



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

Tender Document For

Mokopane Home Affairs – Request for Installation Of Additional 144 000 Litre Water Tank.

Project Manager

John Serepo

Department of Public Works & Infrastructure
Private Bag x9469
Polokwane 0700
071 679 8478

Mechanical Engineer /PA

Mr Alex Marais

ZUTARI (PTY) LTD Polokwane 0700
BAOBAB CORNER,
CLIVICOLA STREET
POLOKWANE, 0700
082 856 2136

Civil & Structural Engineer

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071 772 5499

Electrical Engineer

Mr Shane Palackal
Department of Public Works
060 986 3280
Khanimamba Ndlovu
066 282 6962

NAME OF TENDERER:

TENDER AMOUNT:



EXPANDED PUBLIC WORKS PROGRAMME

TENDER No. PLK24/28

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

PLEASE TAKE NOTE
CLOSING TIME: 11:00

BID NUMBER: PLK24/28
CLOSING DATE: 03/07/2024

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

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

TENDER DOCUMENTS MAY BE POSTED TO

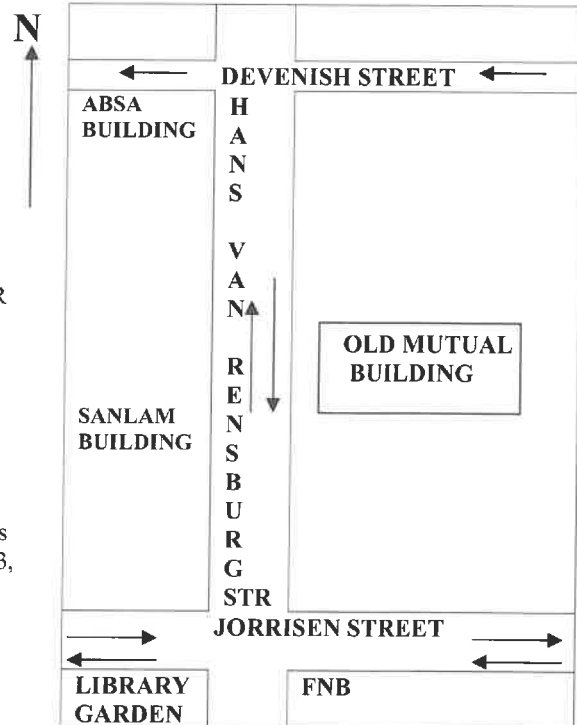
REGIONAL MANAGER
Department of Public Works
Private Bag X 9469
POLOKWANE
0700

ATTENTION: TENDER SECTION: ROOM 03, GROUND FLOOR

Tender documents that are posted must reach the Department of Public Works before the closing date of the tender.

OR

The tender documents may be deposited in the tender box which is identified as the tender box of the Department of Public Works which is located at 78 Hans van Rensburg Street, Old Mutual Building, Room 03, Ground Floor.



The tender box at the Regional Office: Department of Public Works: POLOKWANE is open (**Mondays to Fridays 07:30 – 12:15 / 13:00 – 16:00.**) However, if the tender is late, it will as a rule not be accepted for consideration.

Tenderers should ensure that tenders are delivered timeously to the correct address.

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

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

SUBMIT EACH TENDER IN A SEPARATE SEALED ENVELOPE.

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

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

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

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES TENDERS FOR:

Project title:	Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.
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Tender no:	PLK24/28	Reference no:	
Advertising date:	27/06/2024	Closing date:	03/07/2024
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 **4 ME** or **4 ME*** 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 **Not applicable Not applicable PE** or **Not applicable Not applicable 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:
1. Work Force 1 Contractor to provide proof of work force to execute the project. Copies of trade test certificate in Diesel Mechanic, Plumbing and Electrical and ID of the certificate holder must be attached. Trade test certificates for all 3 trades must be attached in order for bidders to score functionality points.	15
1.1. Artisan (Diesel Mechanic) 1 Artisan = 5 points	
1.2. Artisan (Plumbing) 1 Artisan = 5 points	10
1.3. Artisan (Electrician) 1 Artisan = 5 points	10
2. Management 1 Project Manager or Site Agent or Site Foreman to attach qualifications in Engineering Environment (Qualification in Civil or Mechanical or Electrical Engineering) and ID copy of the certificate holder.	20
2.1 National Diploma NQFL 6 and above = 5 Points 2.2 Higher Certificate NQFL 5 = 4 Points 2.3 Technical Matric Certificate NQFL 4 = 3 Points 2.4 N3 Certificate NQFL 3 = 2 Points 2.5 N2 Certificate NQFL 2 = 1 Point	

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.

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<p>3. Management 2</p> <p>Contractor to provide completion letter or certificate of previous similar projects (Mechanical Engineering fields project) with reference for verifications not older than 10 years and the projects must be minimum of R 3 000 000.00 and above.</p> <p>No combined completion letters will be considered</p> <p>Similar Completed Projects</p> <p>3 completion letters = 5 points 2 completion letters = 4 points 1 completion letters = 3 pointss</p>	<p>20</p>
<p>4. Utility Vehicle</p> <p>Contractor to provide evidence of vehicle registration certificate with minimum loading capacity of 1 ton or more. The vehicle must be registered under the name of the company or the owner of the company.</p> <p>3 vehicles = 5 points 2 vehicles = 4 points 1 vehicle = 3 points</p>	<p>15</p>
<p>5. Financial Credibility</p> <p>Provide stamped bank rating letter from banking institute to justify credit risk. The letter should not be older than 3 months from tender closing date.</p> <p>Credit rating of A = 5 points Credit rating of B = 4 points Credit rating of C = 3 points Credit rating of D = 2 points Credit rating of E = 1 point</p>	<p>10</p>
<p>Total</p>	<p>100 Points</p>

(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)

<p>Minimum functionality score to qualify for further evaluation:</p>	<p>60</p>
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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 functionality minimum score for construction contractors is imposed as 75 or 60 as per Directive 1 of 2015 "Guideline for the application of functionality"
Item 4.1.1 "The following Standard Criteria will be used as Functionality for evaluation of Construction Projects, with the minimum acceptable score being 75 or 60 dependent on the complexity of the project)

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:

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

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<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 type="checkbox"/>	Submission of DPW-16 signed by the authorised official and completion of bid briefing attendance register. insert motivation why the tender clarification meeting is declared compulsory
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"/>	Attach a Trade test In Millwright and ID of the certificate holder.
11	<input checked="" type="checkbox"/>	Registration on National Treasurys central Data Base (CSD)
12	<input checked="" type="checkbox"/>	All individuals that are not born in South Africa and that are working or are employees or are directors / trustees / shareholders / members of a business in Republic of South Africa must submit the permanent residence certificate or relevant permit that are as follows (In terms of Section 15, Section 19, Section 23 and Section 25 of Immigration Act No: 13 of 2002 as amended and must abide by the terms and conditions of Section 43 of Immigration Act No: 13 of 2002 as amended) or they must submit the relevant permit (In terms of Section 22 permit or Section 24 permit or "Certification" or Section 27 of Refugee Act No: 130 of 1998 as amended) or they must submit Neutralisation Certificate (In terms of section 5 of the South African Citizenship Act no: 88 of 1995 as amended). The concerned bidder must also submit a signed original stamped letter from the Immigration Section of the Department of Home Affairs Offices that will confirm that the above mentioned documents (permits or certificates) in terms of the above mentioned acts are authentic. No assessment of Section 43 of Immigration Act No: 13 of 2002 as amended will be performed on this tender in the absence of requested information/ relevant permit or certificate and will therefore render the tender as unacceptable and excluded from any and all further consideration.
13	<input type="checkbox"/>	Specify other responsiveness criteria
14	<input type="checkbox"/>	Specify other responsiveness criteria
15	<input type="checkbox"/>	Specify other responsiveness criteria

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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 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"/>	Submission of a PA 29 (EC): List of returnables documents
14	<input checked="" type="checkbox"/>	Submission of a PA 09 (EC): List of returnables documents
15	<input type="checkbox"/>	Specify other responsiveness criteria
16	<input type="checkbox"/>	Specify other responsiveness criteria
17	<input type="checkbox"/>	Specify other responsiveness criteria
18	<input type="checkbox"/>	Specify other responsiveness criteria

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

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

<input checked="" type="checkbox"/>	<p>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.</p> <p>Table 1</p> <table border="1"> <thead> <tr> <th>Serial No</th><th>Specific Goals</th><th>Preference Points Allocated out of 20</th><th>Documentation to be submitted by bidders to validate their claim</th></tr> </thead> <tbody> <tr> <td>1.</td><td>An EME or QSE which is at least 51% owned by black people (Mandatory)</td><td>10</td><td> <ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. </td></tr> <tr> <td>2.</td><td>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)</td><td>2</td><td> <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. </td></tr> <tr> <td>3.</td><td>An EME or QSE or any entity which is at least 51% owned by black women (Mandatory)</td><td>4</td><td> <ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. </td></tr> <tr> <td>4.</td><td>An EME or QSE or any entity which is at least 51% owned by black people with disability (Mandatory)</td><td>2</td><td> <ul style="list-style-type: none"> SANAS Accredited BBBEE Certificate or Sworn Affidavit where applicable. <p>and</p> </td></tr> </tbody> </table>	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>
Serial No	Specific Goals	Preference Points Allocated out of 20	Documentation to be submitted by bidders to validate their claim																		
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			<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.

☐ **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>

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				<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. <p>Or</p> <p>National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).</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).

6. BID EVALUATION METHOD

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

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

<input checked="" type="checkbox"/> 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 specify period between 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:

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

Criterion 3: Suitably qualified and appropriately experienced human resources

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

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

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

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

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

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The 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 **N/A**. A non-refundable bid deposit of **R N/A** 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 **not compulsory**

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".

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

Venue:	New Mokopane Home Affairs		
Virtual meeting link:	N/A		
Date:	02/07/2024	Starting time:	10h00

11. ENQUIRIES

11.1. Technical enquiries may be addressed to:

DPWI Project Manager	John Serepo	Telephone no:	015 291 6344
Cellular phone no	071 679 8478	Fax no:	
E-mail	john.serepo@dpw.gov.za		

11.2. SCM enquiries may be addressed to:

SCM Official	Thato Morifi	Telephone no:	015 293 8012
Cellular phone no	067 597 2277	Fax no:	
E-mail	Thato.morifi@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).

Tender documents may be posted to: The Director-General Department of Public Works and Infrastructure Private Bag X 9469 Polokwane 0700 Attention: Procurement section: Room 10	OR	Deposited in the tender box at: 77 Hans Van Rensburg , Polokwane Old Mutual Building 0700 room 10
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DPW-03 (EC): TENDER DATA

Project title:	<i>Mokopane Home Affairs - Installation of 144 000 Liter Water Tank.</i>
Reference no:	

Tender / Quotation no:	PLK24/28	Closing date:	03/07/2024
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: PLK24/28

C.1.4	<p>The Employer's agent is:</p> <table border="1"> <tr> <td>Name:</td> <td>John Serepo</td> </tr> <tr> <td>Capacity:</td> <td>Departmental Project Manager</td> </tr> <tr> <td>Address:</td> <td>77 Hans Van Renburg Polokwane</td> </tr> <tr> <td>Tel:</td> <td>071 679 8478</td> </tr> <tr> <td>Fax:</td> <td>Insert fax of agent</td> </tr> <tr> <td>E-mail:</td> <td>john.serepo@dpw.gov.za</td> </tr> </table>	Name:	John Serepo	Capacity:	Departmental Project Manager	Address:	77 Hans Van Renburg Polokwane	Tel:	071 679 8478	Fax:	Insert fax of agent	E-mail:	john.serepo@dpw.gov.za
Name:	John Serepo												
Capacity:	Departmental Project Manager												
Address:	77 Hans Van Renburg Polokwane												
Tel:	071 679 8478												
Fax:	Insert fax of agent												
E-mail:	john.serepo@dpw.gov.za												
C.2.1 C.3.11	<p>A. ELIGIBILITY IN RESPECT OF CIDB REGISTRATION:</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> <ol style="list-style-type: none"> 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 4 ME or 4 ME** class of construction work; and 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> <ol style="list-style-type: none"> every member of the joint venture is registered with the CIDB; the lead partner has a contractor grading designation in the 4 ME or 4 ME** class of construction work; and 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 4 ME or 4 ME** 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>												

Tender no: PLK24/28

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
1. Work Force 1 Contractor to provide proof of work force to execute the project. Copies of trade test certificate in Diesel Mechanic, Plumbing and Electrical and ID of the certificate holder must be attached. Trade test certificates for all 3 trades must be attached in order for bidders to score functionality points. 1.1. Artisan (Diesel Mechanic) 1 Artisan = 5 points	15
1.2. Artisan (Plumbing) 1 Artisan = 5 points	10
1.3. Artisan (Electrician) 1 Artisan = 5 points	10
2. Management 1 Project Manager or Site Agent or Site Foreman to attach qualifications in Engineering Environment (Qualification in Civil or Mechanical or Electrical Engineering) and ID copy of the certificate holder. 2.1 National Diploma NQFL 6 and above = 5 Points 2.2 Higher Certificate NQFL 5 = 4 Points 2.3 Technical Matric Certificate NQFL 4 = 3 Points 2.4 N3 Certificate NQFL 3 = 2 Points 2.5 N2 Certificate NQFL 2 = 1 Point	20
3. Management 2 Contractor to provide completion letter or certificate of previous similar projects (Mechanical Engineering fields project) with reference for verifications not older than 10 years and the projects must be minimum of R 3 000 000.00 and above. No combined completion letters will be considered Similar Completed Projects 3 completion letters = 5 points 2 completion letters = 4 points 1 completion letters = 3 points	20
4. Utility Vehicle Contractor to provide evidence of vehicle registration certificate with minimum loading capacity of 1 ton or more. The vehicle must be registered under the name of the company or the owner of the company.	10

3 vehicles	= 5 points	
2 vehicles	= 4 points	
1 vehicle	= 3 points	
Total		100 Points

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

Minimum functionality score to qualify for further evaluation:	60
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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	<p>Official Municipal Rates Statement which is in the name of the bidder.</p> <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.

			Or
			<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.

☒ **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 <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.

☐ **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. <p>Or</p> <p>National Council for Persons with Physical Disability in South Africa registration (NCPDPSA).</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).

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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 specify period between 10 years.

The tendering Service Provider's experience on comparable projects during the past specify period between 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;

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	<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

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C.2.12	<p>If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements. A tenderer may submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. Provided that the tenderer's main tender offer is according to specification and would under normal circumstances be recommended for acceptance, his alternative tender offer may also be considered for the purpose of the award of the contract.</p> <p>Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.</p> <p>Alternative tender offer permitted: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
C.2.13.2	The list of Returnable Documents identifies which of the documents a tenderer must complete when submitting a tender offer. The tenderer must submit his tender offer by completing the Returnable Documents, signing the "Offer" section in the "Form of Offer and Acceptance" and delivering the Returnable Documents back to the Department.
C.2.13.5	The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are as per Notice and Invitation to Tender T1.1.
C.2.13.6 C.3.5	A two-envelope procedure will not be followed.
C.2.15	The closing time for submission of tender offers is as per Notice and Invitation to Tender T1.1.
C.2.16	The tender offer validity period is as per Notice and Invitation to Tender T1.1.
C2.16.3	Omit the wording of the last sentence for those projects which are subject to CPAP
C.2.18	<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	Access shall be provided for inspections, tests and analysis as may be required by the Employer.
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:</p> <p>SCM office 78 Hans Van Rensburg Polokwane 0700</p>
C.3.8	The words "responsive tender" and "acceptable tender" shall be construed to have the same meaning.

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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.

PA-09 (EC): LIST OF RETURNABLE DOCUMENTS

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>		
Tender / Quotation no:	PLK24/28	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
Submission of Bidder's disclosure (PA-11)	3 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 – 16.1)	5 Pages	Yes
Declaration Certificate for Local Production and Content for designated sectors (PA – 36 and Annexure/s C)	N/A	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
Proof of 30% Subcontracting participation and related documents in terms of the Preferential Procurement Regulations 2017 <i>(if applicable)</i> .	N/A	

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

Tender / Quotation no: PLK24/28

2. ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

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

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

3. RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

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

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

4. OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

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

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

Tender document name	Number of pages issued	Returnable document
Priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts)	31 Pages	<input checked="" 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

Tender / Quotation no: PLK24/28

Tender document name	Number of pages issued	Returnable document
	Pages	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Pages	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Pages	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

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

Signed by the Tenderer

Name of representative	Signature	Date

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

Project title:	Mokopane Home Affairs – Request for Installation of Additional 144000 Litre Water Tank.		
Tender / Quotation no:	PLK24/28	Reference no:	

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Mokopane Home Affairs – Request for Installation of Additional 144000 Litre Water Tank.

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

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

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

Company or Close Corporation: And: Whose Registration Number is: And: Whose Income Tax Reference Number is: CSD supplier number:.....	OR	Natural Person or Partnership: Whose Identity Number(s) is/are: Whose Income Tax Reference Number is/are: CSD supplier number:.....
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*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 / Quotation no: PLK24/28

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

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

*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 / Quotation no: PLK24/28

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

Other Contact Details of the Tenderer are:

Telephone No..... Cellular Phone No.....

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

*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 / Quotation no: PLK24/28

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

WITNESSED BY:

Name of witness	Signature	Date

Schedule of Deviations

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

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION
2022



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

**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 type="checkbox"/> 80/20	<input type="checkbox"/> 90/10
PRICE		
SPECIFIC GOALS		
Total points for Price and Specific Goals	100	

1.5 Breakdown Allocation of Specific Goals Points

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

All Acquisitions

Table 1

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

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION 2022

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

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

All Acquisitions

Table 2

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI)	10	ID Copy Or SANAS Accredited BBBEE Certificate or sworn affidavit where applicable Or CSD Report

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION 2022

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
			Or CIPC (company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	Office Municipal Rates Statement Or Permission To Occupy from local chief in case of rural areas (PTO) Or Lease Agreement
3.	An EME or QSE or any entity which is at least 51% owned by women	4	ID Copy Or CSD Report Or CIPC (company registration)
4.	An EME or QSE or any entity which is at least 51% owned by people with disability	2	Medical Certificate Or South African Social Security Agency (SASSA) registration Or National Council for Persons with Physical Disability in South Africa registration (NCPDASA)
5.	An EME or QSE or any entity which is at least 51% owned by youth .	2	ID Copy Or CSD Report Or CIPC (company registration)

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION 2022

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

All Acquisitions

Table 3

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

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION 2022

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
5. <input type="checkbox"/>	<p>OR</p> <p>An EME or QSE or any entity which is at least 51% owned by youth.</p> <p>(only one specific goal is applicable between specific goal number 4 and specific goal number 5 under 90/10 Preference Point System)</p>		<p>South African Social Security Agency (SASSA) registration</p> <p>Or</p> <p>National Council for Persons with Physical Disability in South Africa registration (NCPDPSA)</p> <p>ID Copy</p> <p>Or</p> <p>CSD Report</p> <p>Or</p> <p>CIPC (company registration)</p>

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

2. DEFINITIONS

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

5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1,2 and 3 above as may be supported by proof/ documentation stated in the conditions of this tender:

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION 2022

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

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

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

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

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

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

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

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

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION 2022

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)
4. An EME or QSE or any entity which is at least 51% owned by people with disability	2	2		
or				
5. An EME or QSE or any entity which is at least 51% owned by youth .*		2		
(only one specific goal is applicable between specific goal number 4 and specific goal number 5 under 90/10 Preference Point System)				

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

DECLARATION WITH REGARD TO COMPANY/FIRM

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

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium

One-person business/sole propriety

Close corporation

Public Company

Personal Liability Company

(Pty) Limited

Non-Profit Company

State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm,

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION
2022

certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

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

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

PA-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.

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

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- 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

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".

For External Use

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PA- 29: CERTIFICATION OF INDEPENDENT BID DETERMINATION

Project title:	Mokopane Home Affairs - Request for Installation of Additional 144000L Water Tank.		
Bid no:	PLK22/28	Reference no:	

INTRODUCTION

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

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

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

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Institution)

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

I certify, on behalf of: _____ that:

(Name of Bidder)

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

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

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

Name of Bidder	Signature	Date	Position

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

PA-14: MEDICAL CERTIFICATE FOR THE CONFIRMATION OF PERMANENT DISABLED STATUS

Project title:	<i>Mokopane Home Affairs _ Installation of 144 000 Liter water tank</i>		
Tender / Bid no:	<i>PLK24/28</i>	Reference no:	

I, _____ (surname and name),
identity number, _____ do hereby declare that I am a registered medical
practitioner, with my practice number being _____, practising at

(Physical or postal addresses)
declare that I have examined Mr. / Ms. _____,
identity number _____ and have found the said person to be
permanently disabled or having a recurring disability.

"Disability" means, in respect of a person, a permanent impairment of a physical, intellectual, or sensory
function, which results in restricted, or lack of, ability to perform an activity in the manner, or within the
range, considered normal for a human being." –

The nature of the disability is as follows:

Thus signed at _____ on this _____ day of _____ 20____

Signature _____

Date _____

OFFICIAL STAMP OF
MEDICAL PRACTITIONER

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
1			
2			
3			
4			
5			
6			
7			
8			
9			
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12			
13			
14			
15			
16			

17			
18			
19			
20			

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

Note:

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

ENTERPRISE STAMP



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

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

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

Held at _____ (place)

on _____ (date)

RESOLVED that:

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

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

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

(Project description as per Bid /Tender Document)

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

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

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

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

Physical address: _____

_____ (code)



Postal Address: _____

_____ (code)

Telephone number: _____

Fax number: _____

	Name	Capacity	Signature
1			
2			
3			
4			
5			
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15			

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

Note:

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

ENTERPRISE STAMP

PA-15.3: SPECIAL RESOLUTION OF CONSORTIA OR JOINT VENTURES

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

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

Held at _____ (place)

on _____ (date)

RESOLVED that:

RESOLVED that:

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

(Project description as per Bid /Tender Document)

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

PA-15.3: Special Resolution of Consortia or Joint Ventures

B. *Mr/Mrs/Ms: _____

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

and who will sign as follows: _____

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

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

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

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

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

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

Physical address: _____

_____ (Postal code) _____

Postal Address: _____

_____ (Postal code) _____

Telephone number: _____

Fax number: _____

PA-15.3: Special Resolution of Consortia or Joint Ventures

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
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15			

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

Note:

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

PA- 40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

Tender no: PLK24/28

Name of Tenderer

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

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

Name and Surname #	Identity/ Passport number and Citizenship##	Percentage owned	Black	Indicate if youth	Indicate if woman	Indicate if person with disability	Indicate if living in Rural (R) / Under Developed Area (UD) / Township (T) / Urban (U).	Indicate if military veteran
1.		%	<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

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".
Effective date 20 September 2021

PA- 40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

Tender no: PLK24/28

2. DECLARATION:

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

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

Signed by the Tenderer

Name of representative	Signature	Date

DPW-16 (EC): SITE INSPECTION MEETING CERTIFICATE

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>		
Tender / Quotation no:	<i>PLK24/28</i>	Reference no:	
Closing date:	<i>03/07/2024</i>		

This is to certify that I, _____ representing

_____ in the capacity of

_____ visited the site on: **'02/07/2024**

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

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

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>			
Tender / quotation no:	PLK24/28	Closing date:	03/07/2024	
Advertising date:	27/06/2024	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 commence-ment date	Contractual completion date	Current percentage progress
1						
2						
3						
4						
5						
6						
7						
8						

Tender no: **PLK24/28**

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 commence-ment date	Contractual completion date	Date of Certificate of Practical Completion
1						
2						
3						
4						
5						
6						
7						
8						
9						

Name of Tenderer	Signature
	Date

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

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>		
Tender no:	<i>PLK24/28</i>	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>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>		
Tender no:	<i>PLK24/28</i>	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:	
------------------------------	--



DPW-22 (EC): PARTICULARS OF ELECTRICAL CONTRACTOR

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>		
Tender no:	PLK24/28	Reference no:	

Name of Electrical Contractor:	
Address:	
Electrical Contractor registration number at the Department of Labour	

Name of Tenderer	Signature	Date

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

Project title:	<i>Mokopane Home Affairs - Request for Installation of 144 000 Liter Water Tank.</i>			
Tender no:	PLK24/28	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 <i>[]</i> 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 <i>PG01.1 (EC) – Scope of Works</i> for detailed description
The Scope is installation of a 144 000 Liter water tank.	

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A 2.0 Site [1.1.1.29]

Erf / stand number	75 pretorius Street
Site address	75 Pretorius street
Township / Suburb	Mokopane
City / Town	Mokopane
Province	Limpopo
Local authority	Mogalakwena Municipality
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	John.serepo@dpw.gov.za	Telephone	071 679 8478
Postal address	Private Bag x 9469 Polokwane 0700		
Physical address	77 Hans Van Rensburg Polokwane 0700 i		

A 3.2 Employer's Representative:

Name	John Serepo	Telephone number	015 291 6344
E-mail	John.serepo@dpw.gov.za	Mobile number	071 679 8478
Postal address	Private Bag x 9469 Polokwane 0700		
Physical address	77 Hans Van Rensburg Polokwane 0700		

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A 4.0	Employers Agent/s		
A 4.1	Principal Agent [1.1.1.16]	Discipline	Mechanical Engineer

Name	Zutari PTY LTD		
Legal entity of above	Zutari PTY LTD	Contact person	Mr Alex Marais
Practice number		Telephone number	082 856 2136
Country	South Africa	Mobile number	
E-mail	Alex.Marais@zutari.com		
Postal address	BAOBAO CORNER CLIVICOLA STREET POLOKWANE 0700		
Physical address	BAOBAO CORNER CLIVICOLA STREET POLOKWANE 0700		

A 4.2	Agent [1.1.1.16]	Discipline	Civil Engineer
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Name	Lubisi Consulting Engineer		
Legal entity of above	Lubisi Consulting Engineer	Contact person	Mr Tichaona Chikukwa
Practice number		Telephone number	
Country	South Africa	Mobile number	071 772 5499
E-mail	tichaona@lubisi.co.za		
Postal address	20 Brander Street Nelspruit 1200		
Physical address	20 Brander Street Nelspruit 1200		

A 4.3	Agent [1.1.1.16]	Discipline	Structural Engineer
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Name	Lubisi Consulting Engineer		
Legal entity of above	Lubisi Consulting Engineer	Contact person	Mr Tichaona Chikukwa
Practice number		Telephone number	
Country	South Africa	Mobile number	071 772 5499
E-mail	tichaona@lubisi.co.za		
Postal address	20 Brander Street Nelspruit 1200		
Physical address	20 Brander Street Nelspruit 1200		

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A 4.4	Agent [1.1.1.16]	Discipline	Electrical Engineer
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Name	Department of Public Works		
Legal entity of above	Department of Public Works	Contact person	Shane Palackal
Practice number		Telephone number	
Country	South Africa	Mobile number	060 986 3280
E-mail	shane.palackal@dpw.gov.za		
Postal address	Private Bag x 9469 Polokwane 0700		
Physical address	Private Bag x 9469 Polokwane 0700		

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	insert postal address insert suburb insert town insert postal code		
Physical address	insert physical address insert suburb insert town insert postal code		

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	insert postal address insert suburb insert town insert postal code		
Physical address	insert physical address insert suburb insert town insert postal code		

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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	insert postal address insert suburb insert town insert postal code		
Physical address	insert physical address insert suburb insert town insert postal code		

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	insert postal address insert suburb insert town insert postal code		
Physical address	insert physical address insert suburb insert town insert postal code		

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	insert postal address insert suburb insert town insert postal code		
Physical address	insert physical address insert suburb insert town insert postal code		

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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)	
DPW-05: (EC): GCC 2015: 3RD EDITION	30
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	1
Specifications issued with the tender	
Schedules issued with the tender	
Bills of Quantities issued with the tender	31
Addenda as issued during tender stage, if applicable	As issued

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B 5.0 Employer's agents [3.0]

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

Principal Agent

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

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%	Not 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%	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

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Public liability insurance [8.6.1.3]	R 5 000 000	Applicable
Ground support insurance [8.6.1.4]	R Eng / PQS to determine value	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: It is a Home Affairs office in operation.	
Restriction of working hours [5.8]	Applicable
If applicable, description: Normal working time 8h00 to 16h00. outside this arrangements should be made.	
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: Certain areas cannot be accessed.	

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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



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The contract period is determined as follows (Period/s indicated in months):	
Period to submit contractual obligatory documents including submission and approval of health and safety plan by the appointed Health & Safety Agent	1 months
Period to obtain Construction Permit from Department of Labour upon approval of the Health & Safety Plan by the appointed Health & Safety Agent	1 Months
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]	3 months
Period to achieve Completion [5.14.4]	5 Months
Defect liability period up to and including issuing Final Approval Certificate in months [5.16.1]	12
Total Contract Period	17 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 .	Applicable
The date for practical completion for the works as a whole shall be the period in months as indicated, starting from the date of Access to and Possession of the site by the contractor inclusive of all special non-working days and builders' holiday shut down periods [1.1.1.14, 5.4.1, 5.14.1]	insert construction period as per B12.1 or N/A if Works in portions are applicable
Notification period for inspection in working days by the principal agent.	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]	R 375.00
Penalty amount per calendar day for late Practical Completion , excluding VAT. [5.13].	R 3750.00
Penalty amount per calendar day for late Completion [5.14.4, 5.13]: Thirty percent (30%) of penalty amount per calendar day for late Practical Completion, excluding VAT.	R 1125.00
Penalty amount per calendar day for late Final Completion (Issuing of Final Approval Certificate) [5.16, 5.13]: Fifteen percent (15%) of penalty amount per calendar day for late Practical Completion, excluding VAT.	R 562.50

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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]					insert construction period as per B12.1 or N/A if Works as a whole is applicable	
Penalty for late Practical Completion, <i>if completion in sections is required</i> , 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	
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
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13.4	Training on electrical, security and mechanical installations if contractually required
13.5	Maintenance / operating manuals
13.6	
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	
14.4	Electrical equipment (e.g. emergency generators, electronic switchgear, etc..)
14.5)
14.6	
14.7	
14.8	
14.9	
14.10	

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B 13.0 Payment [6.10]

Date of month for issue of regular payment certificates Refer [6.10.1]	25 th
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

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

CONTRACT SPECIFIC DATA	
The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third Edition (2015) are applicable to this Contract:	
CLAUSES	COMPULSORY DATA
1.1.1.8	Amend Clause 1.1.1.8 to include the word “rights” to read as follows: “Contract Data” means the specific data which, together with these General Conditions of Contract, collectively describe the rights, risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract.
1.1.1.9	Add to Clause 1.1.1.9 the following: “If the Contractor constitutes under the Law of the Republic of South Africa (B2.0) a joint venture, consortium or other unincorporated grouping of two or more persons: (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract; (b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.”
1.1.1.13	Amend Clause 1.1.1.13 as follows: “Defects Liability Period” means the period stated in the Contract Data, commencing on the date indicated on the Certificate of Completion for the works as a whole or Certificates of Completion in the event of more than one Certificate of Completion is issued for different parts of the Works, during which the Contractor has both the right and the obligation to make good defects in the materials, Plant and workmanship covered by the Contract. Defects Liability Period is: 12 months . The Defects Liability Period for the works shall commence on the calendar day following the date of the Certificate of Completion for the works as a whole or Certificates of Completion in the event of more than one Certificate of Completion is issued for different parts of the Works and end at midnight (00:00) three hundred and sixty five days (365) calendar days from the date of the Certificate of Completion.
1.1.1.14	Amend Clause 1.1.1.14 as follows: “Due Completion Date” means the date of expiry of the time stated in the Contract Data for achieving Practical Completion of the Works, calculated from the date of Access to and Possession of Site date (5.4.1) and as adjusted by such extensions of time or acceleration as may be allowed in terms of Contract (5.12).
1.1.1.15	The name of the Employer: Refer to A 3.1 [CD]
1.1.1.16	The name of the Employer’s Representative: Refer to A 3.2 [CD]
1.1.1.17	The name of the Employer’s Agent: Refer to A 4.0 and B 5.0 [CD]

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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.

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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;

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	<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>

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3.3.2.2.3	Add to Clause 3.3.2.2.3 the following: All oral communication must be reduced into writing to be binding on the parties.
3.3.2.2.4	Add to Clause 3.3.2.2.4 the following: All oral communication must be reduced into writing to be binding on the parties.
3.3.3.2	Amend Clause 3.3.3.2 to insert the word "plant" to reads as follows: Notwithstanding any authority assigned to him in terms of Clauses 3.3.2 and 3.3.4, failure by the Employer's Agent's Representative to disapprove of any work, workmanship, plant or materials shall not prejudice the power of the Employer's Agent's thereafter to disapprove thereof and exercise any of his powers in terms of the Contract in respect of thereof.
4.4.4	Ref Clause 3.2.3.
4.4.6	Not applicable to this Contract.
4.8.2.1	Amend Clause 4.8.2.1 to include the word "person", as follows: Makes available to the Employer, or to any such contractor, person or authority, any roads or ways for the maintenance of which the Contractor is responsible, or
4.8.2.2	Amend Clause 4.8.2.2 to include "Employer" and "contractors", as follows: Provides any other facility or service of whatsoever nature to the Employer or to any of the said contractors, persons or authorities,
4.12.3	Add to Clause 4.12.3 the following: All oral communication must be reduced into writing to be binding on the parties.
5.3.1	Add to Clause 5.3.1: The documentation required before commencement with Works execution are: <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>Work Permit</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 enter or "not exclusive" to the Contractor. In the event of access to, and possession of, the Site is not exclusive to the Contractor, the following limitations apply: this is an home affairs office currently in operational.

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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.

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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 <i>(Select urban area from Statistical News Release, P0141, Table A)</i></p> <p>The applicable industry for the Construction Material Price Index for materials / plant is insert name of industry. <i>(Select the applicable industry from Statistical News Release, P0151.1, Tables 2,4,5)</i></p> <p>The area for the Producer Price Index for fuel is insert name of area. <i>(Select the area from Statistical News Release, P0142.1, Table 1.)</i></p> <p>The base month is insert month insert year. <i>(The month prior to the closing of the tender.)</i></p>

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6.8.3	Price adjustments for variations in the costs of special materials are not allowed.
6.9.1	Replace Clause 6.9.1 with the following: "Plant and materials will only be certified and paid for upon furnishing proof of ownership by the contractor. Once paid, material and goods shall become the property of the Employer and shall not be removed from site without the written authority of the Employers Agent.
6.10.1	Add at end of Clause 6.10.1 The contractor shall provide the Employer's Agent every month, on dates as agreed between parties / instructed by the Principal Agent, with the following information: (a) Monthly Local content report, (b) EPWP / NYS payment register, labour reports and certified ID document of EPWP/ NYS beneficiaries, Contract between Contractor and EPWP/ NYS beneficiaries, attendance register. (if applicable) (c) Tax Invoice (d) Labour intensive report (e) Contract participation goal reports (f) Updated construction programme (g) Revised cash flows
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is: 85 % .
6.10.3	The limit of retention money is dependent on the security to be provided by the Contractor in terms of Clause 6.2.1.
6.10.4	Replace "28 days" with "30 days" provided all required documents including an invoice have been submitted and are correct in all respects.
6.10.5	Replace Clause 6.10.5 with the following: <u>In respect of contracts up to R2 million and in respect of contracts above R2 million where the Contractor elects a security by means of a 10% retention, 50% of the retention shall be released to the Contractor when the 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.</u> <u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or fixed guarantee of 5% of the Contract Sum (excl. VAT) and a 5% retention of the Value of the Works (excl. VAT), the cash deposit or fixed guarantee, whichever is applicable, shall be refunded to the Contractor or return to the guarantor, respectively, when the 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.</u> <u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or a variable guarantee of 10% of the Contract Sum (excl. VAT), the cash deposit or the variable guarantee, whichever is applicable, will be reduced to 5% of the Value of the Works (excl. VAT) when the 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.</u>

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6.10.6.2	<p>Replace Clause 6.10.6.2 with the following:</p> <p>"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).</p>
6.10.9	Ref Clause 3.2.3.
7.2.1	<p>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.</p>
7.5.3	<p>Add the following to Clause 7.5.3</p> <p>"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".</p>
7.9.1	<p>Insert the following at the end of Clause 7.9.1:</p> <p>Provided that, should the Contractor on demand not pay the amount of such costs to the Employer, such amount may be determined and deducted by the Employer from any amount due to or that may become due to the Contractor under this or any other previous or subsequent contract between the Contractor and the Employer.</p>
8.2.2.1	<p>Insert the following as a second paragraph to Clause 8.2.2.1:</p> <p>The Contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works, failing which the Employer may cause same to be done and recover the reasonable costs associated therewith from the Contractor.</p>
8.3.1.10	<p>Replace Clause 8.3.1.10 with the following:</p> <p>"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".</p>
8.4.3	<p>Add the following as Clause 8.4.3:</p> <p>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.</p>
8.6.1	<p>Replace Clause 8.6.1 with the following:</p> <p>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]</p>
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.

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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>

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	<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>

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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>

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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>

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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: PLK24/28

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: PLK24/28

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: PLK24/28

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	The preliminaries shall be adjusted in accordance with the allocation of preliminaries amounts provided by the contractor , apportioned to sections where completion in sections is required
	Fixed - An amount which shall not be varied.
	Value-related - An amount varied in proportion to the contract value as compared to the contract sum . Both the contract sum and the contract value shall exclude the amount of preliminaries , contingency sum(s) and any provision for cost fluctuations. Time-related - An amount varied in proportion to the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4].
Option B	The adjustment of preliminaries shall be based on the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4]. The adjustment shall take into account the resources as set out in the detailed breakdown of the preliminaries for the period of construction during which the delay occurred.

Failure to provide particulars within the period stated

Option A	Where the allocation of preliminaries amounts for Option A is not provided, the following allocation of preliminaries amounts shall apply: Fixed - Ten per cent (10%) Value-related - Fifteen per cent (15%) Time-related - Seventy-five per cent (75%)
	Where the apportionment of the preliminaries per section is not provided, the categorised amounts shall be prorated to the cost of each section within the contract sum as determined by the principal agent
Option B	Where the detailed breakdown of preliminaries amounts for Option B is not provided, Option A shall apply

DPW-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

John Serepo
Private Bag x9469
Polokwane
0700

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: **insert Contract / Tender No**, for the **Mokopane Home Affairs - Installation of a 144 000l water tank** (hereinafter referred to as the “**contract**”) for the sum of R _____, (**insert amount in words**), (hereinafter referred to as the “**contract sum**”).

I / We, _____
in my/our capacity as _____ and hereby
representing _____ (hereinafter referred to as the “**guarantor**”) advise that the **guarantor** holds at the **employer's** disposal the sum of R **insert amount**, (**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

John Serepo
Private Bag x9469
Polokwane
0700

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: **insert Contract / Tender No**, for the **Mokopane Home Affairs - installation of a 144 000L water tank**. (hereinafter referred to as the “**contract**”), for the sum of R _____, (**insert amount in words**), (hereinafter referred to as the “**contract sum**”).

I / We, _____

in my/our capacity as _____ and hereby

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

Contract/Tender No: **insert Contract / Tender No**

5. The **employer** shall have the absolute right to arrange his affairs with the **contractor** in any manner which the **employer** deems fit and the **guarantor** shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the **guarantor**. Without derogating from the 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-23 (EC): SCHEDULE FOR IMPORTED MATERIALS AND EQUIPMENT

Project title:	Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.		
Tender no:		Reference no:	

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

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

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

These net amounts will be adjusted as follows:

FORMULA:

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

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

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



INSTALLATION OF 144 000 LITER WATER TANK

SUMMARY OF BILLS OF QUANTITIES

P + G's	:	PRELIMINARY AND GENERAL	R	-
BILL NO 1	:	GENERAL ITEMS	R	-
BILL NO 2	:	FIRE AND DOMESTIC WATER BOOSTER PUMPS AND WATER STORAGE TANK INSTALLATION	R	-
BILL NO 3	:	EXTERNAL WORKS AND WATER RETICULATION	R	-
BILL NO 4	:	ADDITIONAL ITEMS	R	-
BILL NO 5	:	MOKOPANE TANK ELECTRICAL INSTALLATION	R	-
BILL NO 6	:	INSTALLATION OF 144KL STEEL TANK - CIVIL WORKS	R	-
BILL NO 7	:	INSTALLATION OF 144KL STEEL TANK - STRUCTURAL WORKS	R	-
BILL NO 8	:	OHS REQUIREMENTS	R	-
TOTAL OF BILL OF QUANTITIES			R	-
SUBTOTAL			R	-
15% VAT			R	-
TOTAL CARRIED TO FORM OF OFFER AND ACCEPTANCE			R	-

BILLS OF QUANTITIES

FIRE AND DOMESTIC WATER BOOSTER PUMP AND WATER STORAGE FACILITY

INSTALLATION

PRELIMINARY AND GENERAL

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PART 1A: PRELIMINARY AND GENERAL				
	The agreement is to be the General Conditions of Contract (GCC 2015) (Third Edition), Published by the SA Institution of Civil Engineering.				
	The preliminaries are to be the Construction and management requirements for works contracts - Part 1: General engineering and construction works (SANS 1921 -1: 2004 Edition 1) prepared by Standards South Africa and shall be deemed to be incorporated herein.				
	Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary.				
	Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading.				
	Where any item is not relevant to this specific contract such items is marked N/A (signifying "not applicable").				
	Adjustment of the preliminaries: each item priced, is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time.				
	Time (T) related Preliminaries will only be adjusted for omissions or additions, issued by the Employer, or delays caused by the Employer, for which variation and extension of time has been granted.				
	SECTION A: GENERAL CONDITIONS OF CONTRACT				
A1	General (Clause 1)				
	F: V: T:	Item	1		
A2	Basis of Contract (Clause 2)				
	F: V: T:	Item	1		
A3	Engineer (Clause 3)				
	F: V: T:	Item	1		
A4	Contractor's General Obligation (Clause 4)				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
A5	Time and Related Matters (Clause 5)				
	F: V: T:	Item	1		
A6	Payment and Related Matters (Clause 6)				
	F: V: T:	Item	1		
A7	Quality and Related Matters (Clause 7)				
	F: V: T:	Item	1		
A8	Risk and Related Matters (Clause 8)				
	F: V: T:	Item	1		
A9	Termination of Contract (Clause 9)				
	F: V: T:	Item	1		
A10	Claims and Disputes (Clause 10)				
	F: V: T:	Item	1		
	SECTION B: SANS 1921-1:2004 (Edition 1): CONSTRUCTION AND MANAGEMENT REQUIREMENTS FOR WORKS CONTRACTS: PART 1				
B1	Scope				
	F: V: T:	Item	1		
B2	Normative references				
	F: V: T:	Item	1		
B3	Definitions				
	F: V: T:	Item	1		
B4	Requirements for construction and management				
	F: V: T:	Item	1		
B4.1	General				
	F: V: T:	Item	1		
B4.2	Responsibilities for design and construction				
	F: V: T:	Item	1		
B4.3	Planning, programme and method statements				
	F: V: T:	Item	1		
B4.4	Quality assurance				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
B4.5	Settling out				
	F: V: T:	Item	1		
B4.6	Management and disposal of water				
	F: V: T:	Item	1		
B4.7	Blasting				
	F: V: T:	Item	1		
B4.8	Works adjacent to services and structures				
	F: V: T:	Item	1		
B4.9	Management of the works and site				
	F: V: T:	Item	1		
B4.10	Earthworks				
	F: V: T:	Item	1		
B4.11	Testing				
	F: V: T:	Item	1		
B4.12	Materials, samples and fabrication drawings				
	F: V: T:	Item	1		
B4.13	Equipment				
	F: V: T:	Item	1		
B4.14	Site establishment				
	F: V: T:	Item	1		
B4.15	Survey control				
	F: V: T:	Item	1		
B4.16	Temporary works				
	F: V: T:	Item	1		
B4.17	Existing services				
	F: V: T:	Item	1		
B4.18	Health and safety				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
B4.19	Environmental requirements				
	F: V: T:	Item	1		
B4.20	Alterations, additions, extensions and modifications to existing works				
	F: V: T:	Item	1		
B4.21	Inspection of adjoining structures, services, buildings and property.				
	F: V: T:	Item	1		
B4.22	Attendance on nominated and selected subcontractors				
	F: V: T:	Item			N/A
	SECTION C: SCOPE OF WORK IN ACCORDANCE WITH SANS 10403				
	(The reference to clauses refer to table B.1 of SANS 1921-1:2004)				
C1	Certification by recognised bodies - (Clause 4.4)				
	F: V: T:	Item	1		
C2	Agreement - (Clause 4.5)				
	F: V: T:	Item	1		
C3	Other services and facilities - (Clause 4.8)				
	F: V: T:	Item	1		
C4	Recording of weather - (Clause 5.2)				
	F: V: T:	Item	1		
C5	Management meetings - (Clause 5.3)				
	F: V: T:	Item	1		
C6	Daily records - (Clause 5.6)				
	F: V: T:	Item	1		
C7	Permits - (Clause 5.9)				
	F: V: T:	Item	1		
C8	Proof of compliance with the law - (Clause 5.10)				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
	SECTION D: SPECIFICATION DATA ASSOCIATED WITH SANS 1921-1:2004 (Table A.1)				
D1	Requirements for drawings, information and calculations for which the contractor is responsible - (Clause 4.1.7)				
	F: V: T:	Item	1		
D2	The planning, programme and method statements- (Clause 4.3)				
	F: V: T:	Item	1		
D3	Samples of materials, Workmanships and finishes - (Clause 4.12.1)				
	F: V: T:	Item	1		
D4	Fabrication drawings that the contractor is to provide and deliver to the employer - (Clause 4.12.2)				
	F: V: T:	Item	1		
D5	Office for the foreman - (Clause 4.14.3)				
	F: V: T:	Item	1		
D6	Telephone - (Clause 4.14.3)				
	F: V: T:	Item	1		
D7	Office for inspector of works - (Clause 4.14.3)				
	F: V: T:	Item			N/A
D8	Telephone in office for inspector of works - (Clause 4.14.3)				
	F: V: T:	Item			N/A
D9	Provision and erection of signboards - (Clause 4.14.6)				
	F: V: T:	Item			N/A
D10	Termination, diversion or maintenance of existing services - (Clause 4.17.1)				
	F: V: T:	Item	1		
D11	Services which are known to exist - (Clause 4.17.3)				
	F: V: T:	Item	1		
D12	Detection apparatus - (Clause 4.17.4)				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
D13	Additional health and safety requirements - (Clause 4.18)				
	F: V: T:	Item	1		
	SECTION E: SPECIFIC PRELIMINARIES				
	(Section E contains specific preliminaries items which apply to this contract except where "N/A" (Not applicable) appears against the item.				
E1	WORKING OVER THE WEEKEND				
	Contractor to make allowance to work over the weekend in order to allow for the disconnection of utilities and the connection of the generator. The weekend to be used for disconnection and connection and must be communicated to the Department two weeks in advance.				
	F: V: T:	Item	1		
E2	SITE INSTRUCTIONS				
	Site instructions issued on site are to be recorded in triplicate in a Site Instruction book which is to be maintained on site by the Contractor				
	F: V: T:	Item	1		
E3	PLANT RECORD				
	At every site meeting, the Contractor shall provide the Engineer/Principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.				
	F: V: T:	Item	1		
E4	SITE OFFICE				
	The Contractor is to allow for the provision and removal of a site office in accordance with the Principal Agent's requirements. To accommodate 6 persons.				
	F: V: T:	Item	1		
E5	TRADE NAMES				
	Wherever a Trade Name for any product has been described in the Bill of Quantities, the Bidder's attention is drawn to the fact that any other product of equal quality may be used, subject to the written approval of the Principal Agent being obtained prior to the closing date for the submission of the Bids.				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
E6	INACCURATE AND DEFECTIVE WORK EXECUTED UNDER PREVIOUS CONTRACT				
	The contractor shall, after taking possession of the site and before commencing the work, check all levels, liners, profiles and the like and satisfy himself as to the dimensional accuracy of all work executed under the previous contract which may affect his work.				
	Should any inaccurate or detective work be found, the contractor shall immediately notify the principal agent in writing requesting his instructions with regard thereto and afford every facility to those rectifying such inaccurate or defective work.				
	F: V: T:	Item	1		
E7	VIEWING THE SITE IN SECURITY AREAS				
	If the site is situated in a security area and the bidder must arrange with the Authorities to obtain permission to enter the site for Bidding purposes.				
	F: V: T:	Item	1		
E8	COMMENCEMENT OF WORKS IN SECURITY AREAS				
	If the works falls within a security area, the contractor must arrange with the Authorities and give the necessary notices before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account.				
	F: V: T:	Item	1		
E9	ENTRANCE PERMITS TO SECURITY AREAS				
	If the works falls within a security area, the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which be issued from the time to time regarding the protection of persons and property under the control of the Authority.				
	F: V: T:	Item	1		
E10	PROHIBITION ON TAKING PHOTOGRAPHS				
	In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking photographs, except when authorised thereto by or on behalf of the Minister				
	The same prohibition is also applicable to all Correctional Institutions in terms of article 44.1 of the Correctional Services Act 8 of 1959.				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
E11	TOILET FACILITIES				
	Allow for the supply and removal of portable toilet facilities. The contractor is to maintain the cleanliness of the facilities throughout the contract period. The contractor must provide enough toilets for his/her entire workforce.				
	F: V: T:	Item	1		
E12	MANAGEMENT OF WATER				
	Water for Construction purposes must be obtained from alternative water sources (i.e. supply other than water that is produced and distributed by a regulated water service authority from a licensed water treatment works for human consumption), e.g. dams, rivers, boreholes, springs, rainwater harvesting, recycled sewerage water, etc. The alternative water source shall not be of an inferior quality/ standard than that required for construction purposes. The client reserves the right through his agents to test such supplies or request certificates confirming the grade and nature of the water supply. Relevant knowledge of the respective area will be an advantage.				
	F: V: T:	Item	1		
E13	OCCUPATIONAL HEALTH AND SAFETY ACT & CONSTRUCTION REGULATIONS				
	It is required of the Contractor to thoroughly study the Health and Safety specification that must be read together with and is deemed to be incorporated under this section of the Bill of Quantities. Provision for pricing thereof is made under items E12.1 to E12.15 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained.				
	The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety specification is compulsory. In the event of partial or total non-compliance, the Principal Agent, notwithstanding the provisions of Clause 6 of Section 1: Preliminaries (Part A) or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the Contractor provides satisfactory proof of compliance. The Contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.				
	All references hereafter are to Regulations of the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993).				
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
	The contractor shall, in submitting his bid, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and the Construction Regulations.				
	F: V: T:	Item	1		
E13.1	NOTIFICATION OF CONSTRUCTION WORK (Construction Regulations 3)				
	The contractor shall, before commencing work, notify the Department of Labour of the intend construction work in terms o Regulation 3. The Contractor shall submit the notification in writing, on the appropriate form, prior to commencement of work.				
	F: V: T:	Item	1		
E13.2	HEALTH AND SAFETY PLAN (Construction regulations 5.4)				
	The Contractor shall provide and demonstrate to the Principal Agent a suitable and sufficiently documented health and safety plan based on the Act, Construction Regulations and the health and safety specification, which shall be applied from the date of commencement of and for the duration of the construction work. The Contractor shall ensure that a copy of the health and safety plan is available on request to an employee, inspector, sub contractor or principal agent all in terms of Regulation 5.				
	F: V: T:	Item	1		
E13.3	REGISTRATION WITH THE COMPENSATION FUND (Construction Regulations 5.3 f)				
	The Contractor shall provide proof of his registration and good standing with the Compensation Fund or a licensed compensation insurer prior to the commencement of work				
	F: V: T:	Item	1		
E13.4	HEALTH AND SAFETY FILE (Construction Regulation 5.7)				
	The contractor shall ensure that a health and safety file, which shall include all documentation required in terms of health and safety specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Principal Agent or inspector upon request. Upon completion of the works, the contractor shall hand over a consolidated health and safety file to the principal agent.				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
E13.5	SUPERVISION OF CONSTRUCTION WORK (Safety officers) (Construction Regulation 6)				
	The Contractor shall appoint a full-time competent employee in writing as the construction supervisor, with the duty of supervising the construction work.				
	The Contractor shall appoint a full-time or part-time construction safety officers in writing to assist in the control of all safety related aspects on the site. Such appointments are required to ensure that at all times the requirements of the Act and Construction Regulations are adhered to. Refer to Regulation 6.				
	F: V: T:	Item	1		
E13.6	RISK ASSESSMENT AND SAFETY POLICY (Construction Regulation 7)				
	Before commencing work the Contractor shall cause a risk assessment to be performed by a competent person appointed in writing and the risk assessment shall form part of the health and safety plan. A copy of the risk assessment shall be available on site at all times for inspection.				
	The Contractor shall at all time carry out the works in a manner to avoid the risk of bodily harm to persons or risk of damage to any property. He shall take all precautions regarding training of employees in any hazards and the related work procedures, health and safety induction training of employees, visitors or any other persons entering the site and provide personal protective equipment to all employees and visitors to site which are necessary and adequate to eliminate any conditions which contribute to the risk of injury to persons or damage to property in terms of Regulation 7.				
	F: V: T:	Item	1		
E13.7	SIGNIFICANT HAZARD IDENTIFICATION RISK ASSESSMENT PREPARED BY THE DESIGN CONSULTANTS				
	The Contractor shall allow for additional financial provision, if any , to take the necessary precautions regarding the significant hazards and risks identified and assessed by the design consultants.				
	F: V: T:	Item			N/A
E13.8	ADDITIONAL FINANCIAL PROVISION				
	The Contractor shall allow for additional financial provision, if any, to comply with the requirements of the Occupational Health and Safety Act (Act No 85 of 1993) and the Construction Regulations issued there under which have not been specifically elsewhere.				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
E13.9	FALL PROTECTION PLAN (Construction Regulation 8) The Contractor shall, before commencing any construction work submit a fall protection plan identified all steps to be taken in order to ensure the continued adherence to the fall protection plan and shall include a risk assessment of all work carried out from a relevant position. The fall protection plan shall form part of the health and safety plan and file.				
	F: V: T:	Item	1		
E13.10	PHYSICAL AND PSYCHOLOGICAL FITNESS (Construction Regulation 8.2 (b)) The Contractor and sub-contractor shall before commencing any construction work submit proof of his employees that shall carried out work from an elevated position their physical and psychological fitness and shall be recorded in the health and safety file.				
	F: V: T:	Item	1		
E13.11	CONSTRUCTION VEHICLES AND MOBILE PLANT (Construction Regulations 21) The Contractor and sub-contractors shall ensure that all operated workers received training and been certified competent to operate such vehicles, and are physical and psychological fit to operate such construction vehicles and mobile plants and shall be recorded in the health and safety file.				
	F: V: T:	Item	1		
E13.12	TRAINING (Construction Regulation 8 (c)) The Contractor and sub-contractor shall, before commencing any construction work, submit his training program of all his employees. This program shall form part of the health and safety plan.				
	F: V: T:	Item	1		
E13.13	DEMOLITION WORK (Construction Regulations 12) The Contractor shall, before any demolition work shall be carried out, submit all methods of demolition to be used. This method shall form part of the health and safety plan and file.				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
E13.14	REMOVAL AND DISPOSAL OF ASBESTOS				
	MATERIAL (Asbestos Regulation)				
	The principle contractor shall appoint a contractor that is registered with the Department of Labour as an AIA.				
	The contractor must allow for:				
	NOTIFICATION OF ASBESTOS PROCESSING				
	PERSONAL PROTECTIVE EQUIPMENT				
	PACKAGING AND TRANSPORT AND STORAGE TO DISPOSAL SITE				
	DEMOLITION WORK				
	LABELLING, INFORMATION, ETC.				
	F: V: T:	Item			N/A
E13.15	RISK COMPLIANCE AREAS (As Outlined In "Volume Three": Covid-19 Guidelines for Management of Risk on Construction Sites and Covid-19 addendum (Item 1-12) attached to Health and Safety specification)				
	· Disinfection of the workplace at regular intervals as outlined within the Guidelines "Annexure A"				
	Workplace Preparation Procedure;				
	· Ensure Staff and Security Staff have PPEs (i.e. masks, gloves, sanitizers, etc.)				
	· Installed thermal scanners to check temperature of all staff and visitors. Ensure training of Security Staff for use of thermal scanners. Register to be implemented for staff and visitors to site with identification criteria "ID number, Name, Age, Health Status and Contact details";				
	· Isolation room identified/constructed on site;				
	· Ensure sanitizers and soap are available in locker rooms for staff;				
	· Ensure staff or visitors are wearing masks before entering;				
	· Ensure social distance on site;				
	· Notification about the restriction of the number of people allowed on site at one time;				
	· Disinfection of rooms for meetings and strictly keeping to social distancing and wearing masks;				
	· Plans to rotate work force on percentage allowable on site to comply with regulations;				
	· Permits issued by Authorising Authority for Work Force and vehicles for Cross Provincial and District Borders				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
E14	IMPLEMENTATION OF LABOUR-INTENSIVE INFRASTRUCTURE PROJECTS UNDER THE EXPANDED PUBLIC WORKS PROGRAMME (EPWP)				
	The contractor shall comply with all the requirements of the "Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes" issued in terms of the "Basic Conditions of Employment Act, 1997 (Act No 75 of 1997)" and the related "Ministerial Determination", for the employment of locally employed temporary workers on a labour intensive infrastructure project under the Expanded Public Works Programme (EPWP)				
	The contractor shall maintain daily records with regard to the workers employed and shall, on a monthly basis, submit a report (Contract, ID Copy, Attendance register, Proof of payment) to the principal agent in the prescribed format. Compulsory indicators such as the project budget, actual project expenditure, number of job opportunities created, demographic characteristics of workers employed, minimum daily wage rate, number of person-days of employment created and number of training person-days, shall be included in said report, all as defined in the "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)"				
	Provision for pricing of compliance with the aforementioned is made under this clause and it is explicitly pointed out that all that all requirements in respect of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained				
	F: V: T:	Item	1		.
E14.1	DECLARATION - EPWP PROGRAMME				
	The contractor must adhere to all rules, regulations and requirements regarding the EPWP programme, specifically but not limited to the following:				
	1. Labour intensive construction methods (LIC)				
	1.1 Comply to implementation of LIC BOQ items specified elsewhere in the tender documents				
	2. Recruitment and placement of EPWP NYS (Not Applicable)				
	2.1 Recruitment, placement and exposure training of 25 (Twenty five) participants				
	2.2 Comply to EPWP BOQ specifications and code of good practice				
	3. Recruitment and placement of local labourers				
	3.1 Recruitment and placement of minimum 5 (Five) local labourers				
	3.2 Comply with applicable wage order/determination or agreement, in terms of labour relations act or wage act				
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
	4. Comply with EPWP monthly reporting requirements				
	Monthly prepare and submit below EPWP reports attached to monthly payments certificate				
	4.1 All employees and EPWP participants contracts				
	4.2 All employees and EPWP participants certified SA ID copies				
	4.3 All employees and EPWP attendance register				
	4.4 All employees and EPWP proof of payment				
	4.5 EPWP reports populated on standard templates				
	5. Penalties for non compliance				
	Acknowledge non compliance of R3000-00 (Three thousand rand) per month per participant				
	F: V: T:	Item	1		
E15	HIV/AIDS AWARENESS				
	It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the Bills of Quantities. Provision for pricing of HIV/AIDS awareness is made under items E14.1 to E14.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained				
	The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment				
E15.1	AWARENESS CHAMPION				
	Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification				
	F: V: T:	Item	1		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT FORWARD				
E15.2	AWARENESS WORKSHOPS				
	Selection and appointment of a competent Service Provider approved by the principal agent, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multimedia techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification				
	F: V: T:	Item	1		
E15.3	POSTERS, BOOKLETS, VIDEOS, ETC.				
	Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period, all in accordance with the HIV/AIDS Specification				
	F: V: T:	Item	1		
E15.4	ACCESS TO CONDOMS				
	Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period, all in accordance with the HIV/AIDS Specification				
	F: V: T:	Item			
E15.5	MONITORING				
	Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification				
	F: V: T:	Item	1		
E16	CONSTRUCTION VEHICLES FOR DELIVERY OF EQUIPMENT				
	Allow for vehicles such as truck cranes, forklifts, etc. for the moving of the generator into place and delivery of other necessary equipment for the project.				
	F: V: T:	Item	1		
E17	ALTERNATE POWER SUPPLIES FOR CONSTRUCTION				
	Allow for the supply of portable generators and/or other alternate power supplies for construction equipment in the event of power failure on the premises.				
	F: V: T:	Item	1		
	CARRIED FORWARD TO SUMMARY				

BILLS OF QUANTITIES
FIRE AND DOMESTIC WATER BOOSTER PUMP AND WATER STORAGE FACILITY INSTALLATION
BILL No. 1 – GENERAL ITEMS

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1.1	Drawing and equipment approval:				
	.1 The complete submission of detailed equipment and material list, data, catalogue information, capacity selection information and manufacturing details, prior to ordering and commencement of construction, for approval by the Engineer	sum	1		R -
	.2 The complete production and submission of three sets of detailed dimensioned and co-ordinated installation and manufacturing drawings for all installations, systems and equipment to the Engineer for approval prior to placement of any orders or commencement of construction	sum	1		R -
	.3 The submission and obtaining all drawing and installation approvals from the Local Authorities	sum	1		R -
	.4 Co-ordination of the complete installation relative to other services including the mechanical, electrical and fire services, as well as structure	sum	1		R -
1.2	Commissioning, inspection and testing:				
	.1 Pressure testing of all fire water pipe installations and related equipment	sum	1		R -
	.2 Inspection and Certification of the complete domestic water booster pump and water storage facility installations as complying with the Local Authorities requirements and all relevant codes and regulations	sum	1		R -
	.3 Commissioning and handing over of complete installations and systems to the satisfaction of the Engineer	sum	1		R -
1.3	As-Built Drawings and Operating and Maintenance Manuals:				
	.1 Producing and supplying of three sets of operating and maintenance manuals for all systems and components of this installation for approval by the Engineer	sum	1		R -
	.2 Producing and supplying of three sets of as-built drawings, in hard copy as well as electronic format, for all systems and components of this installation for approval by the Engineer	sum	1		R -
1.4	Quality Assurance:				
	.1 Implementation and execution of an approved Quality Assurance system for the construction works	sum	1		R -
	TOTAL BILL No. 1: – Carried forward to Summary Page:				R -

BILL No. 2 - FIRE AND DOMESTIC WATER BOOSTER PUMP AND WATER STORAGE FACILITY INSTALLATION

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2.1	Packaged Domestic Water Booster Pump				
.1	Supply and Installation of a Packaged Pressure Control Fire water booster pump installation complete with: <ul style="list-style-type: none"> • 2 x diesel powered end suction centrifugal pump. • 1 x electrical powered jockey pump. • Galvanized steel headers, piping and fittings. • Valves, strainers, non-return valves, air release valves, pressure gauges etc. • Membrane type pressure-compensating vessels. • Automated electrical control panel fitted with multi-pump controller, switchgear, BMS signals, and all necessary control equipment. • Electrical wiring, cabling and pressure monitoring and control equipment • Pump system base mounting frame Pump system to comply with particular specification PMW consisting of 2 pumps of which 1 (diesel) will serve as standby pump and sized to provide a peak flow of 21.5 l/sec @ 7 Bar	sum	1		R -
.2	Delivery to site, off-loading, rigging into place, positioning and fixing of complete pump package	sum	1		R -
.3	Supply and Installation of a Packaged Pressure Control domestic water booster pump installation complete with: <ul style="list-style-type: none"> •centrifugal pumps. • Valves, strainers, non-return valves, air release valves, pressure gauges etc. • Membrane type pressure-compensating vessels. • Automated electrical control panel fitted with a level controller, switchgear, BMS signals, and all necessary control equipment. • Electrical wiring, cabling and pressure monitoring and control equipment • Pump system base mounting frame Pump system to comply with particular specification PMW consisting of 1 pump to provide a peak flow of 1.5 l/sec @ 3.5 Bar	sum	1		R -
.4	Delivery to site, off-loading, rigging into place, positioning and fixing of complete pump package	sum	1		R -
	Carried forward				R -

BILL No. 2 - DOMESTIC WATER BOOSTER PUMP AND WATER STORAGE FACILITY INSTALLATION

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	Brought forward				R -
2.2	Piping installation				
	.1 Supply and installation of all pipe work, fittings, and associated equipment inside plantroom between pump systems and storage tanks as per specification and detail drawings - Controls	sum	1		R -
	.2 Supply and installation of all valves, strainers, non-return valves, expansion bellows and associated equipment inside plantroom as per specification and detail drawings	sum	1		R -
	.3 Supply and Installation of water meter station on delivery side of pump discharge - 100 mm dia	sum	1		R -
	.4 Supply and installation of all tank supply pipe work, fittings, and associated equipment from municipal connection to fire water tanks as per specification and detail drawings	sum	1		R -
	.5 Supply and Installation of all drains pipe work from pump drip trays and suction header to drain point.	sum	1		R -
	.6 Supply and Installation of pipe connections to fire water tanks, etc complete with all fittings	sum	1		R -
	Carried forward				R -

BILL No. 2 - DOMESTIC WATER BOOSTER PUMP AND WATER STORAGE FACILITY INSTALLATION

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	Brought forward				R -
2.3	Electrical installation				
	.1 Supply, installation, testing and commissioning of cables, cable trays cable supports, cable ladders, cable glands, shrouds, accessories etc. for the complete sprinkler and fire pump installation	sum	1		R -
	.2 Supply and Installation of all the interlinking controls with the BMS system	sum	1		R -
2.4	Plant accessories				
	.1 Supply and installation of all required signage, notices, identification tags, labels etc in pump room and at storage tank as required by the local authority and specifications	sum	1		R -
	.2 Supply and installation of locking devices, such as pad locks, chains etc., Valves shall be locked in the operating position	sum	1		R -
	.3 Supply and installation of level indicator device to both tanks with indicators positioned inside pump room	sum	1		R -
2.5	Water Storage Tank and Ancillary Equipment				
	.1 Supply and installation of all ancillary equipment as specified in Particular Specification PMT and Detail Drawings	sum	1		R -
	.2 Supply and installation of Square steel panel water storage tank (ABECO or similar approved) as per Particular Specification PMT and Detail Drawings with a total capacity of 146 m³ Water Storage Tanks: Design, Supply, Installation, testing and commissioning of a Square Steel Panel tank, as per suppliers details and the requirements of SANS , specification document and detail drawings with a effective storage capacity of 146,000 litres. Maximum tank width = 4.88 meter Maximum tank Height = 4.88 meter Maximum Tank Length = 6.10 meter The installation shall include the following: •Installation of tank •Commissioning of Tanks •Tank pipe connections, flanges, spool pieces, Vortex Inhibitor, Vent •Tank Cat ladders and Access Hatches •Tank Level Gauge Indicator •Gear operated butterfly valves •Lifting Equipment Hire – Jacks •Transport of Tank Equipment •Automatic In-Fill Shut-off valves	sum	1		R -
	.3 Filling of tank, sterilizing flushing, testing cleaning and fill with fresh water and commissioning and handover of tank installation	sum	1		R -
	TOTAL BILL No. 2: – Carried forward to Summary Page:				R -

BILL No. 3 – EXTERNAL WORKS AND WATER RETICULATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO 3: EXTERNAL WORKS FIRE WATER RETICULATION</u> <u>PREAMBLES</u> Tenderers are advised to study the "Model Preambles for Trades" (2008 Edition), as published by the Association of South African Quantity Surveyors, which shall be deemed to be incorporated in these Bills of Quantities. <u>SUPPLEMENTARY PREAMBLES</u> <u>uPVC pressure pipes and fittings</u> Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings Pipes of 63mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints <u>High density polyethylene (HDPE) pipes and fittings</u> Pipes shall be type IV and of class 16 with fusion jointed class 16 HDPE type IV fittings Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc. will be entertained <u>Galvanised Mild Steel Pipes and Fittings</u> Pipes shall be medium grade with either groove-end, flanged or socketed in accordance with SANS 815 Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc. will be entertained <u>Fixing of pipes</u> Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1m below suspension level <u>Grades of Pipes and fittings</u> The grades of all pipes and fittings called for, whether indicated or not, shall conform to the minimum requirements as stipulated in "The National Building Regulations" and as tested by the SABS and also in compliance with any regulations by Local Authorities. <u>Scope and Descriptions</u> Welded joints of pipes, flanges on pipes and gasket bolt sets would not be measured separately, and would be deemed to be included in the description of pipes, fittings,				
	Carried forward			R	-

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE:					R -
	<p><u>Paper wrapping to pipes</u></p> <p>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings</p> <p><u>Disinfection of water pipework</u></p> <p>Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere)</p> <p><u>Densyl petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with 30% overlaps</p> <p>Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including mastic, tape, "Layflat" sheeting, securing of same, etc</p> <p>Prices for wrapping of pipes shall include for all work as described to couplings in the length</p> <p><u>Laying, backfilling, bedding, etc of pipes</u></p> <p>Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled</p> <p>Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following:</p> <p>SABS 1200L: Medium-pressure pipelines SABS 1200LD: Sewers SABS 1200LE: Stormwater drainage</p> <p>Pipe trenches, etc shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches)</p> <p>Pipes shall be bedded in accordance with Clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)</p> <p>Unless otherwise described bedding of rigid pipes shall be Class B bedding</p>				
	Carried forward				R -

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE:					R -
	<p><u>General</u></p> <p>Descriptions of pipes laid in and including trenches and of inspection chambers, catch pits, etc shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 95% Mod AASHTO density and disposal of surplus material on site</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>Soft rock and "hard rock" shall be as defined in "Earthworks"</p> <p><u>As-built drawings</u></p> <p>Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere)</p>				
Carried forward					R -

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE:					R -
	UNDERGROUND PIPE INSTALLATIONS				
	HDPE PN16				
	<u>HDPE PN16 fusion jointed pipes and fittings laid in ground not exceeding 1200mm deep including all excavation, flexible pipe imported bedding material, backfilling compaction to 95% Modified AASHTO dry density and including all necessary risk of collapse and dewatering etc.</u>				
3.1	110mm internal diameter	m	20	R	-
3.2	50mm internal diameter	m	24	R	-
	Extra over fittings				
3.3	110mm Bend or elbow	No	3	R	-
3.4	HDPE to steel adapter (50mm HDPE - 50mm steel)	No	1	R	-
	ABOVE GROUND PIPE INSTALLATIONS				
	<u>Medium class screwed type galvanised mild steel pipes with couplings, fixed to walls, slabs, columns, retaining walls, pedestals etc.</u>				
3.5	50mm diameter pipes	m	12	R	-
	Extra over 50mm diameter screwed type galvanised mild steel pipes for fittings				
3.6	Elbow or bend	No	2	R	-
3.7	Flange set complete	No	1	R	-
	VALVES AND ACCESSORIES				
	Valves in valve chambers connected to UPVC or HDPE pipes or fittings				
	<u>Approved cast iron valves with bronze rising spindles and handwheel, stainless steel trim fitted with and including flanged ends, bolts, gaskets, nuts, etc and jointing to flanged pipes or fittings</u>				
3.8	50mm diameter RSV gate valve	No	1	R	-
3.9	100mm diameter butterfly valve	No	1	R	-
	CONNECTION TO SITE RET PIPING AND EQUIPMENT				
3.10	Cut into existing 110 mm diameter uPvc pipe below ground with a 110 mm diameter take-off to new 110 mm diameter uPvc pipe below ground including T-Piece, couplings, jointing, testing, flushing, making good etc as per Engineers drawing.	No	1	R	-
3.11	Remove the existing 110 mm diameter tank infill supply piping and replace with new 50mm supply piping from pump set supply reticulation including T-Piece, couplings, jointing, testing, flushing, making good etc as per Engineers drawing.	No	1	R	-
	Carried forward			R	-

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE:					R -
	TESTING				
3.12	Allow for providing all necessary apparatus for and test the water/fire reticulation etc, in accordance with statutory requirements and as directed by the engineer and retesting after taking out and replacing any defective work to his entire satisfaction.	Item	2	R	-
	FLUSHING SYSTEM				
	<u>On completion of laying and testing, each domestic water line shall be disinfected as follows:</u>				
3.13	The pipe lines shall be flushed out with clean water until all sediment and other foreign matter have been removed. The pipe line shall be filled with water containing 0,15litres of calcium hypochlorite. The solution shall be allowed to flow slowly into the pipe line until it fills the whole pipe line and shall be left thus for at least 24 hours. The pipe shall then be thoroughly and repeatedly flushed with clean water until a sample of the wash water drawn from the pipe line complies with the requirements for potable water of the local authority or of the authority such water to the area	Item	2	R	-
TOTAL BILL No. 3: – Carried forward to Summary Page:					R -

BILL No. 4 - ADDITIONAL ITEMS

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5.1	The Tenders shall list below and price for any additional items not priced above that is necessary for a complete and fully operational system				
	TOTAL BILL No. 4: – Carried forward to Summary Page:				

BILL No. 5 - MOKOPANE TANK ELECTRICAL INSTALLATION

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7.1	General	Sum	1		R -
7.2	ELECTRICAL WORKS				
7.1.1	LOW VOLTAGE SUPPLY CABLES				
	Supply and install the following 600/1000V PVC/SWA/PVC cables with copper conductor to SABS 1507 laid vertically or horizontally in conduiting or ducting or clipped direct in accordance with the specifications and drawings, including fixing. (Termination elsewhere).				
7.1.1.1	10mm2 x 4 core SWA/PVC				
0.1	Supply	m	25	R	-
0.2	Install	m	25	R	-
7.1.1.2	25mm diameter PVC Sleeve				
0.1	Supply	m	25	R	-
0.2	Install	m	25	R	-
7.1.1.3	10mm2 Bare Copper Earth Wire				
0.1	Supply	m	25	R	-
0.2	Install	m	25	R	-
7.1.1.4	2,5mm2 GP wire				
0.1	Supply	m	50		
0.2	Install	m	50	R	-
7.1.1.5	2,5mm2 GP earth wire				
0.1	Supply	m	50	R	-
0.2	Install	m	50	R	-
7.1.2	CIRCUIT BREAKERS				
7.1.2.1	40A MCB 3ph 400V curve D	No.	2	R	-
7.1.2.2	Supply and install Loadshedding Contactor	No.	1	R	-
7.1.3	CABLE TERMINATIONS				
	Termination of LV cables as specified including connection of conductors, cable lugs, captive glands, shrouds, etc. for the following cable sizes.				
7.1.3.1	10mm2 x 4 core SWA/PVC	No.	3	R	-
7.1.3.2	10mm2 Bare Copper Earth Wire	No.	3	R	-
7.1.3.3	2,5mm2 GP wires	No.	5	R	-
	Carried forward				R -

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	Brought forward				R -
7.1.4	LIGHTING				
	Termination of LV cables as specified including connection of conductors, cable lugs, captive glands, shrouds, etc. for the following cable sizes.				
7.1.4.1	40W LED Vapourproof Light, 1599mm X 210mm, 5980lm or similar				
	0.1 Supply	No.	1		R -
	0.2 Install	No.	1		R -
7.1.4.2	One lever one way light switch				
	0.1 Supply	No.	1		R -
	0.2 Install	No.	1		R -
7.1.5	DISTRIBUTION BOARDS				
7.1.5.1	Label the circuits and the legend card. Issue a Supplementary/first Certificate of Compliance	No.	2		R -
7.1.6	LIGHTNING PROTECTION				
7.1.6.1	Design and install Lightning protection for the water tank including all testing, commissioning and issuing of certificates.	No.	1		R -
7.1.7	CIVIL WORKS				
	Civil works for electrical cables trenching				
7.1.7.1	Excavation and Filling				
7.1.7.1.1	Excavation and backfilling in soft soil	m³	14		R -
7.1.7.1.2	Excavation and backfilling in hard rock	m³	1		R -
7.1.7.1.3	Excavation and backfilling in pickable soil	m³	5		R -
7.1.7.1.4	Danger Tape	m	50		R -
7.1.7.1.5	Make Paving good	m²	30		R -
7.1.7.2	MAKING GOOD				
7.1.7.2.1	Provisional sum for builders work and making good after completing installations	Sum	1		R -
7.1.8	BUDGETARY ALLOWANCE				
	These provisional sums may be utilised in full or in part. No expenditure will be allowed without the authority of the Consulting Electrical Engineer, in writing.				
7.1.8.1	Allowance sum for unforeseen circumstances	Sum	1		R -
	TOTAL BILL No. 5: – Carried forward to Summary Page:				R -

BILL No. 6 - INSTALLATION OF 144KL STEEL TANK - CIVIL WORKS

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
8.1	CIVIL WORKS				
8.1.1	Trench excavation	m³	38	R	-
8.1.2	Import bedding granular material and compact 150mm thick from commercial source	m³	10	R	-
8.1.3	Supply, deliver and laying class 16 of 110 Upvc pipes complete with fittings,	m	80	R	-
8.1.4	Backfilling and compacting to 97% MOD AASHTO Density	m³	10	R	-
8.1.5	Pipeline testing	m	80	R	-
8.1.6	Supply and install UPVC 110mm connectors	No.	2	R	-
8.1.7	Supply 30MPA Concrete works for thrust blocks	m³	1	R	-
TOTAL BILL No. 6: – Carried forward to Summary Page:					R -

BILL No. 7 - INSTALLATION OF 144KL STEEL TANK - STRUCTURAL WORKS

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
9.1	STRUCTURAL WORKS				
9.1.1	DEMOLITION OF STEEL CARPORTS				
9.1.1.1	Dismantle the steel carports with flat roof, 7 x 7m on plan	m ²	49	R	-
9.1.1.2	Remove fixed steel columns 152.4x5.0 size	m	24	R	-
9.1.1.3	Remove steel roof rafters 160x80x4 size including purlins	m	30	R	-
9.1.1.4	Remove brick paving and stockpile	m ²	49	R	-
9.1.1.5	Demolish 600mm x 600mm x 600mm reinforced concrete footing (4No)	m ³	9	R	-
9.1.2	TANK PLATFORM				
9.1.2.1	Scarify and compact for tank foundation	m ²	49	R	-
9.1.2.2	Supply 150mm G5 Material, backfilling and compacting base tank foundation to 97% MOD AASHTO Density	m ³	10	R	-
9.1.3	TANK PLATFORM				
9.1.3.1	Cast 30MPA Concrete for tank slab and dwarf walls	m ³	11	R	-
9.1.3.2	Supply and fix reinforcement mild steel for the tank to structural concrete works	t	1	R	-
9.1.3.3	Supply and install 80x 6mm thick galvanised steel capping plate grouted	m	30.5	R	-
9.1.4	STEEL TANK SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
9.1.4.1	Smooth formwork to sides	m ²	5	R	-
9.1.4.2	Finishing top surfaces of concrete smooth with a wood float/steel trowel	m ²	30	R	-
TOTAL BILL No. 7: – Carried forward to Summary Page:					R -

BILL No. 8 - OHS REQUIREMENTS

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
10.1	STRUCTURAL WORKS				
10.1.1	A Health and Safety Files readily available that will include the list below?				
10.1.1.1	a. all according to attached site specific OHS specification. b. Notification of Construction Work in file. c. Letter of good standing valid and available. d. PPE and C relate to the specific project e. Medical fitness certificates f. and more	Sum	1	R	-
10.1.2	Registered OHS manager or officer to be permanent on site registered with SACPCMP to oversee OHS on site	Sum	1	R	-
TOTAL BILL No. 8: – Carried forward to Summary Page:					R -

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

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>		
Tender no:	PLK24/28	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

C3.3 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.

Part1 A contains a general description of the works, the site and the requirements to be met.

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

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

3.5.1 GENERAL

PS-1 PROJECT DESCRIPTION:

Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.

3.5.2 AMENDMENTS TO THE STANDARD AND PARTICULAR SPECIFICATION:

None

C3.5.3 PARTICULAR SPECIFICATIONS:

None

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, 2022, No. 40553 Government Gazette, 20 January 2022
- 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. 43495 Government Gazette, 3 July 2020

C3.7 CONTRACT PARTICIPATION GOALS AND CIDB BUILD PROGRAMME

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

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

MINIMUM THIRTY PERCENT (30%) MANDATORY SUBCONTRACTING TO SMMEs: IMPLEMENTATION OF PREFERENTIAL PROCUREMENT REGULATIONS 2017

30% Mandatory subcontracting is *not applicable* to this project.

It is the requirement of the employer that the contractor enhances the use of local Small, Micro and Medium Enterprises (SMME's) in executing this contract, irrespective whether the 30% Participation Goal is applicable or not.

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

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

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

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

- a. An EME or QSE
- b. An EME or QSE which is at least 51% owned by black people
- c. An EME or QSE which is at least 51% owned by black people who are youth
- d. An EME or QSE which is at least 51% owned by black people who are women
- e. An EME or QSE which is at least 51% owned by black people with disabilities
- f. An EME or QSE which is at least 51% owned by black people living in rural or underdeveloped areas or townships
- g. A co-operative which is at least 51% owned by black people
- h. An EME or QSE which is at least 51% owned by black people who are Military veterans
- i. More than one of the categories referred to in paragraphs (a) to (h).

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

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

- a. Possess relevant accreditation where applicable;
- b. Be registered with relevant bodies (CIDB, various Councils, etc.) where applicable;
- c. Possess necessary capabilities to deliver the sub-contracted work;
- d. Meet the requirements in terms of the stipulated designated groups; and
- e. Geographical located at the place where the project will be delivered. Geographical location must be determined using the following criteria:

- Relevant Ward. If not available;
- Relevant neighbouring Wards. If not available;
- Relevant Local Municipality. If not available;
- Relevant District Municipality. If not available;
- Relevant Metro. If not available;
- Relevant Province. If not available;
- Relevant Neighbouring Province. And If not available;
- Anywhere within the borders of South Africa .

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

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

C3.7.2 Minimum Targeted Local Material Manufacturer Contract Participation Goal

The Minimum Targeted Local Building Material Manufacturers CPG is *not 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 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 GREATER TUBATSE MUNICIPALITY , LIMPOPO, and provided that:

- (a) Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- (b) The nonavailability of such materials shall not adversely affect the desired progress of the specific works,
- (c) The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof,
- (d) Materials of at least 2% of the total value of materials purchased including VAT to be sourced from within 50km radius of the project site,
- (e) Material of at least 8% of the total value of materials purchased including VAT to be sourced from within 250km radius of the project site.

Failure to achieve the minimum ten percent (10%) Targeted Local Material Manufacturer participation expressed as a percentage of the original tender amount, excluding allowances and VAT, will result in a two percent (2%) penalty of the 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.

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

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

The Minimum Targeted Local Building Material Suppliers CPG is *not 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

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

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

Preference shall be given to the local material suppliers where feasible in the n/a

- (a) Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- (b) The none availability of such materials shall not adversely affect the desired progress of the specific works,
- (c) The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof,
- (d) Materials of at least two percent (2%) of the total value of materials purchased including VAT to be sourced from within 50km of the project site,
- (e) Material of at least eight percent (8%) of the total value of materials purchased including VAT to be sourced from within 250km of the project site.

Failure to achieve the minimum ten percent (10%) Targeted Local Material Manufacturer participation expressed as a percentage of the original tender amount, excluding allowances and VAT, will result in a two percent (2%) penalty of the 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.

Example: Total material to be purchased from local manufacturers = R 10 Million and only achieved a R8 Million CPG then the penalty = R2 Million x 2%.

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

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

The Minimum Targeted Local Labour Skills Development CPG is *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. 41237 of 10 November 2017, as amended in 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 Ward/s, Municipal District, Town, City, Province 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 thirty percent (30%) [insert percentage as determined by the feasibility study], 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.

C3.7.5 CIDB BUILD PROGRAMME: Minimum Targeted Enterprise Development Contract Participation Goal

The Minimum Targeted Enterprise Development CPG is *not 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 five percent (5%) of the contract amount as defined in the Standard (Tender amount, excluding allowances and VAT on selected contracts to be undertaken by joint-venture partners or to be sub-contracted to developing contractors that are also to be beneficiaries of enterprise development support from the main contractor.

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

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

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

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

C3.7.5.1 Criteria

The main or lead partner of the successful bidder shall:

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

C3.7.5.2 Management

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

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

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

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

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

C3.7.5.4 Format of Communications

The contractor shall submit to the Employer's Representative:

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

C3.7.5.5 The Key Personal

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

C3.7.5.6 Management Meetings

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

C3.7.5.7 Forms for contract administration

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

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

C3.7.5.8 Records

The contractor shall:

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

C3.7.5.9 Payment Certificates

The contractor shall:

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

C3.7.5.10 Compliance requirements

Non-compliance with the Best Practice Project Assessment Scheme

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

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

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

The Minimum Targeted Contract Skills Development CPG is *not 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 43495 of 3 July 2020, as amended in 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.

C3.7.6.1 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 listed in Table 1 above.

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

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

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 3 in the Standard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.

Table 3: Notional Cost of Training per Headcount

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.

- The successful contractor may employ part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates n/a directly or through a Skills Development Agency (SDA), (A1 - List of cidb accredited SDAs).
- 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 n/a) from eligible part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates n/a 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 n/a Occupational qualifications, trade qualification, work integrated learners – P1 and P2 learners, professional candidates n/a
- C3.7.6.2 Management

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

- (k) The successful contractor shall provide personal protective equipment (PPE) to all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (delete that which is not applicable) at the start of their employment on site.
- (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 n/a 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.

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

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. 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.

C3.7.8 LABOUR-INTENSIVE WORKS

Labour Intensive Works is *not 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. A twenty percent (20%) penalty of the value of the works will be imposed on items where unauthorised use of plant was used to carry out work which was to be done labour-intensively.

Labour-intensive competencies of supervisory and management staff:

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



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

C3.7.8.1 GENERIC LABOUR-INTENSIVE SPECIFICATION

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 2 be classified as very loose, loose, medium dense, or dense; or

ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) cohesive materials:

i) whose consistency when profiled may in terms of table 2 be classified as very soft, soft, firm, stiff and stiff / very stiff; or

ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note

1) A boulder is material with a particle size greater than 200mm, a cobble and gravel is material between 60 and 200mm.

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

Table 2: 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	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm;



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

Trench excavation

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

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

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

- a) to ninety percent (90%) Mod AASHTO;
- b) such that in excess of 5 blows of a dynamic 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)

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.

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

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>		
Tender / Quotation no:		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

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".
For Internal & External Use

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 of 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)

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.

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".

The contractor shall achieve in the performance of this contract the prescribed local content deliverables as listed in PA36 and annexures C thereto in the respective designated sectors as published by Department Trade Industry and Competition (DTIC). The Service Provider shall submit an accumulative monthly report 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 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 DTIC 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.
the final account.

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

Minimum Percentage Participation Goal Applicable Yes ☐ No ☐

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 C3.5.2. The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. 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.

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

Minimum Percentage Participation Goal Applicable Yes ☐ No ☐

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 C3.5.3. The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. 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.

C2.1.16.3 MINIMUM TARGETED LOCAL LABOUR CONTRACT PARTICIPATION GOAL

Minimum Percentage Participation Goal Applicable Yes ☐ No ☐

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 C3.5.4. The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. 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.

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

Minimum Percentage Participation Goal Applicable Yes ☐ No ☐

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 C3.5.5. The provisional amount allowed is for the appointment of training coordinator, mentor, training service providers and training of the beneficiary enterprises.

The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. 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.

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)

Minimum Percentage Participation Goal Applicable Yes ☐ No ☐

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 C3.5.6. 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 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 the award of the project and identification of the respective beneficiaries. The CPG value to be achieved

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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.

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.

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.

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: Notional Cost of Training; Headcount

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 remeasurable 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
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

National Youth Service Training and Development Programme Applicable Yes ☐ No ☐

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

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

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".

For Internal & External Use

Effective date 16 January 2023

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C2.1.16.7 LABOUR-INTENSIVE WORKS

Labour Intensive Works Applicable Yes ☐ No ☐

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

C2.2 Submission of Accrual Reports

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

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

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



PG-03.1 (EC) SITE INFORMATION – GCC 3rd Edition (2015)

Project title:	<i>Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.</i>			
Tender no:		WCS no:	056955	Reference no:

C4 Site Information

1. GENERAL

- (a) The Standard for Uniformity in Construction Procurement published in terms of the Construction Industry Development Board (CIDB) Act, 2000 (Act no. 38 of 2000), the Standardized Construction Procurement Documents for Engineering and Construction Works as issued by the CIDB and any other relevant documentation pertaining thereto must be studied and all principles in this regard must be applied to all procurement documentation, practices and procedures.*
- (b) The consultant(s)/project manager must acquaint themselves fully with all relevant matters pertaining to this section in order to enable prospective tenderers to price for all eventualities.*
2. *The following serves as a guideline only with regard to the type of items to be included in the Site Information. (Delete this instruction and re-number the items as required)*
 - (a) Describe nature of ground, surface conditions, water table as visible in test holes and other indisputable facts that may affect construction. Provide available data and information.*
 - (b) Specific requirements must be described in clause 12.1 of the Schedule of Variables, Section B, JBCC Preliminaries.*
 - (c) Describe in detail herein any additional site information such as site location, improvements on site, adjacent buildings, environmental issues, etc.*

Delete second page if not required



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*

Tick the block if Contractor satisfactorily complied with specifications

Tick the block if Contractor satisfactorily complied with specifications																					
DATE	PI			PI			PI			PI			PI			PI					
	D	D	M	M	D	D	M	M	D	D	M	M	D	D	M	M	D	D	M	M	PI
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																					

Please indicate the applicable number for the reporting period									
Workers on payroll (at PI)									
Sub-Contractors who will be on site for longer than 30 days (at PI)									
Workshop attendees									
Number of workshops held									
Scheduled workshops according to approved workshop plan									
Booklets distributed									
Male condoms distributed									
Female condoms distributed									

Representative/Agent

Contractor

Date

Date

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

HIV/AIDS AWARENESS PROGRAMME : WORKSHOP CONTENT ADDRESSED

Fill in the applicable information with regard to each workshop conducted																						
DATE	W/S			W/S			W/S			W/S			W/S			W/S			W/S			
	D	D	M	D	D	M	D	D	M	D	D	M	D	D	M	D	D	M	D	D	M	
Content of workshop: (Mark the content included)																						
	SLO1																					
	SLO2																					
	SLO3																					
	SLO4																					
	SLO5																					
	SLO6																					
SLO7																						
HIV/AIDS in construction video																						
Indicate the duration of the workshop in hours																						
Total number of Workers																						
Indicate workshop venue																						

HIV/AIDS AWARENESS PROGRAMME: ATTENDANCE REGISTER

[illegible]

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

Department:
Public Works
REPUBLIC OF SOUTH AFRICA

National Department of Public Works

(Principal Client)

Health and Safety Site Specific Specification

Submitted to:

Contractor: -----

FOR

Site: Mokopane Home Affairs – Installation of Additional 144000 Litre Water Tank.

Reference nr: 6015/0002

OFFICE OF THE REGIONAL MANAGER

DEPARTMENT OF PUBLIC WORKS

Private Bag X9469

POLOKWANE

0700

Date: 24 May 2024

Scope of work:

**The SANS 10400 –S :2011 must be used to construct the Disability Facility
INDEX:**

1. This specification document (Construction regulation 2014, (7)(c)(1))
2. The Safety File
3. The Safety File Index
4. Incident / Accident reports / Wcl 2
5. Safety Committee and Minutes
6. Monthly Safety Audit Reports (CR 2014 7(1)(c)(vii))
7. Letter of good standing (CR 2014 7(1)(c)(iv))
8. Health and Safety Organogram
9. contractor A's appointment letter as a Contractor
10. Legal Appointments
11. Operators Appointments (CR 2014 23(d)(i)(ii))
12. List of Plant on Site
13. List of Contractors on Site
14. Mandatory Agreement with contractor
15. Contractors Mandatory Agreements
16. Contractors Specification Documents (CR 2014 7(c)(i))
17. Contractors Appointment Letters (CR 2014 7(c)(v))
18. Contractors Safety Plans (CR 2014 7(c)(vi))
19. Contractors "Letter of Good Standing." (CR 2014 7(c)(iv))
20. Plant Hire and Labour only Contractor's Mandatory Agreements
21. contractor A's Safety Plan (CR 2014 7(2)(a))
22. contractor A's Health & Safety Policy Document
23. Risk Assessments Plan/Policy/Procedure (CR 2014 (9))
24. Incident/Accident Reporting Policy/Procedure
25. Health and Safety Specification Document (This document)(CR 2014 ((7)(c)(i))
26. Fall Protection Plan (CR 2014 10(1))
27. Site Emergency Plan
28. Site Rules
29. Risk Assessments
30. Public Safety
31. Safety Awareness Program
32. Toolbox Talks
33. REGISTERS
34. Induction Training Register (CR 2014 (7)(5))

- 36. Safety Harness Register
- 37. Hazardous Chemical Substance Register (CR 2014 (25))
- 38. Ladder Register
- 39. First Aid Register
- 40. Lifting Equipment Register
- 41. Electrical Equipment Register
- 42. Fire Equipment Register
- 43. Scaffold Register
- 44. Form & Support Work Register (CR 2014 12)
- 45. Explosive Actuated Fastening Devices Register (CR 2014 (21)(2)(g)(i))
- 46. CHECKLISTS
- 48. Electrical safety (CR 2014 (24))
- 49. Competency certificates (CR 2014 (1)(a))
- 50. Medical Certificates (CR 2014 7(1)(g))
- 51. Regulations applicable (CR 2014 7(3))
- 52. SANS 400 S

Before you will be allowed to perform work on site you must adhere to all of the following as contemplated in the Occupational Health and Safety Act, Act no 85 of 1993, the Construction Regulation 2014 and this document:

1. This specification document (Construction regulation 2014, (7) (c) (1))

You are required to compile your safety file the way we require in this document. You will not be allowed to start working on site unless your safety file has been approved. Submit the file well in advance to enable our safety Department to audit and approve it, and if there are any discrepancies you will have ample time to rectify and re-submit.

This document requirement is that of what is written in the OHS Act. It also contains guidelines from Departmental Enquiries, court cases and own Experience. The ultimate goal of this document is to direct you to be legal and thereby keep us, contractor, the Principle Contractor, and the Client, legal and free from prosecution.

This document serves as our minimum requirements. We don't go overboard with safety. Nevertheless, this document is the law on site. Don't do less than what is described in this document. Don't fall victim to the new

stupidity of propagating that, "if it is not specified in this document then we won't do it," or, "it is not explicitly mentioned in the OHS Act and therefore we will not do it."

2. The Safety File

1. Use a lever arch file to contain all the documents
2. Divide the documents with dividers of the plastic type, numbered 1 to 31. Use another set of dividers behind the first, if the one set is not sufficient.
3. Clearly identify the file with the words "Safety File" and the Company name printed on the side with letters big enough to read from a distance for anyone on site to recognise it as the safety file.
4. Always have the safety file available in the site office. It will be handed to the Client at site handover. It may never leave the site.
5. All forms must be completely filled in and fully signed by all parties.
6. It must be clearly understood that all documents in the safety files are legal documents and must be treated as such. If corrections are made on any of the documents it must be initialled by all parties involved. No tipex are allowed.
7. All documents that are copies of the originals must be certified as a true and correct copy of the original.

3. The Safety file index

1. Laminate the file index to prevent it from tearing and it will last longer. Paste it in front of the file.
The following is a sample of such an index. There may be items that you want to add or change to fit your style. You may do so.
2. Please note that we need you to keep all documents separate with dividers. It makes it easier to find during an audit and your day to day activities.
3. Also note that one person can be appointed for more than one designation. The site number, printed in red on the cover page, must be prominently printed on all your documents.

INDEX:

1. Incident / Accident reports / Wcl 2 forms / Annexure ones
2. Safety Committee Meeting Minutes (Supplied by contractor)
3. Monthly Safety Audit Reports (We will audit you monthly) (CR 2014 (7) (c) (vii))
4. Letter of Good Standing (CR 2014 (7) (c) (iv))
5. Health and Safety Organogram
6. Contractor A's appointment letter as a Contractor (CR 2014 (7) (c) (v))
7. Legal Appointments With proof of Competency & Medicals
8. CEO Delegation of Duties (16.2)
9. Construction Manager (CR 2014 (8) (1))
10. Assistant Construction Manager (CR 2014 (8) (2))
11. Construction Safety Officer (CR 2014 (8) (5) (6))
12. Construction Supervisor (CR 2014 (8) (7))
13. Assistant Construction Supervisor (CR 2014 (8) (8))
14. Risk Assessors (CR 2014 (9) (1))
15. Temporary Works Designer & Inspector (CR 2014 (12) (1) & (3) (f))
16. Temporary Works Supervisor (CR 2014 (12) (2) & (3) (a))
17. Excavation Supervisor (CR 2014 (13) (1) (a))
18. Scaffold Supervisor (CR 2014 (16) (1))
19. Scaffold Inspector (SANS 10085-1:2004 Edition 1.1 (14.5))
20. Scaffold Team Leader (SANS 10085-1:2004 Edition 1.1 (14.4.1))
21. Scaffold Erectors (SANS 10085-1:2004 Edition 1.1 (14.4.1))
22. Fire Equipment Inspector (CR 2014 (29) (h))
23. Fall Protection Planner (CR 2014 (10) (1) (a))
24. Safety Representatives (OHS Act (17))

25. List of Plant on site
26. Blank Appointments
27. Accident Register
28. Principle Contractor Mandatory Agreement
29. Plant Hire & Labour Only Mandatory Agreements
30. Fall Protection Plan (CR 2014 (10) (1))
31. Principle Contractor Safety Specifications (CR 2014 (7) (c) (1))
32. Safety Plan (CR 2014 (7) (c) (x))
33. SHEQ Policy
34. Risk Assessment Plan
35. Contractor Accident Reporting Procedure
36. Contractor Incident Reporting & Investigation Policy

For your documents that you are using daily, we suggest you open a separate file. The following is a sample of such a file index. There may be items that you want to add or change to fit your style. You may do so. Please again note that we are keeping all documents separate with dividers.

INDEX:

1. Registers:

- Toolbox Talks
- PPE Issue Register
- Hazardous Chemical Substance Register
- Safety Harness Register
- First Aid Register
- Incident/Accident Register
- Lifting Equipment Register

- Earth Leakage Testing Register
- Electrical Equipment Register
- Fire Equipment Register
- Scaffold Register
- Form & Support Work Register
- Explosive Powered Tool Register

2. Checklists:

- Electrical Extension Cords Checklist
- Safety Harnesses Checklist
- First Aid Boxes Checklist
- Lifting Equipment Checklists
- Fire Equipment Checklist
 - Formwork

3. Temporary, Electrical, and DB Box Checklist:

- Electric Drills Checklist
- Angle Grinder Checklist
- Skill Saw Checklist
- Ladder Checklist
- Scaffold Checklist
- Fire Extinguisher Checklist
 - formwork

4. Excavation Checklist:

- Form and Support Work Checklist
- Gas Welding & Cutting Checklist

- Hand tools Checklist

It must be clearly noted that we do not accept registers that are also a checklist. We herewith clearly state that the registers and checklists are separate forms and must be utilised as such.

4. Incident / Accident reports / Wcl 2

All incidents and accidents where someone was hurt, there was damage or illness, must be reported to our Safety officer

Do not hide any accidents from us. We need to know about any incidents in order for us to assist you in preventing a similar incident. We have no blame but retrain policy. You are to familiarise yourself with our incident/accident reporting procedures.

5. Safety Committee and Minutes

We have established a Health and Safety Committee. You must nominate one person from your management and one person from your Safety Reps to serve on our safety committee. Whether you qualify to have a Safety Rep or not. We will supply the appointment letters and appoint them on the safety committee. Every Contractor must be represented on our safety Committee and be involved in safety on site. The safety meeting will be held monthly. Minutes will be kept and distributed to you for filing in your safety file. The Client, NDPW representative will sit in on some of the meetings as an observer.

6. Monthly Safety Audit Reports (CR 2014 7(1) (c) (vii))

We will do a full health and safety audit on your safety file and your activities every month. The results and the report must be filed by you in the safety file. Discrepancies must be action Ed within a week and signed off on the audit report. You must also do monthly safety audits on yourself. The reports must be filed in your safety file.

7. Letter of good standing (CR 7(1) (c) (iv)) 2014

You are to ensure that a letter of good standing with the Workman's Compensation Commissioner is current and kept in your file as proof that you are registered and in good standing with the compensation fund, or with a licensed compensation insurer prior to work commencing on site. (At least two weeks before arriving on site). If your letter has expired, your workers on site are not insured and work will be stopped until such time as you are in good standing with the Workman's Compensation Commissioner

again. Contractor will not take responsibility on our Workman's Compensation insurance for your workforce.

8. Health and Safety Organogram

You must have a health and safety organogram in your safety file. It must always be kept up to date and current.

9. Contractor A's appointment letter as a Contractor

It is your duty to ensure that your appointment letter as a Contractor is in the safety file.

10. Legal Appointments

All your appointment letters must be properly signed by all parties involved. It must also be completely filled in with no blank spaces. The name of the appointment must be clearly written on the appointment. Proof of competency (Construction Regulation 2014 (1) (a)) must be attached to the back of the appointment letter. Proof of competency may be proven with degrees, diploma's, certificates and/or a short abbreviated CV as per the following example. A medical certificate (Construction Regulation 2014 (7) (8)) must be attached behind the proof of competencies. We do not accept appointment letters that has two designations on it. Each designation must have its own appointment letter.

Sample abbreviated CV:

Project name	year	period	Contract amount	Your position

The following appointments must be made by you. Remember that in most cases one person can be appointed for more than one appointment:

- * CEO Delegation of Duties (16.2)
- * Construction Manager (CR 2014 (8) (1))
- * Assistant Construction Manager (CR 2014 (8) (2))
- * Construction Safety Officer (CR 2014 (8) (5) (6))

- * Construction Supervisor (CR 2014 (8) (7))
- * Assistant Construction Supervisor (CR 2014 (8) (8))
- * Risk Assessors (CR 2014 (9) (1))
- * Temporary Works Designer & Inspector (CR 2014 (12) (1) & (3) (f))
- * Temporary Works Supervisor (CR 2014 (12) (2) & (3) (a))
- * Scaffold Inspector (SANS 10085-1:2004 Edition 1.1 (14.5))

If you are going to erect your own scaffolding, you need to have a scaffold Inspector and the following three scaffold appointments.

- * Scaffold Supervisor (CR 2014 (16) (1))
- * Scaffold Team Leader (SANS 10085-1:2004 Edition 1.1 (14.4.1))
- * Scaffold Erectors (SANS 10085-1:2004 Edition 1.1 (14.4.1))
- * Temporary Electrical Installation Controller (CR 2014 (24) (c))
- * Fire Equipment Inspector (CR 2014 (29) (h))
- * Fall Protection Planner (CR 2014 (10) (1) (a))
- * Safety Representatives (OHS Act (17))
- * First Aiders

11. Operators Appointments (CR 2014 23(d) (i) (ii))

All operators must be appointed with a letter of appointment. The letter of appointment is actually a letter to authorise that person to operate the plant, equipment or tool.

- * The letter must be properly signed by all parties involved. The name of the appointment must be clearly noted on the appointment.
- * The operator must have a competency certificate from, or sent for training at, an accredited training provider.
- * The certificate of competency must be attached to the back of the appointment letter.
- * The operator must be in possession of a valid medical certificate declaring the operator medically fit to operate the plant,

equipment or electric tool, as per the Construction Regulations 2014 (7) (8) & Annexure 3.

* If an operator has no competency certificate, they won't be allowed to operate the plant. If an operator has no medical certificate, they won't be allowed to operate the plant.

* Copies of original documents must be certified as being a true and correct copy of the original document.

12. List of Plant on Site

You must paste a list of all plant on site in the safety file. It must always be kept up to date and current.

13. List of Contractors on Site

If you have contractors, you must paste a list of all Contractors on site in the safety file. It must always be kept up to date and current.

14. Mandatory Agreement with contractor

We will see to it that a mandatory agreement is signed and entered into with contractor and contractor A. This agreement must be properly signed and all pages must be initialled by all parties. It refers to Section 37 1 and 2

15. Contractors Mandatory Agreements

It is contractor A's duty to see to it that a mandatory agreement is signed and entered into between contractor A and all their contractors on site before they come onto site. These agreements must be properly signed and all pages must be initialled by all parties. These mandatory agreements must be done in duplicate. One properly signed copy must be filed in your safety file. The other copy must be filed in the Contractors safety file. You must come to an agreement regarding the Safety Rep and the first aid arrangements with the Contractors. These arrangements must be written in the mandatory agreement. These arrangements are as follow; they must have at least one trained Safety Rep and at least one trained First Aider, whether they qualify to have one or not.

16. Contractors Specification Documents (CR 2014 7(c) (i))

Each one of your Contractors must be issued with a health and safety specification document written by contractor A. Remember you must issue a site specific, and a job specific health and safety specification document. We don't want to see generic specification documents. We also don't want to see this document passed onto your Contractors as your specification document to them. Write your own. Contractors must sign for their specification documents.

17. Contractors Appointment Letters (CR 2014 7(c) (v))

Each one of your Contractors must be appointed in writing as a Contractor. The original letter where contractor A informed the Contractor of the allocation of the tender to them would suffice. These documents must be filed in your safety file. Copies of these documents must also be filed in the Contractors safety files by the Contractors.

18. Contractors Safety Plans (CR 2014 7(c) (vi))

All your Contractor's safety plans must be scrutinised by you and if in line with this document, the OHS Act and the Construction Regulation 2014, it must be approved by you in writing. The approval letters must be filed in the Contractors safety file and copies thereof in yours.

19. Contractors "Letter of Good Standing." (CR 2014 7(c) (iv))

None of your Contractors may be allowed to perform any work unless they submit a valid "Letter of Good Standing" as proof that they are in good standing with the Workman's Compensation Commissioner. These letters must be filed in the Contractor's safety files and the validation dates closely monitored.

20. Plant Hire and Labour only Contractor's Mandatory Agreements

This is a very controversial subject. Are they contractors or not? This is how we want you to handle the situation. If you hire a TLB from a person or a few tippers from another, and you want to treat them as a plant hire company and not a Contractor, then we require you to enter into a mandatory agreement with them. In the agreement you must clearly state that the operators are under your full management and control. You must also clearly state that contractor A takes full responsibility for the operators under their Workman's Compensation insurance. Labour Only's must be treated in the same manner. It is clearly stated that all plant hire companies cannot be treated this way just to avoid them having a safety file. We're talking one or two plant being hired. All the pages of the mandatory agreements must be initialled by all parties. It must also be properly signed by all parties.

21. Contractor A's Safety Plan (CR 2014 7(2) (a))

In answer to this safety specification document, contractor A must submit a safety plan on exactly how you plan to implement and manage health and safety on the site. The safety plan must address and reference to all items mentioned in this safety

specification document. The safety plan will be scrutinised by contractor and after we familiarised ourselves with the content, and only after we are satisfied that will be compliant to the OHS Act, the Construction Regulation 2014 and this specification document, will we issue an approval letter for your submitted safety plan. The approval letter must be filed with your safety plan in your safety file. Please be advised that your safety plan must be signed by contractor A's Chief Executive Officer.

WARNING:

- 1 Do not submit a generic safety plan. It must be special ally design for your project
- 2 Do not submit a safety plan that says some items in your plan may not be applicable to the site. that makes it generic. Make it site and job specific. We don't want to pick which items are applicable.
- 3 If your safety plan is approved, you are obliged to implement everything mentioned in your safety plan.
- 4 Construction Regulation 2014 (7) (1) (c) (vi)) explicitly says that we must take steps to ensure that each Contractor's health and safety plan is implemented and maintained on the construction site.

22. Contractor A's Health & Safety Policy Document

You must paste your health and safety policy document in the safety file.

23. Risk Assessments Plan/Policy/Procedure (CR 2014 (9))

You must file your signed site specific risk assessments plan/policy/procedure in the safety file. The plan/policy/procedure must be communicated to all persons on site and record there-of must be kept.

Your assessment must be more or less have the basic matrix as shown below see tables

BASELINE RISK MATRIX			HAZARD EFFECT / CONSEQUENCE		
Loss type	1 Insignificant	2 minor	3 moderate	4 major	5 catastrophic
Time line	No impact on overall project timeline	May result in overall project timeline overrun of less than 5%	May result in overall project timeline overrun of between 5% and less than 20%	may result in overall project timeline overrun of between 20% and less than 50%	May result in overall project timeline overrun of 50% or more
Budget	No impact on the budget of the project	May result in overall project budget overrun of less than 5%	May result in overall project budget overrun of between 5% and less than 20%	May result in overall project budget overrun of between 20% and less than 50%	May result in overall project budget overrun of 50% or more
Investment return NPV loss	Less than R5m	R5m to less than R50m	R50M to less than R500m	R500m to R5b	R5b or more
Quality	No impact on quality	Minimal quality issues that can be addressed in a short timeframe with minimal interactions	Some quality issues that requires immediate management action	Significant quality issues that requires senior project management interaction	Significant quality issues that requires sponsorship intervention with significant resource and cost implications for rework
Safety / health	First aid case / Exposure to minor health risk	Medical treatment case / Exposure to major health risk	Lost time injury / Reversible impact on health	Single fatality or loss of quality of life / Irreversible impact on health	Multiple fatalities / Impact on health ultimately fatal
environment	Minimal environmental harm – L1 incident	Material environmental harm – L2 incident remediable short term	Serious environmental harm – L2 incident remediable within LOM	Major environmental harm – L2 incident remediable post LOM	Extreme environmental harm – L3 incident irreversible
Legal & regulatory	No legal impact	Minor legal concerns with minor impact	Some legal concerns with manageable level of impact	Serious legal concerns and significant impact on operations	Legal non-compliance with risk of shutdown of operations with significant cost impacts
Reputation /social / community	Slight impact - public awareness may exist but no public concern	Limited impact - local public concern	considerable impact - regional public concern	National impact - national public concern	International impact - international public attention

LIKELIHOOD		RISK RATING				
5 Almost Certain	The unwanted event has occurred frequently; has a 90% and higher probability of reoccurring	11 Medium	16 Significant	20 Significant	23 High	25 High
4 Likely	The unwanted event has a probability of between 60% and less than 90% of occurring	7 Medium	12 Medium	17 Significant	21 High	24 High
3 Possible	The unwanted event has a probability of between 30% and less than 60% of occurring	4 Low	8 Medium	13 Significant	18 Significant	22 High
2 Unlikely	The unwanted event has a probability of between 1% and less than 30% of occurring	2 Low	5 Low	9 Medium	14 Significant	19 Significant
1 Rare	The unwanted event has never occurred, has a probability of less than 1% of occurring	1 Low	3 Low	6 Medium	10 Medium	15 Significant

NO	HAZARD ITEM	RISK ASSOCIATED WITH HAZARD	CONSEQUENCES	RISK REVIEW	HOW IS HAZARD TO BE DEALT WITH	BY WHOM	BY WHEN?
1.	SITE ESTABLISHMENT						
1.1	incompetent persons - Incorrect stacking - procedures during site establishment	Injuries during off loading • Cuts and burns • Rushed activities • Incorrect supervision • Trip and fall • Cuts • Collapsing of stacks	• Hand and back injuries • Dropping of equipment • Physical injuries • Lost Time injuries • Medical treatment cases • Potentially fatal accidents • Loss of limbs	6	• The contractor must declare all employees competent in writing • Contractor OHS file must be approved prior to site establishment begins • Site specific safe work procedures must be followed • Site –induction must be given to all employees to make them aware of the specific hazards • Employees must be issued with correct PPE before work begin • All workers on site must be declared medically fit by a medical practitioner	Construction supervisor - Contractor Safety Officer - CHSA (Construction Health & Safety Agent) - Construction Manager - Construction supervisor	During site establishment
1.2	OFFLOADING HEAVY EQUIPMENT AND CONTAINERS P/C SITE ESTABLISHMENT	• Defective mobile crane can cause accidents • Adverse weather conditions • Untrained personnel/ Operators • Unsafe hooking methods unstable load	• Serious injury and fatalities • Damage to property and equipment • Potential hand & foot injuries • Standing time	19	• Material to be stacked on firm and level ground. • Stacking to be supervised by a competent supervisor. • Adequate storage area to be provided • All unstable stacks to be dismantle and stacked over • Load test certificate will be submitted to the client. • Rope certificates must be submitted to the client. • Safe load indicator must be in good working order. • Over wind device must be in place and in working order. • Daily checks as per checklist by operator. • Checklist signed by supervisor and filed by safety officer.	- Construction Supervisor - CHSO - Construction Manager	During site establishment

LIST OF COMMEN RISKS ON THIS PROJECT SUBJECTED TO CHANGE: These risks must be tableted; see above tables for reference and then put the risk and then the remedial action for the following list of risks

You may add to the list of risks in your risks analyses

- Concrete works
- Formwork
- Reinforcement
- Dust and noise pollution
- Debris removal
- Handling of materials

- Temporary supports to openings through existing walls
- Electrical strip and making safe work and all other electrical works
- Demolitions
- Breaking up and removal mass concrete aprons and ramps
- Repair of cracks in walls
- Breaking up brick walls
- Taking down and remove roof tiles
- Install new roof
- Woodwork
- Taking out and removing doors windows etc.
- Taking out roof trussers
- Taking out and removing fascia's and barge boards
- Removing ceilings
- Removal of floor and wall tiles ,floor covering
- Ironmongery removal of locks handles
- Removal of glass and related glazing work including a safety glass installation
- Removal of plaster
- Removal of skirting
- Removal of all water pipes and reinstall copper pipes
- Laying and backfilling of pipes and electrical supply cables
- Plumbing and drainage
- Paintwork including sanding and cleaning
- Tree removal
- Excavating
- Compacting of under floors, paving's, aprons, etc.
- Soil poisoning
- Form work ,scaffolding ,rigging
- Bricklaying
- Chemicals that will be used on the project
- Metalwork
- Air-conditioning installations
- Industrial stove and cold room installations
- Gas reticulation and appliance installations
- General
- Built of disability facility

24. Incident/Accident Reporting Policy/Procedure

You must paste our incident/accident reporting policy/procedure document in your safety file.

25. Health and Safety Specification Document (This document) (CR 2014 ((7) (c) (i))

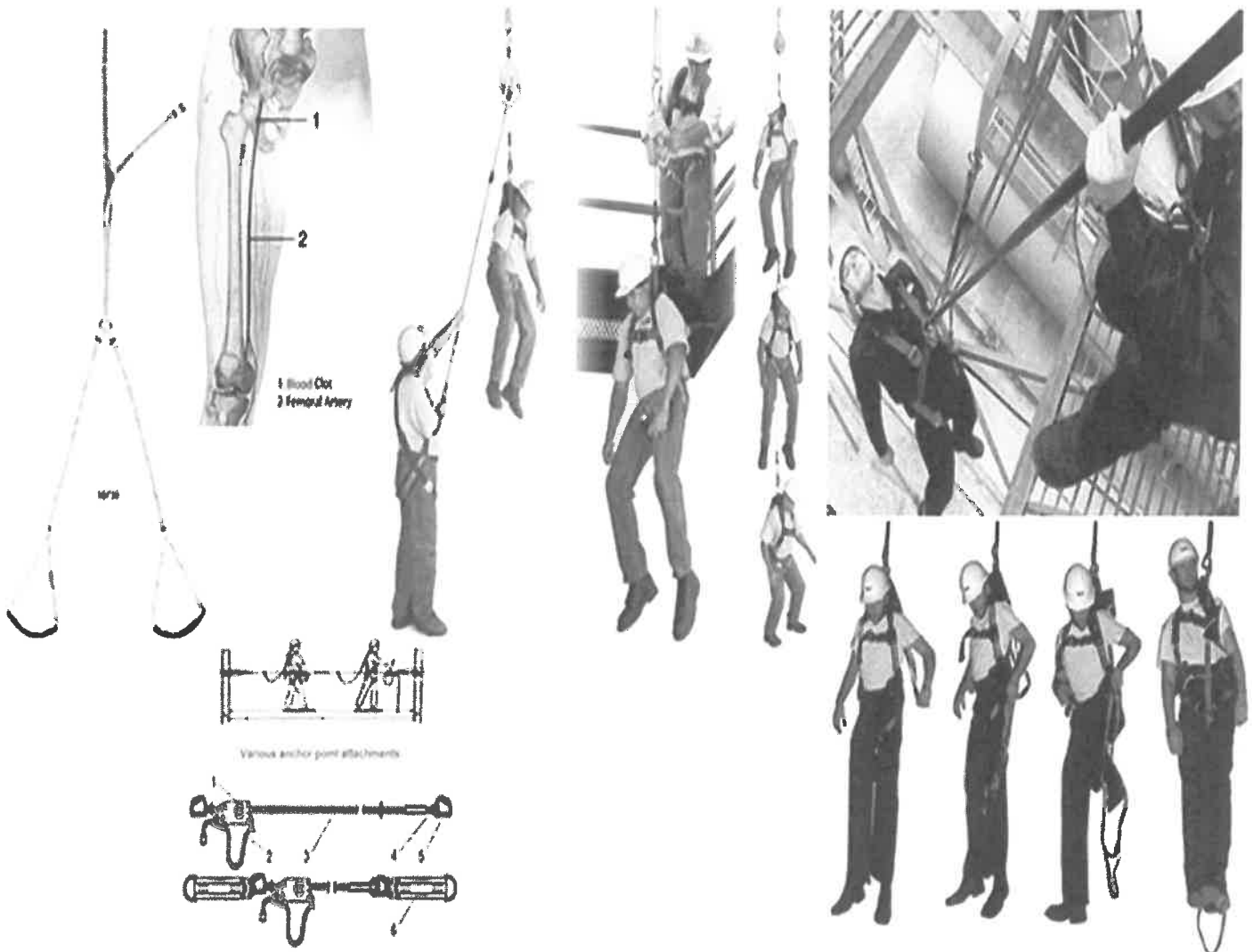
This specification document must be signed by your CEO and filed in your safety file.

26. Fall Protection Plan (CR 2014 10(1))

You must have a fall protection plan in your safety file. The plan must be developed by your appointed Fall Protection Planner.

Your fall protection plan must be site specific and practically viable and must cover this sites anticipated fall hazards for your Work area. Do not submit a generic fall protection plan, we know them all. All persons in your employment on site must be trained in fall protection plan.

The attendance register for the training must be attached to the fall protection plan. The plan must also contain a rescue plan for workers hanging from a height in a harness. You only have five minutes to rescue the person hanging from a harness. Your plan should include a practical rescue plan and equipment. Persons executing the rescue plan must be Trained in the plan. Your site management must endorse (sign) the plan.



27. Site Emergency Plan

You must familiarise yourself with the site emergency plan developed by contractor. All your employees on site

Must be trained on the site emergency plan. The attendance registers for the training in the site emergency plan

Must be signed and filed in your safety file. The emergency plan is pasted on the notice board on site.

Emergency numbers is also prominently displayed on the notice board.

28. Site Rules

Our site rules, applicable to this site, are pasted on the notice board for everyone to have access to it. All your

Employees on site must be trained in our site rules. The attendance registers for the training in the site rules

Must be signed and filed in your safety file.

29. Risk Assessments

All your tasks performed on site must be backed by a risk assessment which determined the risks, the hazards

And determines the best preventative measures to minimize the risks and hazards. All the risk assessments must have:

- 1 The site name on the risk assessment.
- 2 The date on the risk assessment.
- 3 The person/s name/s that did the risk assessment and their signatures.
- 4 Managements signature - as proof of their endorsement and knowledge of the assessment.
- 5 An attendance register as proof that your employees were trained in the risk assessment.

30. Public Safety

The site is securely barricaded to keep members of the public from entering the site. The entrance to the site

Has access control. Make sure your visitors to the site signs the visitor's book and follow signage directing all

Visitors to the site office.

31. Safety Awareness Program

Poster is displayed in conspicuous places on site depicting various safety tips. Make your employees aware of

Them

32. Toolbox Talks

You will do a safety talk with your employees once per week and it must be recorded as proof that you have Done so. The Toolbox talk attendance register must be filed in the safety file. Each person on site must attend a toolbox talk at least once per week. You must force the contractors to also do toolbox talks once per week and they must also keep record thereof. Topics must be meaningful, not just, e.g. "PPE" or "Safety." It must be Specific and really meaningful. Toolbox talks must be signed by the facilitator and signed off by management.

33. REGISTERS

Do not use checklists as registers. You must have a separate document that serves as a checklist and a separate Document as a register. A register is not a checklist and vice versa. A register is documents where you list all the items you have in stock.

34. Induction Training Register (CR 2014 (7) (5))

We, contractor, the Principal Contractor, will do the site specific induction training with everyone on site. All Induction training will be recorded by us in the induction training register. ID numbers will also be noted, so keep them close by. No person or employee will be allowed or permitted to work on the site, unless such an employee or person has undergone the site's health and safety induction training, pertaining to the hazards prevalent on the site at the time of entry. It is your responsibility to ensure that all your employees on site has indeed undergone the said induction training before they start working

35. PPE Issue Register

You must issue your employees with the prescribed PPE free of charge. Hard hats, Overall, Steel point safety Shoes are compulsory on site. You will keep a PPE issue Register and record all PPE Issued thereon. ID numbers must also be noted. All persons must be trained in the care and correct use of their PPE. PPE issued must be backed by a risk assessment.

36. Safety Harness Register

All your harnesses must be numbered and recorded on register. You must have a separate document that serves as a checklist. A register is not a checklist and vice versa. If you issue safety harnesses you must make the employee sign for it and you must train them in the proper use thereof and keep record of the training.

37. Hazardous Chemical Substance Register (CR 2014 (25))

All hazardous chemical substances must be listed and controlled on a register. These chemicals must be stored in a well-ventilated secure storage facility on site. Most of these chemicals on site is flammable and must be stored in your flammable goods store. These are samples of storage facilities for hazardous chemical Substances.

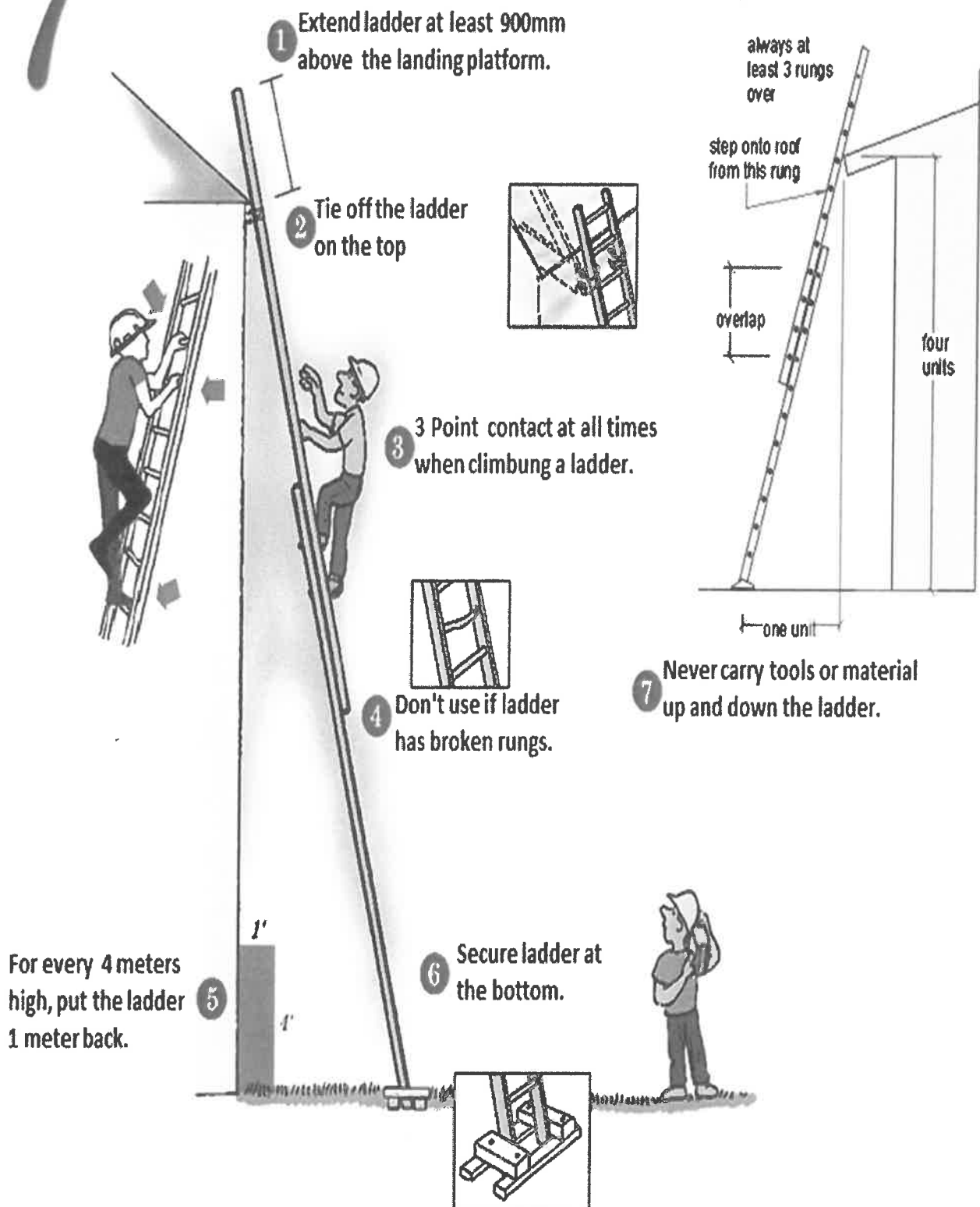


38. Ladder Register

All your ladders must be numbered and listed on a "Ladder Register" and this register must be kept up to date. No self-made ladders will be allowed on site. Study the seven rules of ladders and make sure your employees strictly adhere to it.



7 Steps to Ladder Safety



39. First Aid Register

All your first aid incidents must be recorded in your first aid register. It must also be reported to our Safety Officer.

40. Lifting Equipment Register

All your lifting equipment must be listed on a Lifting Equipment Register. All lifting equipment must be inspected on a separate checklist. The checklist must be signed by the person doing the check and signed off by management. Any discrepancies noted must immediately be actioned and action taken must be noted on the checklist. No discrepancy may be carried over to another checklist.

41. Electrical Equipment Register

Your electrical equipment must be numbered and listed on an electrical equipment register. Each one of these items on the register must be inspected on their own checklist. The checklist must be signed by the person doing the check and signed off by management. Any discrepancies noted must immediately be actioned and action taken must be noted on the checklist. No discrepancy may be carried over to another checklist.

42. Fire Equipment Register

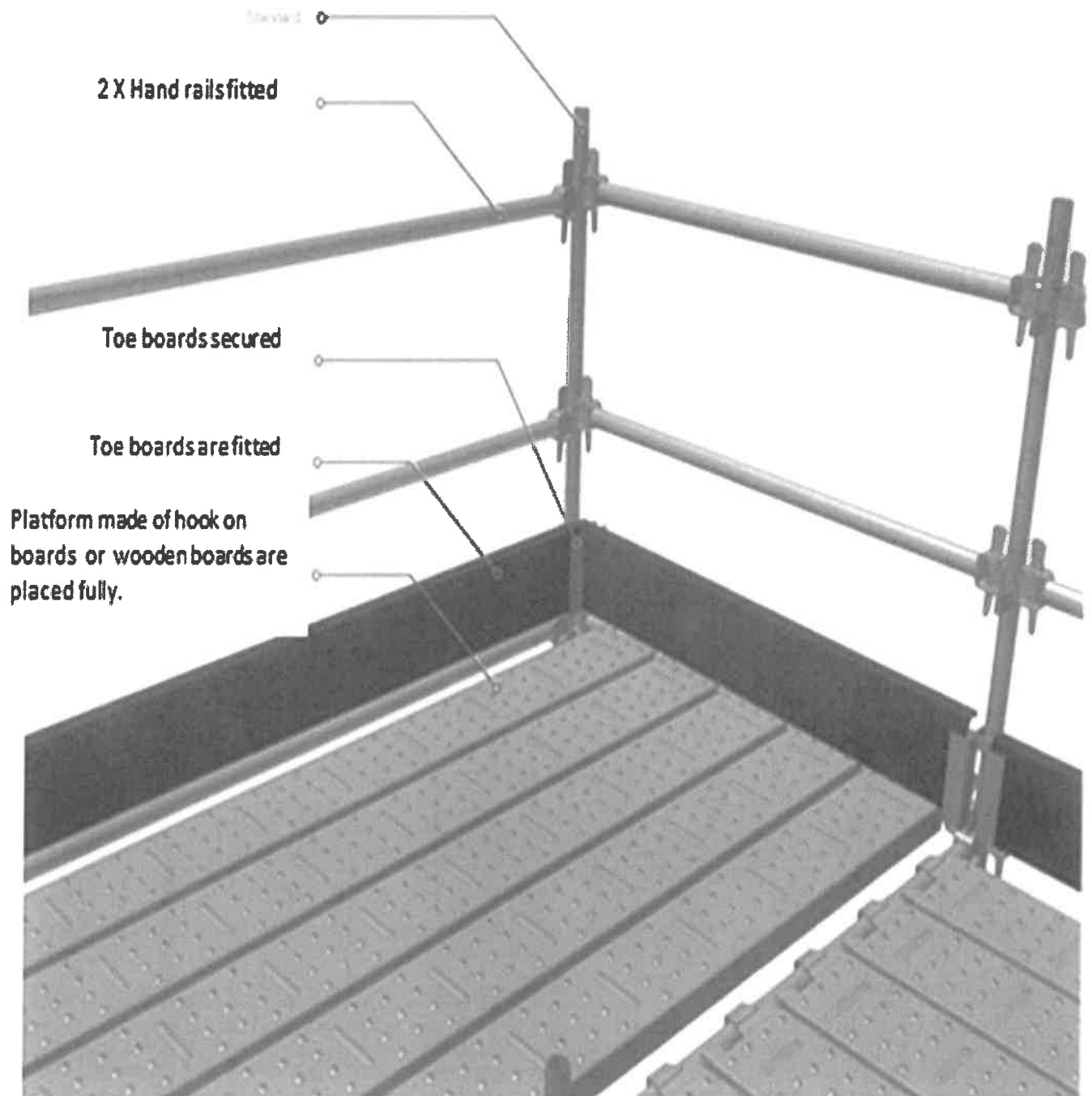
All your fire equipment must be numbered and listed on a fire equipment register. All fire equipment on register must be inspected monthly on a separate checklist. The checklist must be signed by the person doing the check and signed off by management. Any discrepancies noted must immediately be actioned and action taken must be noted on the checklist. No discrepancy may be carried over to another checklist.

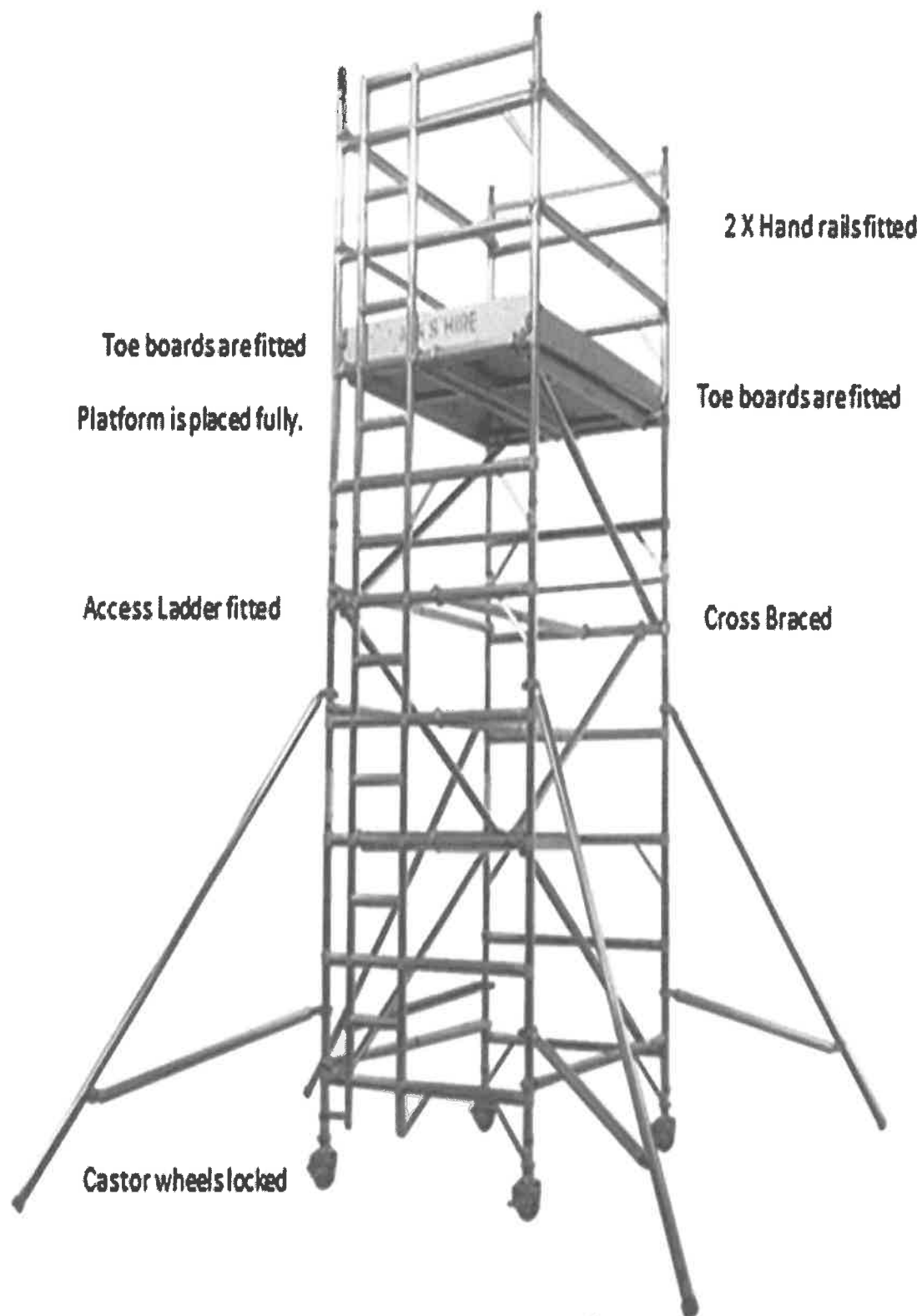
43. Scaffold Register

All you're scaffolding on site, whether completed or not, certified safe or not, must be listed on a register. All Scaffolding on your register must be inspected daily, or if any changes on the structure was made. This must be done on a separate checklist. The checklist must be signed by the person doing the check and signed off by

Management. Any discrepancies noted must immediately be actioned and action taken must be noted on the checklist. No discrepancy may be carried over to another checklist.

Scaffolding must at least be of the standard shown underneath. Make sure that all your employees are trained in the illustrations and scaffold rules underneath.





No person may use any scaffold if it isn't declared safe for use and tagged with a tag, similar to this tag, tied to the scaffold.



Front



Back

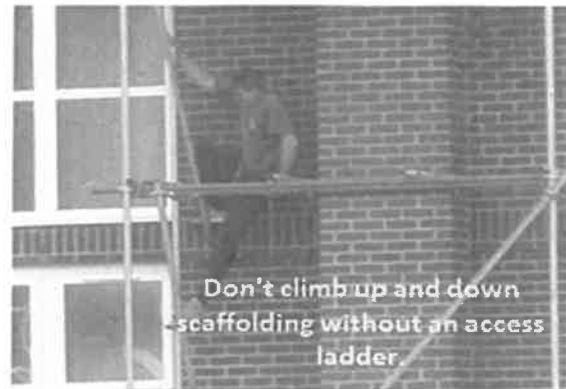


Front



Back

No person may use any scaffold if it is tagged with a tag, similar to this tag, tied to the scaffold.



Scaffold Safety



- ✓ Make sure the scaffolding boards are in place and in good condition.
- ✓ The scaffold must be strong enough for the usage purpose.
- ✓ Never overcrowd scaffold with people, supplies, or equipment.
- ✓ Erect scaffold with proper access and guard rails.
- ✓ Tied scaffold adequately where required.
- ✓ Place the guard rails and toe boards firmly.
- ✓ Use safety harness and lifeline.
- ✓ Do not climb or stretch out over the guard rails.
- ✓ Incomplete scaffold must be blocked off or must display a warning notice that it must not be used.

44. Form & Support Work Register (CR 2014 12)

All your form and support work must be listed on a form and support work register. All form and support work on register must be inspected and certified by a competent person before pouring of any concrete.

45. Explosive Actuated Fastening Devices Register (CR 2014 (21) (2) (g) (i))

Your explosive powered tool and the cartridges must be listed and controlled on an explosive powered tool register.

46. Gas registers

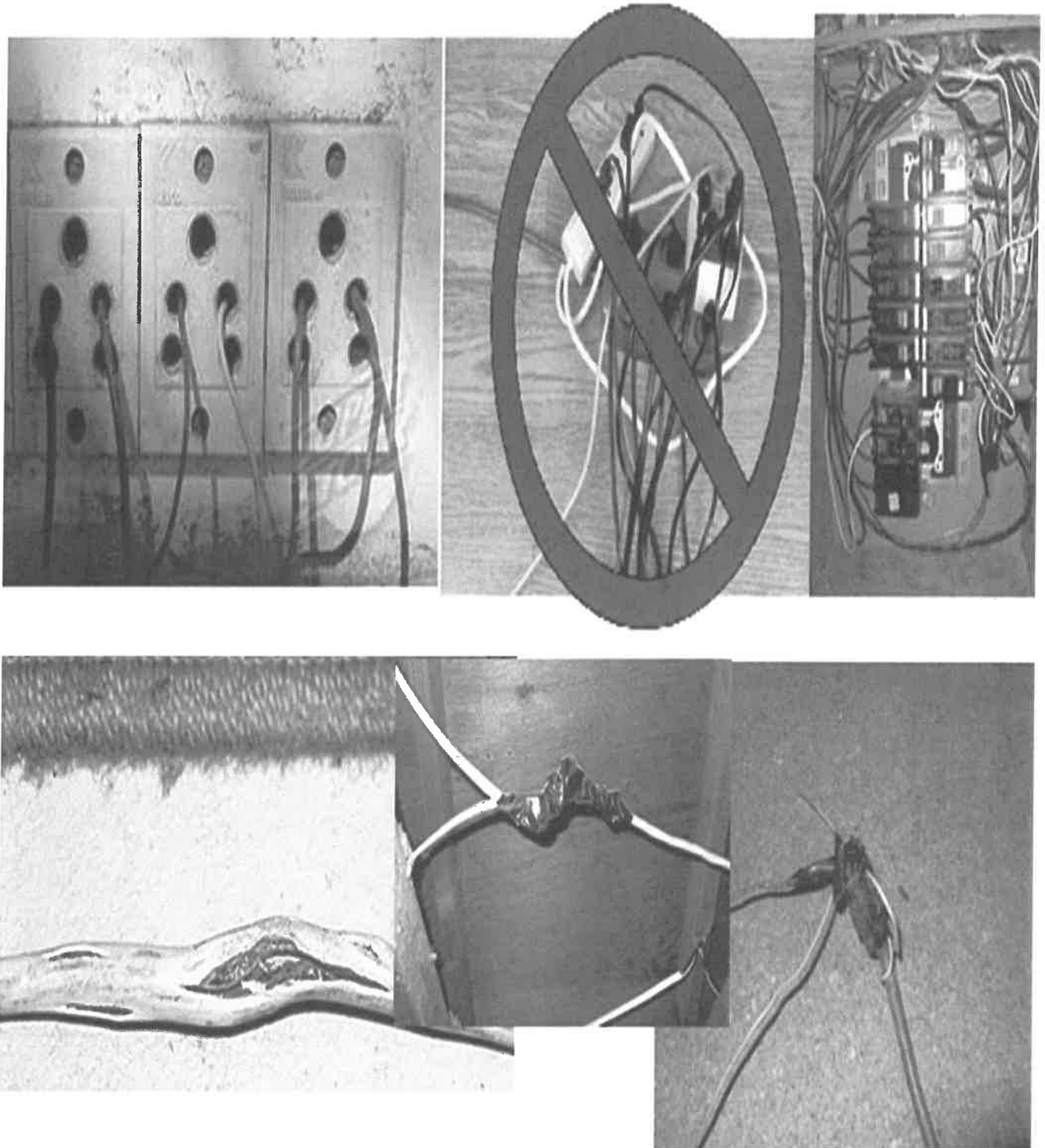
Gas must be registered to ensure there's not more gas on site as necessary this gas include AC refill gas and nitrogen

47. CHECKLISTS

Checklists must be done daily, weekly or monthly depending on the type of checklist. If an item on a checklist is "OK" or "correct," the block must not be ticked, it must be initialled. The person doing the checks must initial in the block. Any discrepancies must be marked with a cross and then action ed immediately by your Construction supervisor. All checklists must be dated. All checklists must be signed by the person doing the checklist. Your Construction Supervisor must sign off the checklist. The checklist must be kept in the file for record and auditing purposes. In this document we supply a long list of possible checklists that could be used on site. Our advice is for you to have as much checklists as possible, to cover yourself.

48. Electrical safety (CR 2014 (24))

We take electrical safety very seriously. The following are examples of common unsafe electrical practices we don't want to see on our site



No joints are allowed on electric extensions cords. DB boards must have a COC certificate. We don't want to see any exposed wires like we see in the photo.

49. Competency certificates (CR 2014 (1) (a))

Where-ever this specification document prescribes a "competent" person, we will need a competency certificate issued by an accredited training service provider. All competency certificates must have the required criteria lay down by SAQA and the National Qualifications Forum (NQF), for the issuing of certificates in South Africa. All certification documents, whether a certificate or a letter, must at least, have the following criteria:

Issued

- Expiry date
- At least two signatures
- One signature – the Assessor who assessed the certificate holder
- Assessors registration number at the NQF
- Certificate number
- Contact telephone number where we can verify the authenticity of the certificate.
- Certificate holder's full names and surname
- ID Number of certificate holder

50. Medical Certificates (CR 2014 7(1) (g))

All your employees must have a medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of the attached Annexure 3.

51. Regulations applicable (CR 2014 7(3))

Where contractor appoints another contractor to perform construction work, the duties determined in the Construction Regulations 2014 that apply to the principal contractor apply to the contractor, as if he or she were the principal contractor. Your file must be submitted to us for approval, well in advance, prior to you coming on site. (At least two weeks) This will prevent delays. You will not be allowed to start working on site unless our safety department gave their approval on the successful implementation of the above.

Medical Certificate of Fitness

Name of Employee:

ID Number:

Co Number:

	* Possible Exposures e.g. noise, heat, fall risk, dust, confined space, etc.	* Job Specific Requirements e.g. Operating Mobile Crane, Digging Trenches, Erecting formwork & Scaffolding, etc.	* Protective Equipment e.g. Dust Respirator (Light Duty), Welding Gloves, etc.
* Occupation			

* The Employer to complete the information in the spaces marked with an * before sending the Employee for a medical examination.

Declaration by the Medical Examiner:

I certify that I have by, examination and testing, using the above criteria specified by the employer, satisfied myself that the abovementioned employee is fit to perform the duties as described by the employer in the matrix above.

Occupational Medicine Practitioner/Occupational Health Nursing Practitioner: (Please Print Name)

Signature:

Practice Number:

Date: _____

Address:

52. SANS 400 S

The standard SANS 400S must be used to construct the disability facility

End of site specific OHS Specification

Specifications and Drawings

Technical Specification

Mokpane – Department of Home Affairs,
Tender Specification Document for the central
Domestic and Fire Water Pumps, Water Storage
Tank And pipe distribution installation and
ancillary work.

Department of Public Works

Reference: 112763

Revision: A

Submission date: 2024/04/17

Document control record.

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Title			Title

TENDER SPECIFICATION FOR THE CENTRAL FIRE WATER PUMP, FIRE WATER TANK AND FIRE WATER PIPE DISTRIBUTION INSTALLATION AND ANCILLARY WORK

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Mokopane, Department of Home Affairs Mokopane

FIRE ENGINEERING SPECIFICATION

SPECIFICATION NO:
112763-ZUT-SPE-FI-0000-0

DATE: April 2024

CLIENT: Department of Home affairs

COMPILED BY:
ZUTARI
IMPACT. ENGINEERED.

PART 1

PARTICULAR SPECIFICATION

PM GENERAL SPECIFICATION

CONTENTS

PM 01	GENERAL
PM 02	GENERAL SCOPE OF WORKS
PM 03	ALTERNATIVE OFFER
PM 04	CO-OPERATION WITH OTHER TRADES
PM 05	PARTICULARS OF ELECTRICAL SYSTEM AND SERVICE CONDITIONS
PM 06	DELIVERY AND ANTICIPATED PROGRAM
PM 07	STANDARDS AND APPROVAL
PM 08	DIVISION OF WORK SCHEDULE
PM 09	DRAWINGS

PM 1 - GENERAL

The particular specifications included in this document define the systems, materials and equipment to be used for the specified Fire installations. This section must be read in conjunction with the technical specifications and tender drawings and details included and/or attached to this document.

The Contractor shall at all times adhere to these specifications and drawings, where conflicting information between the technical and particular specifications exist, the particular specification and drawings shall take preference.

The Engineers' drawings show broad principles of design, general layouts, and schematic arrangements and when read together with the specifications and the drawings of other disciplines and other contractors, they carry sufficient information to enable the Contractor to determine how the installation is to be installed, operated, serviced and maintained.

All rules, regulations, by-laws, codes and standards as specified in the technical specifications shall apply unless otherwise specified in the particular specification.

All the work set out in this document is to be executed in a first-class workmanlike manner and all equipment supplied shall be of new high-quality material, design and manufacture, suitable for providing an efficient, reliable and trouble-free service.

The buildings are to be protected by means of a conventional fire protection installation, designed, supplied, installed, tested and commissioned in accordance with **SANS 10400 – Parts T & W Code of Practice – Application of the National Building Regulations** and the requirements of the **Local Authority having Jurisdiction**.

PM 2 - GENERAL SCOPE OF WORK

The contract works consist of the supply and installation of water storage tanks and domestic and fire pump sets to the existing department of Home affairs Development situated in Mokopane on 70-88 Pretorius St, as specified in this document.

The drawing show the design installation for the pumphouse and water storage for both systems indicated. The pump installations and water tanks for this development will be designed as common supply to the entire site structure developments.

The Contract works to be carried out consist of the engineering design, supply, erection, testing, commissioning into service, SANS certification, guarantee and maintenance of the following installations:

- (a) Fire water pump installations including all pipework, electrical work inside the pump house and between the fire water tanks and fire pump house.
- (b) The fire water tanks are steel panel with re-enforced concrete foundations (to be constructed by the Main Contractor)
- (c) Domestic water pump installation including all pipework, electrical work inside the pump house and between the water tanks and pump house,
- (d) The levels of the domestic elevated will be monitor by the new domestic pump and filled as when the tank reaches a level of 50%.
- (e) Co-ordinated Installation and shop drawings by sub-contractor for approval by the Engineer

These installations shall adhere to the relevant particular and technical specifications included in this document and in particular the following:

- (a) General Technical Specification – Technical Specification M
- (b) Conventional Fire Protection Installation – Technical Specification MF

The above work shall be executed in a first-class workmanlike manner and all equipment shall be of new high-quality material, design and manufacture, suitable for providing an efficient, reliable and trouble-free service.

PM 3. ALTERNATIVE OFFER

The tenderer can provide an alternative offer to the specified document and drawings, provided that the Main Tender has been completed and priced in full.

The alternative offer must be clearly described in the section provided for in this document, stating the deviations from the main tender as well as supplying all necessary information and documentation for this alternative offer to be technically evaluated by the Engineer.

PM 4. CO-OPERATION WITH OTHER TRADES

The Contractor shall co-operate fully with other trades and provide any information necessary to permit work of other trades and contracts to be installed satisfactorily and without interference or delay.

Where work is to be installed in close proximity to work of other trades, or where there is evidence that work may interfere with work of other trades, assist in working out space conditions to make satisfactory adjustment.

PM 5. PARTICULARS OF ELECTRICAL SYSTEM AND SERVICE CONDITIONS

□	Primary operating voltage	:	400 V
□	Secondary operating voltage	:	250 V
□	Frequency	:	50 Hz
□	Number of phases	:	Three plus neutral
□	Site altitude	:	1,310 m ASL

PM 6. DELIVERY AND ANTICIPATED PROGRAM

The Contractor will be required to co-operate with the Principal Building contractor so that all work may proceed with the minimum of delay and disruption. This, in particular, will apply to any planning that is required beforehand in order to make the site erection as simple as possible. Every reasonable assistance will be rendered to the Contractor to ensure that the installation will be handed over by due date. Within a period as required by the Principal Building contract, the Contractor will be required to confirm with the Engineer and the Principal Building contractor the program for the completion of the contract.

PM 7. STANDARDS AND APPROVAL

The standards as detailed and described in the Technical Specifications and the Particular Specifications shall apply to this installation in full.

All items, design proposals, drawings shall be submitted to the Engineer for approval, and have his approval prior to supply, manufacturing or installation as described in the technical specifications.

All drawings shall be read in conjunction with each other and the relevant technical and particular specifications.

PM 8. DIVISION OF WORK SCHEDULE

The following related work to the sub-contract works will be provided by others. The sub-contractor shall be responsible for the detailing, checking and ensuring that the work as listed in the schedules and shown in principle on the drawings is provided as per his detailed builder's work and related services drawings.

Instructions for the fire sub-contractor's exact requirements shall be transmitted to the Principal contractor and other sub-contractors timeously in the form of builder's and associated services drawings in accordance with an agreed programme. Should these instructions be issued after the completion of relevant areas, then this work will be carried-out at the expense of the sub-contractor.

PM 8.1 - PRINCIPAL BUILDING CONTRACTOR

- a) All openings through walls and structural slabs including making good around pipe services, and fireproofing where necessary.
- b) Fire Department Connection Chamber
- c) Fire Hydrant and Hose Reel Cabinets and Cupboards

PM 8.2 - ELECTRICAL SUB-CONTRACTOR

- a) Fire signal interface between fire detection system and fire pump control panel to be provided and connected by Electrical Sub-contractor.
- b) All required BMS signal interface between the BMS system and the fire pump control system to be provided and connected by Electrical Sub-contractor.

PM 8.3 - PLUMBING & CIVIL CONTRACTOR SUB-CONTRACTOR

- a) Floor drains and drain test valve drain points where required.
- b) Water supplies to the Fire Pump and storage tank installation

PM 9. DRAWING LIST

The Tender Design Drawings as listed below shall form the basis of this Contract and to be read in conjunction with this specification.

Drawing number	Drawing title	Current Revision
<u>FIRE WATER PUMP ROOM</u>		
ME30476-FIRE03	COMBINED BULK WATER TANK	T2
ME30476 FIRE04	TANK LAYOUT	T0
<u>SPECIFICATIONS</u>		
112763-ZUT-SPE-FI-0000-0	Services Specification	001

In addition to these drawings the sub-contractor shall also obtain all the Architectural, Structural, and other services drawings and ensure that the installation (shop) drawings are co-ordinated with all relevant services.

PART 2

PARTICULAR SPECIFICATION

PMS AUTOMATIC FIRE PUMPS AND CONVENTIONAL FIRE PROTECTION INSTALLATIONS

CONTENTS

PMS 01	SCOPE OF WORKS
PMS 02	SYSTEM DESCRIPTION
PMS 03	DESIGN INFORMATION, OCCUPATION AND HAZARD CLASSIFICATION
PMS 04	EQUIPMENT AND INSTALLATION DETAILS
PMS 05	LOCATION PLANS

PMS 1. SCOPE OF WORKS

This specification covers the design, manufacture, supply, delivery to site, off-loading, erection, painting, commissioning, testing, and handing over in complete working order, to the satisfaction of the Engineer and Local Authorities, of the conventional fire pump systems and fire water storage as described herein for the Mokopane Home Affairs building in Mokopane.

- (a) The work to be carried out under this contract shall be the supply and installation of a Domestic and Fire water pump Systems, but not be limited to the following:
 - (i) Conventional fire water pump installations and fire water storage tank installations, situated on ground level at the plant room, consisting of the following:
 - (1) Fire Hydrant pump set consisting of 2 x diesel driven,
 - (2) Fire Hose Reel Jockey pumps, 1 off,
 - (3) Domestic pump set consisting of 1 x electrical driven pump,
 - (4) Electrical pump control panels, Diesel Control Panels, Jockey Pump control panels, Annunciator Panel,
 - (5) Combined Steel Panel Domestic Water and Fire Water Storage Tanks,
 - (6) All associated pipes work as indicated on the drawings inside the fire plant room and to and associated pipe work to and from storage tanks.
 - (7) All electrical controls and cabling.
 - (8) Water storage tank ancillary equipment including vortex inhibitors, level indicators, tank fill point and tank suction point.
 - (ii) The fire water pump of this development shall include pressure gauges, flow switches, butterfly valves, and all interconnecting pipe work for the tank and to the site reticulation.
 - (iii) The Domestic water pump of this development shall include pressure gauges, flow switches, butterfly valves, and all interconnecting pipe work above ground from the storage tank to the elevated day storage tank.

- (vi) Testing of the complete domestic and fire water plant room systems,
- (iv) Co-ordination of the complete water system relative to other services including the mechanical, electrical, and plumbing services as well as structure.
- (v) Painting of all water piping and equipment within the plantroom.
- (vi) Installation and shop drawings by sub-contractor for approval by the Engineer.
- (vii) Certification of the complete installation as complying with Authority having Jurisdiction requirements and all relevant codes and regulations.
- (viii) Supplying of operating and maintenance manuals for all systems and components of this installation.
- (ix) Training of client's maintenance and operating personnel in operating, servicing, and maintaining the systems and components forming part of this installation.
- (x) Commissioning and handing over of complete systems within the plantroom to the satisfaction of the Engineer.
- (xi) Maintaining and servicing of complete installations during the warranty period.

1 SYSTEM DESCRIPTION

PMS 2.1 - GENERAL

The domestic and fire water pumps and tank are to be located at the rear of the property which will then feed the fire water into the existing underground fire reticulation and the domestic will supply the day tank with top water. The water plantroom and tank shall be designed, installed, tested, and commissioned in accordance with the relevant codes, regulations, and requirements of the Local Authorities. The system shall be designed and installed in accordance with SANS 10400 - T Rules and shall be certified as such.

The water supplies to the water storage tanks shall be provided by means of a municipal connection to the Combined domestic and Fire Water Storage Tanks and installed under this contract. The water storage tanks will be situated on Ground level next to the Domestic and Fire Booster Pumps. The storage tanks will provide stored treated water for the domestic and fire use. The domestic pump system will provide the water supplies to the day storage tank located at an elevated position via a new underground main supply pipe, which is installed by others, at the required pressure and flow. The fire pump system will provide the water supplies to the conventional fire protection system via the existing underground ring main pipe reticulation at the required pressure and flow. The intended contract as described to be supplied and installed in accordance with the relevant Particular and Technical specifications forming part of this document.

The systems are designed to function and operate as follows:

The fire protection system shall be installed in accordance with the relevant codes and regulations described in this document as well as the design drawings provided. The water supplies to this installation shall be as described above.

Water shall be stored in two equally sized Steel panel Combined Water Storage Tanks, each with a total dedicated fire water storage capacity of 146m³ for the conventional fire water hydrant and hose reel installations and domestic use.

The fire pump house, to be situated on Ground Floor pump room, will be equipped with the following:

- A Domestic pump set consisting of 1 x electrical driven pump. The pump shall be of the end-suction centrifugal pumps, providing water to the elevated storage tank.
- A fire hydrant/ hose-reel pump set consisting of 2 x diesel driven, and jockey fire pumps. The main fire pumps shall be of the end-suction centrifugal pumps, providing water to the hydrants and hose reel systems.

Each of the above pump systems shall provide the required flow and pressure to the various buildings via the existing underground fire ring main pipe reticulation. The site fire ring main pipe reticulation has been installed by the civil engineer's contractor and does not form part of this scope of works.

Each of the above pump systems shall provide the required flow and pressure to the various locations via the new and existing underground supply piping. The site fire ring main pipe reticulation has been installed by another contractor and does not form part of this scope of works.

Vortex inhibitors to be installed in each of the storage tanks. From this, point a 150 – 250dia suction pipe header to be installed with a valve on each line to each fire pump. This pipe shall be connected to the pumps by means of the necessary fittings, valves etc. From the pumps, the water shall be pumped to the various neighbourhoods building connections via the existing fire water ring main.

The domestic pump, consisting of one electrical driven pump, shall be of the end-suction centrifugal type. The pumps shall be capable of delivering the required flow rate to fill the day storage tank at the required operating head.

The main fire pump set, consisting of two diesel driven pump, shall be of the end-suction centrifugal type. The pumps shall be capable of delivering the required flow rate of the development, which shall include the combined flowrate for one fire hydrant and 3 fire hose reels operating simultaneously at the required operating head.

In addition to the above fire pumps a jockey pump set, shall be provided which shall be supplied and installed in parallel with the main fire pumps and shall be of the vertical multi-stage type. The flowrate of the pump sets shall be in accordance with the system design requirements.

All pumps shall be controlled by means of the automatic pressure starting systems consisting out of a pressure switch starting arrangement. A key operated manual activation starting system shall be provided on the Fire Pump control Panel.

PMS 2. DESIGN INFORMATION, OCCUPATION AND HAZARD CLASSIFICATION

PMS 3.1 - GENERAL DESIGN INFORMATION

Design Information				
Location of Site				
1.1	Country:	Limpopo, South Africa		
1.2	City / Town:	Mokopane		
1.3	.Site:	Mokopane Home Affairs building		
Weather Data				
2.1	Ambient Temperature:	.Winter Average:	:	15 °C
		Summer Average:	:	26 °C
2.2	Wet bulb Temperature.	.Winter Average:	:	8 °C
		Summer Average:	:	24 °C
2.3	Humidity:	35%	to	70%
Water Supply Temperature				
3.1	Average:	18 °C		
Electrical Supply Data				
4.1	Phases:	Three + Neutral		
4.2	Voltage:	400 Volt		
4.3	Frequency:	1 z		

Table 1 | Design Information

DETAIL DESIGN INFORMATION:

PMS 3.2.1 - Proposed Design Protection Measures Information:

The following fire protection measures design information is provided and shall be read in conjunction with the specification and design drawings:

FIRE HYDRANT/ HOSE REEL PUMP SYSTEM DETAILS	
Number of Pumps:	2 Main Pumps & 1 Jockey (2 x Diesel)
Jockey Pumps	
Number of pumps:	1
Pump Capacity / pump:	Duty Point: 1,5 L/sec @ 72 meter
Type of Pumps:	Vertical multi-stage
Power Requirements:	2.2 kW, 3P, 50Hz electric motors
Main Pumps – 2 x Diesel Driven	
Number of pumps:	2 of each
Pump Capacity / pump:	Duty Point: 1,290 litres/min @ 72 meter
Type of Pumps:	2 x End-Suction Centrifugal Diesel Electrical Driven pumps
Power Requirements:	1 x 230v, 40 kW, 1P
FIRE WATER STORAGE TANKS	
Type of Storage Tank	Sectional Steel Panel Type
Total Effective Fire Water Storage Capacity	146 m ³
FIRE WATER MAINS ON SITE	
Type of pipe	100 mm dia
DOMSECTIC PUMP SYSTEM DETAILS	
Number of Pumps:	1 Main Pump (1 x Electrical driven)
Pumps	
Number of pumps:	1
Pump Capacity / pump:	Duty Point: 1.1 L/sec @ 25 meters
Type of Pumps:	Water booster pump
Power Requirements:	1,5 kW, 1P, 50Hz electric motor
FIRE WATER MAINS ON SITE	
Type of pipe	50 mm dia

PMS 4.1 - PIPING SPECIFICATION

The following piping and fittings shall be used for this project and shall comply with the local Authorities requirements and shall be as specified in the Technical Specifications MS & MF included in this document:

PMS 4.1.1 - Pumphouse Fire Protection System:

Pumphouse fire water piping installations shall be supplied and installed in accordance with the **Technical Specification MF 04.01** and the requirements of **SANS 10400**. All piping, fittings and equipment shall be submitted to the Engineer as well for approval prior to ordering and installation.

PIPE SIZES ≤ 50 mm Ø	
DESCRIPTION	REQUIREMENTS
Operating Pressure:	700 kPa
Closed Head Pressure:	1,100 kPa
Test Pressure:	1,600 kPa
Temperature Range:	8°C to 25°C
Pipe Type:	Medium Grade Screwed and Socketed Galvanized Steel Pipes
Pipe Material Code Specification Reference:	SANS 62-1 Part 1: Pipes suitable for threading and of nominal size not exceeding 150 mm. Part 2: Screwed pipes and pipe fittings of nominal size not exceeding 150 mm.
Pipe Class Rating:	Medium Grade
Pipe and Fitting Joint Method:	Galvanized Screwed and Socketed with threads complying with SANS 1109 Parts 1 & 2
Pipe Fitting Materials and Code Specification Reference:	Galvanized Screwed and Socketed malleable cast iron pipe fittings as per SANS 14 - Malleable cast iron fittings threaded to ISO 7-1.
Pipe Fitting Class Rating	Medium Grade
Technical Specification Ref:	MF 04.05

b) PIPE SIZES ≥ 50 mm Ø

DESCRIPTION	REQUIREMENTS
Operating Pressure:	700 kPa
Closed Head Pressure:	1,100 kPa
Test Pressure:	1,600 kPa
Temperature Range:	8°C to 25°C
Pipe Type:	Medium Grade Groove-ended Galvanized Steel Pipes

b) PIPE SIZES ≥ 50 mm \varnothing	
Pipe Material Code Specification Reference:	<u>SANS 815-2</u> <i>Shoulder-ended and groove-ended pipe systems</i> <i>Part 2: Groove-ended steel pipes, fittings and couplings</i> with pipes as per <u>SANS 62-1</u> <i>Part 1: Pipes suitable for threading and of nominal size not exceeding 150 mm</i>
Pipe Class Rating:	Medium Grade
Pipe and Fitting Joint Method:	Galvanized Groove-ended cast iron fittings and cast-iron couplings
Pipe Fitting Materials and Code Specification Reference:	Galvanized Groove-ended cast iron fittings and cast-iron couplings complying with <u>SANS 815-2</u> <i>Shoulder-ended and groove-ended pipe systems</i> <i>Part 2: Groove-ended steel pipes, fittings and couplings</i> and <i>SANS 936</i>
Pipe Fitting Class Rating	Medium Grade
Technical Specification Ref:	MF 04.05

PMS 4.1.2 - General:

In addition to the Technical Specifications MF & MS included in this document, the following shall apply to the fire water systems:

- (a) Only piping 50 mm diameter and larger may be permitted to be joined together by welding. This is provided that the joints are fabricated and welded in the workshops of the Contractor whose welding procedures shall be approved by a recognised authority. No welding or heat cutting shall be permitted on the site.
- (b) No fire piping shall be embedded in the structure, nor shall it be concealed in any situation where difficulty would be involved in making alterations or additions which may subsequently become necessary.
- (c) Where pipework is erected in locations where it is prone to damage and it is impractical to avoid such areas, the pipework shall be protected by adequate guards. The method of protection shall be approved by the Engineer.

PMS 4.1.3 - Pipe Supports:

In addition to the Technical Specifications MF & MS included in this document, the following shall apply to the fire water system:

- (a) Purpose structurally designed and manufactured support brackets shall be supplied and installed for the main distribution and riser piping where they are bunched together. This shall consist out of galvanised angle iron frames fitted with U-bolts anchored to building structure.

- (b) Purpose structurally designed and manufactured support brackets shall be supplied and installed for the fire pump piping installation. This shall consist out of galvanised angle iron frames fitted with U-bolts anchored to building structure.

PMS 4.2 - VALVE SPECIFICATIONS

- (a) Valves > 50 mm dia.

Shall be of the butterfly valve type with resilient rubber seat and shall be equipped with gear operated closing mechanism. The valves shall be in accordance with BS 5155 and shall be similar or equally approved to Victaulic groove ended or flanged valves fitted with supervisory micro switches which shall be wired back to the fire control panel by others.

- (b) Valves smaller and equal than 50 mm dia.

These valves shall be of the screwed and socketed type with bronze body and gates with non-rising spindle.

PMS 4.3 - FIRE AND DOMESTIC WATER PUMP EQUIPMENT AND INSTALLATION SPECIFICATION

The fire protection systems to this development will be provided with water supplies from the fire pump room to be situated on ground level in fire plant room next to the site entrance.

The water supplies shall consist of the following:

- Fire system supplies via the primary site fire underground pipe reticulation systems, installed by others, fed from a common fire pump system fitted with multi-stage pumps.
- Domestic system supplies via a primary underground pipe reticulation system, installed by others, fed from a pump system.
- Water storage sectional steel tank – 146m³

The fire hydrant/hose-reel pump installation shall be equipped with the following pump system, situated inside the pump room, consisting out of the following:

- (a) 1 x Jockey pump
- (b) Main diesel driven end-suction centrifugal pump.
- (c) Main electrical driven end-suction centrifugal pump
- (d) Jockey, Main Electrical pump and diesel fire pump drive control panels.
- (e) Automatic pressure-switch starting arrangements.
- (f) Diesel storage tank with a storage capacity of at least 6-hours running time of the diesel driven pump at 100% capacity.
- (g) All required pipework, valves, non-return valves, pressure gauges, strainers, bracketing, supports etc. for the complete installation required and as indicated on the plan and schematic layouts.
- (h) All electrical cabling, wiring, cable ways, controls, level indicating equipment, float switches etc. for the complete pump room installation.
- (i) Engine cooling and pump cooling installation.

The Domestic pump installation shall be equipped with the following pump system, situated inside the pump room, consisting out of the following:

- (a) Main electrical driven end-suction centrifugal pump
- (b) Pump drive control panels.

- (c) Automatic Level pressure-switch starting arrangements.
- (d) All required pipework, valves, non-return valves, pressure gauges, strainers, bracketing, supports etc. for the complete installation required and as indicated on the plan and schematic layouts.
- (e) All electrical cabling, wiring, cable ways, controls, level indicating equipment, float switches etc. for the complete pump room installation.

This installation shall be installed in accordance with **SANS 10252-Part 1 and the** Technical Specification MS and MF included in this document and Local Authority requirements.

PMS 4.5.1 - Fire Hose Reel Jockey Pump Sets:

Each of the fire hydrant/ hose-reel pressure zones supplies shall be provided with a vertical multi-stage electrical driven jockey pump, each with a capacity as follows:

Fire Hose-Reel Jockey Pumps

Number of pumps:	1
<u>Pump Capacity / pump:</u>	
Pump for System 1	Duty Point: 1,5 L/sec @ 72 meter
Type of Pumps:	Vertical Multi-stage

Each Hydrant/ Hose-Reel Jockey pump shall be controlled by means of the pressure switch starting arrangement and shall keep the systems under pressure at the pressures indicated above.

The pumps and drive controllers for these pump sets shall be designed, supplied and installed in accordance with the requirements of **SANS 10252-Part 1** and as specified in the Technical Specification documents MF.

The drive controllers shall be mounted inside the fire hose-reel jockey pump control panel.

The Contractor shall provide full-certified hydraulic calculations to enable exact sizing of the pumps.

PMS 4.5.2 - Main Diesel Driven Fire Hydrant Pump Set:

Each main diesel driven hydrant fire pump shall be of the Horizontal Multi-Stage/ Multi-Port type pumps capable of providing the required flow and pressure of the entire development:

Main Hydrant Diesel Driven Fire Pump (Multi-Stage Multi-Port)

Number of pumps:	2
<u>Pump Capacity / pump:</u>	
Port 1 – take-off	Duty Point: 1,290 litres/min @ 72 meter
Type of Pumps:	2 x end-suction centrifugal pump
Pump Model:	Similar or Equal to Grundfos Hydro EN 50-250/249 T1JS A-U2-B-A

The pump shall be controlled by means of the pressure switch starting arrangement and shall start by means of the pre-set pressure.

The pumps and engine drive controller for the pump shall be designed, supplied and installed in accordance with the requirements of **SANS 10252-Part 1** and as specified in the Technical Specification documents MS

The drive controllers shall be mounted inside the diesel driven pump control panel.

The Contractor shall provide full-certified hydraulic calculations to enable exact sizing of the pumps.

The pump shall be tested certified in accordance with the requirements of **SANS 10252-Part 1** by an approved testing authority, such as the SABS, and a certified bench-test certificate to be issued.

The diesel engine shall be of the compression ignition mechanical injection naturally aspirated type and cooled by means of a water-to-water exchanger. This diesel engine and ancillary equipment shall comply with **SANS 10252-Part 1** and the Technical Specification MS included in this document.

PMS 4.5.3 - Domestic Supply Pump

Main Electrical Driven Fire Pump	
Number of pumps:	1
Pump Capacity / pump:	
Port 1 – take-off	Duty Point: 1.1 L/sec @ 25 meters
Type of Pumps:	1 x pump
Pump Model:	Similar or Equal to Grundfos SCALA2 3-45

The pump shall be controlled by means of a float switch starting arrangement and shall start by means of the pre-set water level in the day tank.

The pumps and electrical drive controller for the pump shall be designed, supplied, and installed in accordance with the requirements of **SANS 10252-Part 1** and as specified in the Technical Specification documents MS.

PMS 4.5.4 - Water storage tanks.

The water storage tanks shall be designed for use in both domestic and fire water storage.

ZUTARI - BUILDING ENGINEERING UNIT		ZUTARI
SECTIONAL PANEL WATER STORAGE TANK SIZE CALCULATION		
PROJECT NAME:	MOKOPANE HOME AFFAIRS	
PROJECT NUMBER:	112763	DATE:
CALCULATION REF. No.:	ABECO Steel Tank	17-04-24
DOMESTIC & FIRE WATER SECTIONAL STORAGE TANK - CAPACITY Rev 1		
CAPACITY REQUIRED:		138,400,000 liters
Size Selected:	4L x 6W x 3H	DIMENSIONS
LENGTH:	5	6.10 m
WIDTH:	4	4.88 m
HEIGHT:	4	4.88 m
FREE BOARD ON TOP:		0.10 m
FREE BOARD AT BOTTOM:		0.10 m
CAPACITY WITHOUT FREE BOARD		145.27 m³
EFFECTIVE STORAGE CAPACITY		139.31 m³

The tank level shall be controlled by means of the altitude level or flow control valve, located on the outside of the tank.

The tank shall be designed, supplied, and installed in accordance with the requirements of **SANS 10252-Part 1** and as specified in the Technical Specification documents MS.

The tank shall provide storage for domestic and fire water supply.

PART 3

TECHNICAL SPECIFICATION

M GENERAL SPECIFICATION

CONTENTS

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M 1. GENERAL

The technical specifications included define the standard of equipment and materials as well as the quality of the services required for the various sections of the installation. Not all the clauses in this section of the technical specification shall necessarily be applicable on the Contract. Refer to the particular or material specification for materials and equipment to be used.

The Contractor shall at all times adhere to this specification unless otherwise specified on the drawings and/or in the detailed specifications.

The Engineers drawings show broad principles of design, general layouts, schematic arrangements and when read together with the specifications and the drawings of other disciplines and other contractors, they carry sufficient information to enable the Contractor to determine how the installation is to be installed, operated, serviced and maintained.

The Contractor shall submit workshop drawings, samples, catalogues, performance characteristics, etc. on all equipment, except when not required by the Engineer.

The Contractor shall take insitu measurements for installation of the equipment of the system and produce complete workshop drawings for fabrication and installation, which shall be coordinated by the Contractor with all other relevant equipment and services. Dimensions given on the drawings are only a guide and should be adapted to suit the relevant measurements of the specific fittings and/or equipment

M 2. COMPLIANCE WITH REGULATIONS AND STANDARDS

It shall be the responsibility of the Contractor to ensure that all equipment and methods used in the installation comply with all relevant statutory regulations and amendments thereto in particular the following:

- (a) Government and Local Authorities ordinances.
- (b) Regulations, By-Laws, Rules and other Statutory requirements.
- (c) Specifications and Codes of Practice issued by the SANS, National Fire Protection Association and British Standards Institute.

All materials and equipment supplied and installed shall carry a mark of approval unless otherwise specified.

M 2.1 - GENERAL STANDARD SPECIFICATIONS, REGULATIONS AND CODES

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

M 2.1.1 - Relevant Specifications and Codes:

- ❑ SANS 10400 - The Application of the National Building Regulations – (As amended)
 - *Part A: General principles and requirements.*
 - *Part S: Facilities for persons with disabilities.*
 - *Part T: Fire protection.*
 - *Part W: Fire installation.*
- ❑ SANS 0142 - Code of Practice for the Wiring of Premises
- ❑ SANS 0140 - Identification Colour Marking
- ❑ SANS 044 - Parts I to IV Welding
- ❑ SANS 460 - Copper tubes for Domestic Plumbing
- ❑ SANS 543 - Fire Hose Reels (With Hoses).
- ❑ SANS 810 - Portable Rechargeable Dry Powder Fire Extinguishers.
- ❑ SANS 1151 - Portable Fire Extinguishers of the Halogenated Hydrocarbon Type.
- ❑ SANS 1186 - Symbolic Safety signs.
- ❑ SANS 0105 - The classification, use and maintenance of Portable Fire Extinguishers
- ❑ SANS 0139 - The Prevention, Automatic Detection and Extinguishing of Fire in Buildings
- ❑ SANS 1200 DB - Earthworks (Pipe trenches)
- ❑ SANS 1200 LB - Bedding (Pipes)
- ❑ SANS 1200 PSL- Medium pressure pipelines
- ❑ SANS 10252-Part 1 - Water supply installation for buildings
- ❑ SANS SM 1172;- Fire extinguishers, classification system, fire ratings

- ❑ CKS 532; - Fire extinguishers, foams
- ❑ SANS 0105-1; - Fire extinguishers, portable, classification system, control systems
- ❑ SANS 1322; - Fire extinguishers, portable, non-refillable
- ❑ SANS 1567; - Fire extinguishers, portable, rechargeable, carbon dioxide
- ❑ SANS 1573; - Fire extinguishers, portable, rechargeable, foams
- ❑ SANS 1475-1; - Fire extinguishers, portable, reconditioning
- ❑ SANS 1522; - Fire extinguishers, powders
- ❑ SANS 1571; - Fire extinguishers, transportable, rechargeable
- ❑ SANS 889; - Fire extinguishers, water fire extinguishers, portable, rechargeable
- ❑ SANS 0105-1; - Fire fighting equipment, fire extinguishers, portable
- ❑ SANS 1322; - Fire fighting equipment, fire extinguishers, portable, non-refillable
- ❑ SANS 0105-2; - Fire fighting equipment, fire hose reels
- ❑ SANS 1128-1; - Fire fighting equipment, fire hydrants
- ❑ SANS 1128-2; - Fire fighting equipment, fire hose, pipe couplings, pipe connections
- ❑ SANS 1475-1; - Fire fighting equipment, reconditioning, fire extinguishers, portable
- ❑ SANS 889; - Fire fighting equipment, water fire extinguishers, portable, rechargeable
- ❑ SANS 0105-2; - Fire hose reels, classification systems, control systems
- ❑ SANS 1475-2; - Fire hose reels, reconditioning
- ❑ SANS 1456-5; - Fire hoses, collapsible, delivery pipes (fire fighting), oil resistance tests, chemical resistance tests
- ❑ SANS 1456-2; - Fire hoses, collapsible, delivery pipes (fire fighting), percolating hoses
- ❑ SANS 1456-1; - Fire hose, collapsible, delivery pipes (fire fighting), testing
- ❑ SANS 1456-4; - Fire hoses, collapsible, delivery pipes, coated materials, non-percolating hoses
- ❑ SANS 1456-3; - Fire hoses, collapsible, delivery pipes, uncoated materials, non-percolating hoses
- ❑ SANS 1056-1; - Fire safety, ball valves

M 2.1.2 - Occupational Health and Safety Act no 85:

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

M 2.1.3 - Manufacturers' Specifications, Codes of Practice and Installation Instructions:

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

M 2.1.4 - Local Authority Codes, Regulations, Laws and By-laws:

All municipal and fire safety regulations, laws, by-laws and special requirements of the Local Authorities shall be adhered to unless otherwise specified. All submissions and approvals required by these authorities shall be adhered to and obtained by the Contractor.

M 3. VARIATIONS AND ADDITIONS TO STANDARD SPECIFICATIONS

The following additional general specifications and notes shall be read in conjunction with this document and shall be adhered to unless otherwise specified in the particular specification

M 3.1 - GENERAL CONSTRUCTION AND INSTALLATION REQUIREMENTS

- (a) All materials and equipment supplied and installed shall be of new, high quality material, designed and manufactured to the relevant specifications, suitable for providing an efficient, reliable and trouble-free service.
- (b) All work has to be executed in a first-class workman-like manner by qualified tradesmen.
- (c) All equipment, component parts, fittings and materials supplied and/or installed, shall conform in respect of quality, manufacture, test and performance to the requirements of the applicable current SANS, NFPA or/and BS specifications and codes, except where otherwise specified or permitted with approval from the Engineer in writing.
- (d) All materials and workmanship, which may in the opinion of the Engineer, be inferior to that specified for the work, will be condemned. All condemned material and workmanship must be replaced or rectified as directed by the Engineer, to the satisfaction of the Engineer.
- (e) The Contractor shall submit a complete, detailed equipment and material list to be used to the Engineer for approval prior to placing orders or commencing installation.
- (f) All new equipment, materials and systems shall be installed in such a manner and positioned as to not impede on access routes, entrances and other services. The Contractor shall co-ordinate these items taking into account other services and equipment.
- (g) All control equipment and serviceable items shall be installed in such a manner and positioned to be accessible and maintainable.
- (h) The Contractor shall ensure that all safety regulations and measures are applied and enforced for the full Contract period to ensure safety of the workforce, public and user.
- (i) All materials and equipment shall be carefully examined for defects and flaws prior to installation. All defective and/or flawed materials and equipment shall be replaced with new.
- (j) All pipe installations shall be neatly fitted and properly secured and bracketed.
- (k) During construction all pipe ends shall be kept plugged to prevent any ingress of dirt and foreign matter.
- (l) All piping shall be installed in such a manner as to allow for contraction and expansion.

M 4. EQUIPMENT AND DRAWING APPROVAL

- (a) The Contract drawings shall be defined as the drawings issued by the Engineer at time of tender and during the Contract period together with the installation and manufacturing drawings to be produced by the Contractor.

- (a) The Contractor shall at his own expense be required to produce and submit three sets of detailed dimensioned and coordinated installation and manufacturing drawings for all installations, systems and equipment to the Engineer for approval prior to placement of any orders or commencement of construction. The manufacturing drawings shall be kept up to date and re-submitted to the engineer as and when changes occur. The drawings shall provide at least the following information:
 - (i) Pipe sizes
 - (ii) Material specifications;
 - (iii) Dimensional pipe positions;
 - (iv) Capacity ratings of all equipment;
 - (v) Certified hydraulic pipe size calculations;
 - (vi) Installation details;
 - (vii) Pipe support and bracketing details;
 - (viii) Electrical control panel details and wiring diagrams;
 - (ix) Manufacturing details;
 - (x) Dimensional details of plant bases, drain points, water connections, wall openings, sleeves, ventilation requirements, concrete work, equipment to be built in and any other work required.
- (b) The Contractor shall be required to submit a detailed equipment and material list prior to ordering and commencement of construction for approval by the Engineer. This shall include the following information:
 - (i) Detailed catalogued information on all equipment and materials;
 - (ii) Capacity ratings of all equipment;
 - (iii) Manufacturing details and model numbers.
- (d) The site co-ordination drawings shall be fully dimensioned to show the inter-relationship of all engineering services, where applicable.
- (e) The Engineer will review and approve drawings and samples, but only for conformance with the design concept, specification and information given in the Contract Documents. Approval by the Engineer shall not relieve the Contractor of any of his obligations in terms of the Contract or relieve the Contractor from responsibility of errors or omissions. The Contractor shall be responsible for determining and verifying all site measurements and site construction data to ensure installation or erection fit. The Contractor shall make any corrections required by the Engineer and shall re-submit the required number of corrected copies of drawings or new samples until approved.
- (f) Comments, amendments or corrections by the Engineer on drawings or samples submitted for approval shall not constitute any variation the cost of the Works. Should any comments, amendments or corrections, in the opinion of the Contractor, involve additional cost, the Contractor shall notify the Engineer in writing and shall not proceed with such portion of the works until instructed by the Engineer.
- (g) The Contractor shall be responsible for obtaining all drawing and installation approvals from the Local Authorities, where required.

M 5. AS-BUILT DRAWINGS AND OPERATING AND MAINTENANCE MANUALS

M 5.1 - AS-BUILT DRAWINGS

The Contractor shall at all times keep a set of updated as-built drawings on site. On completion of the works the Contractor shall produce and provide the Engineer with a set of verified as-built drawings consisting of three paper prints per drawing as well as electronic format drawings in AutoCAD 2012 version. These drawings shall consist of the following:

- (a) Scaled plan layouts of all pipe installations (1: 50 scale);
- (b) Scaled plan, sections and elevation drawings of all plant layouts (1: 50 scale);
- (c) Detailed electrical panel wiring diagrams and panel layouts;
- (d) Manufactured equipment drawings;
- (e) Electrical installation drawings.
- (f) A general description, illustration and flow diagram of the whole installation.
- (g) All approved local authority submission drawings

The drawings shall be detailed in such a manner to enable the Employer's maintenance staff to maintain, dismantle, reassemble and adjust all items, parts and equipment of the installation.

The final completion certificate shall only be furnished once the above has been submitted and approved by the Principal Agent.

M 5.2 - OPERATING AND MAINTENANCE MANUALS

The Contractor shall on completion of the works produce and submit three sets of operating and maintenance manuals to the Project Agent for approval. These manuals shall be structured to include at least the following:

- (a) System description
Complete system description and the plant operation description.
- (b) Commissioning data
Complete commissioning, test and inspection data of systems and equipment.
- (c) Operating data
 - (i) Systems and equipment running check list and frequency of servicing required;
 - (ii) Safety precautions to be implemented
 - (iii) Operator's duties and logging required
 - (iv) Lubricating oils and service instructions
- (d) Mechanical equipment
 - (i) Description of all major items with the make, model number, names, addresses and telephone numbers of the suppliers, manufacturer or their agents;
 - (ii) Design capacities of all equipment, including selection parameters, selection curves, capacity tables, etc;
 - (iii) Manufacturer's brochures and pamphlets;

- (iv) Schedule of spares with part numbers recommended to be held as stock.
- (e) Maintenance instructions
 - (i) Schedule of maintenance particulars, frequency of services and replacements;
 - (ii) Trouble-shooting guide;
 - (iii) Part number of all replacement items and spares;
 - (iv) Capacity curves of pumps;
 - (v) Serial numbers of all items of equipment.
- (f) Electrical equipment
 - (i) Schedule of equipment, indicating manufacturer, type, model number, capacity and addresses and telephone numbers of suppliers;
 - (ii) Maintenance instructions;
 - (iii) Manufacturer's brochures and pamphlets;
 - (iv) Complete as-built circuit diagrams and diagrammatic representation of inter-connections of all electrical equipment.
- (g) Instrumentation and control
 - (i) Description of each control system;
 - (ii) Schedule of control equipment indicating manufacturer, type, model number, capacity and addresses and telephone numbers of suppliers;
 - (iii) Maintenance instructions;
 - (iv) Manufacturer's brochures and pamphlets.
- (h) Drawings
 - (i) Paper prints as well as electronic format (Autocad 2004) of all as-built mechanical and electrical drawings;
 - (ii) Wiring diagrams framed behind glass shall be mounted adjacent to each relevant control panel.

M 6. TRAINING AND OPERATION OF INSTALLATION AND EQUIPMENT

The Contractor shall be responsible for providing onsite training to the operating and maintenance personnel. The Contractor shall develop and facilitate the training course.

The training of the maintenance and operating personnel is to include the following aspects:

- (a) Awareness of safety, health and personal hygiene in terms of the requirements of the Relevant Life Safety Code;
- (b) Functioning of the installation, including all its systems, services, parts of buildings and infrastructure;
- (c) All specific tasks related to routine preventative maintenance;
- (d) Interpretation and understanding of Operating and Maintenance Manuals;

- (e) Repair/reconditioning and installation/construction of equipment and materials forming part of an installation;
- (f) Equipment and component recognition;
- (g) How to operate the equipment including the following:
 - a. Starting the equipment;
 - b. Manual and automatic controlling;
 - c. Shut down and isolating of equipment and systems;
 - d. Cleaning of equipment.
- (h) Emergency procedures to be followed in the case of breakage's, system faults, etc.
- (i) Safety precautions to be followed and implemented;
- (j) The identification, reporting and recording of faults and operation of equipment;
- (k) The logging of equipment operation, readings and settings.

On completion of the training of the maintenance personnel, the Contractor shall evaluate each of the personnel by means of an approved examination.

M 7. TEST AND INSPECTIONS

M 7.1 - GENERAL

- (a) Except where otherwise provided in the Contract, the Contractor shall provide all labor, materials, power, fuel, and accessories and properly calibrated and certified instruments necessary for carrying out such tests. The Contractor shall make arrangements for such tests and he shall give at least 96 hours' notice to the Engineer and Independent Commissioning Agent, in writing, prior to commencement of the test.
- (b) In the event of the plant or installation not passing the test, the Engineer shall be at liberty to deduct from the Contract price all reasonable expenses incurred by the Employer or the Engineer attending the repeat tests.
- (c) Whenever any installation or equipment is operated for testing or adjusting as provided for above, the Contractor shall operate the entire system for as long a period as may be required to prove satisfactory performance at all times in the occupied space served by that system for up to twenty-four hours a day continuously until the system is handed over.
- (d) The Contractor shall provide all labor and supervision required for such operation and the Employer may assign operating personnel as observers, but such observation time shall not be counted as instruction time.
- (e) After complete installation of the system all equipment shall be tested, adjusted a re-adjusted until it operates to the satisfaction and approval of the Engineer and the Local Authorities.
- (f) The Contractor shall submit certificates of tests carried out to prove all equipment and also certificates to be obtained from all relevant authorities and statutory bodies, etc.
- (g) The Contractor shall allow for all required inspections, tests and certification by an approved inspection authority on the works where required by the Relevant Health and Safety Act.
- (h) The Contractor shall be responsible for all approvals and testing required by the local authorities or other statutory bodies as required. The Contractor shall provide four sets of all test certificates

witnessed by the authorities having jurisdiction, Independent Commissioning Agent and the Engineer's representative. Such certificates shall be detailed so as to identify the area tested.

- (i) Acceptance of any tests by the Engineer and Independent Commissioning Agent shall not relieve the Contractor of responsibility for proper materials and workmanship. It shall be the Contractor's responsibility to test all piping, valves, fittings and other equipment, erected by the Contractor in accordance with the requirements of all authorities having jurisdiction.
- (j) The Contractor shall remove all gauges, instruments and items which could be damaged by the tests and shall supply and install blanks, blinds or temporary fittings for testing. The Contractor shall remove blinds, blanks and temporary fittings and replace gauges and items, which could have been damaged, on satisfactory completion of the test.
- (k) The Contractor shall supply all test equipment and materials.
- (l) The Contractor shall be responsible for the removal of water, used for flushing and testing, from all piping systems, including attached equipment. The Contractor shall supply any required temporary drains for draining of the works; these shall be removed after use, leaving the area in its original condition.
- (m) The Contractor shall conduct all required tests and adjustments to equipment specified, as necessary to verify performance requirements. The Engineer reserves the right to be present at all tests and shall be notified 48 hours in advance.
- (n) The Contractor shall be responsible for any and all damages resulting from test. The Contractor shall supply safeties to protect the system under tests. The Contractor shall be responsible for venting all sections of piping systems, and equipment while flushing, testing and draining to prevent possible collapse by vacuum.
- (o) In the event of a system failing a test, a new test shall be executed only after repairs and corrections have been made. Under no circumstances may repairs or corrections be made while the test is in progress.
- (p) After completion of repairs, the system is to be re-tested including any parts which may have passed the tests but which, in the opinion of the Engineer, may have been affected by the repair.
- (q) The Contractor shall supply test pressure gauges, which shall either be dual scale test gauges, or, if single indicating scale types, a second gauge shall be used and installed adjacent to the test gauge. Gauges shall be suitable for the maximum test pressure, with dial not less than 80 mm diameter. The maximum pressure capacity of the gauge shall not exceed twice the test pressure. Gauges shall be checked against a standard gauge.
- (r) Supply all materials, supplies, labor and power required for testing. Make preliminary tests and prove work satisfactory. Notify the Engineer and all authorities having jurisdiction in ample time to be present for final testing of all piping. Test before concealing any piping. Repair defects disclosed by tests, or, if required by the Engineer, replace defective work with new work without additional cost to the Employer. Make tests in stages if so ordered by the Engineer to facilitate work of others. Caulking of leaks will not be permitted.
- (s) The Contractor is responsible for work of other trades disturbed or damaged by tests and/or repair and replacement of his work, and shall reinstate work so disturbed or damaged, to be restored to its original condition at his own expense

M 8. QUALITY ASSURANCE SYSTEM

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

M 9. COMMISSIONING OF PLANT AND INSTALLATION

On completion of the works the installation, plant and equipment shall be put into operation after all tests and adjustments have been carried out to the satisfaction of the Engineer and the Independent Commissioning Agent.

The Contractor shall run and operate the installation for a period as specified by the Engineer and Independent Commissioning Agent Consultant and train the Employers' representatives to operate and maintain the system.

Logging of the operation of the installations shall commence immediately upon start-up.

The commissioning of all installations shall conform to the requirements of the relevant CIBSE commissioning codes and the requirements by the Independent Commissioning Agent Consultant as detailed in Section 4 of this document.

On completion of the commissioning process the Contractor shall submit a full commissioning report to the Engineer and Independent Commissioning Agent Consultant for approval. The commissioning shall be done strictly in accordance with the manufacturer's specification and relevant standards, norms and specifications from the applicable body, authority and/or department. This shall include but not be limited to the following:

(a) All required pre-commissioning checks

- (i) Check all electrical, water and drain connections.
- (ii) Check all moving parts.
- (iii) Check seals, gaskets and joints.
- (iv) Ensure that plugged or spaded ends are properly secured.
- (v) Check and record all lubrication to equipment and components has been done in accordance with manufacturer's specification.
- (vi) Check and ensure that all valves, strainers, non-return valves, etc. are correctly installed and in the correct operating position.
- (vii) Check and clean out fire water storage tanks – (by civil eng contractor).
- (viii) Check, test and inspect the correct installations and operation of all fire pumping installations.
- (ix) Check that all the required pressure testing to the installations and equipment has been done, witnessed and recorded in accordance with the relevant specifications.
- (x) Check, test and inspect that all bracketing and supports to the relevant installations and equipment is properly secured and installed in accordance with the manufacturer's specifications and installation specification.
- (xi) Check, inspect and ensure that no leaks to equipment, systems and installations are present.
- (xii) Check, inspect and ensure that all strainer elements are cleaned of any foreign matter.

- (xiii) Check, inspect and ensure that all electrical equipment and systems are correctly installed and that all required pre-commissioning tests and checks have been performed. Before the installation is commissioned for the purpose of practical completion and before requesting acceptance of the installation, the Contractor shall be responsible for the cleaning or replacing of all equipment filters and strainers which have become dirty or clogged during the installation and testing of the plant.
- (xiv) Thoroughly brush and clean all work. Remove all dirt, rust, grease or other foreign matter prior to insulation, concealing or painting. Clean and wash all transparent surfaces on both sides. Unpainted exposed work shall be left clean before final acceptance. Painted exposed work soiled or damaged shall be cleaned or repaired to match adjoining work before final acceptance.
- (xv) Remove all debris from inside and outside of all material and equipment.

(b) Commissioning of equipment

On completion of the pre-commissioning checks the Contractor shall proceed with the commissioning of the equipment and installation. This shall be done strictly in accordance with the manufacturers specification and system parameters and shall include but not be limited to the following:

- (i) During this process all operating and safety checks shall be performed and recorded.
- (ii) During load conditions the equipment shall be re-adjusted and final settings recorded.
- (iii) Check the operation of all Installation control valves, alarm gongs, boosters, drain test valves, flow switches etc.
- (iv) Check the correct operation of all fire pumping systems. Re-adjust controls and control-equipment where applicable.
- (v) Test and check for any leaks to the system, equipment and installation.
- (vi) Check for any unnecessary strain to the system, equipment and installation due to expansion and contraction.
- (vii) The complete pipe system shall be flushed out after a one-week period of operation.

The Contractor shall visit, inspect, test and re-adjust the systems, equipment and installation during the week following commissioning to ensure the correct functioning of the equipment and its associated components.

M 10. GUARANTEE OF INSTALLATION AND EQUIPMENT

- (a) All equipment, including the complete installation and the systems as a whole, shall be guaranteed for a period of 12 (twelve) months, commencing on the day of issue of a certificate of completion of the installation, which shall be from date as specified in the Principal Building Contract.
- (b) The Contractor shall guarantee the entire installation as described in this specification for a period of one year from the date of first delivery of the Principal Building Contract. The guarantee shall provide that all parts, spares, equipment that become defective during the guarantee period shall be replaced free of charge. The guarantee shall cover all costs including material, labour, overheads, traveling, etc.
- (c) The complete installation shall be guaranteed against defects whether patent or latent as well as against faulty materials and workmanship.

- (d) The guarantee shall cover all materials, plant and equipment whether or not it is covered by a manufacturer's guarantee. The guarantee in terms of this Contract on the entire installation shall not be affected by the prior expire of any guarantee provided by the manufacturer of any item of equipment or plant.
- (e) The Contractor shall cede to the Employer the remainder of any equipment guarantee which he has received from his suppliers and which extends beyond the guarantee period. It shall be the responsibility of the Contractor to ensure that the guarantee is transferable.
- (f) The Engineer may at his discretion allow the guarantee period on any item of equipment or section of the installation start at a date prior to final handover if it is put into operation for beneficial use of the owner prior to final handover. This will not be permitted in cases where final handover is delayed due to the Contractor not carrying out remedial work in good time.

M 11. MAINTENANCE TOOLS AND SPARES

Each installation shall be provided with the necessary maintenance tools and spares as required by the specific type of equipment and installation for the daily operation and maintenance of the system and as described by the relevant SANS codes. The Contractor shall hand all tools and spares over to the Employer's Maintenance Supervisor on completion of the Works.

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

- (a) Tools
 - (i) Grease and oil lubrication equipment.
 - (ii) Equipment operating keys and tools
- (b) Spares
 - (i) Spare strainer elements.
 - (ii) Spare seats, gaskets and gland packing for valves, etc.
 - (iii) Spare pressure gauges, at least one of each range and type.
 - (iv) Spare V-belts for diesel engine
 - (v) Spare fuel filters
 - (vi) Injector nozzles

M 12. MAINTENANCE OF INSTALLATION

M 12.1 - ROUTINE AND PREVENTATIVE MAINTENANCE

- (a) The Contractor shall maintain the entire installation as described in this specification for the guarantee period.
- (b) The maintenance visits shall be carried out at regular intervals.
- (c) The maintenance shall cover all items of plant and equipment and shall include replacement of all expendable items.
- (d) The Contractor shall report to the Employer's nominated representative both on arriving and leaving the site. The Contractor shall provide the Employer's and the Engineer with a service report for each visit whether scheduled or breakdown.

- (e) At each maintenance visit the Contractor shall check the function of each item of plant and equipment and shall ensure that the plant is performing to specification. All automatic controls and safety devices shall be checked. All electrical control gear, bulbs etc. shall be checked and adjusted or replaced as necessary.
- (f) The equipment and plant rooms shall be cleaned at each scheduled visit.
- (g) The Contractor shall notify the Engineer prior to the final monthly service so that the Engineer may accompany the Contractor.
- (h) The Engineer may at his discretion allow the maintenance period on any item of equipment or section of the installation start at a date prior to final handover if it is put into operation for beneficial use of the owner prior to final handover. This will not be permitted in cases where final handover is delayed due to the Contractor not carrying out remedial work in good time

M 12.2 - EMERGENCY ATTENDANCE

The Contractor shall provide for the attendance of unscheduled visits for equipment and/or system failures due to patent or latent defects. The cost of which shall be deemed to be included in the tender price.

M 13. BUILDING TUNING

For buildings where a Green Star rating is required, all fire protection systems shall be tuned in accordance with the requirements of the Green Building Council of South Africa's Technical Manual - Green Star SA Office v1.1, Man-3 Building Tuning, which shall at least include the following:

Monthly monitoring of the entire fire protection installation shall be undertaken and the outcomes shall be reported to the Engineer and Independent Commissioning Agent on a quarterly basis (every three months) to allow corrective action to be taken. Corrective actions shall be made as required by the Engineer or Independent Commissioning Agent.

The entire fire protection installation shall be fully re-commissioned 12 months after practical completion. Re-commissioning shall comply with the general commissioning requirements as specified under clause M 08 above. Corrective actions shall be made as required by the Engineer or Building Owner during the re-commissioning process.

A full building tuning report shall be submitted to the Engineer and Independent Commissioning Agent on the outcomes of the tuning and re-commissioning process.

A programme of the tuning process and report dates shall be submitted to the Engineer and Independent Commissioning Agent prior to practical completion.

M 14. TECHNICAL SPECIFICATIONS INCLUDED

The following technical specifications are included and shall form a integral part of this document:

- Technical Specification MF – CONVENTIONAL FIRE PROTECTION INSTALLATION

PART 4

TECHNICAL SPECIFICATION

MF CONVENTIONAL FIRE PROTECTION INSTALLATIONS

CONTENTS

MF 01	SCOPE
MF 02	PRESSURE TEST
MF 03	STERILIZATION OF FIRE WATER SYSTEMS
MF 04	GENERAL REQUIREMENTS FOR CONVENTIONAL FIRE PROTECTION INSTALLATIONS
MF 05	FIRE WATER PIPE-WORK SPECIFICATIONS
MF 06	FIRE PROTECTION EQUIPMENT SPECIFICATIONS

MF 1. SCOPE

- (a) This standard specification covers the standards, materials and code of practice for the supply and installation of conventional fire protection systems for the building services trade.
- (b) This specification shall form an integral part of the contract document and shall be read in conjunction with the schedule of quantities, drawings and additional and particular specifications compiled as part of this document.
- (c) This specification shall act as a guideline to the particular specification, where in conflict the particular specification shall take precedence.
- (d) The Contractor shall at all times adhere to this specification unless otherwise specified in the particular specification.

MF 2. PRESSURE TEST

- (a) All pipes shall be pressure tested before taken into use. The Engineer and the Independent Commissioning Agent shall witness these pressure tests.
- (b) All pressure tests shall be performed and recorded in accordance with the CIBSE commissioning codes W and M
- (c) The Contractor shall allow to pressure test the fire water systems in stages as programmed by the Main Contractor. For tender purposes the contractor to allow min. 2 pressure tests per floor level. The water to be used for the water pressure test shall be sterilized as described in section MF 03. On completion and approval of the water pressure test the system shall be drained and flushed and only filled with approved water from the completed water supply system on approval from the Engineer.
- (d) For water tests completed sections of the pipe installation shall be filled with water after all outlets have been plugged, sealed or closed. The section of pipe shall be hydraulically pressure tested by means of a suitable manually operated or mechanically driven pressure pump. A pressure of at least 1,5 times the working pressure of the class rating of pipes or fittings, with a minimum pressure of

1600 kPa shall be applied for a period of time specified in the specifications or as recommended by the manufacturers

- (e) Tests should not be performed against closed valves.
- (f) Leakages that occur shall be measured and calculated and checked against the allowable losses.

MF 3. STERILIZATION OF FIRE WATER SYSTEMS

- (a) Before any pipeline is taken into use, it shall be sterilized over its complete length and including the fittings. The pipe shall be filled with potable water chlorinated to a concentration of 15 mg of chlorine per liter of water, which shall remain in contact with the inner surface of the pipeline for a period of not less than 24 hours. The pipeline shall be filled for sterilizing in such a manner that no chlorine shock is created, or air is trapped in the pipeline
- (b) At least 14 days prior to the commencement of sterilizing the Contractor shall submit full details of the proposed method of sterilizing the pipeline to the Engineer for his approval.
- (c) The cost of water for filling the pipeline for sterilizing shall be borne by the Contractor.
- (d) The Contractor shall provide all necessary materials, tools, equipment and labor necessary to sterilize the pipeline. After sterilizing the pipeline, the Contractor shall, at no extra cost, empty the pipeline and dispose of the water in a manner approved by the Engineer.
- (e) The Contractor may use the following products as a source of chlorine:
 - (i) Chloride of lime yielding 33 % free chlorine by mass.
 - (ii) Calcium hypochlorite yielding 70 % free chlorine by mass.
 - (iii) Chlorine gas applied by chlorinator.
- (f) After sterilization an approved water quality test shall be carried out to a minimum number of 10% of the total water points, randomly selected, evenly spread and marked on drawings. These tests shall include a full bacteriological test. The results shall be handed to the Engineer for inclusion in the Contract documents. Each abortive test shall be for the Contractors account.

MF 4. GENERAL REQUIREMENTS FOR CONVENTIONAL FIRE PROTECTION INSTALLATIONS

All conventional fire protection installations shall adhere to the technical and particular specifications and shall include the following general requirements:

- (a) Piping shall conform to applicable standards of current Specification of SANS 0400 and all referenced specifications.
- (b) Reference to a Specification from recognized authorities to establish basis of quality shall mean current edition at date of Tender.
- (b) Routes of pipes in roof spaces are shown on the drawings as a guide only and the Contractor must ensure that no pipes are placed in positions impeding on access routes and entrances and other services.
- (c) All pipes are to be carefully examined for defects and flaws before installation and shall be neatly fitted.

- (d) The ends of all pipes are to be cleaned, free from burrs and rough edges and joined together tightly. An approved pipe joint compound may be sparingly used with best quality hemp. All surplus or exposed hemp is to be thoroughly cleaned off joints before the painting of pipes.
- (e) All vertical pipes must be securely fixed with brackets and supports of an approved type, securely fixed into the wall not more than 40 mm from the wall. These fixings must be strictly adhered to.
- (f) Pipes installed in service ducts and ceiling voids are to be perfectly plumbed and to be secured by approved brackets securely fixed at distances not exceeding the specified distances and not more than 40 mm away from the face of the walls or soffits. Pipes inside buildings and where specified shall be chased into walls, wrapped with building paper and properly secured and covered. Pipes must be free to move in the brackets.
- (g) Pipes passing through the walls and concrete floors are to be provided with suitable pipe sleeves extending 10 mm beyond finished floor or wall surfaces. All pipe fixings and throughways shall be free to allow movement for expansion, and contraction. Any pipe fitting feeding a pipe, which is rigidly secured to a structural element, shall be securely anchored to prevent any stress developing between the fitting and the structural element.
- (h) Chromium or nickel-plated metal covering plates are to be provided and fixed securely to pipes passing through the ceilings and walls. This is not applicable for concrete floors and ceilings.
- (i) Pipes passing through the ceilings or floors shall be offset from the wall to the front of the cornice with sufficient clearance to allow for the clear fixing of a ceiling plate. Pipes installed directly through the cornice will not be allowed. The same shall apply in multi-storey buildings where wall thicknesses vary.
- (j) All offsets shall be evenly and symmetrically set, the offsets are to be as high and as near the ceiling as possible.
- (k) Pipes shall be installed in such a manner as to allow for contraction and expansion.
- (l) Fire hydrants, hose reels and fire extinguishers shall be placed in position as indicated on drawings, provided that the relevant coverage distances and areas as required by the relevant codes and regulations shall be adhered to. The equipment to be placed in such a position that the approach to these units is not obstructed.
- (m) During construction all pipe ends shall be kept plugged to prevent any ingress of dirt, rubble, etc.
- (n) All piping shall be properly earthed by the Electrical Contractor in accordance with the Electrical Engineer's specification.

MF 5. FIRE WATER PIPE-WORK SPECIFICATION

MF 5.1 - COPPER PIPE INSTALLATIONS

- (a) The installation of copper piping systems shall be done in accordance with the manufacturers code of practice and all relevant codes, standards and regulations and shall only be used where approved by the Local Authority
- (b) Copper pipes shall only be installed downstream of galvanized mild steel pipes when applicable.
- (c) Where dissimilar metals are joined, di-electric- or isolating couplings shall be used. This is not required where copper and brass dezincified alloys join.
- (d) Copper pipes shall be of the hard-drawn type Class "0" according to SANS 460 and shall be joined by means of capillary soldered type fittings. No compression type fittings shall be allowed unless otherwise specified.

- (e) Copper capillary soldered type fittings shall be used in accordance with ISO 2016, SANS 1067, DIN 2856 or BSS 864.
- (f) The soldering flux to be used shall be water based and easily flushed out and be able to withstand temperatures above 240°C and shall contain no ammonia. The flux shall be non-toxic when dissolved in water.
- (g) The solder to be used shall consist of a material containing 97% tin and 3% copper. Solders containing lead, resin core and acid core shall not be used.
- (h) The heat source to be used shall be propane gas with induction air, at a temperature not higher than 240°C. The pipe ends and fittings shall be cleaned and waxed with an approved solder flux, before soldering. The pipe and fittings shall then be fitted together and heated to the correct temperature before the solder is applied. Care must be taken not to add too much or too little solder to the joint. Immediately after setting of the solder the joint shall be wiped clean with a wet cloth. Pipes shall be washed out as soon as possible after jointing and all traces of flux shall be removed.
- (i) All bronze or brass equipment and fittings shall be of the dezincified type.
- (j) Copper pipes and fittings shall be installed strictly to the manufacturer's specification, including:
- (k) No labour bends.
- (l) Provision for thermal contraction and expansion of pipes.
- (m) Pipe brackets shall be installed at appropriate positions where pipes are installed on surface level.
- (n) Pipes hangers and brackets shall be of copper, copper alloy or non-conductive materials. No piece of copper pipe shall be in touch with any other conductive surface. Brackets shall be designed to structurally support and fix the pipe system, and shall allow sufficient clearance from walls, soffits, etc. to enable insulation of hot water pipes and maintaining of equipment.
- (o) Pipe hangers and brackets shall be installed according to the manufacturer's specification on the following maximum spacing:

MAXIMUM PIPE HANGER / BRACKET SPACING		
PIPE DIAMETER (mm)	HORIZONTAL (meter)	VERTICAL (meter)
15 Ø	1,3	1,9
22 Ø & 28 Ø	1,9	2,5
35 Ø & 42 Ø	2,5	2,8
54 Ø	2,5	3,9
67 Ø – 108 Ø	2,8	3,9

- (p) Steel sleeves or a structurally designed cover shall protect all copper pipes open to structural damage.
- (q) All pipe work shall be tested and sterilized to the Engineer's specifications.
- (r) Where flanged fittings are used cadmium-plated bolts, nuts and spring washers shall be used to join these flanges.
- (s) All pipes shall be marked in accordance with the requirements of the Local Authority or as specified by the Engineer.

MF 6.2 - GALVANIZED MILD STEEL PIPE INSTALLATIONS

- (a) All galvanized steel pipes shall be at least medium grade mild steel tube in accordance with SANS 62-1 and SANS 62-2 and shall be normalized and marked as such by the manufacturer. Pipes to be utilized shall be as follows:
- ❑ For pipes sizes up to and including 40 mm Ø - Screwed and socketed pipes with screwed and socketed galvanized malleable cast iron fittings complying with SANS 509
 - ❑ For pipe sizes 50 mm Ø and larger - Shouldered-ended and/or grooved ended piping and fittings complying with the requirements of SANS 815;
 - ❑ For pipe sizes larger than 150 mm Ø - Fabricated flanged steel pipes and fittings complying with the requirements of SANS 1476
 - ❑ Pipes shall be hot dipped galvanized to SANS 763.
- (b) Flanged piping shall be fitted with Class 16 flanged couplings. The bolts, nuts and spring washers to be used on these joints shall be cadmium plated.
- (c) In pipe ducts and elsewhere pipes shall be fixed onto walls, soffits etc. with approved type of supports, holderbats, clamps, etc. Brackets shall be designed to structurally support and fix the pipe system and shall have sufficient clearance from walls, soffits, etc. to enable insulation of hot water pipes and maintaining of equipment.
- (d) Pipes shall be supported according to the manufacturers specifications at the following maximum intervals:

MAXIMUM PIPE HANGER / BRACKET SPACING		
PIPE DIAMETER (mm)	HORIZONTAL (meter)	VERTICAL (meter)
15 Ø to 20 Ø	1,2	1,83
32 Ø to 40 Ø	1,83	2,45
50 Ø to 150 Ø	2,45	3,05

- (f) All pipes shall be marked according to the Local authority requirements or as specified by the Engineer. All surface pipes shall be painted to the required color as specified by the Principal Agent.
- (g) Pipes shall be installed flush unless otherwise instructed by the Engineer.
- (h) Provision shall be made for thermal contraction and expansion.
- (i) The type of pipe joint compound shall be approved by the Engineer and sparingly used with good quality hemp. For pipes larger than 80 mm Ø a jointing compound such as Epedermix 32 shall be used.
- (j) Any pipe buried shall have at least 900 mm cover and be coated and wrapped and tested in the presence of the Engineer.
- (k) All pipework and fittings shall be pressure tested and sterilized to the Engineers specifications.

MF 6. FIRE PROTECTION EQUIPMENT SPECIFICATIONS

MF 6.1 - VALVES FOR WATER INSTALLATIONS

MF 6.1.1 - Gate Valves above Ground to connect to Steel Piping (65 NB and Larger):

- (a) Gate valves to be equipped with non-rising spindle, spherical graphite iron body to SANS 936 Grade 42, cast iron nitrile butadine rubber covered gate, stainless steel spindle, nitrile butadine rubber o-rings and seals, cast iron bonnet and gunmetal thrust collar to BS 1400 LG2.
- (b) The valve shall conform to SANS 664 and/or 665, shall be capable of withstanding a working pressure of 1 600 kPa.
- (c) The valves shall be fitted with flanged ends to SANS 1123/1600 (1977), hand wheel to close the valve in a clockwise direction and installed in an upright position or sideways to a max. 90° from upright.

MF 6.1.2 - Gate Valves above Ground (up to 50 NB):

- (a) The gate valves shall be of the dezincified brass type with brass gate, brass body, non-rising spindle and BSP threaded socket ends. The valve shall conform to SANS 776-1965 Class 125.
- (b) The valve shall be able to withstand a working pressure of 1 600kPa.
- (c) The valve shall be equipped with a handwheel to close in a clockwise direction.
- (d) The valve shall be installed in an upright position or sideways to a max. 90° from upright and shall be so placed with other fittings to be removable without cutting the pipework.

MF 6.2 - STRAINERS

MF 6.2.1 - Strainers for connection to Copper Pipes (65 NB and Larger):

This strainer shall be of the Y-type with bronze or dezincified brass body, stainless steel strainer element and must be equipped with flanged ends to SANS 1123/1600 (1977). The hole sizes of the strainer element shall be max. 1 mm in diameter. The strainer element shall be removable without dismantling of pipework. The strainer shall be suitable for a temperature of up to 90°C at a 1 600 kPa pressure rating and installed with the element facing downwards or a max. of 45° sideways.

MF 6.3 - NON-RETURN VALVES

MF 6.3.1 - Non-return Valves (65 NB and Larger):

The non-return valve shall be of the spring-loaded dual flap plate type fitted between two flanges.
(Wafer)

The non-return valve shall be equipped with a cast iron body, aluminium bronze plates, stainless steel springs and neoprene seals on the plates. The valves shall be suitable for a working pressure of 1 000 kPa.

MF 6.3.2 - Non return Valves (up to 150 Ø):

The non-return valve shall be of the spring loaded piston type, with bronze or dezincified brass body, stainless steel spring and bronze disc with neoprene seal fitted with BSP threaded socket ends. The valve shall be suitable for a working pressure of 1 000 kPa and a temperature of up to 90°C. All valves shall be installed as to be removable without extensive pipework removal.

MF 6.4 - FIRE HYDRANT

Fire hydrants to be installed shall be of the type as approved by the local authority and shall be installed as indicated and detailed on the relevant drawings. The Hydrants shall comply with the requirements of SANS 1128 and 10400. The hydrants shall be installed inside purpose-manufactured cabinets as approved by the Architect. Hydrants shall be of the 65 mm bore instantaneous female coupling type conforming to BS 336 with single-lug twist release. The valve shall be fitted with a blank cap fixed to a chain and each hydrant valve cabinet shall be equipped with a 30-meter long 65 mm dia. canvas hose and nozzle. The nozzle must be equipped with the following three settings:

- ☐ Jet
- ☐ Fog
- ☐ Stop

Where the supply pressure is higher than 7 bars a listed pressure-limiting device shall be installed inside the cabinet before the Hydrant.

MF 6.5 - FIRE BOOSTER CONNECTION

The fire booster connection shall be of the two-way inlet type with end caps fixed to chains and shall comply with the local authority's requirements. The coupling shall comply with BS 336 and the inlet breeching piece shall comply with BS 5041 Part 3. The booster connection shall be installed as indicated and detailed on the relevant drawings.

MF 6.6 - FIRE HOSE REEL

The fire hose reels shall be supplied and installed in accordance with SANS 10400 and SANS 543

The hose reel shall be suitable for working pressures of up to 10 Bar.

The hose shall be of the 25 mm dia. (ID) rubber fire hose reinforced with double braiding and 30 meters in length. The hose reel shall be fully equipped with nozzle and stop cock.

The handwheel shall be marked with an arrow and the words "OPEN" to indicate direction of opening.

The hose reel shall be securely fixed to the hose reel cabinet or structure if installed separately. Where fabricated hose reel cabinets are required the hose reel cabinet shall be of the 12 SWG steel cabinet fabricated type for surface mounted or recessed mounted. The cabinet is to be fitted with doors in accordance with the Architects and Local Authority requirements. The cabinet shall be clearly marked "HOSE REEL".

Where the supply pressure is higher than 7 bars a pressure-limiting device shall be installed inside the cabinet before the Hose reel.

MF 6.7 - FIRE EXTINGUISHERS

Fire extinguishers shall be supplied and installed on a correctly sized and secured bracket as indicated and detailed on the drawings. The fire extinguisher shall be installed in accordance with SANS 10400 and shall comply with SANS 810, SANS 889, SANS 1151 and SANS 0105.

Fire Extinguishers shall be installed inside each fire cabinet and where elsewhere indicated on the drawings.

Fire extinguishers shall have the following capacities:

- | | | |
|-----------------------------|---|------------|
| ❑ DCP (Dry Chemical Powder) | - | 4.5 & 9 kg |
| ❑ CO ₂ | - | 5 & 9 kg |
| ❑ Wet Chemical | - | 9 L |

MF 6.8 - LABELING OF VALVES

- (a) All main stop valves, control valves, etc shall be labeled by means of rust-free metal tags indicating their purpose and the section they isolate, if isolating valves.
- (b) The tags shall be securely fixed to the valve and shall be clearly legible.
- (c) All letters on labels shall be engraved or punched. No painted or plastic embossed labels will be accepted.
- (d) Alternatively, 12 mm wide stainless-steel tape embossed labels, may be used, fixed with copper wire to the relevant valves.

MF 6.9 - COLOUR CODING OF PIPES

- (a) Identification of the contents of a pipeline shall be by means of applying a color code on the specific pipe in the colors as specified by the Local Authorities and relevant SANS code (latest edition).
- (b) Generally, coding shall consist of 300 mm long primary color bands painted around the pipe and where applicable, a central 100 mm secondary band shall be added.

However, where short lengths of pipe run through occupied areas and in plant rooms, the primary color shall be applied to their entire length.

PART 5

TECHNICAL SPECIFICATION

MS FIRE PROTECTION INSTALLATION

CONTENTS

MS 01	FIRE JOCKEY PUMP
MS 02	MAIN ELECTRICAL CONTROL PANEL

MS 01 - FIRE JOCKEY PUMP

The fire jockey pump installation shall consist of an electrical driven pump, installed with the necessary valves, strainers, non-return valves, pressure gauges, starting arrangement, drive controllers, etc.

The pump shall be of the centrifugal multi-stage type, designed according to BS 5257 and be completely equipped with an electric driven direct or close-coupled motor. The electrical drive shall be fitted with an approved drive controller fitted with the necessary safety features as allowed by SANS 10287.

The electric motor shall conform to BS 2613 and BS170 and be drip-proof. The windings must at least be according to IP 55 of IEC 144. High temperature, permanent sealed bearings shall be used.

The rotation speed of the pump shall not exceed 2 950 revs/min and the pump must be able to pump water with temperatures between 0°C and 45°C.

Preference will be given to pumps of the self-regulating type and where the power consumption characteristic is such that with an increase in delivery to beyond a certain limit, the power consumption decreases, thereby ensuring that the motor is not overloaded in the event of a large reduction in pumping head.

The pumps shall be manufactured according to the latest relevant rules and regulations of the local authorities and statutory bodies and be freely available on the market, including back-up service and parts.

The design and fabrication of each pump unit shall allow for easy dismantling and removal of any serviceable part or piece of equipment, which functions as part of the pump units. The pump's serviceable parts or pieces of equipment shall allow for easy inspection. Parts, subjected to wear and tear, shall be replaceable and may not form an integral part of the body unit. The types and angle between suction and delivery points shall be suitable for this installation.

All parts and pieces of equipment, which make up the pump units, shall be manufactured of suitable approved material to minimize wear and tear. Complete details in this respect shall accompany the tender. Cast iron parts shall have an anti-corrosion coating on the inside and outside. The shaft shall be of stainless steel.

Rotating elements of the pumps shall be balanced accurately to prevent vibration and noise.

Adequate anti-vibration transfer measures shall be incorporated into the system, such as anti-vibration pad mountings to bases and flexible couplings to inlet and outlet.

Sturdy mild steel bases, adequately corrosion protected by either hot dip galvanizing after manufacturing or painted with 1 coat of zinc chromate primer on a clean surface and followed by 2 coats enamel paint of approved manufacture, shall be provided. The pump base shall be filled in with concrete and properly secured to the floor.

The manufacturer's name, model, serial number and date of manufacture shall be clearly indicated on the pump body. A test certificate for each pump unit, providing satisfactorily laboratory test runs, shall accompany the delivery of the pumps.

A complete test of performance characteristics and shop drawings shall be handed to the Engineer and Local Authority for written approval before ordering, supplying and installation commences. This includes flow charts, power consumption-, NSPH-, and efficiency curves. General pump curves as supplied by the pump manufacturer are not acceptable.

MS 02 - MAIN ELECTRICAL CONTROL PANEL

- (a) The electric control panel to be supplied and installed shall comply to the Local Authorities regulations, codes and SANS 10287. This panel and electrical installation shall adhere to all relevant regulations, codes, by-laws and laws as set out in above specification and applicable to the installation. The electric control panel shall be of the indoor floor standing type and shall be vermin and insect proof, drip proof and dust proof to at least Class IP 55. Unless otherwise specified the control, panel shall be equipped with a lockable hinged door(s) and lockable facia panel and a bolted removable back plate. The panel shall be finished with a powder coated finish or baked enamel system with the interior of the panel in a brilliant white color and the rest of the panel in a fire red color. It shall have a top cable entry removable gland plate. Power and control cables shall be grouped together.
- (b) The panel shall be designed and manufactured to automatically control the whole system as set out above and shall easily house at least the following equipment: (with a 30% spare space allowed)
 - (i) Main isolating switch, with label to indicate to switch off in case of emergency, on the facia panel.
 - (ii) Suitable circuit breakers for pumps and control circuit with correct fault current rating, on back plate with faces protruding through facia panel.
 - (iii) Suitable contactor for jockey pump and star delta starting arrangement for main electrical driven pump.
 - (iv) Suitable thermal overloads for pumps.
 - (v) Supply for diesel driven pump control panel and battery charger.
 - (vi) All control equipment necessary for the complete automatic control of system (i.e. relays, selector switches, push buttons, indicator lights, etc.), on facia panel and back plate.
 - (vii) Voltmeter with selector switch to monitor voltages between each current phase and neutral and between phases (min 65 mm), on facia panel
 - (viii) Ammeter with selector switch to monitor each phase (min 65 mm), on facia panel.
 - (ix) Indicator lights for all fault, on/off and automatic conditions, on facia panel.
 - (x) Alarm for major faults conditions, on top of control board.
 - (xi) Water storage tank level monitoring indication and devices
 - (xii) Alarm accept and reset buttons, on facia panel.

- (xiii) 24 Volt low voltage circuit for low water level and high level float switch in tank and diesel engine starting and control circuit.
- (xiv) Lightning arrestors/surge suppressors on all lines and neutral, on back plate.
- (xv) Remote alarm start and stop system wired back to fire station control room.
- (c) Labels, with black lettering on white background, shall be securely fitted to indicate the name and function of the components and other relevant information eg. "stop", "start", "Pump 1" etc. The minimum letter size shall be 5 mm.
- (d) The Contractor shall ensure before manufacturing of control panel that the fault current rating of panel is with-in the limits of this particular installation.
- (e) The electric control panel shall be tested and inspected before leaving the manufacturer.
- (f) Before any ordering, manufacturing, supplying and/or installation commences, the complete offered system shall be checked and reviewed by the Engineer in writing. Full details and 3 sets of drawings showing wiring diagram, component lists, panel dimensions and layout shall be supplied to the Engineer for this purpose.
- (g) The electrical installation shall be carried out in accordance with the latest edition of the Local Authorities regulations and codes.
- (h) In addition to the components mentioned in the above and this specification, at least the following shall be incorporated in the control circuit on the hinged front panel.
- (i) Adequately sized led type indicators at a visible position in the distribution board (min 20 Ø). One set for each pump indicating:

1) Pump off	Red
2) Pump running	Green
3) Pump tripped	Orange-flickering (including alarm)
4) Pump automatic	Yellow
5) Pump manual	Yellow
6) Water low	Orange-flickering (including alarm)
7) Water overflow	Orange-flickering (including alarm)
8) Power supply adequate	Red
- (j) Meters

(i) 1 x Volts	0 - 400 Volt (min 65 mm)
(ii) 3 x Amps	Amps as required (min 65 mm)
- (k) Selector switches for:
 - (i) Pump: manual, off or automatic selection for each pump.
 - (ii) Voltmeter between phases and phases and neutral and off selection.
 - (l) Push buttons for: (min 20 Ø diam)
 - (i) Alarm accept. (black)
 - (ii) Alarm reset button. (black)
 - (iii) Indicator and alarm test buttons. (yellow)
 - (iv) Pump start and stop. (green; red)

- (m) Proper labels indicating functions of components and other relevant information eg. voltage, pump 1 etc. (min 3 mm high characters).
- (n) An audible alarm of the flashing strobe type shall be mounted outside the pump room panel for fault condition and pump running signaling. The alarm shall be of a kind and so situated that it produces a sound level of 110 dBA at a distance of 1 m.
- (o) In all cases the malfunction indicators shall only be activated in the event of a fault condition and stay in operation until reset manually at the switchboard, while auto resetting protection equipment shall keep the pump in working order (except for thermal overload). Flickering and/or flashing emergency lights/indicators refer to malfunction conditions, while a constant signal serves for monitoring purposes.
- (p) Provision shall be made for test button(s) activating all signals, in order to test functioning; (alarm and monitoring circuits).

Remote fault and status signals for all equipment shall be provided on this control panel to be relayed back to the fire detection system.

Part 6 – Technical Data Sheets

Contents

PART 6

TECHNICAL DATA SHEETS

NOTE:

TECHNICAL DATA SCHEDULES: MATERIALS AND EQUIPMENT WHICH MIGHT BE PROCURED, SUPPLIED AND INSTALLED UNDER THIS CONTRACT

The tenderer shall provide the following information completed in BLACK INK at tender stage

SECTION 1 - CONVENTIONAL FIRE PROTECTION INSTALLATION

2.1 FIRE HYDRANT/ HOSE REEL PIPING - GROOVED > 50 mm dia. ≤ 150 mm dia.

Manufacturer:	
Type:	
Manufacturing Code and Class:	
Country of origin:	
Pipe jointing method:	
Pipe Connection Range (dia):	
Listed operating pressure (kPa):	
Listed test pressure (kPa):	
Approval Listing:	

2.2 FIRE HYDRANT/ HOSE REEL PIPING – SCREWED AND SOCKETED ≤ 50 mm dia.

Manufacturer:	
Type:	
Manufacturing Code and Class:	
Country of origin:	
Pipe jointing method:	
Pipe Connection Range (dia):	
Listed operating pressure (kPa):	
Listed test pressure (kPa):	
Approval Listing:	

2.3 FIRE HYDRANT/ HOSE REEL PIPING – FLANGED ≥ 50 mm dia. (HIGH PRESSURE)

Manufacturer:	
Type:	
Manufacturing Code and Class:	
Country of origin:	
Pipe jointing method:	
Pipe Connection Range (dia):	
Listed operating pressure (kPa):	
Listed test pressure (kPa):	
Approval Listing:	

2.4 FIRE DEPARTMENT INLET BOOSTER CONNECTION.

Manufacturer:	
Type:	
Model:	
Country of origin:	
Body Material:	
Instantaneous Coupling Type & Size:	
Pipe Connection Size (dia):	
Listed test pressure (kPa):	
Approval Listing:	

2.5 LISTED SUPERVISED BUTTERFLY VALVES > 50 mm dia.

Manufacturer:	
Type:	
Model:	
Country of origin:	
Materials:	
	Body:
	Valve Disc:
	Valve Seat:
	Stem Retaining Ring:
	Stem Seals:
	Coating:
	Bearings:
Actuator:	
Pipe Connection Type:	
Pipe Connection Range (dia):	
Listed operating pressure (kPa):	
Listed test pressure (kPa):	
Approval Listing:	

2.6 HIGH-PRESSURE LISTED SUPERVISED BUTTERFLY VALVES > 50 mm dia.

Manufacturer:	
Type:	
Model:	
Country of origin:	
Materials:	
	Body:
	Valve Disc:
	Valve Seat:
	Stem Retaining Ring:
	Stem Seals:
	Coating:
	Bearings:
Actuator:	

Pipe Connection Type:	
Pipe Connection Range (dia):	
Listed operating pressure (kPa):	
Listed test pressure (kPa):	
Approval Listing:	

SECTION 3 - FIRE WATER PUMP INSTALLATION

3.13 FIRE HYDRANT PUMPS

Manufacturer :	
Model :	
Country of origin :	
Type of pump :	
Impellor type :	
Impellor size :	
Impellor material :	
Inlet coupling size :	
Outlet coupling size :	
Closed coupled :	
Pump casing material :	
Pump Operating Point:	
Pressure Stage 1 (l/min @ m):	
Pressure Stage 2 (l/min @ m):	
Pressure @ Closed Head:	

3.14 COMPRESSION IGNITION ENGINE DRIVE FOR FIRE HYDRANT PUMP P2

Manufacturer :	
Model :	
Country of origin :	
Fuel system :	
Method of aspiration :	
Method of engine speed control :	
Cold starting device :	
Oil heater :	
Water jacket heater :	
Method of engine cooling :	
Cooling medium flow rate :	
Cooling medium pipe size :	
Method of air filtration :	
Rated power output at full load :	
Engine speed at max. power :	
Engine speed at operating point :	
Power output at operating point :	
Control panel model :	
Battery system :	
Battery charger model :	
Type of coupling - engine & pump :	
Weight complete with pump :	
Dimensions complete with pump :	

3.15 ELECTRICAL MOTOR DRIVE FOR FIRE HYDRANT PUMP P1

Manufacturer :	
Model :	
Country of origin :	
Class of water protection :	
Rated output :	
Rated voltage :	
Rated full load current :	
Rated load factor against full load :	
Rated frequency :	
Type of motor :	
Rotation speed :	
Starting method :	
Motor cooling method :	
Nett mass :	
Motor cooling method :	
Nett mass :	

3.16 MAIN ELECTRICAL FIRE HYDRANT PUMP CONTROL PANEL.

Manufacturer :	
Type :	
Fault current :	
Dimensions :	
Voltage Rating:	
Power Supply Required :	
ASIB Certified:	

3.17 DIESEL PUMP DRIVE CONTROL PANEL.

Manufacturer :	
Type :	
Fault current :	
Dimensions :	
Voltage Rating:	
Power Supply Required :	
ASIB Certified:	

3.18 BATTERY CHARGER

Manufacturer :	
Model :	
Country of origin :	
Trickle charge rate :	
Full charge rate :	
Charge control method :	

3.19 FIRE HOSE REEL JOCKEY PUMP – PRESSURE STAGE 1

Manufacturer :	
----------------	--

Model :
Country of origin :
Class of water protection :
Rated output :
Rated voltage :
Rated full load current :
Rated load factor against full load :
Rated frequency :
Type of motor :
Rotation speed :
Starting method :
Motor cooling method :
Nett mass :
Pump:
Manufacturer :
Model :
Country of origin :
Type of pump :
Impellor type :
Impellor size :
Impellor material :
Inlet coupling size :
Outlet coupling size :
Closed coupled :
Pump casing material :
Pressure height against no flow :
Maximum flow :
Flow and pressure height against most effective operating point :

3.20 FIRE HOSE REEL JOCKEY PUMP – PRESSURE STAGE 2

Manufacturer :
Model :
Country of origin :
Class of water protection :
Rated output :
Rated voltage :
Rated full load current :
Rated load factor against full load :
Rated frequency :
Type of motor :
Rotation speed :
Starting method :

Motor cooling method :
Nett mass :
Pump:
Manufacturer :
Model :
Country of origin :
Type of pump :
Impellor type :
Impellor size :
Impellor material :
Inlet coupling size :
Outlet coupling size :
Closed coupled :
Pump casing material :
Pressure height against no flow :
Maximum flow :
Flow and pressure height against most effective operating point :

3.21 FIRE HOSE REEL JOCKEY PUMPS DRIVE CONTROL PANEL.

Manufacturer :
Type :
Fault current :
Dimensions :
Voltage Rating:
Power Supply Required :
ASIB Certified:

3.22 FLOW SWITCHES

Manufacturer :
Type :
Model :
Country of origin :
Adjustable flow setting (minimum) :
Rated voltage :
Rated switching current :
Type of contacts :

3.23 PRESSURE SWITCHES.

Manufacturer :
Type :
Model :
Country of origin :
Rated voltage :

Type of contacts :

Operating range :

3.24 FIRE STORAGE TANK EQUIPMENT.

Type of water level indicator :

Make :

Model :

Size :

Vortex inhibitor :

Make :

Model :

Size :

Automatic filling valve

Make :

Model :

Type

Capacity

Size :

3.25 ELECTRICAL MOTOR DRIVE FOR DOMESTIC PUMP P1

Manufacturer :

Model :

Country of origin :

Class of water protection :

Rated output :

Rated voltage :

Rated full load current :

Rated load factor against full load :

Rated frequency :

Type of motor :

Rotation speed :

Starting method :

Motor cooling method :

Nett mass :

Motor cooling method :

Nett mass :

In diversity there is beauty
and there is strength.

MAYA ANGELOU

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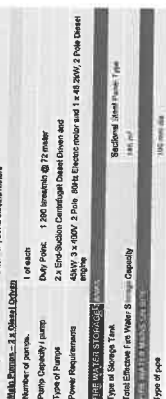
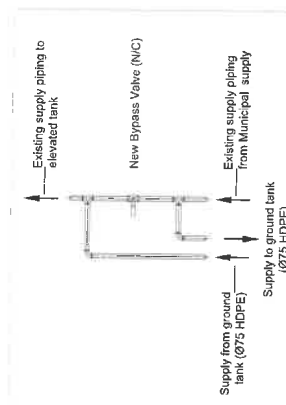
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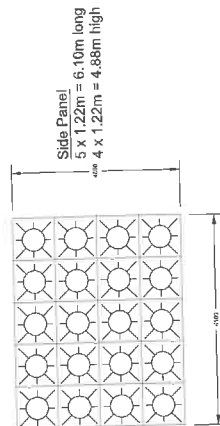
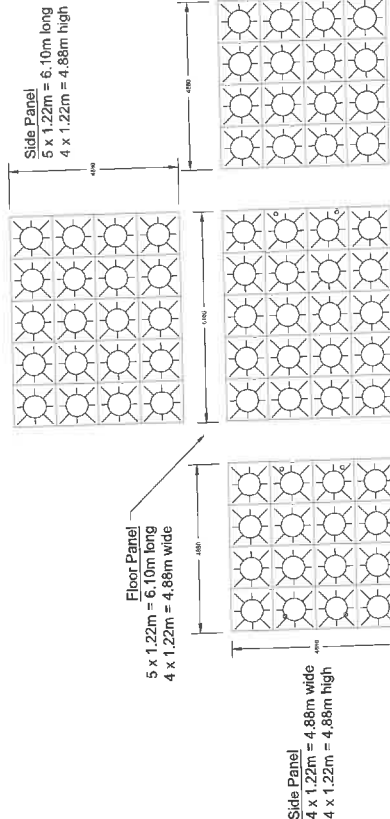
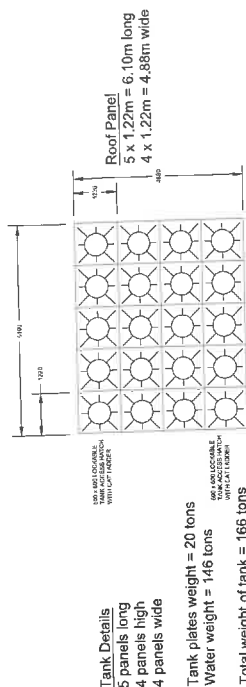
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Bypass Valve Arrangement

Scale NTS

1. Aimed to comply with SANS 10400-2011 unless addressed by an SABS fire code.
2. Compliance with SANS 10400-2011 unless addressed by an SABS fire code.
3. Compliance with SANS 10400-2011 unless addressed by an SABS fire code.
4. Compliance with SANS 10400-2011 unless addressed by an SABS fire code.
5. Compliance with SANS 10400-2011 unless addressed by an SABS fire code.
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ZUTARI	
IMPACT ENGINEERING	
discipline	FIRE PROTECTION
service	CONVENTIONAL FIRE FIGHTING - SITE PLAN LAYOUT

WCS number	
drawing title	
MOKOPANE HOME AFFAIRS	
Tank Layout Plan	
designed	J. MONTAGNALE
checked	J. MONTAGNALE
date	10/04/11
drawing number	10/04/11