides a Class A wiring system if the control panel is so designed.

Isolating device: Devices that isolate a line to line short circuit so that only the section between the isolating devices will be effected. The effective use of an isolating device requires Class A wiring.

IG 04 OPERATING AND MAINTENANCE MANUALS

IG 04.01 PROCUREMENT OF AVAILABLE OPERATING AND MAINTENANCE INFORMATION

At the commencement of the contract, the Contractor shall obtain all available operating and maintenance documentation. Please note that although existing manuals may be available they may not be complete and additional information must be obtained. New manuals shall be compiled even if existing manuals exist.

The Contractor shall be responsible for the compilation of a complete set of drawings, inventory list and operating and maintenance manuals. This shall be done in accordance with the Additional Specification SB - Operating and Maintenance manuals.

The Contractor shall allow for the required tools and equipment to establish the correct information.

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

IG 04.02 INFORMATION REQUIRED IN MANUALS

Over and above what is specified in the Additional Specification - SB Operating and Maintenance manuals, the Operating and Maintenance Manual to be compiled shall be structured and shall at least include the following for each fire alarm panel. *Please adapt and add as required.*

Master manuals and manuals for each fire panel shall be prepared containing extracts from the master manuals.

IG 04.02.01 A complete listing of all the configuration and programming information of the control panel. Enough information must be supplied so that the control panel can be reconfigured by a person not knowledgeable of the site.

IG 04.02.02 Complete drawings showing the positions of all the devices connected to the system and schematic connection diagrams.

IG 04.02.03 Complete design information containing at least:

- Sizes of batteries and battery chargers. The quiescent and alarm current of the system must be included.
- Sizes of sirens and strobes.
- Types of detectors and other devices and their specifications.

IG 04.02.04 A full description of the system providing information similar to that shown in the table

IG.4

below,

SYSTEM DESCRIPTION	
Name of system	
Device	Manufacturer / type / description
Control panel	
Battery charger	
Detectors	
Break glass units	
Strobes	
Sounders	
Cables	
Class of wiring system	
Link to the fire brigade	
Links to other systems	

IG 04.02.05 A complete list of all the devices of the system providing at least the information indicated in the table below.

LIST OF DEVICES			
Name of system			
Device no.	Type of device	Zone no.	Physical position (include room no.)

IG 04.02.06 A complete list of inputs and output to the system excluding the devices indicated in the list of devices above providing at least the information indicated in the table below. Examples of other inputs and outputs are:

- Switch off air conditioning when a fire alarm occurs in zone 2.
- Activate gas release when two fire alarms occur in the computer room.
- Give an alarm when there is flow in the sprinkler piping.

OTHER INPUTS AND OUTPUTS			
Name of system			
Input / output	Description	Action taken by the control panel	Physical position (include room no.)

IG 05 DETAIL OF REPAIR WORK (Not Applicable)

IG 06 MAINTENANCE

The maintenance functions starts from day one of the contract even if the repair has not been completed and shall consist of preventative and breakdown maintenance with the purpose of keeping the complete installation in fully working condition as specified in the additional specifications.

IG 06.01 The preventative maintenance shall be done according to the specifications of the manufacturer of the equipment and shall at least include the following:

- Testing of all the functions of the fire detection system in a period of 12 months.
- Testing, cleaning and servicing parts of the system every 3 months to ensure that the fire detection system functions correctly.

IG 06.02 Table 1 indicates recommended testing frequencies. (T for test and I for inspect)

No.	Part of the system	Quarterly	Annually
1	Alarm notification devices		Test
2	Batteries	Load voltage test	Discharge test
	Battery charger	Charger test	Charger test
3	Control equipment	Clean	Test all functions
4	Initiating devices	Activate and clean 25% of devices	Activate all devices
5	Interface equipment		Activate all devices
6	Labels, drawings & manuals	Update as required	
7	Supervisory signals (e.g. fire brigade)	Test	
8	Wiring		Check all terminations for bad connections.

IG 06.03 A brief description of some of the tests are given below but the specifications of the manufacturer shall also be followed.

Test	Description
Battery load voltage test for sealed lead acid batteries.	Apply a load of 0.1C with the battery charger disconnected. The battery voltage should be higher than 24.5V after 30 seconds.
Battery discharge test for sealed lead acid batteries.	Apply a load of 0.2C or the full alarm load (whichever is higher) with the battery charger disconnected. The battery voltage should be higher than 23V after 30 minutes or as recommended by the battery manufacturer.
Battery charger test	The charging voltage shall be between 27.0V and 27.6V with the batteries in a charged state. The ripple voltage should be less than 30mV.

IG 07 RECORD KEEPING AND LABELLING

IG 07.01 LABELS

All equipment shall have a unique number inscribed on a label and fixed to the equipment. These numbers shall correspond with that on the drawings and in the manuals.

IG 07.02 DESIGN INFORMATION

- IG 07.02.01** The following information shall be indicated on a label:
- The battery type and size. (next to the batteries)
 - The quiescent load and alarm load in amps of the system. (next to the batteries)
 - The sizes of all the fuses. (next to the fuses)
 - The dates that the batteries were installed. (on the batteries)
 - The number of each detector, break glass unit, interface, relay or other activation or initiating devices. (on or next to the unit)

IG 07.03 RECORD KEEPING

A record shall be kept of each inspection and test in a book next to the fire panel.
The record book shall state at least the following:

- The date and name of the person and company.
- Comments on the tests or inspections.
- The voltages measured for the battery tests.

The date on which batteries were installed shall be clearly marked on the batteries and also indicated in the record book.

IG 07.04 INFORMATION CABINET

A neat, high quality cabinet or holder with a lock shall be provided next to the fire panel.

- IG 07.04.01** This cabinet shall have the following characteristics:
- It shall be wall mounted next to the fire panel.
 - It shall have a lock that opens with a general type of key such as the fire panel key or a square key.
 - It shall be large enough to hold the information indicated below but at least 350mm x 250mm x 50mm deep.

- IG 07.04.02** The information cabinet shall contain all the system specific information contained in the master manuals but at least:
- Basic operating instructions.
 - The complete design information.
 - The record book.
 - A full description of the system with drawings.
 - Configuration and programming information.

IG 07.04 BLOCKED PLAN

A framed drawing shall be fixed to the wall next to the fire panel and kept up to date with changed information on the fire detection system. The drawing shall contain at least the following:

- The building name as shown outside the building otherwise as known by the users of the building. The panel number shall also be shown.
- All the initiating devices and their numbers and types shall be shown.
- A symbol list of all the symbols used on the drawing.
- The positions and numbers of all the battery chargers and gas cylinders shall be shown.
- Detection and gas zones must be indicated.
- The drawing shall be at least A3 size but large enough to contain all the required information. The drawing shall be mounted behind glass with a hard wood frame.

IG 08 DAMAGE CAUSED BY VOLTAGE SURGES

All damage caused by lightning or power surges must be fixed under this contract. No such claims will be considered.

Please note that the Louis Trichardt area is very prone to lightning and voltage surges must therefore be expected.

The contractor is advised to install surge protection equipment on the systems and to regularly check the surge protection equipment for proper operation. Contact a specialised lightning specialist to assist with the design of the surge protection.

IG 09 TEST EQUIPMENT

The contractor shall ensure that the following equipment is available on site for the engineer's use.

- A digital multimeter.
- Smoke and heat detector testers suitable to reach heights of 6 meter.
- Testers to test batteries.
- Test equipment to test flame detectors, beam detectors, etc, if applicable.

IG 10 EQUIPMENT AND COMPONENTS REMOVED

All equipment and components of the fire detection systems that the contractor removes during a replacement action shall, where still usable be retained by the contractor and shall be used as spare parts to maintain other systems.

IG 11 MEASUREMENT AND PAYMENT

The measurement of items does not imply that those items form part of the scope of the work. Work shall be done according to the drawings, specifications and the instructions of the engineer.

- IG.01 DEVICES & EQUIPMENT Number**
 Devices are measured per item and include the removal of an existing device (if applicable) and the supplying, installation and testing of the replacement device. The price includes all wire connections, lugs, labels, mountings and updating of the manuals and drawings. The patching and touching up of paint, woodwork, plaster, etc. shall be included in the price.
- IG.02 WIRING metre**
 All wiring shall include the supply, installation into conduit, wiring channel or any other medium and the testing thereof. Prices shall include wastage, off cuts, labels, etc. to make the installation complete. The measurement is the length installed.
- IG.03 CONDUITS AND CONDUIT ACCESSORIES**
 See PBK.
- IG.04 TESTING Number**
 The testing of fire panels, detectors and other devices or systems shall include all the test equipment, obtaining testing procedures, changes to make the test possible, recommissioning of the device or system, test reports, etc. to make the test complete and acceptable to the engineer.
 All tests shall be done according to the manufacturer's specifications, standard specifications and the requirements of the engineer.
 Test shall also include the calibration, cleaning of the unit and sending the unit to the supplier if the tests cannot be locally carried out.
- IG.05 LABELS**
 Prices shall include the supply and installation of the labels. Printed drafts of the labels shall be submitted to the engineer for approval before manufacture.
- IG.05.01 Large labels Number**
 Labels for large equipment such as fire panels and battery charges shall be reverse engraved labels fixed to the equipment with screws. The labels shall be at least 20mm x 60mm.
- IG.05.02 Small labels Number**
 Small labels shall be applied to smaller devices such as detectors and draw boxes. Labels for detectors and addressable devices shall be as supplied by the manufacturer of the device. Other small labels shall be of the laminated plastic type with a letter size of at least 4mm. The mounting surface shall first be cleaned with alcohol before fixing the label.

TECHNICAL SPECIFICATION**JB AUTOMATIC GAS EXTINGUISHING SYSTEM****CONTENTS**

JB 01	SCOPE
JB 02	STANDARD SPECIFICATIONS
JB 03	DEFINITIONS
JB 04	OPERATION AND MAINTENANCE MANUALS
JB 05	DETAIL OF REPAIR WORK
JB 06	MAINTENANCE
JB 07	RECORD KEEPING AND LABELLING

JB 01 SCOPE

JB 01.01 This standard specification covers the installation, repair and maintenance of the complete automatic gas extinguishing system including the following (this list is not intended to be comprehensive):

- ☐ Actuating Devices for valves
- ☐ Gas distribution systems – piping and valves
- ☐ Discharge Nozzles
- ☐ Odouriser containers
- ☐ Gas storage vessels
- ☐ Automatic shutters/blankets
- ☐ Breathing apparatus
- ☐ Input/output line relays for interface with other systems
- ☐ Painting

JB 01.02 The following does not form part of the scope of this technical standard:

- ☐ Smoke/fire detection systems – refer to Technical Specifications "IG Automatic Fire Detection Systems".
- ☐ Fire and smoke dampers
- ☐ SCADA, computers and other monitoring systems
- ☐ Modems, line drivers, optic fibre converters, etc that form part of a link to a remote panel or a monitoring station such as the fire brigade.
- ☐ Control panels and alarm signals (part of the fire detection system)
- ☐ Audible and visual alarms (part of the fire detection system)
- ☐ Auxiliary power supply
- ☐ Door locks and door closers (part of the fire detection system)

JB 01.03 There is an existing CO₂ based suppression system which needs to be decommissioned.

JB 02 STANDARD SPECIFICATIONS**JB 02.01 SANS STANDARD AND CODES**

The latest revisions of the following SANS standards and codes shall apply:

- SANS 10139: *The prevention, automatic detection, and extinguishing of fire in buildings.*
- SANS 10142: *The wiring of premises.*

JB.2

- SANS EN 54 : *Components of automatic fire detection systems.*
- ISO 14520 – *Gaseous fire –extinguishing systems – Physical properties and system design*
- SANS 10019 – *Portable metal containers for compressed gasses: basic design criteria, use and maintenance.*

JB 02.02

DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS

N/A

JB 02.03

OCCUPATIONAL HEALTH AND SAFETY ACT OF 1993

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

JB 02.04

MANUFACTURER'S SPECIFICATIONS, CODES OF PRACTICE AND INSTRUCTIONS

All the wiring, installation, maintenance, testing and other specifications of the manufacturer of the equipment shall be adhered to.

JB 02.05

MUNICIPAL REGULATIONS, LAWS AND BY-LAWS

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

JB 03

OPERATING AND MAINTENANCE MANUALS

JB 03.01

PROCUREMENT OF AVAILABLE OPERATING AND MAINTENANCE INFORMATION

At the commencement of the contract, the Contractor shall obtain all available operating and maintenance documentation. Please note that existing manuals are not available or are incomplete and additional information must be obtained. New manuals shall be prepared even if existing manuals exist.

The Contractor shall be responsible for the compilation of a complete set of drawings, inventory list and operating and maintenance manuals. This shall be done in accordance with the Additional Specification SB – Operating and Maintenance manuals.

The Contractor shall allow for the required tools and equipment to establish the correct information.

All information shall be recorded and reproduced in electronic format and the Engineer shall also be supplied with three sets of hard copies.

JB 03.02

INFORMATION REQUIRED IN MANUALS

Over and above what is specified in the Additional Specification – SB Operating and Maintenance Manuals, the Manuals to be compiled shall include the following for each item or group of equipment. Please adapt and add as required.

JB 03.02.01

Plant room instructions

JB.3

Large scale wiring and sub system safety, instrumentation, control and operation diagrams shall be mounted in the gas plant rooms. The diagrams shall be complete with:

- Final sub-system schematics
- Block logic operating sequence
- Sub-system equipment safety settings

The diagrams and operating instructions shall be printed on high quality, non-deteriorating paper framed behind glass and located in properly illuminated positions.

JB 03.02.02

Equipment

For each piece of equipment, the following checklist shall be used in indexing and sequencing the manufacturer's information:

- | | |
|--|---|
| • Descriptive Literature | - Catalogue cuts, brochures
- Dimensional drawings
- Materials of construction
- Parts designation |
| • Operating Characteristics | - Pressure, Temperature Limitations
- Safety devices and settings |
| • Operating Instructions | - Inspection during operation
- Adjustment and regulations
- Testing
- Detection signals |
| • Maintenance Instructions | - Schedule of routine and preventative maintenance
- Procedures
- 'Trouble shooting' guides |
| • Spares | - Essential spares to be stored on site
- Distributor/supplier spares |
| • Supplier Data | - Name, address, telephone and fax numbers
- Contact Person |
| • Overall Summary of Scheduled Maintenance | - Information necessary to perform maintenance under the selected types of program for optimal performance of systems |

JB 04

DETAIL OF REPAIR WORK (Not Applicable)

JB 05

MAINTENANCE

The maintenance functions shall consist of preventative and breakdown maintenance with the purpose of keeping the complete installation in fully working condition as specified in the additional specifications. Also refer to ISO 14520 Part1 for maintenance instructions.

JB.4

JB 05.01

The preventative maintenance shall be done according to the specifications of the manufacturer of the equipment and shall at least include the following:

- Testing of all the functions of the gas extinguishing system in a period of 12 months
- Testing, cleaning and servicing parts of the system every 3 months to ensure that the gas extinguishing system functions correctly.

JB 05.02

Table 1 indicates recommended testing frequencies.

No.	Part of the system	Quarterly	Annually
1.	Batteries	Load voltage test	Discharge test
2.	Battery charger	Charger test	Charger test
3.	Actuating devices		Activate all devices
4.	Direction valves		Activate all valves
5.	Discharge test	Simulate a discharge	
6.	Labels, drawings & manuals	Update as required	
7.	Supervisory signals (e.g. gas discharge)	Test	
8.	Wiring		Check all terminations for bad connections
9.	Nozzles & piping	Check and clean	Check with pressurised air
10.	Cylinders	Check pressure if a meter is attached	Check the amount of gas in the cylinder
11.	Automatic shutters/blankets	Check function	

JB 05.03

A brief description of some of the tests is given below but the specifications of the manufacturer shall be followed.

Test	Description
Battery load voltage test for sealed lead acid batteries	Apply a load of 0.1C with the battery charger disconnected. The battery voltage should be higher than 24.5V after 30 seconds.
Batter discharge test for sealed lead acid batteries	Apply a load of 0.2C or the full alarm load (whichever is higher) with the battery charger disconnected. The battery voltage should be higher than 23V after 30 minutes or as recommended by the battery manufacturer.
Battery charger test	The charging voltage shall be between 27.0V and 27.6V with the batteries in a charged state. The ripple voltage should be less than 30mV.
Check amount of gas (non-liquefied gasses)	Check the pressure and compensate for air temperature. Note the temperature and pressure in the logbook. Measure the weight if it is not possible to check the pressure.
Check amount of gas (liquefied gasses)	Measure the weight of each cylinder after disconnecting the cylinder from the manifold and note the weight in the log book.
Actuators (mechanical release)	Disconnect the mechanical release arms and simulate a gas discharge.
Actuator (detonators)	Measure the continuity of the detonator with a suitable multi-meter.
Actuator (solenoid valve)	Disconnect the electrical wiring and simulate a gas discharge
Simulate a gas discharge	De-couple the actuator on mechanical release systems or the wiring where mechanical de-coupling is not possible. Simulate a discharge by activating a break-glass unit of detectors.
Direction valves	Activate the direction valves by simulating a gas discharge for each zone.
Nozzles & piping	Check each nozzle for obstructions. If required connect pressurised air to the piping system and check that each nozzle is clean of obstructions. Check the piping for corrosion and damage.

JB 05.04

TESTING OF CYLINDERS

Each cylinder shall be weighed each year to check if enough gas is still in the cylinder. The mass shall be recorded in the logbook.

JB.5

Internal inspections and a hydrostatic pressure test shall be done every 10 years on each cylinder as described in SANS 10019.

If the cylinders contain a pressure gauge then the gauge shall be compared to a calibrated pressure gauge.

JB 05.05 **CYLINDER ROOM**

Cylinder rooms and areas surrounding the cylinders shall be kept clean and dust free. Door shall be kept locked at all times

JB 05.06 **DISCHARGE TEST**

A live discharge test shall be done if required by the engineer. This test shall discharge all or some of the cylinders into the protected area by simulating a fire. The cost of the test shall include the refilling and re-installing the cylinders. The installation shall be checked, tested and commissioned after a live discharge test.

The contractor shall refill the cylinders and redo the live discharge test at his cost if the test fails for any reason.

JB 05.07 **PROTECTED AREA**

The protected area shall be regularly checked for changes to the walls, floor, ceiling and content that may effect the effectiveness of the gas discharge system. Special attention shall be given to possible gas leakage out of the area and changes in the size of the protected area.

JB 06 **RECORD KEEPING AND LABELLING**

JB 06.01 **LABELS**

All equipment shall have a unique number inscribed on a label and fixed to the equipment. These numbers shall correspond with that on the drawings and in the manuals.

JB 06.02 **RECORD KEEPING**

A record shall be kept of each inspection and test in a book next to the fire panel. The record book shall state at least the following:

- The date and name of the person and company.
- Comments on the tests or inspections.
- The voltage measured for the battery tests.

The date on which batteries were installed shall be clearly marked on the batteries and also indicated in the record book.

JB 06.03 **INFORMATION CABINET**

A neat, high quality cabinet or holder with a lock shall be provided next to the fire panel.

JB 06.03.01 This cabinet shall have the following characteristics:

JB.6

- It shall be wall mounted in the cylinder room.
- It shall have a lock that opens with a general type of key such as the fire panel key or a square key.
- It shall be large enough to hold the information indicated below but at least 350mm x 250mm x 50mm deep.

JB 06.03.02

The information cabinet shall contain all the system specific information contained (also refer to ISO 14520) in the master manuals but at least:

- Basic operating instructions
- The complete design information
- The record book
- A full description of the system with drawings.
- A copy of the completion certificate as defined in ISO 14520-1

JB 07**DAMAGE CAUSED BY VOLTAGE SURGES**

All damage including gas discharge caused by lightning or power surges must be fixed under this contract. No claims for lack or absence of surge arrestors will be considered.

Please note that the area is very prone to lightning and voltage surges must therefore be expected.

The contractor is advised to install surge protection equipment on the systems and to regularly check the surge protection equipment for proper operation. Contact a specialised lightning specialist to assist with the design of the surge protection.

JB 08**TEST EQUIPMENT**

The contractor shall ensure that the following equipment is available on site for the engineer's use.

- A digital multi-meter.
- Portable scale to measure the weight of cylinders.
- Tester to test batteries.
- Calibrated pressure gauge suitable to measure the pressure in the cylinders.

JB 09**EQUIPMENT AND COMPONENTS REMOVED**

All equipment and components of the gas extinguishing systems that the contractor removes during a replacement action shall where still usable be retained by the Contractor and shall be used as spare parts to maintain other systems. Cylinders and fittings will stay the property of the department.

JB 10**MEASUREMENT AND PAYMENT**

The measurement of items does not imply that those items form part of the scope of the work. Work shall be done according to the drawings, specifications and the instructions of the engineer.

JB.01**DEVICES & EQUIPMENT **Number****

Devices are measured per item and include the removal of an existing device (if applicable) and the supplying, installation and testing of the replacement device. The price includes all wire connections, lugs, labels, mountings and updating of the manuals and drawings. The patching and touching up of paint, woodwork, plaster, etc. shall be included in the price.

JB.02**TESTING **Number****

The testing of cylinders, valves, pipes and other devices or systems shall include all the test equipment, obtaining testing procedures, changes to make the test possible, recommissioning of the device or system, test reports, etc. to make the test complete and acceptable to the engineer.

All tests shall be done according to the manufacturer's specifications, standard specifications and the requirements of the engineer.

Test shall also include the calibration, cleaning of the unit and sending the unit to the supplier if the tests cannot be locally carried out.

JB.03

LABELS

Prices shall include the supply and installation of the labels. Printed drafts of the labels shall be submitted to the engineer for approval before manufacture.

JB.03.01

Large Labels Number

Labels for large equipment such as valves, actuating devices, fire panels and battery chargers shall be reverse engraved labels fixed to the equipment with screws. The labels shall be at least 20mm x 60mm.

JB.03.02

Small labels Number

Small labels shall be applied to smaller devices such as detectors and draw boxes. Labels for detectors and addressable devices shall be as supplied by the manufacturer of the device. Other small labels shall be of the laminated plastic type with a letter size of at least 4mm. The mounting surface shall first be cleaned with alcohol before fixing the label.

**SPECIFICATION FOR THE SUPPLY, DELIVERY, INSTALLATION AND
COMMISSIONING OF UNINTERRUPTED POWER SUPPLY
SECTION 4 – PRICE SCHEDULES**

TABLE OF CONTENTS

<u>Clause</u>	<u>Page</u>
1. General.....	4.1
2. Schedule.....	4.1
3. Summary of Schedule of Quantities.....	4.2

SECTION 4 – PRICE SCHEDULES

1. General

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

2. Schedule

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
					R	c
1.1	Delivery, installation, and commissioning of the UPS, complete with all equipment as specified:					
	a) --kVA					
	Supply	No	1			
	Installation	No	1			
	b) --kVA					
	Supply	No	1			
	Installation	No	1			
1.2	Battery as specified:					
	a) --kW					
	Supply	No	1			
	Installation	No	1			
	b) --kW					
	Supply	No	1			
	Installation	No	1			
1.3	Three Copies of Operation and Maintenance Manuals:					
	a) --kVA	No	1			
	b) --kVA	No	1			
Total Carried to Summary					R	

3. Summary of Schedules of Quantities

Schedule

Page No

Amount

R

c

1.

.....

4.1

**Total Tender Price (Excluding VAT) for the
Supply, Delivery, Installation, And
Commissioning Of Uninterrupted Power
Supply to be Carried Forward to Part A**

R

SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT TO BE
COMPLETED BY TENDERER

<u>Items</u>	<u>Material / Equipment</u>	<u>Rand (R) (Excluding VAT)</u>
1		
2		
3		
4		
5		
6		

The Contractor shall list imported items, materials and/or equipment which shall be excluded from the Contact Price Adjustment Provisions (if applicable) and shall be adjusted in terms of currency fluctuations only. Copies of the supplier's quotations for the items, materials or equipment (not higher than the Contract rate as listed below) should be lodged with the Representative/Agent of the Department of Public works within 60 (sixty) days from the date of acceptance of the tenders. No adjustment of the contractor's profit, local VAT amount, discount, mark-up, handling costs, etc. shall be allowed.

The net amounts will be adjusted as follows

FORMULA:

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

$$A = V \left(\frac{Z}{Y} - 1 \right)$$

A = the amount (R) of adjustment

V = the net amount (R) (Supplier's Quotation) of the imported item
(Material or Equipment)

Y = exchange rate at the closing date of tender submission

Z = exchange rate on the date of payment

CONTRACTOR

SIGNED _____

DATE _____

SECTION 3 – SCHEDULES OF TECHNICAL INFORMATION

1. SYSTEM PARAMETERS

1.	Net output power of inverter system	kVA
2.	Power factor for which the system is rated	Lagging
3.	Nominal input voltage	Volts
4.	Maximum input voltage tolerated	Volts
5.	Minimum input voltage tolerated	Volts
6.	Maximum input frequency deviation tolerated	Hz
7.	Maximum and minimum input power factor at rated KVA	kVA
8.	Maximum harmonic input tolerated for successful operation	%
9.	Nominal output voltage	Volts
10.	Steady state output voltage regulation	Volts
11.	Dynamic output voltage regulation:	
(a)	Step load of 25% between 10% and 100% of full load	%
(b)	150% overload for 1 sec	%
(c)	Input voltage step variation of $\pm 15\%$	%
12.	Time for voltage recovery to steady state:	
(a)	25% step load	ms
(b)	100% step load	ms
(c)	150% step load for 1 sec and then returned to 100%	ms

13.	Relative output phase angles at 100% unbalanced load (in degrees)	Degrees
14.	Maximum harmonic content of output voltage	%
15.	Overload capacity	
(a)	One hour	%
(b)	One minute	%
(c)	Ten seconds	%
(d)	One second	%
(e)	Five msec	%
(f)	One msec	%
16.	Total input required with batteries charged for rated full load	KVA
17.	Total input required at full load and and battery discharged	KVA
18.	Allowable temperature rise across equipment at input air temperature of:	
(a)	25 °C	°C
(b)	30 °C	°C
(c)	32 °C	°C
(d)	35 °C	°C
(e)	40 °C	°C
19.	Heat dissipation under normal full load Running conditions:	
(a)	Converter	KW

(b)	Battery	kW	
20.	Efficiency of the complete UPS system	<u>1.0p.f.</u>	<u>0.8p.f.</u>
(a)	Full load	%	%
(b)	80% load	%	%
(c)	75% load	%	%
(d)	65% load	%	%
(e)	50% load	%	%
(f)	40% load	%	%
21.	R.M.S. value of the A.C. <u>current</u> component through the batteries for:		
(a)	Discharged battery	Amp	
(b)	Charged battery	Amp	
22.	R.M.S. value of the A.C. <u>voltage</u> component through the batteries for:		
(a)	Discharged battery	Volts	
(b)	Charged battery	Volts	
23.	Total number of cubicles		
24.	Total floor space required		
25.	Dimensions of cubicle in mm	W	
		H	
		L	

2. BATTERY CHARGER

1.	Type	
2.	Output voltage for trickle charge	Volts
3.	Steady state regulation of output voltage trickle to full load	\pm %
4.	Output voltage for input voltage fluctuation	
(a)	$\pm 10\%$	%
(b)	$\pm 15\%$	%
5.	Ripple content (%)	%
6.	Current limit value	Amp
7.	Input voltage at which battery charger switches off	
(a)	Maximum	Volts
(b)	Minimum	Volts
8.	Maximum switch on inrush current	Ampere
9.	Battery charger overload protection (type)	
10.	Efficiency	%
11.	How is the effect of harmonics on input voltage minimised?	

3. OSCILLATOR

1.	Type of oscillator (RC, crystal, etc.)	
2.	Stability:	
(a)	With oscillator supply fluctuation	\pm %
(b)	Temperature variation	\pm °C
(c)	Number of power supplies in parallel redundancy	
3.	Number of batteries from which oscillator is fed	
4.	Minimum time synchronise to mains frequency	sec

4. INVERTER

1.	Maximum continuous power output (kVA)	KVA
2.	Nominal output voltage	Volts
3.	Maximum harmonic content	%
4.	Nominal input voltage:	
(a)	Maximum	Volts
(b)	Nominal	Volts
(c)	Minimum	Volts
5.	Input current at full load	Ampere
6.	Input power factor at full load	Lagging
7.	Efficiency at full load	%
8.	Overload protection	

5. STATIC SWITCH

	Does switch comply to clause 3.2.2.12	
1.	Describe electronic switch	
2.	Minimum power factor at which switches will operate satisfactorily	
3.	How does switch derive operating signal ?	
4.	Maximum break time for switchover	ms

6. BATTERIES

1.	Manufacturer	
2.	Country of origin	
3.	Type	
4.	Type No	
5.	Total number of cells	
6.	Number of cells per inverter	
7.	Battery voltage (float conditions)	Volts
8.	Battery voltage (Boost charge)	Volts
9.	Capacity (rated for time required)	Ah at
		Hrs
10.	Battery time offered under load conditions specified in Clause 2.17 Part 2) and (Clause 3.2.2.5 (Part 3)	Minutes
11.	Maximum output current	Ampere

12.	Cell voltage under float conditions	Volts
13.	Cell conditions under boost conditions	Volts
14.	Cell voltage at start of discharge and full inverter load	Volts
15.	Cell voltage at end of discharge period	Volts
16.	Expected lifetime of batteries	Years
17.	Time to charge to 90% capacity	Hrs
18.	Total time to charge to 100% capacity	Hrs
19.	Material of supporting framework	
20.	Finish of framework	
21.	Dimensions of each cell	W
		H
		L
22.	Design of positive plate of cell	
23.	Rating of fused isolator	Ampere
24.	Cell configuration	

7. SYSTEMS ABOVE 200kVA

1.	No of shelves	
2.	No of rows/shelves	
3.	No of tiers/shelves	
4.	Shelf length	
5.	Shelf height (incl. Batteries)	

**NOTE : ALL BATTERY CALCULATIONS INCLUDING CURVES SHALL BE INCLUDED IN
THE TENDER**

8. DETAILS OF MANUFACTURE OF UPS

1.	Manufacturer	
2.	Address	
3.	Country of origin	
4.	Make or trade name of equipment	
5.	Manufacture's type no.	
6.	Is tenderer an accredited agent ?	YES/NO
7.	Furnish details of maintenance and repair service facilities which can be rendered.	

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

Part C4: Site Information

Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building
Request for Replacement of 4 UPS

C4 Site Information

PG-03.1 (EC) SITE INFORMATION – GCC 3rd Edition (2015)

Project title:	<i>Pretoria Central Home Affairs Pretoria Regional Office: New Cooperation (BVR) Building Request for Replacement of 4 UPS</i>		
Tender no:	PT24/064	WCS no:	056608
Reference no:			

C4 Site Information

The BVR BUILDING FOR THE DEPARTMENT OF HOME AFFAIRS is located at **184 Jeff Masemola St, Pretoria Central, Pretoria, 0001**. The UPS room is situated on the ground floor at the back of the building opposite the parking bays.

The BVR Building site is in Gauteng Province (see Locality Map):

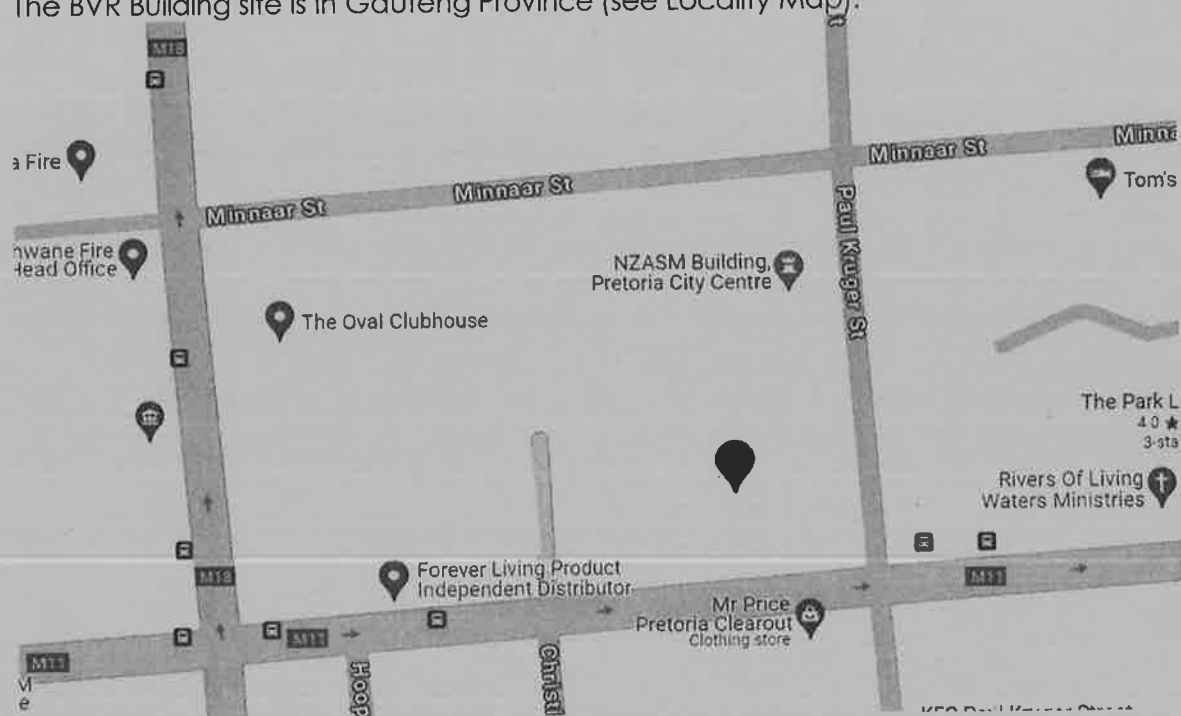


Figure 1: Google Earth Locality Map – 184 Jeff Masemola St, Pretoria Central, 0001