



public works & infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

BID DOCUMENT

PROJECT DESCRIPTION: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

BID NO: BL25/014
Closing Date: 19 August 2025
Closing Time: 11H00
Bid Briefing Meeting Date: N/A
Bid Briefing Meeting time: N/A

Tenderers CSD No:

Name of the Tenderer:

Bid Box Address

Department of Public Works & Infrastructure
Eben Donges Building
Corner Robert & Hancock Street
Gqeberha
6001

SCM SPECIFIC ENQUIRIES:

Enquires: **Sanna Seleke**
Tel No: **051-4087438** during office hours
Cell No: **Indicate**
Email Address: Sanna.seleke@dpw.gov.za

TECHNICAL / PROJECT SPECIFIC ENQUIRIES

Enquires: **Wayne Hurst**
Tel No: **051-4087352** during office hours
Cell No: **0823142014**
Email Address: Wayne.hurst@dpw.gov.za

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SUMMARY OF BID INFORMATION

Bid Number	BL25/014	
Bid/ Project Description	Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System	
Bid Closing date & Time	Tuesday, 19 August 2025	Closing Time: 11H00
Bid Briefing Date & Time (If applicable)	<i>Date of Bid Briefing (if any)</i> N/A	<i>Time of Bid Briefing (if any)</i> N/A
Venue	N/A	
SCM SPECIFIC ENQUIRIES:	Sanna Seleke	Sanna.seleke@dpw.gov.za
	051-4087438	N/A
TECHNICAL / PROJECT SPECIFIC ENQUIRIES	Wayne Hurst	Wayne.hurst@dpw.gov.za
	051-4087352	0823142014
Bid Validity Period	84 calendar days	
Bid Document Price	R 200.00	
Procurement Plan Reference Number	[Comments]	

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

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES TENDERS FOR:

Project title:	Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System		
Bid no:	BL25/014	Procurement Plan Reference no:	[Comments]
Advertising date:	Friday, 25 July 2025	Closing date:	Tuesday, 19 August 2025
Closing time:	11H00	Validity period:	84 calendar days

1. REQUIRED CIDB GRADING

It is estimated that tenderers should have a CIDB contractor grading designation of **3 EB** or **3 EP*** or higher.

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

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

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

2. FUNCTIONALITY CRITERIA APPLICABLE

2.1 The Bid will be evaluated on Functionality and the following Functionality evaluation criteria will apply and failure to meet minimum functionality score will result in the tenderer being disqualified. From further evaluation:

Functionality criteria ¹ :	Weighting factor:
1. N/A	N/A
2.	
3.	
4.	
5.	
6.	
7.	
8.	
TOTAL	N/A

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

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

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

3. EVALUATION METHOD FOR RESPONSIVE BIDS

3.1. The following Evaluation Method for responsive bids will be applicable:

☐ Method 1 (Financial offer)	☒ Method 2 (Financial and Preference offer)
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3.2. The 80/20 Preference points scoring system will be applicable for this bid

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.	☒	Only those tenderers who satisfy the eligibility criteria stated in the Tender Data may submit tenders.
2.	☒	Tender offer must be properly received on the tender closing date and time specified on the invitation, completed either electronically (if issued in electronic format), or by writing legibly in non-erasable ink. (All as per Standard Conditions of Tender).
3.	☒	Use of correction fluid is prohibited. Corrections to be crossed out and initialed. <i>ht</i>
4.	☒	Submission of a signed bid offer as per the DPW-07 (EC) . <i>ht</i>
5.	☐	Submission of DPW-09 (EC): Particulars of Tenderer's Projects.
6.	☒	Bidders must comply with DPW-21 (EC): Record of Addenda to tender documents, if any.
7.	☒	The tenderer shall submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts) together with his tender.
8.	☐	There will be a compulsory bid briefing meeting and all potential bidders must attend.
9.	☐	The tenderer shall submit his fully priced and completed sectional summary- and final summary pages with the tender.
10.	☐	Submission of registration letter as an electrical contractor for bidder issued by the Department of Labour (DOL), permitting to issue a Certificate of compliance (COC's)
11.	☐	Bidders will be evaluated as per special conditions of bid (SCB-1)
12.	☒	<i>Submission of letter of Registration as Electrical Contractor (Company) in terms of regulation 6(4) of the Electrical Installation regulations 2009 issued and stamped by Department of Employment and Labour</i>
13.	☒	<i>Bidder must submit a copy of an original Wireman's Licence Registered by the Department of Employment and Labour.</i>
14.	☒	<i>Bidder must submit copies of electrical Trade Test certificates.</i>

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

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

1.	☒	Any correction to be initialised by the person authorised to sign the tender documentation as per PA 15.1 or PA 15.2 resolution of board/s of directors / or PA15.3 Special Resolution of Consortia or JV's.
2.	☒	Submission of applicable (PA-15.1, PA-15.2, PA-15.3): Resolution by the legal entity, or consortium / joint venture, authorising a dedicated person(s) to sign documents on behalf of the firm / consortium / joint venture.
3.	☒	Submission of (PA-11): Bidder's disclosure
4.	☒	Submission of proof of Registration on National Treasury's Central Supplier Database (CSD).
5.	☒	All parts of tender documents submitted must be fully completed in ink and signed where required.
6.	☒	Upon request, submission of fingerprints obtainable from local SAPS including any other additional documentation and information required for vetting purposes.
7.	☒	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.
8.	☒	Submission of (PA 40): Declaration of Designated Groups for Preferential Procurement
9.	☐	Bidders will be evaluated as per special conditions of bid (SCB-1)
10.	☒	Submission of DPW-09 (EC): Particular of Tenderer's Projects: Bidders may use 'own form' - the details of all the tenderers current and previous projects must however be similar to the DPW-09 (EC) forms details. Bidders are required to sign and date the DPW09 / 'own form' and cross-reference the documents if 'own form' is used. <i>LT</i>
11.	☐	Submission of DPW-21 (EC): Record of addenda to tender documents: Bidder maybe requested to confirm receipt and or compliance with the "Record of Addenda" if the record of Addenda" was not submitted with the bid at the closing date.
12.	☒	Bidder must sign declaration for an undertaking of EPWP Compliance (Annexure A)
13.	☒	The tender must submit a valid, original or certified copy of BBEE certificate/ Sworn affidavit or DTI certificate together with a bidding document at closure
14.	☒	Submission of documentation relating to Risk assessment criteria as contained in PA-04 item number 7.

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

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

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

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 black people (Mandatory) .	10	SANAS Accredited BBBEE Certificate or sworn affidavit where applicable.
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area (Mandatory) . Fezile Dabi District	2	- Official Municipal Rates Statement which is in the name of the bidder. Or - Any Account or statement which is in the name of the Bidder. Or - Permission To Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. Or - Lease Agreement which is in the name of the bidder.
3.	An EME or QSE or any entity which is at least 51% owned by black women (Mandatory) .	4	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	- SANAS Accredited BBBEE Certificate or sworn affidavit where applicable. and - Medical Certificate indicating that the disability is permanent or - South African Social Security Agency (SASSA) registration indicating that the disability is permanent Or - National Council for Persons with Physical Disability in South Africa registration (NCPDPSA)
5.	An EME or QSE or any entity which is at least 51% owned by black youth (Mandatory) .	2	ID Copy and SANAS Accredited BBBEE Certificate or sworn affidavit where applicable.

6. BID EVALUATION METHOD

This bid will be evaluated according to the preferential procurement model in the PPPFA and the 80/20 preference point scoring system will be applicable

7. ELIGIBILITY IN RESPECT OF RISK TO THE EMPLOYER:

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

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

In order for the evaluation reports to be prepared by the Professional Team, the Tenderer is obliged to provide comprehensive information on form DPW-09 (EC).

Failure to complete the said form will cause the tender to be declared non-responsive and removed from any further consideration. The Employer reserves the right to request additional information over and above that which is provided by the Tenderer on said form. The information must be provided by the Tenderer within the stipulated time as determined by the Bid Evaluation Committee, failing which the tender offer will *mutatis mutandis* be declared non-responsive.

7.1 Technical risks:

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

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

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. L+
L+

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

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

Criterion 3: Suitably qualified and appropriately experienced human resources

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

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

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

7.2 Commercial risks:

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

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

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

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

(a)	Minimum Targeted Local Manufacturers of Material Contract Participation Goal, in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable
(b)	Minimum Targeted Local Building Material Suppliers Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable
(c)	Minimum Targeted Local Labour Skills Development Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable

(d)	CIDB BUILD Programme: Minimum Targeted Enterprise Development Contract Participation Goal in accordance with the cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable
(e)	cidb BUILD Programme: Minimum Targeted Contract Skills Development Goal in accordance with the cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 43495 of 3 July 2020, as amended in 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

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 NDPW/
~~Eben Danges Building, Cnr Robert and Hancock street, Gqeberha, 6056.~~ **18 PRESIDENT BRAND STREET**
~~A non-refundable bid deposit of R 200.00 is payable (cash only) on collection of the bid documents.~~ **Bloubaai 9200**

10. SITE INSPECTION MEETING

Details of Bid Briefing meeting (if any)

There will be no bid briefing meeting.

Venue:	N/A		
Virtual meeting link:	(Type link here or indicate "N/A")		
Date:	<i>Date of Bid Briefing (if any)</i> N/A	Starting time:	<i>Time of Bid Briefing (if any)</i> N/A

11. ENQUIRIES

11.1 Technical enquiries may be addressed to:

DPWI Project Manager	Wayne Hurst	Telephone no:	051 408 7352
Cellular phone no	0823142014	Fax no:	N/A
E-mail	Wayne.hurst@dpw.gov.za		

11.2 SCM enquiries may be addressed to:

SCM Official	Sanna Seleke	Telephone no:	051-4087438
Cellular phone no	Indicate	Fax no:	N/A
E-mail	Sanna.seleke@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).

Closing Date: Tuesday, 19 August 2025

Closing Time: 11H00

Tender documents may be posted to: The Director-General Department of Public Works and Infrastructure Private Bag X 20605 Bloemfontein 9300 Documents must be deposited in The Bid Box before the closing date of the bid	OR	Deposited in the tender box at: The Bid Box Department of Public Works & Infrastructure 18 President Brand Street Bloemfontein
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EVALUATION ON FUNCTIONALITY

N/A

DPW-07: FORM OF OFFER AND ACCEPTANCE

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

Bid no: BL25/014

Bid/ Project Description: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

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 responsibilities of the Service Provider 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 OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX (All applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies) IS:

Rand (in words):	
Rand in figures:	R

The award of the tender may be subjected to price negotiation with the preferred tender(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 Service Provider in the conditions of contract identified in the contract data.

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

Company or Close Corporation: And: Whose Registration Number is: And: Whose Income Tax Reference Number is: CSD supplier number:	OR	Natural Person or Partnership: Whose Identity Number(s) is/are: Whose Income Tax Reference Number is/are: CSD supplier number:
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AND WHO IS (if applicable):

Trading under the name and style of:
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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 / Member / Partners of the Legal Entity must accompany this Offer, authorising the Representative to make this offer.
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Bid No: BL25/014

Bid/ Project Description: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

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) ☐

SECURITY OFFERED: ~~(Not required for this quotation/ bid)~~ *Wt*

The Service Provider will provide one of the following forms of security:

- (1) Cash deposit of 2.5% of the Contract Sum (excl. VAT) Yes ☐ No ☒ *Wt*
 (2) Variable guarantee of 2.5% of the Contract Sum (excl. VAT) (DPW-10.5: FM) Yes ☐ No ☒ *Wt*
~~(3) Retention of 2.5% of the Contract Sum (excl. VAT) Yes ☐ No ☒ *Wt*~~
~~(4) 1.25% cash deposit and 1.25% retention of the Contract Sum (excl. VAT) Yes ☐ No ☒ *Wt*~~

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

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

Other Contact Details of the Tenderer are:

Telephone No. Cellular Phone No.
 Fax No.
 Postal address
 Banker Branch
 Bank Account No. Branch Code
 Registration No of Tenderer at Department of Labour

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 Service Provider 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.

Bid No: BL25/014

Bid/ Project Description: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

The terms of the contract, are contained in:

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

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

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

The Tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Employer's agent (whose details are given in the contract data) to arrange the delivery of any 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, if delivered by hand on the day of delivery, or if delivered by courier within two working days after submission by the Employer to the courier services for a door-to door delivery to the tenderer, provided that the Employer notifies the tenderer of the tracking number within 24 hours of such submission. Unless the tenderer (now Service Provider) within seven working days of the date of such submission notifies the Employer in writing of any reason why he cannot accept the contents of the schedule of deviation to this agreement if applicable), this agreement shall constitute a binding contract between the parties.

For the Employer:

Name of signatory	Signature	Date

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

WITNESSED BY:

Name of witness	Signature	Date

SCHEDULE OF DEVIATIONS

Bid no: BL25/014

Bid/ Project Description: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

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

TERMS OF REFERENCE/ SPECIFICATIONS

Bid no: BL25/014

Bid/ Project Description: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

SPECIAL CONDITIONS OF CONTRACT (SCC) FOR TERM CONTRACTS ONLY

IMPORTANT:

PROSPECTIVE TENDERERS ARE REMINDED TO ACQUAINT THEMSELVES FULLY WITH THE CONTENTS OF THIS DOCUMENTATION BEFORE COMPLETING ANY DETAILS.

1. SCOPE OF CONTRACT

This contract pertains to the continuous servicing, maintenance and repairs of Low Voltage installations and associated equipment used in electrical installations to ensure that all equipment is kept in a safe working order and in accordance with the requirements as set out in the Machinery and Occupational Safety Act No 6 of 1983 or any other national standard or requirements of the Department of Public Works.

The scope of low tension work must include the following:

- 1.1 Call out to buildings to attend to power failures.
- 1.2 Replacement of faulty single and three pole circuit breakers.
- 1.3 Repair of faulty over head lines and underground electrical cables.
- 1.4 Repair of low tension outdoor kiosks, outdoor pillar boxes and distribution boards.
- 1.5 Repair of hot water cylinder elements (geyser elements) up to units of 200 litres.
- 1.6 Repair electrical kitchen equipment, e.g.

Tilting pans; electrical domestic and industrial stoves, electrical ovens, bain-marie units, etc.

- 1.7 Repair electrical laundry equipment, e.g.

Industrial washing machines, tumble driers, ironing machines, etc.

- 1.8 The electrical contractor must include in his tariffs for the repairing of cable joints:

Detection of cable faults

Price for a length of low tension cable and earth wire, if required to be replace only a portion of the cable.

Low tension cable joint complete.

Low tension cable ends complete.

Cable markers indicate cable joints and cable routes.

Excavation required for the repair cable. Install cable joint and back fill and compaction of excavation after completion of work.

- 1.9 Maintenance of all low tension overhead power lines:

Repair of broken lines (must include all required material and labour).

Replacement of broken pin insulators, lightning arrestors, etc.

Replacement of damaged pole, anchors and stays

1.10 The contractor must make provision that all low tension rooms in substations or in the particular buildings must apply to the applicable Occupational Safety and Health Acts (eq. Signs, etc.)

1.11 The contractor must allow cleaning substation (low tension room) on the inside (dusting and sweeping, etc.)

1.12 The contractor must inspect the substation (inside and outside) building and report if any damages is visible that should be repaired.

1.13 The contractor must allow time to enable him to prepare drawings of the low tension cable reticulation and switch gear. Copies of the drawings must be placed in the substations.

1.14 All substation and or low tension room doors must be secured with padlocks and keys. (The contractor must verify that the doors are secured).

1.15 Repair and maintain of street light pole mounted security light fittings.

1.16 Air craft landing lights

1.17 Sliding gate motor and controllers

2. ST 36

This tender is subject to the conditions of ST36 (General Conditions and Procedures) and further as stipulated hereunder. Tenderers are required to fully acquaint themselves with the contents thereof. Copies of ST36 may be obtained from the Government Printer, Private Bag X 85, Pretoria, 0001, or the closest Regional office of the Department of Public Works.

3. VALVE-ADDED TAX

Prices tendered must include Value-Added Tax (VAT).

4. PRICES

All prices quoted by the tenderer for items in this document must include for additional costs, if any, that may occur as a result of these "Special Conditions" as well as for the supply of all scaffolding and normal plant, electrical Low Voltage testing equipment and instruments and all expendable material such as oil, grease and cleaning material necessary for the proper execution of maintenance, servicing and repair work, and everything necessary for the proper performance of the work.

5. THE TENDER

The tenderer shall, before submitting his tender, check the numbers of the pages and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent or meaning of any description, or this tender contains any obvious errors, the tenderer shall obtain a directive in writing from the Department of Public Works.

The text of this tender and other documents prepared by the Department of Public Works will be adhered to and no alteration, erasure, omission or addition thereto by the tenderer will be recognized.

6. DOCUMENTS

The following documents must be read in conjunction with this tender:

- 6.1 State Tender Board General Conditions and Procedure (ST.36).
- 6.2 Standard Specification for Electrical Services (available for inspection at the Department of Public Works).
- 6.3 The South African Bureau of Standard "Code of Practice", SANS 10142.
- 6.4 Occupational Health and Safety Act, 1993 (Act 85 of 1993).
- 6.5 Municipal By-laws and fire regulations and special requirements of the local Authority.

N.B.

This tenderer must study these documents and acquaint him with the contents thereof as no claims in this regard will be entertained.

7. PROVISIONAL QUANTITIES

Variations to the Contract to a limit of 20% of the Contract Sum as set out in clause 18 of the 'CONDITIONS OF CONTRACT GCC', shall not be applicable to this tender.

Estimated quantities cannot be given and no guarantee can be given as to the quantities of material that will be used by the contractor for the duration of this contract. The Department reserves the right to increase or decrease quantities during the progress of the contract and such increases or decreases shall not alter the tariffs for any item. Payment will be as set out in clauses 22 to 24 hereafter.

8. CONTRACT PERIOD

This contract will be valid for a period of thirty six (36) months, commencing from the date of the letter of acceptance of the tender.

9. SERVICES APPLICABLE TO THIS TENDER

This tender involves maintenance work at complexes occupied by various user Departments, in the area as per scope defined during hand-over of contract.

It is a specific condition of the contract that all new work or additions of any nature whatsoever are excluded. The Department of Public Works will have the right however, to enter into new contracts for major Repairs and Renovations and New Works in any complex or building covered in the area of this contract, which will then excluded day to day maintenance for the duration of this new contract.

- 9.1 Minor electrical maintenance work such as the replacement of lamps, light switches, socket outlets and light fittings etc.

Work undertaken under this tender consists primarily of the cleaning and maintenance of all low tension equipment, outdoor pillar boxes, distribution boards, light fittings and general electrical equipment, e.g. light switches, socket outlet points, isolators, etc., as well as:

- 9.2 The tracing (detection) and exposing of Low Voltage cable faults.
- 9.3 The repairs, testing and commissioning of Low Voltage cable faults.

9.4 The tracing, repairs and commissioning of faults on Low Voltage overhead reticulation systems.

9.5 Low Voltage switching in order to isolate faults and close open point in order to restore power.

NOTE:

With regard to the low voltage reticulation systems the contractor shall be responsible for making all the necessary arrangements with the Supply Authority or the user departments representative prior to carrying out switching.

Provision has been made for call outs for emergency services (clause 13 + 18), however the Department reserves the right to enlist the services of the local supply authorities or its workshop personnel in this regard.

10. WORK EXPLICITLY EXCLUDED FROM THIS CONTRACT

The contractor shall under no circumstances undertake work of any nature, related to or in connection with:

10.1 Lift and escalator installations.

10.2 Intruder alarm systems.

10.3 Repairs to and replacement of stoves in official quarters/dwellings.

10.4 All standby generating sets.

10.5 All UPS installations.

10.6 TV and TV antenna installations.

10.7 All new work or additions of any nature whatsoever. The Department of Public Works will have the right however, to enter into new contracts for major Repairs and Renovations and New Works in any complex or building covered in the area of this duration of this new contract.

10.8 Fans, microwave ovens, heaters and other technical and electronic equipment, and machinery such as latches and workshop equipment.

11. UNIT RATES

The Department of Public Works reserves the right to adjust, before awarding the contract, individual unit rates in The Schedules as may be necessary to eliminate errors, discrepancies or what is considered to be unreasonable or unbalanced rates.

12. MANAGEMENT

The contractor undertakes to:-

12.1 Arrange with the occupants of building regarding access to the premises in order to execute the required repairs.

12.2 Take adequate precautions to prevent damage to buildings, to fittings and furnishing inside the premises and elsewhere on the site;

12.3 Accept liability and to indemnify the Department against any claims whatsoever arising from this conduct and/or the conduct of his employees;

12.4 Safeguard all his employees in accordance with the regulations of the Unemployment Insurance Act 1966, (Act No 30 of 1966) and any amendments thereof;

12.5 Comply with all By-laws and requirements of the local authority;

12.6 Comply with the local Fire officer's regulations; and

12.7 Provide a qualified electrician and personnel on a 24-hour basis including weekends and public holidays to carry out any emergency repair work.

13. EXECUTION OF REPAIRS

Generally upon the instruction or request to render any work, the contractor must determine the urgency of the requirements before responding to the call. For this purpose the call outs will be classed as follows:

13.1 An Emergency: such as loss of power to a portion of an institution or a total power failure, not attributable to a supply authority power failure. Such an emergency must be attended to within minimum delay and in any event, within 2 hours of receipt of the call.

13.2 All other repair-replacement: Shall be attended to on the day of the call, provided the call is received before 12:00. Otherwise the call must be attended to the following day. If the contractor fails to respond within the time limits as stated in 13(a) and (b) hereof, the Department shall have the right to appoint any other contractor to do the work without further notification to the contractor. The additional costs if any of such work, executed by another contractor, will be for the account of the contractor.

14. AN ACCREDITED PERSON

Electrical repair work must be executed under the direct supervision of a Competent Person. The Competent Person must be registered as a three phase electrician. The Competent Person must be registered in terms of Regulation 9 of the Occupational Health and Safety Act 1993, (Act 85 of 1993). A certified copy of the Certificate of Registration has to be submitted with the tender.

15. MATERIAL OF EQUAL QUALITY

Replacement parts, spares and materials used must be of equal specification to the component that is being replaced and must where possible carry the SABS mark of approval. If such equivalent component is not available, then the alternative component must be approved by the Regional Technical Representative prior to installation.

A representative of the "user" department must sign for spares that have been used in the execution of services and details entered on Job Cards.

The serial numbers of original and new components or appliances such as stoves, motors, etc. shall be entered on job cards and invoices presented for payment. The guarantee cards for items such as electrical domestic stoves, etc. must also be attached to job cards.

DEFECTIVE PARTS MUST BE HANDED TO THE REPRESENTATIVE OF THE "USER DEPARTMENT", for safe keeping.

16. UNCERTAINTY REGARDING THE EXTENT OF A REPAIR (SCOPE)

Should the Contractor be uncertain about the scope of any work to be executed under this contract, the Department must be immediately requested to clarify its instruction.

17. OFFICIAL ORDER FORM

17.1 An official order number for this contract will be used to the Contractor at the commencement of this contract.

17.2 Service may only be commissioned to contractors by officials of the Department. For each service the complaint number issued for that service as well as details regarding the defects that must be repaired shall be given to the contractor in writing. If the contractor has facsimile facilities, the Complaint will be faxed to him as per Department of Public Works procedures. It is, however, expected of the contractor to respond to telephonic requests for services. However, he must obtain the official Complaint Form OWG 415 for the service requested, as soon as possible.

17.3 Special arrangements are applicable for emergency services, which are explained in 18 hereof.

17.4 No payments will be made for work executed without the necessary written authority.

18. EMERGENCY SERVICES

Emergency Services after hours may be executed without receipt of an official Complaint number solely on the request of an official of a “user” department. The contractor must however, ensure that the official of the “user” department signs the Job Card. The contractor must also ensure that he obtains the official complaint number form the Department on the following working day. No payment will be made without a complaint number.

19. TRANSPORT AND LABOUR COSTS

19.1 Transport costs shall include travelling time for artisans, assistants and driver, as well as overheads and profit.

19.2 Labour rates referred to shall be deemed to include for statutory minimum labour rates, contribution to bonus, holiday, pension and medial funds, etc., as well as any profit.

19.3 N.B.:

TRANSPORT COSTS, INCLUDING TRAVELLING TIME, MUST BE ALLOWED IN THE RATES FOR EACH AND EVERY ITEM IN PRICE SCHEDULE, AND IN THE RATES FOR NON-SCHEDULE LABOUR ITEMS. UNDER NO CIRCUMSTANCES WILL TRANSPORT OR TRAVELLING COSTS BE PAID WHERE THIS IS CLAIMED AS A SEPARATE ITEM ON ANY INVOICE RENDERED.

20. FIXED PRICE CONTRACT

This contract is a fixed price contract and no price adjustments shall be made for any increases or decreases of price except for VAT rate adjustments.

21. JOB CARDS

The Contractor must provide, as his own cost, a supply of Job Cards in accordance with the example including herein. The Job Card must be completely legibly in ink after completion of each service. In addition to the original completed Job Card submitted with the account, the contractor must submit a copy of the Job Card to the User Department for audit purposes.

22. ACCOUNTS

Accounts for services rendered, must be accompanied by a Job Card.

The unit rates for items on the Job Card must be cross referenced to be applicable rates for similar items in the Tender document by means of the page and items numbers e.g. 16/15a (page 16, Item 15a).

NOTE:

Any errors in the compilation of the Job Cards or accounts discovered at a later stage, shall be rectified and the overpayment recovered by the Department all in accordance with the regulations of clauses 53 (3) of “State Tender Board Conditions and Procedures” form (ST36)

23. PRICING OF NON-SCHEDULED MATERIALS

The percentage mark-up on prices by the contractor for non-schedule material shall be as quoted in Schedule II.

Unit prices for items of work executed but not specified in this contract must be verified by means of invoices of suppliers. The amount of such invoiced, after deduction of any discount, will be taken into account for payments to the contractor. If such invoices are not submitted, accounts will not be paid.

Should the prices of the Contractor's supplier be abnormally high, then the department reserves the right to obtain a written quotation for similar items from an independent supplier and the rates of such quotation shall then be applicable.

24. PAYMENT

24.1 Invoices for services rendered, must be accompanied by the following:

- a. Completed Job Card.
- b. Proof of attendance register (signed by the relevant official of Client Department and the contractor).
- c. Schedule report whenever scheduled maintenance services are applicable.

Accounts can be submitted weekly or monthly. Payments of accounts complying with all the requirements shall be made within 30 days electronically into the contractors banking account after receipt thereof

Note: It should be noted that no work will be paid if the above mentioned documents stated in clause 15.1a to 15.1c are not attached to the invoice.

24.2 CALCULATION OF PENALTIES

Penalties applicable to each stage and/or phase of the project to be stipulated in the Contract Data applicable to the project [DPW04 (EC) JBCC Contract Data or DPW05 (EC) GCC Contract Data].

24.2.1 CALCULATION OF PENALTY PER DAY (EXCLUDING VAT)

The table below to be used as a guide to determine penalties.

CONTRACT PERIOD		RATE PER R100 OF ESTIMATE	
1	month	27,5	cents
1,5	months	22	cents
2	months	16,5	cents
2,5	months	13,5	cents
3	months	11	cents
3,5	months	9,5	cents
4	months	8,5	cents
4,5	months	7,5	cents
5	months	6,25	cents
6	months	5,75	cents
7	months	4,75	cents
8	months	4	cents
CONTRACT PERIOD		RATE PER R100 OF ESTIMATE	
9	months	3,75	cents
10	months	3,5	cents
11	months	3	cents
12	months	2,75	cents
14	months	2,5	cents
15	months	2,25	cents
16	months	2	cents

18	months	1,75	cents
20	months	1,5	cents
21	months	1,5	cents
24	months	1,25	cents
30	months	1	cent
36	months	1	cent
42	months	1	cent

24.2.2 PENALTY PER DAY ROUNDED OFF AS FOLLOWS:

R 0	–	R 500	nearest	R 5
R 501	–	R 1 000	nearest	R 10
R 1 001	–	R 5 000	nearest	R 50
R 5 001 and above		nearest		R 100

24.2.3 EXAMPLE

Estimated contract value = R2 500 000 (excluding VAT)
 Construction period = 12 months
 = R2 500 000 X 0.0275
 = R687-50/day
 Therefore rounded off
 to the nearest R10-00 = R690-00/day

25. RUBBLE AND WASTE

All rubbish and waste arising from the work must be removed and the site and buildings left clean and tidy.

26. ACCESS CARDS TO SECURITY AREAS

Should the work fall within a security area, the contractor shall obtain from S.A. National Defence Force or S.A. Police Service, access cards for his personnel and employees who work within such an area. The contractor must comply with any regulations or instructions issued from time to time, concerning the safety of persons and property, the S.A. National Defence Force or S.A. Police Service.

27. SECURITY CHECK ON PERSONNEL

The Department of the Chief of the SA National Defence Force, or the Commissioner of the SA Police Service, or any other Department, may require the contractor to have his personnel or a certain number of them security classified.

In the event of the Department, the Chief of SA National Defence Force or the Commissioner of the SA Police Service, or any other Department requesting the removal of a person or persons from the site for security reasons, the contractor shall do so forthwith and the contractor shall thereafter ensure that such person or persons are denied access to the site and/or to any documents or information relating to the work.

28. DEPARTMENT OF PUBLIC WORKS RESPONSIBILITY

The Department of Public Works is responsible for the electricity supply to hire or state owned complexes and/or building, irrespective whether the services are supplied from a PWD reticulation network or from the local supply authority.

The items mentioned under clause 1- are included under this responsibility.

Any dispute or uncertainty with regards to the responsibility of the execution of a service must be referred to this department for clarification.

29. REPLACED ITEMS

Rates for items described to be replaced, must allow for fault finding, the removal of the existing defective item or part, setting aside and storing thereof in the space/store-room indicated by the user department, and for supplying and fixing of the new items. The items removed remain the property of this department.

30. THE CONTRACTOR AND USER DEPARTMENT SHALL NOT NEGOTIATE

The contractor and the user department on whose behalf the work is being done are not permitted to enter into negotiations with regard to any matter whatsoever relating to the rates and conditions of the contract.

In the event of any dispute arising out of any matter in connection with the contract, such matters shall be referred by the Department for submission to the State Tender Board, whose decision shall be final. The contractor shall not delay the execution of any work pending such decision.

31. GUARANTEE

Notwithstanding clause 40.1 of ST36, the guarantee period for any work executed shall be 3 months. Should the contractor install any replacement equipment, which offers a manufacturers guarantee in excess of the 3 months referred to above, he shall be responsible for liaising with the manufacturer/supplier for the repair/replacement thereof (in the event of faulty equipment) at no extra cost to the State.

32. GENERAL ITEMS TO COMPLETE TARIFFS

32.1 The first 50 kilometres of a trip must be included in the tariffs, there after must the distance be measured from post office to post office.

32.2 Tariffs must include the material cost.

32.3 Time base labour prices must include all personnel to execute the service.

32.4 With non schedule items and large brake downs of instructions must the contractor first submitted quotations to the department that shows the parched/quotation from the supplier and the percentage mark up of the contractor.

33. DETAIL OF AREA

Three (3) year Service schedule for Low Tension installations in the FREE STATE AREA.
NB: FEZILE DABI DISTRICT WHICH INCLUDES THE FOLLOWING TOWNS AND AREA:-

33.1. MOQHAKA LOCAL MUNICIPALITY

33.1.2 KROONSTAD

33.1.3 STEYNSRUS

33.1.4 VIERFONTEIN

33.1.5 VILJOENSKROON

33.2. METSIMAHOLO LOCAL MUNICIPALITY

33.2.1 SASOLBURG

33.2.2 ORANJEVILLE

33.2.3 DENEYSVILLE

33.2.4 GROENPUNT PRISON

33.2.5 VILJOENS DRIFT

33.3. MAFUBE LOCAL MUNICIPALITY

33.3.1 VILLIERS

33.3.2 CORNELIA

33.3.3 FRANKFORT

33.4. NGWATHE LOCAL MUICIPALITY

33.4.1 PARYS

33.4.2 KOPPIES

33.4.3 HEILBRON

33.4.4 EDENVILLE

33.4.5 VREDEFORT

34. STANDARDS, RULES AND REGULATIONS

The installation work shall comply with all:

Rules and Regulations as set out in the O.H.S. Act, Electrical Installation Regulations and Electrical machinery Regulations where appropriate.

Conform to SANS 10142. The Amended Code of Practice for the Wiring of Premises.

S.A.B.S. 0108 - 1974, The Classification of Hazardous Locations and the selection of Electrical Apparatus for use in such Locations.

The Occupational Health and Safety Act, 1993.

The local Fire Regulations.

Local municipal regulations and by-laws.

S.A.B.S. 1020 - 1975, Standard specification for Electrical Components of free standing Power operated Dispensing Devices for Flammable Liquids.

S.A.B.S. Part 2 - 1966, Electrical Code for the Petroleum Industry; S.A.B.S. 314 - 1971, Flameproof Enclosures for Electrical Apparatus.

Any special conditions stipulated in this specification.

35. WORKMANSHIP

The installation shall be executed in a professional and workmanlike manner and shall present a neat appearance on completion.

36. MATERIALS

All materials must be S.A.B.S. approved and should bear the S.A.B.S. mark where possible.

37. DAMAGE TO BUILDING

The electrical contractor will be responsible for all damages due to his activities, chasing of conduit, damage to ceilings, etc.

All chases must be done by means of chasing machines and drills, etc.

The electrical contractor must allow in his tender for the cost to repair the chases to the satisfaction of the architect.

38. TYPES OF LOW TENSION CABLE

The new low tension cable will be of the stranded type copper core PVC/PVC/SWA/PVC, 600/1000 volt cable according to SABS 150/1970 as amended.

39. CABLE LENGTH

The cable length shall be as indicated in the Bills of Quantities. For installation purposes, the cable length must be measured on site before the cable is ordered and the Contract Price shall be adjusted to allow for any differences between the specified and the actual cable length installed.

40. CABLES

40.1 General

Supply, install and connect the low voltage cable specified in this document. Bare hard drawn copper earth continuity conductors are to run with all four core underground cables constituting part of the low voltage distribution system. The earth conductors must be bound to the cables at intervals not exceeding 1000mm.

Conductor insulation which is colour coded by a line only, will not be accepted. The total insulation must have the phase colour.

Tenderers must base their tender on the amount of cable, including earth conductors, as indicated in the Bills of Quantities. During the course of the work the actual lengths will be measured on site and adjustments will be made according to the price per metre length as inserted by the tenderer for the particular cable size concerned.

Tenderers must base their cost for trenching in earth; soft rock and hard rock on the total quantities as indicated in the Bills of Quantities. The actual quantities, based on the dimensions as specified below for trenches for the applicable number of cables to be laid, will be measured on site during the course of the service and adjustments made according to the price per cubic metre as inserted by the tenderer. Payment for cable trenching having a greater volume than that specified for the purpose will not be considered except where extra excavations are necessary to by-pass obstacles such as water pipes, drains, large boulders etc. In all such instances the amount of the extra excavations must be agreed upon on site between the REPRESENTATIVE OF THE Department of Public Works and the Contractor.

40.2 No guarantee can be given that explosives will not be necessary for excavations. However, should explosives be necessary and the Contractor receive permission to use explosives, the Electrical Contractor shall remain responsible for all work done with the explosives and shall comply to all conditions, regulations, requirements etc., imposed by the governing bodies.

Mechanical excavators may be used for trenching operations provided that they are not used in close proximity to other plant, services or other installations likely to be damaged by the use of such machinery. The use of mechanical excavators shall be subject to the approval of the client.

Should excavations be done in close proximity of existing services extreme care must be taken. Only labourers with experience of these conditions may be utilised.

TENDERERS ARE TO NOTE THAT:

40.3 Hard rock:

Shall mean granite, quartzitic sandstone, slate and rock of a similar or greater hardness, solid shale and boulders over 0.03m³ in volume.

40.4 Soft rock:

Shall mean rock that can be loosened by hand - pick and includes hard shale, compact outcrop and boulders from 75mm in diameter up to 0.03m³ in volume.

40.5 Earth:

Shall mean ground that can be removed by pick and hand shovel and includes loose gravel, clay, made-up ground, loose or soft shale, loose oukclip and boulders less than 75mm in diameter.

The storage, transportation, handling and laying of the cables shall be according to first class practice, and the Contractor shall have adequate and suitable equipment and labour to ensure that no damage is done to cables during such operations.

The cable-trenches shall be excavated to a depth of 600mm deep below ground level and shall be 450mm wide for one to three cables, and the width shall be increased where more than three cables are laid together so that the cables may be placed at least two cable diameters apart throughout the run. The bottom of the trench shall be level and clear and the bottom and sides free from rocks or stones liable to cause damage to the cable.

The Contractor must take all necessary precautions to prevent the trenching work being in any way a hazard to the personnel and public and to safeguard all structures, roads, sewage works or other property on the site from any risk of subsidence and damage.

In the trenches made in soft and hard rock the cables shall be laid on a 75mm thick bed of earth and be covered with a 150mm layer of earth before the trench is filled in.

All joints in underground cables and terminations shall be made either by means of compound filled boxes according to the best established practice by competent cable jointers using first class materials or by means of approved epoxy-resin pressure type jointing kits such as "Scotchcast". Epoxy-resin joints must be made entirely in accordance with the manufacturer's instructions and with materials stipulated in such instructions. Low-tension PVC-armoured cables are to be made off with sealing glands and materials designed for this purpose, which must be of an approved make. Where cables are cut and not immediately made off, the ends are to be sealed without delay.

The installation of cables shall not be commenced until the trenches have been inspected and approved in writing. The cable shall be removed from the drum in such a way that no twisting, tension or mechanical damage is caused and must be adequately supported at intervals during the whole operation. Particular care must be exercised where it is necessary to draw cables through pipes and ducts to avoid abrasion, elongation or distortion of any kind. The ends of such pipes and ducts shall be sealed to approval after drawing in of the cables.

Backfilling (after bedding) of the trenches is to be carried out with a proper grading of the material to ensure settling without voids, and the material is to be tamped down after the addition of every 150mm. The surface is to be made good as required. The price for back-filling and compaction must be included into the prices for the excavation.

On each completed section of the laid and jointed cable, the insulation resistance shall be tested to approval with an approved "Megger" type instrument of not less than 500 volt for low-tension cables.

Earth continuity conductors are to be run with all underground cables constituting part of a low-tension distribution system. Such continuity conductors are to be stranded bare copper of a cross-sectional area equal to at least half that of one live conductor of the cable, but shall not be less than 4mm² or more than 70mm². A single earth wire may be used as earth continuity conductor for two or more cables run together, branch earth wires being brazed on where required.

40.6 Installation

Testing

The low voltage cables must be tested on site, in the presence of a representative from the client. The test result must be submitted to the client.

On each completed section of the laid cable, the insulation resistance shall be tested to approval with an approved "Megger" type instrument of not less than 500V for low voltage cables.

40.6.1 Cable joints

Joints in cable runs shall not be allowed unless specified or authorised in writing, by the client. Where cable joints are to be made, a joint hole must be excavated of sufficient size to enable the cable jointer to work efficiently and unimpeded.

Each cable end must be left in a loop of 900mm to prevent any tension on the joint. During backfilling the section supporting the joint must be compacted to the extent that no movement will take place after the trenches have been backfilled.

All joints in underground cables and terminations shall be made either by means of compound filled boxes according to the best established practice by competent cable jointers using first class materials or by means of approved epoxy-resin pressure type jointing kits such as "Scotchcast". Epoxy resin joints must be made entirely in accordance with the manufacturer's instructions and with materials stipulated in such instructions. Low voltage PVC-armoured cables are to be made off with sealing glands and materials designed for this purpose which must be of an approved make.

Where cables are cut and not immediately made off, the ends are to be sealed without delay.

40.6.2 Cable laying

Cables must be removed from the drums in such a manner that the cable is not subjected to mechanical damage, twisting or tension exceeding that stipulated by the cable manufacturer.

The laying of cables shall not commence until the trenches have been inspected and approved. The cables must be adequately supported at intervals during the whole operation. Particular care must be exercised where it is necessary to draw cables through pipes and ducts to avoid abrasion, elongation or distortion of any kind. The ends of such pipes and ducts are to be sealed to approval after drawing in of the cables.

41. MARKING TAPE

Yellow PVC-marking tape, 150mm wide must be supplied and installed 400mm above all cables. The wording "Electric Cable Below - Caution" and "Elektriese Kabel Hieronder- Gevaar" must be provided on the marking tape.

42. CABLE MARKERS

Cable markers must be provided on all cable runs at 50m intervals on straight runs and at all bends. The position of cable markers must be confirmed on site.

Cable markers must also indicate the exact position of cable joints.

Cable markers must consist of 150mm x 150mm x 300mm high concrete blocks with aluminium or other rust free metal plates marked with arrows to indicate the route. The cable markers must protrude 25mm above ground level.

43. LIGHT FITTINGS AND LAMPS

Supply and install the light fittings as per instruction/order

The required light fitting types are as specified and tie up with the types indicated on the drawings. Samples of all the new light fittings are to be approved by the representative of the Department of Public Works, before any orders are placed.

The installation of light fittings must be done in accordance with the relevant clauses in this specification.

All light fittings must be complete with lamps and where necessary, control gear. All the light fittings shall comply with SANS 60598.

All the fluorescent light fittings must be complete with ELECTRONIC CONTROL GEAR (Class A2), etc.

Note:

All recess mounted light fittings must be complete with 3m cords and 5 ampere 3-pin un-switched socket outlet points.

Type	Description
B1	Streetlight fitting equal and similar to GEC Z8691 light fitting complete with 80 watt MV lamp and control gear.
B2	Streetlight fitting equal and similar to BEKA – BEKALUX light fitting complete with 80 watt MV lamp and control gear.
B3	Streetlight fitting equal and similar to BEKA – BEKALUX light fitting complete with 125 watt MV lamp and control gear.
B4	Streetlight fitting equal and similar to BEKA – BEKALUX light fitting complete with 70 watt HPS lamp and control gear.
B5	Security light fitting equal and similar to BEKA – BEKAFLOOD light fitting complete with 2 x 18 watt PL lamps and control gear.
B6	Security light fitting equal and similar to BEKA – BEKAFLOOD light fitting complete with 2 x 24 watt PL lamps and control gear.
B7	Floodlight fitting equal and similar to LASCON cat no L14 complete with 250 watt HPS lamp and control gear.
B8	Floodlight fitting equal and similar to LASCON cat no L14 complete with 400 watt HPS lamp and control gear.
B9	Area light fitting equal and similar to BEKA cat no BEKARAY complete with 80 watt MV lamp and control gear.
B10	Area light fitting equal and similar to BEKA cat no BEKARAY complete with 125 watt MV lamp and control gear.
B11	Area light fitting equal and similar to BEKA cat no AZIMUTH complete with 70 watt HPS lamp and control gear.
B12	Area light fitting equal and similar to BEKA cat no AZIMUTH complete with 125 watt MV lamp and control gear.
B13	500 Watt Halogen light fitting complete with glass
B14	1500 Watt Halogen light fitting complete with glass
B15	1200mm long double tube surface mounted light fitting complete with 2 x 36 watt tubes and control gear
B16	1500mm long double tube surface mounted light fitting complete with 2 x 58 watt tubes and control gear
REPLACE LAMPS	
RL1	PL 18 watt fluorescent lamp
RL2	PL 24 watt fluorescent lamp
RL3	500 Watt halogen lamp
RL4	1500 Watt halogen lamp
RL5	70 Watt High Pressure Sodium lamp
RL6	80 Watt Mercury Vapour lamp
RL7	125 Watt Mercury Vapour lamp
RL8	250 Watt Mercury Vapour lamp
RL9	400 Watt Mercury Vapour lamp
RL10	1200mm fluorescent 36 watt
RL11	1500mm fluorescent 58 watt

44. LIGHT SWITCHES AND SOCKET OUTLETS

The rating of switches and socket outlets must be 20 ampere and must bear the SABS mark of approval.

45. PHOTOCCELL FOR CONTROL OF AREA LIGHTS

The rating of new photocell unit must be at least 10 ampere.

The photocell must comply to the following:-

- 45.1 Area lights must be switched ON when the illumination dropped to 50lux.
- 45.2 Area lights must be switched OFF when the illumination is raised to 90lux.
- 45.3 It must be weatherproof and must have a built in time delay of approximately 40 seconds.
- 45.4 Built in protection against voltage surges must be provided.
- 45.5 The photocell must be mounted in a polycarbonate watertight 150mm x 150mm x 100mm deep outlet box. The watertight outlet box must be complete with a hinged door and a clear lid.
- 45.6 A sample of the proposed photocell must be submitted to the Department for approval.

46. CONDUIT AND WIRING

Conduit and conduit accessories shall be galvanised plain end conduit or steel as specified in accordance with SABS 162, 763 and 1007 as amended, respectively.

All conduits, regardless of the system employed, shall be installed strictly as described in the applicable paragraphs of the STANDARD SPECIFICATION FOR ELECTRICAL INSTALLATIONS.

NOTE

Where plain end conduit is offered all switches and light fittings must be supplied with a permanent earth terminal for the connection of the earth wire.

Lugs held by switch fixing screws or self tapping screws will not be acceptable.

47. WIRING

All circuits shall be wired from fresh unused coils of red, white, blue and black conductors. The colours of conductors shall correspond to the phase from which that circuit is fed. An alternative colour shall be used for the switched conductor between the light switch and the light fitting.

Equipment shall be wired as follows:

- | | |
|--|--|
| Lighting circuits | 2 x 2.5mm² and 2.5mm² earth wire in 20mm diameter conduit |
| Socket outlet circuits (Normal) | 2 x 4mm² and 2.5mm² earth wire in 20mm diameter conduit |
| Dedicated socket outlets | 2 x 4mm² and 2.5mm² PVC-insulated copper earth wire in 20mm diameter conduit. |

48. LIGHT SWITCHES

The light switch outlet shall be fitted with white steel cover plates.

Light switches shall be of the 20 ampere rating mounted flush or surface as required.

49. SINGLE PHASE SOCKET OUTLETS

Single phase single or double socket and dedicated outlets shall be of the 20 ampere 3-pin, switched, flush or surface mounted type as required.

49.1 Socket outlet points shall be fitted with WHITE steel cover plates.

49.2 Dedicated power socket outlets shall be fitted with RED steel cover plates that will only allow shaved earth pin plug tops.

50. SECURITY LIGHT POLES

The electrical contractor must allow for the supply, delivery and installation of filament fibreglass reinforced polyester or steel security light poles. The mounting height of the light fittings must be 4000mm above final ground level.

The poles must be supplied complete with gland plates, 5 ampere single pole miniature circuit breakers to control the light fitting, internal wiring and terminal blocks. Further must all poles must be complete with cable entries and access doors. The access doors must be secured by means of ALLEN cap screws.

The material thickness must be at least 8 mm $\pm 20\%$. The colour of the poles must be grey coloured.

51. OVERHEAD LINES

51.1 General

This section of the specification covers the repair of existing overhead transmission lines up to 1kV on wooden poles.

The repair work on the existing installations may consist of the replacement of wooden poles, cross-arms, stays, conductors, insulators, isolators, fuse-links, transformers, lightning arrestors and any other auxiliary equipment required.

All materials and fittings used to repair the existing installation shall be new and of a high quality.

51.2 Poles and cross-arms

Wooden poles and cross-arms shall conform to SABS 753.

The poles and cross-arms shall be of Group strength "A" and shall bear the SABS mark of approval.

Preservatives of the poles and cross-arms shall comply with the requirements for Type A1 of SABS 590 and the impregnation shall be carried out in accordance with SABS 05 using the empty-cell pressure process.

The method of banding of the poles and cross-arms shall be LOOP TENSIONING on both ends of the poles and cross-arms.

All the poles damaged poles replaced with new poles shall be installed with marking tags facing the roadside where applicable or shall face in the same direction where a road does not exist alongside the overhead line.

The pole dimensions listed in the table below shall be used. Poles not complying with these dimensions shall be allowed for installation purposes.

Length (m)	Top dia. (mm)	
	min.	max
9.3	160	185
10.5	160	185

Templates shall be used for drilling holes required to fix cross-arms, brackets, insulators, etc. to the new poles replacing damaged poles. After drilling, the holes shall be coated with a mixture of creosote and tar.

The poles shall be planted at the following minimum depths:

Length (m)	Planting depth (m)
9.3	1.7
10.5	1.8

51.3 Cross-arms

Cross-arms shall consist of the same material as the original used.

Steel cross-arms shall be manufactured from standard steel sections complying with SABS 221 or BS 4360.

Wooden cross-arms shall comply with SABS 753, Group Strength "A" and shall be straight in grain. The minimum diameter of cross-arms shall be as follows:

Length (m)	Top dia. (mm)	
	min.	max.
0.3	185	210
2.4	140	160

The new Tie straps shall be manufactured of mild steel to SABS 221 or Grade 43 of BS 4360.

Cross-arms and tie straps shall be bolted to poles using galvanized bolts, nuts and washers, and curved wood pole washers shall be fitted between bolt heads and the poles and between cross-arms and the poles. Back straps and U-bolts may be used to attach wooden cross-arms to the poles.

Curved wood pole washers shall also be fitted between the collars of insulator pins and the cross-arm or pole and between the pin nut and the cross-arm or the pole.

Curved wood pole washers shall be galvanized malleable cast iron or mild steel with a minimum thickness of 6mm and shall have a minimum square outside dimension of 63mm.

51.4 Insulators and fittings

Pin insulators and their pins complying with SABS 177 shall be used in straight line intermediate positions only.

Disc insulators shall be used in all strain, tension or angle positions. Clevis-and-tongue or ball-and-socket type insulators complying with SABS 177 shall be used. Disc insulators may be of glass or porcelain.

Insulator hooks shall be of an approved pattern and shall be manufactured from BS 4360 grade 43 mild steel or forged.

Terminating and yoke straps shall be manufactured from BS 4360 grade 43 steel.

All steel or ironwork i.e. fittings, cross-arms, bolts, nuts, washers, etc., shall be hot dip galvanized to SABS 763.

51.5 Conductors

Conductors of overhead electrical transmission lines shall comply with SABS 182, PART 3, reinforced with galvanized steel wires and the cross-sectional area shall comply with the STANDARD SPECIFICATION FOR ELECTRICAL INSTALLATIONS.

Manufacturer's stringing and tensioning charts shall be used to erect conductors.

Conductors shall not be tensioned to more than 25 % of the breaking strength of the conductor at -5.50°C with no wind.

Midspan joints are not acceptable.

51.6 Stays

Where damaged stays are replaced will the new stay wire consist of galvanized steel and the individual steel strands shall have a breaking stress of not less than 695 MPa and shall comply with B'S 183 of SABS 182, Part V. Stay wire make-offs shall be painted with bitumastic paint on completion.

Stay rods shall comply with B'S pattern 2 and shall be of circular section with tubular type turn buckles. Heavy duty construction, deep contoured type thimbles shall be used.

Galvanized steel stay plates shall be used.

Porcelain stay insulators shall be installed in the stay wire as high as possible above ground level but far enough away from the structure to ensure that the portion of the stay below the insulator does not become alive.

51.7 Excavations

Excavations for poles, stays and trench earths shall remain open for a short period as possible. The Contractors shall erect and maintain guards, warning notices and lights at open excavations and soil heaps.

After poles and stays have been planted, the holes shall be backfilled and well compacted. Compaction shall be executed in layers or not more than 300mm to obtain a high compaction density.

The following dimensions shall be used when calculating the cubic capacity of excavations:

Pole holes	:	1200mm x 600mm x depth
Stay holes	:	1200mm x 600mm x 1800mm

51.8 Insulators and fittings for overhead lines

This section covers the supply of insulators and associated fittings for use on overhead lines with system voltages UP to 1 kV and with a frequency of 50 Hz.

Insulators together with their metal fittings shall comply with the following standards:

For system voltage UP to 1 kV (Low Voltage) : SABS 161

Insulators shall be suitable for use with the size and type of conductor specified.

All low voltage and high voltage pin insulators shall be of glazed porcelain manufacture. Glass string insulators shall only be used in areas with abnormal air pollution and where specified. In all other cases glazed porcelain string insulators shall be used. Insulators, complete with all fittings, shall not exhibit excessive or localized corona formation at voltages less than 1,3 times normal phase to neutral voltage.

51.9 L.V. INSULATORS

Where damaged pin insulators must be replaced the new insulators must the new units consist of:

porcelain insulator mounted on a steel pin.

of Class B.

The insulators for nominal system voltage of 1 kV shall be designed to limit radio interference and the marking "RIF" shall appear on the insulator. A semi-conductive glaze coating applied to the tie-top portion of the insulator and cemented-in metal thimbles in the pin hole may be employed for this purpose.

The pins of pin insulators shall be straight and shall be complete with washers and nuts. The shank and threaded lengths shall be as specified on the drawings or as required for the mounting application. Pins, nuts and washers shall be hot-dip galvanized in accordance with SABS 763.

String insulators:

Where string insulators are replaced the new string insulators must the new units consist of: A single string insulator unit together with its metal fittings or multiple string insulator units arranged in a single string together with their metal fittings.

The string insulator units shall be of type U70/LC in accordance with SABS 177 and shall be complete with gudgeon pins, washers and split pins.

All the metal parts shall be hot-dip galvanized in accordance with SABS 763 excluding the split pins for the securing of the gudgeon pin which shall be of phosphor bronze or stainless steel.

The insulators of nominal system voltages of 11kV shall be designed to limit radio interference and the marking "RIF" shall appear on the insulator.

LV Insulators

Where LV pin insulators must be replaced with new pin insulators must the new units consist of:

Of white glazed porcelain with top and side grooves. The groove sizes shall be suitable for the size of conductor used.

Shall be internally threaded to accept "CORDEAUX" threaded spindles.

Shall be supplied complete with mild steel straight spindles, fibrous or neoprene washers, washers and nuts. All steel parts shall be hot-dip galvanized in accordance with SABS 763.
LV Shackle and Reel Insulators

Where damaged LV shackles and reel insulators must be replaced the new insulators must the new units consist of:

Shall be of white glazed porcelain with a side groove. The groove size shall be adequate to accept the conductor size used.

Stay insulators

Where damaged stay insulators must be replaced the new insulators must the new units consist of:

Stay insulators shall be of brown glazed porcelain.

MEDIUM VOLTAGE EQUIPMENT MAINTENANCE AND SERVICING (PLANNED) INSPECTION SCHEDULES.

- C3.4.1 CHECK LIST FOR SUBSTATIONS AND MINI SUBSTATIONS.
- C3.4.2 CHECK LIST FOR MISCELLANEOUS INSPECTION AND ATTENDANCE TO SUBSTATIONS AND MINI SUBSTATIONS.
- C3.4.3 CHECK LIST FOR HIGH VOLTAGE AND LOW VOLTAGE SUBSTATIONS AND MINI SUBSTATIONS ELECTRICAL METER READINGS.
- C3.4.4 MV & LV SWITCHGEAR QUESTIONNAIRE.
- C3.4.5 MAINTENANCE AND SERVICE SCHEDULE FOR BATTERY.
- C3.4.6 INSPECTION CHECK LIST.

C3.4.1 CHECK LIST FOR SUBSTATIONS AND MINI SUBSTATIONS

VISUAL INSPECTION

		<u>YES</u>	<u>NO</u>
1	H.T. Cables in order		
2	H.T. Cable Terminations in order		
3	L.T. Cables in order		
4	L.T. Cable Terminations in order		
5	All H.T. Switchgear, Covers and Panels intact?		
6	All L.T. Switchgear, Covers and Panels intact?		
7	Are all Switchgear and Circuit Breakers in "ON" Position?		
8	Are circuit legends available?		
9	Are all Switchgear and Circuit Breakers properly labelled?		
10	Are all Time Switchers correct and set accordingly?		
11	Are all Indicating Panel Lights working: - if not - replace where required?		
12	Check all Transformer oil levels and top up where required?		
13	Are all primary conductor bolts and nuts torque-tested?		
14	Are all circuit breakers checked for any defects or damage due to manhandling?		
15	Are all circuit breakers checked for alignment and ease of racking in and out?		
	<u>Report any leaks under "Remarks"</u>		
	<i>FUNCTIONAL TESTING</i>		
1	Test all control circuits to ensure correct operation of Circuit Breakers.		
2	Check and test solenoid relays.		
3	Test interlocking (where applicable).		
4	Test transformer trip/alarm devices.		
5	Test differential protection schemes.		
6	Submission of a comprehensive test report detailing:		
	i Test certificates for all tests undertaken.		
	ii All faults repaired and all faults outstanding.		
	iii Correction to any drawings.		
7	Check bus bar shutter operation for smooth operation.		
8	Check operation of circuit breaker manually.		
9	Test earth continuity of earthing bus bars and connection to station earth mat using suitable earth resistivity test equipment		
10	Ensure that all covers are fitted and explosion vents functional.		
11	Ensure that the panel complies with IP.		

REMARKS:

(a) Leaks: _____

DATE: _____

NAME (PRINT): _____

ELECTRICIAN: _____

SIGNATURE: _____

CLIENT STAMP

**C3.4.2 CHECK LIST FOR MISCELLANEOUS INSPECTION AND ATTENDANCE TO SUBSTATION AND
MINI SUBS**

DUST AND CLEAN

		YES	NO
1	Doors and frames		
2	Windowpanes and frames		
3	Window guards		
4	Window cills		
5	Walls and ceilings		
6	Cable ducts		
7	H.T. Switchgear		
8	L.T. Switchgear		
9	L.T. Transformer		
10	L.T. Distribution Board		

CLEAN AND OIL

1	Door hinges		
2	Door locks		

CLEAN AND POLISH

1.	Substation floors		
2	Outside cut grass, weeds and apply weed killer for a 2m Circumference where required		

Report under "Remarks" on the condition of:

1	Doors including hinges, locks, etc		
2	Windows including glass, cills, guards, etc		
3	Yard fencing and gates		
4	Walls - any cracks		
5	Roof - any leaks		
6	Cable duct covers		
7	Warning signs		
8	Floors		

REMARKS:

DATE: _____
 NAME (PRINT): _____
 ELECTRICIAN: _____
 SIGNATURE: _____

CLIENT STAMP

C3.4.3 CHECK LIST FOR HIGH VOLTAGE AND LOW VOLTAGE SUBSTATION AND MINI SUBS
ELECTRICAL METER READINGS

METER READINGS:

(Reset all Maximum Demand Ammeters).

a H.T.

MW _____ Rph _____ Yph _____ Ph _____
 _____ A _____ A _____ A _____ A

b L.T.

i) Transformer No. _____

3-ph _____ V Ph.1 _____ V Ph.2 _____ V
 V _____ A V _____ A V _____ A

ii) Transformer No. _____

3-ph _____ V Ph.1 _____ V Ph.2 _____ V
 V _____ A V _____ A V _____ A

iii) Transformer No. _____

3-ph _____ V Ph.1 _____ V Ph.2 _____ V
 V _____ A V _____ A V _____ A

iv) Transformer No. _____

3-ph _____ V Ph.1 _____ V Ph.2 _____ V
 V _____ A V _____ A V _____ A

v) Transformer No. _____

3-ph _____ V Ph.1 _____ V Ph.2 _____ V

V _____ A V _____ A V _____ A

DATE: _____

NAME (PRINT): _____

ELECTRICIAN: _____

SIGNATURE: _____

CLIENT STAMP

C3.4.4 H.V. & L.V. SWITCHGEAR QUESTIONNAIRE

(TO BE COMPLETED ON FIRST VISIT TO SUBSTATION)

- 1 a) H.T. Switch identification _____
- b) Manufacturer: _____
- c) Type _____
- d) Size _____
- e) H.T. Tripping Relays: _____

(EG (I) Solkor; (ii) Translay; (iii) CDG Earth Fault and Over Current Relays)

- | | | |
|------------|---------|-------|
| i) _____ | Setting | _____ |
| ii) _____ | Setting | _____ |
| iii) _____ | Setting | _____ |

2 L.T. TRANSFORMERS

- a) Transformer Identification: _____
- b) Manufacturer: _____
- c) Type/Serial N:o _____
- d) KVA: _____
- e) AMPS: _____
- f) Voltage Ratio: _____
- g) Impedance: _____
- h) Vector group: _____

DATE: _____

NAME (PRINT): _____

ELECTRICIAN: _____

SIGNATURE: _____

CLIENT STAMP

C3.4.5 CHECK LIST FOR L.V. BATTERY SUPPLY

- Contractors are to note that all maintenance to Nickel Cadmium Alkaline batteries, charging equipment and accessories, are to be in accordance with the manufacture's requirements. - Any loss or damage to the equipment through negligence on the contractor's part will be for his account		YES	NO
1	Clean Battery and/or Container/Stand and Terminals with lukewarm water and dry out.		
2	Neutralize corrosion with bicarbonate of soda solution		
3	Top up all cells with distilled water.		
4	Clean all battery terminals and cover with "Vaseline".		
5	Clean for loose connections and terminals, Tighten where necessary		
6	Ensure that Battery charger is set on "Trickle charge".		
7	Is Amp/Voltmeter on charger operational? (See "Remarks")		
8	Is "Test" button on charger operational? (See "Remarks")		
9	Check indicating lights on charger and replace if necessary; indicate quantity replaced under "Remarks" (see "Remarks")		
10	The following information on each cell is to be recorded.		
TOTAL VOLTS			
BATTERY CHARGER			AMPS
<u>L.V. BATTERY SUPPLY: CHECK LIST CONT.</u>			

REMARKS: (If answer is "No" on any of the previous items, state action taken by you or to be taken by the Department)

DATE: _____
 NAME (PRINT): _____
 ELECTRICIAN: _____
 SIGNATURE: _____

CLIENT STAMP

C3.4.6 INSPECTION CHECKLIST

Substation / Mini sub: _____
 Name or Number : _____
 Area: _____
 Delete which is not applicable:

Visual Inspection

	In Order		In Order
HT Cables	Yes/No	LT Cables	Yes/No
HT Terminals	Yes/No	LT Terminals	Yes/No
HT Covers/Panels	Yes/No	LT Covers/Panels	Yes/No
Switchgear labelled	Yes/No	LT Circuits labelled	Yes/No
Time Switches	Yes/No	Top Up Transformer oil	Lt
Panel lights replaced			

Remarks: _____

Dust/clean/oil

Doors + Frames	Yes/No	Door hinges/locks	Yes/No
Window Panel & Frames	Yes/No	Window guards / sills	Yes/No
Walls & Ceilings	Yes/No	No. of windows broken	
Floors Polish/Paint	Yes/No	Cable ducts	Yes/No
All Switchgear	Yes/No	All Distribution Boards	Yes/No
All Transformers	Yes/No	All rooms in Sub	Yes/No
Cut grass/weed killer	Yes/No		

Yard fencing/gates: _____
 Walls any cracks: _____
 Warning/Danger signs present: _____
 Remarks: _____

Low Voltage Battery Supply

Cater with water/bicarbonate of soda	Yes/No	Top Up Batteries	Yes/No
Vaseline Terminals	Yes/No	Check all connections	Yes/No
Amp/Voltmeter in order	Yes/No	Charger on "Trickle"	Yes/No
Test Button in order	Yes/No	No. of lights replaced	
Indication lights in order	Yes/No		
Volts No.1	Battery No.2		Battery No.3
Volts SG	Volts SG	Volts SG	
Cell No.	Cell No.	Cell No.	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			



11		
12		

Total Voltage _____

Total Amps _____

Remarks: _____

C3.4.6 INSPECTION CHECKLIST

Checklist Continued

Meter Readings: Reset All Meters

HT: _____

LT: _____
Transformer 1: _____
Transformer 2: _____
Transformer 3: _____
Transformer 4: _____

Switchgear	No.1	No.2	No.3	No.4	No.5
Manufacturer					
Type (T1/3)					
Size (Amps)					
Setting					
Litres Oil Replaced					
Other Work Done					

Transformers	No.1	No.2	No.3	No.4	No.5
Manufacturer					
Type/Serial					
KVA					
Litres Oil Capacity					
Amps					
Voltage Ratio					
Impedance					
Vector Group					
Silica Gel Replaced					
Other Work Done					

Name of Artisan: _____

Names of Labourers: _____

Date Started: _____ Time Started: _____

Date Completed: _____ Time Completed: _____



PRICING SCHEDULE/ BILL OF QUANTITIES

Bid no: BL25/014

Bid/ Project Description: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

See attached BOQ of 9 pages

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

ITEM	DESCRIPTION	UNIT	QTY	ITEM PRICE YEAR 1	TOTAL PRICE YEAR 1	QTY	ITEM PRICE YEAR 2	TOTAL PRICE YEAR 2	QTY	ITEM PRICE YEAR 3	TOTAL PRICE YEAR 3	TOTAL AMOUNT YEAR1+YEAR2+YEAR3
17	REPALCE FLUSH TYPE SWITCH AND SOCKET OUTLET											
17,1	16a 3 Pin industrial switch / socket outlet	ea	37			37			37			
17,2	16A Watertight switch Type N2500	ea	20			20			20			
18	REPALCE FLUSH TYPE SWITCH AND SOCKET OUTLET											
18,1	16A switch complete, flush or industrial, 1 or 2 or 3 lever or 2 way or pull switch (with cord).	ea	20			20			20			
18,2	Watertight switch	ea	10			10			10			
18,3	16A 3 Pin switch plug complete flush or industrial	ea	40			40			40			
18,4	16 AMP power skirting socket outlet	ea	20			20			20			
19	REPLACE CIRCUIT BREAKER (ALL MAKES)											
19,1	Single pole 2,5 KA 1-60 Amp	ea	20			20			20			
19,2	Single pole 5 KA 80-100 Amp	ea	15			15			15			
19,3	Triple pole 2,5 KA 5-60 Amp	ea	10			10			10			
19,4	Triple pole 5 KA 80-100 Amp	ea	5			5			5			
19,5	Double pole 5 KA 1-60 Amp	ea	20			20			20			
19,6	Double pole 5 KA 80-100 Amp	ea	20			20			20			
19,7	Adaptor clip	ea	20			20			20			
20	REPLACE 30 MA EARTH LEAKAGE UNITS											
20,1	Single phase 2,5 KA 30-60 Amp O/L Type	ea	10			10			10			
20,2	Single phase 2,5 KA 60 Amp switch Isolator type	ea	10			10			10			
20,3	Triple pole 2,5 KA 30-60 Amp O/L type	ea	10			10			10			
20,4	Triple pole 2,5 KA 60 Amp switch Isolator type	ea	10			10			10			
20,5	Single phase 5 KA 30-80 Amp O/L type	ea	10			10			10			
20,6	Single phase 5 KA 80-100 Amp O/L type	ea	10			10			10			
20,7	Triple pole 5 KA 30-60 Amp O/L type	ea	10			10			10			
20,8	Triple pole 5 KA 80-100 Amp O/L type	ea	10			10			10			
20,9	Triple pole 5 KA 150-180 Amp O/L type	ea	10			10			10			
20,10	Triple pole 5 KA 200-400 Amp O/L type	ea	10			10			10			
TOTAL CARRIED FORWARD - 7												

[illegible]

ITEM		TOTAL AMOUNT YEAR 1 + YEAR 2 + YEAR 3
1	TOTAL CARRIED FORWARD 1	
2	TOTAL CARRIED FORWARD 2	
3	TOTAL CARRIED FORWARD 3	
4	TOTAL CARRIED FORWARD 4	
5	TOTAL CARRIED FORWARD 5	
6	TOTAL CARRIED FORWARD 6	
7	TOTAL CARRIED FORWARD 7	
8	TOTAL CARRIED FORWARD 8	
9	SUB TOTAL CARRIED FORWARD (1-8)	
10	VAT @ 15%	
TOTAL PRICE (CARRIED FORWARD TO THE "FORM OF OFFER AND ACCEPTANCE" DPW-07		

OPERATES :

* All distances for inspection, repairs and installations will be measures from the "Reference Location" identified

FULL NAME OF TENDERER:

NAME OF FIRM:

CELLPHONE
NUMBER:

TELEPHONE NUMBER:

EMAIL ADDRESS:

SIGNATURE:

DATE:

ANNEXURE: A

DECLARATION – EPWP PROGRAMME

I _____ from company

Hereby Undertake to Comply To:

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 PARTICIPANTS

2.1 Recruitment, Placement and Exposure Training Of N/A 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 Three (03) Local Labourers

3.2 Comply With Applicable Wage Order/Determination or Agreement, In Terms of Labour Relations Act or Wage Act

4. COMPLY TO EPWP MONTHLY REPORTING REQUIREMENTS

Monthly prepare and submit below EPWP reports attached to monthly payments certificate:

4.1 All Local Labourers / EPWP Participants Contracts

4.2 All Local Labourers / EPWP Participants Certified SA ID Copies

4.3 All Local Labourers / EPWP Attendance Register

4.4 All Local Labourers / EPWP Proof of Payment

4.5 EPWP Reports Populated on Standard Templates

Failure to comply with the above will result in the contractor's invoice/certificate not being processed.

5. PENALTIES FOR NON-COMPLIANCE

Acknowledge Non-Compliance Penalty of R3000-00 (Three thousand rand) Per Month Per Participant (NYS).

Acknowledge Non-Compliance will result in the invoice/certificate not being processed (local labourers).

Signed by : _____
Director of the Company

Company name : _____

Date: : _____



OCCUPATIONAL HEALTH AND SAFETY

HEALTH & SAFETY SPECIFICATIONS

FOR

ELECTRICAL THREE YEAR TERM CONTRACT

FOR

THE NATIONAL DEPARTMENT OF
PUBLIC WORKS FREE STATE

PROJECT: REPAIRS TO LOW VOLTAGE INSTALLATIONS

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1. PREAMBLE

In terms of **Construction Regulation 4(1) (a) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Occupational Health and Safety Act, 1993 Electrical Installation Regulations of March 2009**, the Department of Public Works, as the Client and/or its Agent on its behalf, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Principal Contractor who is making a bid or appointed to perform construction work for the Client and/or its Agent on its behalf with the same.

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

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. Notwithstanding this, cognizance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is suggested that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this argument is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. It is reiterated that environmental management can not be disregarded.

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

This specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Principal Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains.

2. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT

The Health and Safety Specifications pertaining to the project, cover the subjects contained in the index and is intended to outline the normal as well as any special requirements of the **Client** pertaining to the health and safety matters (including the environment) applicable to the project in question. These Specifications should be read in conjunction with the Act, the Construction Regulations and all other Regulations and Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

3. PURPOSE

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

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

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

It must be ensured that the Principal Contractor (and his / her contractor) is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made there-under including the applicable safety standards, and in particular in terms of **Section 8 of the Act**.

The Occupational Health and Safety Act, 1993 (Act 85 of 1993) in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations promulgated on 18 July 2003 and incorporated into the above Act by Government Notice R 1010, published in Government Gazette 25207 shall apply to any person involved in construction work pertaining to this project, as will the Act.

4. DEFINITIONS

"Purpose of the Act" –

To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"Agent" –

means any person who acts as a representative for a client.

"Client" –

means any person for whom construction work is performed.

"Construction Work" is defined as any work in connection with –

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

"Contractor" –

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

“Health and Safety File” –

means a file, or other record in permanent form, containing the information required a contemplated in the regulations.

“Health and Safety Plan” –

means a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.

“Health and Safety Specification” –

means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons.

“Method Statement” –

means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment.

“Principal Contractor” –

means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site.

“Risk Assessment” –

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

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

5.1 Structure and Organisation of OH&S Responsibilities

5.1.1. Overall Supervision and Responsibility for OH&S

The Client and/or its Agent on its behalf to ensure that the Principal Contractor appointed in terms of Construction Regulation 4(1)(c), implements and maintains the agreed and approved H&S Plan.

The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act. The pro forma Legal Compliance Audit may be used for this purpose.

All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective appointment forms to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad- hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).

The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of **Construction Regulation 6** to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections And on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad- Hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site Records (Health & Safety File).

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

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

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

Required appointments as per the Construction Regulations:-

Item	Regulation	Appointment	Responsible Person
1.	4(1)(c)	Principal contractor for each phase or project	Client
2.	5.(3)(b)	Contractor	Principal Contractor
3.	5(11)	Contractor	Contractor
4.	6(1)	Construction supervisor	Contractor
5.	6(2)	Construction supervisor sub-ordinates	Contractor
6.	6(6)	Construction Safety Officer	Contractor
7.	7(1)	Person to carry out risk assessment	Contractor
8.	7(4)	Trainer/Instructor	Contractor
9.	8(1)(a)	Fall protection planner	Contractor
10.	11(1)	Excavation supervisor	Contractor
11.	14(2)	Scaffold supervisor	Contractor
12.	17(8)(a)	Material hoist inspector	Contractor
13.	21(1)(d)(i)	Construction vehicle operator	Contractor
14.	21(1)(j)	Construction vehicle inspector	Contractor
15.	22(d)	Electrical installations inspector for Low Voltage	Contractor
16.	22 (e)	Electrical installations controller for Low Voltage	Contractor
17.	26 (a)	Stacking and storage supervisor	Contractor
18.	27 (h)	Fire equipment inspector	Contractor

This list may be used as a reference or tool to determine which components of the Act and Regulations would be applicable to a particular site, as was intended under the Chapter "Preamble" above.

5.2 Communication & Liaison

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

6. INTERPRETATION

- (i) The Occupational Health and Safety Act and all its Regulations, with the exception of the Construction Regulations, distinguish between the roles, responsibilities and functions of employers and employees respectively. It views consultants and contractors as employees of the "owner" of a construction or operational project, the "owner" being regarded as the employer. Only if formally agreed to by way of the written agreement in this regard between the "owner(s)" and consultant and /or between the "owner(s)" and the



contractor(s), will these assumptions be relinquished in favour of the position agreed upon between the relevant parties.

(ii) The position taken by the Construction Regulations is that the “owner”, in terms of its instructions, operates (has to operate) in the role of client as per relevant definition. The contractors working for the “client” are seen to be in two categories, i.e. the Principal Contractor and Contractors. *The Principal Contractor has to take full responsibility for the health and safety on the site of the relevant project / contract.* This includes monitoring health and safety conditions and overseeing administrative measures required by the Construction Regulations from all contractors on the project site. (Ordinary / sub) Contractors are required to operate under the scrutiny and control (in terms of all health and safety measures which are covered in the Construction Regulations) of the Principal Contractor. Where for the work the Principal Contractor will have to execute himself, practical health and safety measures are applicable, he will also be subject to the relevant requirements with which (ordinary / sub) Contractors have to comply. The Principal Contractor will, however, not have to actually fulfill such requirements in respect of any of the work / functions of any (ordinary / sub) Contractors on the site for which he has been appointed as Principal Contractor. However, he has to monitor / oversee such processes, ensuring that the requirements are complied with and that the required appointments / evaluations / inspections / assessments and tests are done and that the records are duly generated and kept as prescribed in the Construction Regulations. This has to feature clearly in the Principal Contractor's Health and Safety Plan.

7. RESPONSIBILITIES

7.1 Client

7.1.1 The Client or his appointed Agent on his behalf will appoint each Principal Contractor for the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations and determined by the Documentation.

7.1.2 The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.

7.1.3 The Client or his appointed Agent on his behalf will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.

7.1.4 The Client or his appointed Agent on his behalf will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:

- have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
- have failed to implement or maintain their health and safety plan;
- have executed construction work which is not in accordance with their health and safety plan; or
- act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

7.2 Principal Contractor

7.2.1 The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the **Department of Labour of the intended construction work** in terms of **Regulation 3** of the Construction Regulations. Annexure B of this Specification contains a “Notification of Construction Work” form. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.

7.2.2 The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation. This Specification is not intended to supersede the Act nor the Construction Regulations or any part of either. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this



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

- 7.2.3 The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.
- 7.2.4 **Workman Compensation Fund:** - The Principal Contractor shall submit a letter of good standing with its compensation insurer to the client as proof of registration.

This certified proof of registration to be submitted with the tender document.

All contractors and sub-contractors shall proof of registration to the Principal Contractor and shall be demonstrated in the Safety File. **No contractor shall commence work on this building site unless proof of the above is received.**

- 7.2.5 The Potential Principal Contractor shall, in submitting his tender, *demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements*, the Act and Construction Regulations. (Note: This shall have to be contained in the conditions of tender upon which a tenderer's offer is based.)
- 7.2.6 The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- 7.2.7 The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Sub-contractor.
- 7.2.8 The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. **Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client. This Health and Safety File shall be kept at the contractors workshop.**
- 7.2.9 The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.

8. SCOPE OF WORK

These specifications are applicable to the specific scope of work pertaining to the above-mentioned project as detailed in the tender documents, this amongst all includes for example: (elaborate sufficiently and provide adequate information to give full understanding of all work to be done)

8.1 This repair work is design in:- Repair low voltage installations.

8.2 LOW VOLTAGE ELECTRICAL INSTALLATIONS:

- 8.2.1 *The workforce of the contractor shall be identified in their clothing and all safety PPE and equipment.***
- 8.2.2 *The contractor shall provide a certified of their appointed designate /competent person of his workforce that shall execute work above 3000mm.***

8.2.3 The contractor and sub-contractors shall provide proof of their workforce of physically and psychologically fitness to operates construction vehicles and mobile plants. (medical certificate of fitness).

8.2.4 The principal contractor shall display all necessary notices and signs in all working areas before any work shall be executed.

8.2.5 The principal contractor shall appoint in writing a designated person in a full-time capacity, in respect of any premises where repair work shall be executed.

8.2.6 Substations;- only a appointed authorized person shall be allowed to enter and to work inside a substation.

Lockout procedures and notices shall be complying within.

8.2.7 Overhead Lines; wooden poles, full lockout procedures, notices and earthing procedures shall be adhere to.

8.2.7 Climate weather;- no workforce of the contractor or sub-contractor shall be allowed to work in climate weather. (wet surfaces and strong wind).

N.B The Principal Contractor shall on tendering make provision for the cost of health and safety measures in terms of his / her documented Health and Safety Plan and measures based on these Health and Safety Specifications during the period of the project. **Construction Regulation 5(3)(g)** determines that potential contractors submitting tenders have made provision for the cost of health and safety measures during the construction process.

THE HEALTH AND SAFETY PLAN IS THEREFORE TO BE INCLUDED WITH THE TENDER DOCUMENTS WHEN TENDERS ARE INVITED FOR THE PROJECT.

9. HEALTH AND SAFETY FILE

The Principal Contractor must, in terms of **Construction Regulation 5(7)**, keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done. A more detailed list of documents and other legal requirements that must be kept in the Health and Safety File is attached as an addendum to this document.

IMPORTANT:

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

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

The Principal Contractor is required to maintain a CIFR of at least 8 (See Annexure 3. to this document: "Measuring Injury Experience") and report on this to the Client and/or its Agent on its behalf on a monthly basis.

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

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

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

12. ARRANGEMENTS FOR MONITORING AND REVIEW

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

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

12.2 Other audits and inspections by client and/or its agent on its behalf.

The Client and/or its Agent on its behalf reserves the right to conduct any other ad hoc audits and inspections as it and/or its Agent on its behalf deem necessary.

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

12.3 Reports

The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".

The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she:

- ✓ dies
- ✓ becomes unconscious
- ✓ loses a limb or part of a limb
- ✓ is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or
- ✓ likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was
- ✓ usually employed

OR where:

- ✓ a major incident occurred
- ✓ the health or safety of any person was endangered
- ✓ where a dangerous substance was spilled
- ✓ the uncontrolled release of any substance under pressure took place
- ✓ machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- ✓ machinery ran out of control,

To the Provincial Director of the Department of Labour (DoL) within seven days and at the same time to the Client and/or its Agent on its behalf as per **Section 24 of the Act & General Administrative Regulation 8.**



The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations.

The Principal Contractor is required to provide a.s.a.p. the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports including the reports contemplated in 12.7, 12.8.2, 15, 16, 17, 21 and 22 below. As soon as the occurrence of any accident/incident of whatever nature comes to the notice of the Principal Contractor, it shall be reported immediately to any of the following:

Appointed incident and accident officer.

12.4 Review

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

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

12.5 Site Rules and other Restrictions

12.5.1 Site OH&S Rules

The Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction.

When required, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

12.5.2 Security Arrangements

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees shall at all times be provided with fulltime supervision while on site.

The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period.

If not already tasked to the H&S Officer appointed in terms of **Construction Regulation 6(6)**, the Principal Contractor must appoint a **competent Emergency Controller** who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments. These must include a monthly practice/testing programmed for the plans e.g. January: trench collapse, February: flooding etc. and practiced/tested with all persons on site at the time, participating.

12.6 Training

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

12.6.1 General Induction Training

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

12.6.2 Site Specific Induction Training

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

12.6.3 **Other Training**

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

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

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

- General Induction (Section 8 of the Act)
- Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- Site/Project Manager
- Construction Supervisor
- OH&S Representatives (Section 18 (3) of the Act)
- Training of the Appointees indicated in 12.6.1. & 12.6.2. above
- Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 27)
- As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3)
- Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- Emergency, Security and Fire Co-coordinator

12.7 **Accident and Incident Investigation**

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

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

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

The Principal Contractor is responsible for the investigation of all road traffic accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

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

12.8 **H&S Representatives (SHE-Reps) and H&S Committees**

12.8.1 **Designation of H&S Representatives ('SHE – Reps')**

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

H&S Representatives have to be designated in writing and the designation shall be in accordance with the Collective Agreement as concluded between the parties as is required in terms of **(General Administration Regulation 6.)**

12.8.2 **Duties and Functions of the H&S Representatives**

The Principal Contractor must ensure that the designated H&S Representatives conduct at least a weekly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor, after which these reports shall be consolidated for submission to the Health and Safety Committee.

H&S Representatives must be included in and be part of accident/incident investigations.

H&S Representatives shall be members of at least one H&S Committee and must attend all meetings of that H&S committee.

12.8.3 *Establishment of H&S Committee(s)*

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

The H&S Committee must meet minimum monthly and consider, at least, the following Agenda for the first meeting. Thereafter the H&S Committee shall determine its own procedures as per the previous paragraph.

13. PROJECT/SITE SPECIFIC REQUIREMENTS

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

- Clearing & Grubbing of the Area/Site
- Site Establishment including:
 - Office/s as workshop
 - Secure/Safe Storage and storage areas for materials, plant & equipment
 - Ablution facilities
 - Sheltered dining area
 - Vehicle access to the site
- Dealing with existing Structures.
- Location of existing Services
- Installation & Maintenance of Temporary Construction Electrical Supply, Lighting and Equipment
- Boundary & Access control/Public Liability Exposures (Remember: the Employer is also responsible for the OHS of non-employees affected by his / her work activities.)
- Health risks arising from neighboring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning, allergies etc.
- Exposure to Noise
- Exposure to Vibration
- Protection against dehydration and heat exhaustion
- Protection from wet & cold conditions
- Use of Portable Electrical Equipment including:
 - Angle grinder
 - Electrical Drilling machine
- Excavations including:
 - Ground/soil conditions
 - Trenching
 - Shoring
 - Daily inspections
- Welding including:
 - Arc Welding
 - Gas welding
 - Flame Cutting
 - Use of LP Gas torches and appliances
- Loading & Offloading of Trucks
- Aggregate/Sand and other Materials Delivery
- Manual and Mechanical Handling
- Driving & Operation of Construction Vehicles and Mobile Plant including:
 - Excavator
 - Plate Compactor
 - Parking of Vehicles
 - Towing of Vehicles

- Use and Storage of Flammable Liquids and other Hazardous Substances – the client and/or its Agent on its behalf to be informed of this prior to commencing of the project
- Installation of Pipes in trenches
- Backfilling of Trenches
- Protection against Flooding
- Protection from Overhead Power Lines
- As discovered by the Principal Contractor's hazard identification exercise
- As discovered from any inspections and audits conducted by the Client and/or its Agent on its behalf or by the Principal Contractor or any other Contractor on site
- As discovered from any accident / incident investigation.

13.1 The following are in particular requirements depending on scope of works and will form a basis for compliance audits.

1. Administrative & Legal Requirements
2. Education, Training & Promotion
3. Public Safety & Emergency Preparedness
4. Personal Protective Equipment
5. Housekeeping
6. Scaffolding
7. Ladders
8. Electrical Safeguarding
9. Emergency / Fire Prevention & Protection
10. Excavations
11. Tools
12. Personnel & Material Hoists
13. Transport & Materials Handling
14. Plant & Storage Yards/Site Workshops Specifics
15. Health & Hygiene

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

14.1 Administrative & Legal Requirements

<i>OHS Act Section/ Regulation</i>	Subject	<u>Requirements</u>
General Admin. Regulation 4	Copy of OH&S Act (Act 85 of 1993)	Updated copy of Act & Regulations on site. Readily available for perusal by employees.
COID Act Section 80	Registration with Compens. Insurer	Written proof of registration/Letter of good standing available on Site
Construction. Regulation 4 & 5(1)	<u>H&S Specification & Programme</u>	H&S Spec received from Client and/or its Agent on its behalf OH&S programme developed & Updated regularly
Section 8(2)(d) Construction. Regulation 7	<u>Hazard Identification & Risk Assessment</u>	Hazard Identification carried out/Recorded Risk Assessment and – Plan drawn up/Updated RA Plan available on Site Employees/Sub-Contractors informed/trained
Section 16(2)	Assigned duties (Managers)	Responsibility of complying with the OH&S Act assigned to other person/s by CEO.
Construction. Regulation 6(1)	Designation of Person Responsible on Site	Designated / Competent person appointed in writing as Construction Supervisor with job description
Construction. Regulation 6(2)	Designation of Assistant for above	Designated / Competent person appointed in writing as Assistant Construction Supervisor with job description
Section 17 & 18 General Administrative Regulations 6 & 7	Designation of Health & Safety Representatives At the workshop	More than 20 employees - one H&S Representative, one additional H&S Rep. for each 50 employees or part thereof. Designation in writing, period and area of responsibility specified in terms of GAR 6 & 7 Meaningful H&S Rep. reports. Reports actioned by Management.
Section 19 & 20 General	Health & Safety Committee/s	H&S Committee/s established. All H&S Reps shall be members of H&S Committees

Administrative Regulations 5		Additional members are appointed in writing. Meetings held monthly, Minutes kept. Actioned by Management.
Section 37(1) & (2)	Agreement with Mandatories/ (Sub-)Contractors	Written agreement with (Sub-)Contractors List of (Sub-) Contractors displayed. Proof of Registration with Compensation Insurer / Letter of Good Standing. (COIDA) Construction Supervisor designated Written arrangements re. H&S Reps & H&S Committee Written arrangements re. First Aid
Section 24 & General Admin. Regulation 8 COLD Act Sect.38, 39 & 41	Reporting of Incidents (Dept. of Labour)	Incident Reporting Procedure displayed. All incidents in terms of Sect. 24 reported to the Provincial Client and/or its Agent on its behalf Cases of Occupational Disease Reported Copies of Reports available on Site / workshop Record of First Aid injuries kept
General Admin. Regulation 9	Investigation and Recording of Incidents	All injuries which resulted in the person receiving medical treatment other than first aid, recorded and investigated by investigator designated in writing. Copies of Reports (Annexure 1) available on Site Tabled at H&S Committee meeting Action taken by Site Management.
Construction. Regulation 8	Fall Prevention & Protection	Competent person appointed to draw up and supervise the Fall Protection Plan Proof of appointees competence available on Site Risk Assessment carried out for work at heights Fall Protection Plan drawn up/updated Available on Site
Construction. Regulation 14	<u>Scaffolding</u>	Competent persons appointed in writing to: - erect scaffolding (Scaffold Erector/s) - act as Scaffold Team Leaders - inspect Scaffolding weekly and after inclement weather (Scaffold Inspector/s) Written Proof of Competence of above appointees available on Site Copy of SANS 085 available on Site Risk Assessment carried out Inspected weekly/after bad weather. Inspection register/s kept
Construction. Regulation 11	<u>Excavations</u>	Competent person/s appointed in writing to supervise and inspect excavation work Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out Inspected: - before every shift - after any blasting - after an unexpected fall of ground - after any substantial damage to the shoring - after rain. Inspections register kept Method statement developed where explosives will be/ are used.
Construction. Regulation 17	<u>Materials Hoist</u>	Competent person appointed in writing to inspect the Material Hoist Written Proof of Competence of above appointee available on Site. Materials Hoist to be inspected weekly by a competent person. Inspections register kept.
Construction. Regulation	Inspection & Maintenance of	Competent person appointed in writing to inspect/test the installation and equipment.

22/Electrical Machinery Regulations 9 & 10/ Electrical Installation Regulations	Electrical Installation & Equipment (including portable electrical tools)	Written Proof of Competence of above appointee available on Site. Inspections: - Electrical Installation & equipment inspected after installation, after alterations and quarterly. Inspection Registers kept Portable electric tools, electric lights and extension leads must be uniquely identified / numbered. Weekly visual inspection by User/Issuer/Store man. Register kept.
Construction. Regulation 26/ General Safety Regulation 8(1)(a)	Designation of Stacking & Storage Supervisor.	Competent Person/s with specific knowledge and experience designated to supervise all Stacking & Storage Written Proof of Competence of above appointee available on Site.
Construction. Regulation 27/ Environmental Regulation 9	<u>Designation of a Person to Co-ordinate Emergency Planning And Fire Protection</u>	Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures Emergency Evacuation Plan developed: - Drilled/Practiced - Plan & Records of Drills/Practices available on Site Fire Risk Assessment carried out All Fire Extinguishing Equipment identified and on register . Inspected weekly. Inspection Register kept Serviced annually.
General Safety Regulation 3	First Aid First Aid Kit must be accompany within each vehicle to a site.	Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed) First Aid freely available Equipment as per the list in the OH&S Act. One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed) List of First Aid Officials and Certificates Name of person/s in charge of First Aid box/es displayed. Location of First Aid box/es clearly indicated. Signs instructing employees to report all Injuries/illness including first aid injuries
General Safety Regulation 2	Personal Safety Equipment (PSE)	PSE Risk Assessment carried out Items of PSE prescribed/use enforced Records of Issue kept Undertaking by Employee to use/wear PSE PSE remain property of Employer, not to be removed from premises GSR 2(4)
General Safety Regulation 9	Inspection & Use of Welding/Flame Cutting Equipment	Competent Person/s with specific knowledge and experience designated to Inspect Electric Arc, Gas Welding and Flame Cutting Equipment Written Proof of Competence of above appointee available on Site All new vessels checked for leaks, leaking vessels NOT taken into stock but returned to supplier immediately Equipment identified/numbered and entered into a register Equipment inspected weekly. Inspection Register kept Separate, purpose made storage available for full and empty vessels
Vessels under Pressure Regulations	Vessels under Pressure (VUP)	Competent Person/s with specific knowledge and experience designated to supervise the use, storage, maintenance, statutory inspections & testing of VUP's Written Proof of Competence of above appointee available on Site Risk Assessment carried out Certificates of Manufacture available on Site Register of VUP's on Site Inspections & Testing by Approved Inspection Authority (AIA): - after installation/re-erection or repairs

		- every 36 months. - Register/Log kept of inspections, tests. Modifications & repair
General Safety Regulation 13A	Inspection of Ladders	Competent person appointed in writing to inspect Ladders Ladders inspected at arrival on site and weekly there after. Inspections register kept Application of the types of ladders (wooden, aluminium etc.) regulated by training and inspections and noted in register

14.2 Education & Training

Subject	Requirement
Company OH&S Policy Section 7(1)	Policy signed by CEO and published/Circulated to Employees Policy displayed on Employee Notice Boards Management and employees committed.
Company/Site OH&S Rules (Section 13(a))	Rules published Rules displayed on Employee Notice Boards Rules issued and employees effectively informed or trained: written proof Follow-up to ensure employees understand/adhere to the policy and rules.
Induction & Task Safety Training (Section 13(a))	All new employees receive OH&S Induction Training. Training includes Task Safety Instructions. Employees acknowledge receipt of training. Follow-up to ensure employees understand/adhere to instructions.
General OH&S Training (Section 13(a))	All current employees receive specified OH&S training: written proof Operators of Plant & Equipment receive specified training Follow-up to ensure employees understand/adhere to instructions.
Occupational Health & Safety Promotion	<u>Incident Experience Board indicating e.g.</u> * No. of hours worked without an Injury * No. of days worked without an Injury Mission, Vision and Goal Star Grading - Board kept up to date. Safety Posters displayed & changed regularly Employee Notice Board for OH&S Notices. Site OH&S Competition. Company OH&S Competition. Participation in Regional OH&S Competition Suggestion scheme.

14.3 Public Safety, Security Measures & Emergency Preparedness

Subject	Requirement
Notices & Signs	Notices & Signs at entrances / along perimeters indicating "No Unauthorised Entry" . Notices & Signs at entrance instructing visitors and non - employees what to do, where to go and where to report on entering the site/yard with directional signs. e.g. "Visitors to report to Office" Notices & Signs posted to warn of overhead work and other hazardous activities. e.g. General Warning Signs
Site Safeguarding	Nets, Canopies, Platforms, Fans etc. to protect members of the public passing / entering the site.
Security Measures	Access control measures/register in operation Security patrols after hours during weekends and holidays Sufficient lighting after dark Guard has access to telephone/ mobile/other means of emergency communication
Emergency Preparedness	Emergency contact numbers displayed and made available to Security & Guard Emergency Evacuation instructions posted up on all notice boards (including employees' notice boards) Emergency contingency plan available on site/in yard Doors open outwards/unobstructed Emergency alarm audible all over (including in toilets)
Emergency Drill & Evacuation	Adequate No. of employees trained to use Fire Fighting Equipment. Emergency Evacuation Plan available displayed and practiced.

(See Section 1 for Designation & Register)

14.4 Personal Protective Equipment

Subject	Requirement
PPE needs analysis	Need for PPE identified and prescribed in writing. PPE remain property of Employer, not to be removed from premises GSR 2(4)
Head Protection	All persons on site wearing Safety Helmets including Sub-contractors and Visitors (where prescribed)
Foot Protection	All employees on site wearing Safety Footwear including Gumboots for concrete / wet work and non-slip shoes for roof work. Visitors to wear same upon request or where prescribed
Eye and Face Protection	<u>Eye and Face (also Hand and Body) Protection</u> (Goggles, Face Shields, Welding Helmets etc.) used when operating the following: * Jack/ Kango Hammers * Angle / Bench Grinders * Electric Drills (Overhead work into concrete / cement / bricks * Hammers & Chisels * Cutting / Welding Torches * Cutting Tools and Equipment * CO ² and Arc Welding Equipment
Hearing Protection	<u>Hearing Protectors</u> (Muffs, Plugs etc.) used when operating the following: * Jack / Kango Hammers Working Machines e.g.
Hand Protection	<u>Protective Gloves</u> worn by employees handling / using: * Handling of electrical cables * Jack / Kango Hammers etc.
Respiratory Protection	Suitable/efficient prescribed <u>Respirators</u> worn correctly by employees handling / using: * Dry cement * Dusty areas * Hazardous chemicals * Angle Grinders
Fall Prevention Equipment	Suitable <u>Safety Belts / Fall Arrest Equipment</u> correctly used by persons working on / in unguarded, elevated positions e.g.: * Scaffolding * Edge work Other methods of fall prevention applied e.g. catch nets
Protective Clothing	All jobs requiring protective clothing (Overalls, Rain Wear, Welding Aprons etc.) Identified and clothing worn.
PPE Issue & Control	Identified Equipment issued free of charge. All PPE maintained in good condition. (Regular checks). Workers instructed in the proper use & maintenance of PPE. Commitment obtained from wearer accepting conditions and to wear the PPE. Record of PPE issued kept on H&S File. PPE remain property of Employer, not to be removed from premises GSR 2(4)

Stacking & Storage
continued

14.5 Housekeeping

Subject	Requirement
Scrap Removal System	All items of Scrap/Unusable Off-cuts/Rubble and redundant material removed from working areas on a regular basis. (Daily) Scrap/Waste removal from heights by chute/hoist/crane. Nothing thrown/swept over sides. Scrap disposed of in designated containers/areas Removal from site/yard on a regular basis.
Sub-contractors (Housekeeping)	Sub-contractors required complying with Housekeeping requirements.

14.6 Working at Heights (including roof work)

Subject	Requirement
Openings	Unprotected openings adequately guarded/fenced/barricaded/catch nets installed
	Fall protection measures (including warning notices) when working close to edges or on fragile roofing material
	Covers over openings in roof of robust construction/secured against displacement

14.7 Scaffolding / Formwork / Support Work

Subject	Requirement
Access/System Scaffolding	Foundation firm / stable Sufficient bracing. Tied to Structure/prevented from side or cross movement Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs Complying with OH&S Act/SANS 085
Free Standing Scaffolding	Foundation firm / stable Sufficient bracing. Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs Height to base ratio correct Outriggers used /tied to structure where necessary Complying with OH&S Act/SANS 085
Mobile Scaffolding	Foundation firm / stable Sufficient bracing. Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs
Mobile Scaffolding	Wheels / swivels in good condition Brakes working and applied. Height to base ratio correct. Outriggers used where necessary Complying with OH&S Act/SANS 085
Edges & Openings	Edges barricaded to acceptable standards. Manhole openings covered / barricaded. Openings in floor / other openings covered, barricaded/fenced. Stairs provided with handrails. Lift shafts barricaded / fenced off.

14.8 Ladders

Subject	Requirement
Physical Condition / Use & Storage	Stepladders - hinges/stays/braces/stiles in order. Extension ladders - ropes/rungs/stiles/safety latch/hook in order. Extension / Straight ladders secured or tied at the bottom / top. No joined ladders used Wooden ladders are never painted except with varnish Aluminium ladders NOT to be used with electrical work All ladders stored on hooks / racks and not on ground. Ladders protrude 900 mm above landings / platforms / roof. Fixed ladders higher than 5 m have cages/Fall arrest system

14.9 Electricity (as part of, or additional to the manual “Safety & Switching Procedures for Electrical Installations”- see attached document)

Subject	Requirement
Electrical Distribution Boards & Earth Leakage	Colour coded / numbered / symbolic sign displayed. Area in front kept clear and unobstructed. Fitted with inside cover plate / openings blanked off / no exposed “live” conductors / terminals/Door kept close Switches / circuit breakers identified. Earth leakage protection unit fitted and operating. Tested with instrument: Test results within 15 – 30 milliamps Aperture/Opening/s provided for the plugging in and removal of extension leads without the need to open the door Apertures and openings used for extension leads to be protected against the elements and especially rain.
Electrical Installations & Wiring	Temporary wiring / extension leads in good condition / no bare or exposed wires. Earthing continuity / polarity correct: Looking at the open connectors to connect the wiring, the word “Brown” has the letter ‘R’ in it, so the b’R’own wire connects to the ‘R’ight hand connector. “Blue” has the letter ‘L’ in it, so the b’L’ue wire connects to the ‘L’eft hand connector. Cables protected from mechanical damage and moisture. Correct loading observed e.g. no heating appliance used from lighting circuit etc. Light fittings/lamps protected from mechanical damage/moisture. Cable arrestors in place and used inside plugs
Physical condition of Electrical Appliances & Tools	<u>Electrical Equipment and Tools:</u> (includes all items plugging in to a 16 Amp supply socket) Insulation / casing in good condition. Earth wire connected/intact where not of double insulated design Double insulation mark indicates that no earth wire is to be connected. Cord in good condition/no bare wires/secured to machine & plug. Plug in good condition, connected correctly and correct polarity.

14.10 Emergency and Fire Prevention and Protection

Subject	Requirement
Fire Extinguishing Equipment	Fire Risks Identified and on record The correct and adequate Fire Extinguishing Equipment available for: Offices General Stores Flammable Store Equipment Easily Accessible
Maintenance	Fire equipment checked minimum monthly, serviced yearly
Location & Signs	Fire Extinguishing Equipment: Clearly visible Unobstructed Signs posted including “No Smoking” / “No Naked Lights” where required. (Flammable store,)
Storage, Issue & Control of Hazardous Chemical Substances (HCS)	HCS storage principles applied: products segregated Only approved, non-expired HCS to be used Only the prescribed PPE shall be used as the minimum protection Provision made for leakage/spillage containment and ventilation Emergency showers/eye wash facilities provided HCS under lock & key controlled by designated person Decanted/issued in containers as prescribed with information/warning labels Disposal of unwanted HCS by accredited disposal agent No dumping or disposal of any HCS on or inside the storage area or anywhere else on the project site All vessels or containers to be regularly checked for leaks



Subject	Requirement
Excavations deeper than 1m.	Shored / Braced to prevent caving / falling in. Provided with an access ladder. Excavations guarded/barricaded/lighted after dark in public areas Soil dumped at least 1 m away from edge of excavation On sloping ground soil dumped on lower side of excavation All excavations are subject to daily inspections

14.12 Tools

Subject	Requirement
Hand Tools	<u>Shovels / Spades / Picks:</u> Handles free from cracks and splinters Handles fit securely Working end sharp and true <u>Hammers:</u> Good quality handles, no pipe or reinforcing steel handles. Handles free from cracks and splinters Handles fit securely <u>Chisels:</u> No mushroomed heads / heads chamfered Not hardened Cutting edge sharp and square

14.14 Builder's Hoist

Subject	Requirement
Builder's Hoist	"Hoist In Operation" - sign displayed. General construction strong and free from patent defects. <u>Tower:</u> * Adequately secured / braced. At least 900 mm available for over travel. Barricaded at least 2 100 mm high at ground level and floors. Landing place provided with gate at least 1 800 high. <u>Platform:</u> * No persons conveyed on platform Steel wire ropes with breaking strength of six times max. load. Signal systems used which may include two-way radio connection. Goods prevented from moving / falling off. Effective brake capable of stopping and holding max. load.

14.15 Transport & Materials Handling Equipment

Subject	Requirement
Site Vehicles	All Site Vehicles, checked daily before use by driver / operator. Inventory of vehicles used/operated on site Inspection by means of a checklist / result recorded. No persons riding on equipment not designed or designated for passengers. Site speed limit posted, enforced and not exceeded. Drivers / Operators trained / licensed and carrying proof. No unauthorised persons allowed driving / operating equipment.

14.16

Site Plant and Machinery

Subject	Requirement
Electric Arc Welder	Welder Trained. Only authorised / trained persons use welder. Earth cable adequately earthed to work. Electrode holder in good condition/safe Cables, clamps & lugs/connectors in good condition. Area in which welding machine is used is dry/protected from wet. Welder using correct PPE - eye/ face/foot/body/respirator. Correct transparent screens & warning signs placed
Compressors	Relief valves correctly set and locked / sealed. Maximum Safe Working Pressure (MSWP) indicated on face of pressure gauge: not on glass cover. All drives adequately guarded. Receiver/lines drained daily Hoses good condition/clamped, not wired Compressed air NEITHER used to dust off clothing/PPE/ and work areas NOR on bare skin

14.17 Plant & Storage Yards/Site Workshops Specifics

(i) Subject	(ii) Requirements
Section 8(2)(1) General Machinery Regulation 2(1): Supervision of the Use & Maintenance of Machinery	Person/s with specific knowledge and experience designated in writing to Supervise the Use & Maintenance of Machinery Critical items of Machinery identified/numbered/placed on register/inventory Inspection/maintenance schedules for abovementioned Inspections/maintenance carried out to above schedules Results recorded
General Machinery Regulation 9(2): Notices re. Operation of Machinery	Schedule D Notice posted in Work areas
Vessels under Pressure Regulation 13(1)(b): Supervision of the Use & Maintenance of Vessels under Pressure (VuP)	Person/s with specific knowledge and experience designated in writing to Supervise the Use & Maintenance of VuP's VuP's identified/numbered/placed on register/Manufacturers plate intact Inspection/maintenance schedules for abovementioned Inspections/maintenance carried out to above schedules Results recorded/Test certificates available
<u>Lock-out Procedure</u>	Lock-out procedure in operation
<u>Ergonomics</u>	Ergonomics survey conducted – results on record Survey results applied
<u>Demarcation & Colour Coding</u>	Demarcation principles applied All services, pipes, electrical installation, stop-start controls, emergency controls etc. colour coded to own published or SANS standard Employees trained to identify colour coding

14.18 Workplace Environment, Health and Hygiene

Subject	Requirement
Lighting	Adequate lighting in places where work is being executed e.g. stairwells and basements. Light fittings placed / installed causing no irritating/blinding glare. Stroboscopic effect eliminated (not only reduced) where moving objects or machinery is used
Ventilation	Adequate ventilation / extraction / exhausting in hazardous areas e.g. chemicals / adhesives / welding / petrol or diesel/ motors running and in confined spaces / basements.
Noise	Tasks identified where noise levels exceeds 85 dB at any one time. All reasonable steps taken to reduce noise levels at the source. Hearing protection used where noise levels could not be reduced to below 85 dB.

Heat Stress	Measures in place to prevent heat exhaustion in heat stress problem areas e.g. steel decks, when the WBGT index reaches 30. (See Environmental Regulation 4) Cold drinking water readily available at all times.
Ablutions	Sufficient hygiene facilities provided - 1 toilet per 30 employees (National Building Regulations prescribe chemical toilets for Construction sites) Toilet paper available. Sufficient showers provided. Facilities for washing hands provided Soap/cleaning agent available for washing hands Means of drying hands available Lock-up changing facilities / area provided. Ablution facilities kept hygienic and clean.
Eating / Cooking Facilities	Adequate storage facilities provided. Weather protected eating area provided, separate from changing area Refuse bins with lids provided. Facilities kept clean and hygienic.
Pollution of Environment	Measures in place to minimize dust generation. Accumulation or littering of empty cement pockets, plastic wrapping / bags, packing materials etc. prevented. Spillage / discarding of oil, chemicals and diesel into storm water and other drains or into existing or newly dug holes/cavities on site expressly prohibited.
Hazardous Chemical Substances	All substances identified and list available e.g. acids, flammables, poisons etc. Material Safety Data Sheets (MSDS) indicating hazardous properties and emergency procedures in case of incident on file and readily available. Substances stored safely. Expiry dates meticulously checked where applicable

15. THE PRINCIPAL CONTRACTOR'S GENERAL DUTIES

The Principal Contractor shall at all times maintain his status of an "employer" as referred to in the Act, and will abide by his/her responsibilities, duties and functions as per the requirements of the Act and Regulations with specific reference to Section 8 of the Act.

The Principal Contractor shall keep, and on demand make available, a copy of the Act on site at all times and in addition to that he/she will introduce and maintain a file titled "Health and Safety File", or other record in permanent form, which shall contain all relevant aspects and information as contemplated in the Construction Regulations. He/she will make this file available to the client or his representative whenever necessary or on request to an interested party.

16. THE PRINCIPAL CONTRACTOR'S SPECIFIC DUTIES

The Principal Contractor's specific duties in terms of these specifications are detailed in the Construction Regulations as published under government notice No.R1010 dated 18 July 2003.

The Principal Contractor is specifically referred to the following elements of the Construction Regulations:

- Regulation No. 1 - Definitions
- Regulation No. 2 - Scope of application
- Regulation No. 5 - Principal Contractor and Contractor
- Regulation No. 6 - Supervision of construction work
- Regulation No. 7 - Risk Assessment
- Regulation No. 26 - Stacking & Storage on construction sites
- Regulation No. 28 - Construction welfare facilities
- Regulation No. 29 - Approved Inspection authorities
- Regulation No. 30 - Offences and penalties



The Principal Contractor shall ensure compliance to the Act and its Regulations and specifically to the above regulations, and document each record in the Health and

Safety File.

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

The following activities are identifiable as hazardous in terms of the Construction Regulations.

The contractor shall execute the activities in accordance with the following Construction Regulations and other applicable regulations of the Act:

Regulation No. 8	- Fall protection
Regulation No. 11	- Excavation work
Regulation No. 14	- Scaffolding
Regulation No. 17	- Material hoists
Regulation No. 21	- Construction vehicles.
Regulation No. 22	- Electrical installations and machinery on construction sites
Regulation No. 23	- Use and temporary storage of flammable liquids on construction sites
Regulation No. 24	- Water environments
Regulation No. 25	- Housekeeping on construction sites
Regulation No. 27	- Fire precautions on construction sites.

All these will be read in conjunction with the relevant regulations and health and safety standards as required by the Act. All documents and records required by the Construction Regulations will be kept in the Health and Safety File and will be made available at any time when required by the client or his representative, or on request to an interested party.

18. GENERAL NOTES TO THE PRINCIPAL CONTRACTOR

Legal Framework

Part of legal obligations

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

- (i) The latest issue of SANS 0142: "Code of Practice for the Wiring of Premises"
- (ii) The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority
- (iii) The Fire Brigade Services Act 1987, Act 99 of 1987 as amended
- (iv) The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as amended and relevant proclaimed Regulations (SANS 0400)
- (v) The Post Office Act 1958 (Act 44 of 1958) as amended
- (vi) The Electricity Act 1984, Act 41 of 1984
- (vii) The Regulations of Local Gas Board(s)
- (viii) Legislation pertaining to water usage and the environment
- (ix) Legislation governing the use of equipment, which may emit radiation (e.g. X-Rays etc.)
- (x) Common Law

19. HOUSE KEEPING

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

Particular emphasis is to be placed on the following crucial elements of a construction site:

Phase priorities and production/plant layout

- ✓ Enclosures
- ✓ Pits, openings and shoring
- ✓ Storage facilities
- ✓ Effective, sufficient and maintained lighting or illumination
- ✓ Principal sources of injuries e.g. stairways, runways, ramps, loose building material
- ✓ Oil, grease, water, waste, rubble, glass, storm water
- ✓ Colour coding
- ✓ Demarcations
- ✓ Pollution
- ✓ Waste disposal
- ✓ Ablution and hygiene facilities
- ✓ First aid

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

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

NOTE: No employer (Principal Contractor) shall require or permit any person to work at night or after hours unless there is adequate, suitable artificial lighting.

20. LOCKOUT SYSTEMS

- **Electrical installation work**
- **Mechanical work**

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

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

21. INCIDENT INVESTIGATION

Inspection and reporting is the best way in which a responsible contractor can control his area of responsibility. All incidents therefore, whether it gave rise to loss, injury, damage or not, shall be investigated and the results recorded in the Health and Safety File.

22. GENERAL

The project under control of the Principal Contractor shall be subject to periodic health and safety audits that will be conducted by the client at intervals agreed upon between the Principal Contractor and the client, provided such intervals will not exceed periods longer than one month. The Principal Contractor is to ensure that he/she and all persons under his control on the construction site shall adhere to the above specifications, as non-conformance will lead to the client taking action as directed by Construction Regulation 4.1(e). The Principal Contractor should note that he/she shall be held liable for any anomalies including costs and resulting deficiencies due to delays caused by non-conformance and/or non-compliance to the above Health and Safety Specifications and the Health and Safety Plan based on these specifications.

23. IMPORTANT LISTS AND RECORDS TO BE KEPT

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

- 1 List of appointments
- 2 List of record keeping responsibilities
- 3 Inspection checklist

These lists and documents are to be used as a point of reference to determine which components of the Act would be applicable to a particular site or task or project, as was intended under paragraph 1 ("Preamble") above.

1. LIST OF APPOINTMENTS

<u>ITEM</u>	<u>REGULATION</u>	<u>APPOINTMENT</u>	<u>RESPONSIBLE PERSON</u>
1.	4(1)(c)	Principal contractor for each phase or project	Client
2.	5.(3)(b)	Contractor	Principal Contractor
3.	5(11)	Contractor	Contractor
4.	6(1)	Construction supervisor	Contractor
5.	6(2)	Construction supervisor sub-ordinates	Contractor
6.	6(6)	Health and Safety Officer	Contractor
7.	7(1)	Person to Carry Out Risk Assessment	Contractor
8.	7(4)	Trainer/Instructor	Contractor
9.	8(1)(a)	Fall Protection Planner	Contractor
10.	11(1)	Excavation Supervisor	Contractor
12.	11(3)(b)(ii)(b)	Professional Engineer or Technologist	Contractor
13.	14(2)	Scaffold Supervisor	Contractor
14.	15(2)(c)	Compliance Plan Developer	Contractor
15.	22(d)	Electrical Installations Inspector on Low Voltage	Contractor
16.	22 (e)	Electrical Installations Controller on Low Voltage	Contractor
17.	26 (a)	Stacking and Storage Supervisor	Contractor
18.	27 (h)	Fire Equipment Inspector	Contractor

23.1.1

LIST OF RECORD KEEPING RESPONSIBILITIES

<u>ITEM</u>	<u>CR</u>	<u>RECORD TO BE KEPT</u>	<u>RESPONSIBLE PERSON</u>
1.	3(3)	Notification to Provincial Director – Annexure A Available on site	Principal Contractor
2.	4(3)	Copy of Principal Contractor's Health & Safety Plan Available on request	Client
3.	5(6)	Copy of Principal Contractor's Health & Safety Plan As well as each Contractor's Health & Safety Plan Available on request	Principal Contractor
4.	5(7)	Health and Safety File opened and kept on site (including all documentation required i.t.o. OHSA & Regulations Available on request	Every Contractor
5.	5(8)	Consolidated Health and Safety File handed to Client on completion of Construction work. To include all documentation required i.t.o. OHSA & Regulations and records of all drawings, designs, materials used and similar information on the structure	Principal Contractor
6.	5(9)	Comprehensive and Updated List of all Contractors on site, the agreements between the parties and the work being done Included in Health and Safety file and available on request	Principal Contractor
7.	6(7)	Keep record on the Health and Safety File of the input by Construction Safety Officer [CR 6 (7)] at design stage or on the Health and Safety Plan	Contractor
8.	7(2)	Risk Assessment - Available on site for inspection	Contractor
9.	7 (9)	Proof of Health and Safety Induction Training	Every Employee on site
10.	8(3)	Construction Supervisor [CR 6(1)] has latest updated version of Fall Protection Plan [CR 8(1)]	Contractor
11.	9(2)(b)	Inform contractor in writing of dangers and hazards relating to construction work	Designer of Structure
12.	9(3)	All drawings pertaining to the design of structure On site available for inspection	Contractor
13.	9(4)	Record of inspections of the structure [First 2 years – once every 6 months, thereafter yearly] - Available on request	Owner of Structure
14.	9(5)	Maintenance records - safety of structure - Available on request	Owner of Structure
15.	10(d)	Drawings pertaining to the design of formwork/support work structure - Kept on site, available on request	Contractor
16.	11(3)(h)	Record of excavation inspection - On site available on request	Contractor
17.	17(8)(c)	Material Hoist daily inspection entered and signed in record book kept on the premises	Contractor
18.	17(8)(d)	Maintenance records for Material Hoist - Available on site	Contractor
19.	22(d)	Record of temporary electrical installation inspections [once a week] and electrical machinery [daily before use] in a register and kept on site	Contractor
20.	27(l)	Fire Evacuation Plan	Contractor



WARNING: Under no circumstances shall any work of any nature whatsoever on any ASBESTOS material be undertaken unless the work is entrusted and mandated to a “REGISTERED ASBESTOS CONTRACTOR” in terms of the Asbestos Regulations. [CR 12(9)] (plse. contact the Regional Manager’s Office)

24. HEALTH AND SAFETY FILE COMPILATION AND CONTENT

25. SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS

NOTE:

The guidelines and conditions provided in this attached document form an integral constituent of the Health and Safety Specifications. It is therefore a condition of acceptance that no Health and Safety Plan shall be complete unless all relevant elements of this document applicable to the above project have been included in

the Health and Safety Plan. The final approval of the Health and Safety Plan in terms of CR 4(2) shall be subject to this requirement based on the following certification by the Principal Contractor or his Agent:

*“ I hereby certify that I have taken cognisance of the content of the document titled ‘**SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS**’ and have included the relevant elements of the document applicable to the above project in my Health and Safety Plan and shall ensure adherence to the requirements thereof.”*

The contents of CR 5 are pivotal when mandatory appointments are contemplated.

HEALTH AND SAFETY FILE:

This document serves as a guide to Principle Contractors and Contractors (and their agents) to assist them in complying with the requirements of the Act and more specifically the Construction Regulations and to ensure a most comprehensive Health and Safety File. Kindly note the following extractions from the Construction Regulations:

“Every contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of the Act and the Regulations, is opened and kept on site and made available to an inspector, client, client’s agent or principle contractor upon request. [CR 5(7)]

A Principal Contractor shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall, in addition to the documentation referred to in sub regulation (7) [above], include a record of all drawings, designs, materials used and other similar information concerning the completed structure. [CR 5(8)]

A Principal Contractor shall ensure that in addition to the documentation required in the health and safety file as determined in the two sub regulations above, a comprehensive and updated list of all the contractors on site accountable to the Principal Contractor, the agreements between the parties and the type of work being done are included and available. [CR 5(9)]”

The information, documentation and lists required to be included in the Health and Safety File as contemplated in the Construction Regulations [CR 5(7)], shall be suitably and sufficiently documented in terms of the following items listed below to ensure compliance with the Act as far as is reasonably practicable.

Note: In the event that any of the items listed below may not have reference to the planning, implementation and completion of the work to be done pertaining to the project on the construction site, it must clearly be indicated as such with a proper statement e.g. ‘Not Applicable’. All other relevant references or items below shall relate to the information required as contemplated in the Act and Regulations.

IMPORTANT - *This Health and Safety File shall be regarded as the property of the Client as it has to be consolidated and handed over to the Client upon completion of the project. The Principal Contractor shall ensure that this file is adequately protected against any form of damage, abuse or fraud.*

Registers as follows:

Accident/Incident Register (Annexure 1 of the General Administrative Regulations)
H&S Representatives ('SHE - Reps') Inspection Register
Arc & Gas Welding & Flame Cutting Equipment Inspections
Inspection of Ladders
Inspection of Vessels under Pressure plus all other excluded under VUP regulations
Fire fighting equipment

The H&S Representatives (SHE-Reps) will be required to submit the abovementioned registers as well as other legally required registers, also from the list below, on a monthly basis to the chairman of the H&S committee for submission to, and endorsement by the H&S Committee. Also refer to the suggested Agenda for the H&S Committee under 12.8.3

Documents as follows:

Copy of OH&S Act (updated) (General Administrative Regulation 4.)
Proof of Registration and good standing with a COID Insurer (Construction Regulation 4(1)(g))

Appointments – in terms of the Construction Regulations * [See references Page 4]
Notification of Construction Work – Annexure 1 [CR 3]

H&S Specifications [CR 4]
H&S Plan – Principal Contractor, Contractor & Sub-contractors [CR 5(1) & (4)]
Proof of Periodic Audits [CR 4, 5 & 6]
List of all Contractors (accountable to Principal Contractor) on site [CR 5(9)]
Contractor Agreements [CR 5(9)]
Type of work done on site [CR 5(9)]
Records of drawings, designs, materials used and similar information concerning the completed structure [CR 5(8)]
Input by Construction Safety Officer [CR 6(7)]
Risk Assessment [CR 7(1)]
Copy of Risk Assessment [CR 7(2)]
Proof of H&S Induction Training [CR 7(4) & (7) & (9)(b)]
Fall Protection Plan [CR 8]
Drawings design of structure [CR 9(3)]
Records of Inspections of Structure [CR 9(4)]
Maintenance records – structure safety [CR 9(5)]
Record Excavation Inspection [CR 11(3)(h)]
Method Statement [CR 11(3)(k)]
Method Statement [CR 12(2)]
Method Statement [CR 12(11)]
Operational Compliance Plan [CR 15(2)(c)]
Suspended Platform Inspection and Performance Test records [CR 15(11)]
Medical Certificate of Fitness [CR 15(12)(b)]
Proof of Training [CR 15(12)(c)]
Material Hoist Inspections [CR17(8)(c)]
Maintenance Records Material hoist [CR17(8)(d)]
Medical Certificates of Fitness [CR 20(g)]
Medical Certificates of Fitness [CR 21(1)(d)(ii)]
Findings of daily inspections Construction Vehicles [CR21(1)(j)]
Record of Electrical Installation Inspections [CR22(d)]
Record of Electrical Machinery Inspections [CR22(d)]

Proof of Training [CR 27(i)]

Evacuation Plan [CR 27(l)]

H&S Rep & Committee Members details

H&S Committee Meetings' Minutes

Other appointments in terms of OHASA

The following further identified requirements in terms of the Act and other Regulations of the Act are similarly applicable as part of the contents of the 'Health and Safety File':

Details of Inspections (by DoL)

Recording and Investigation of Incidents – Annexure 1 [GAR 9(1-3)]

Action taken on all incidents [GAR 9(4)]

Certificates of Competency in First Aid [GSR 3(4)]

Record of Medical Surveillance required in terms of OHASA

IMPORTANT:

A copy of the following certification in terms of the “**SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS**” (Document attached) signed by the prospective tenderer / contractor is to be included in the Health and Safety File:

“ I hereby certify that I have taken cognisance of the content of the document titled 'SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS' and have included the relevant elements of the document applicable to the above project in my Health and Safety Plan and shall ensure adherence and compliance to the requirements thereof.”



NATIONAL DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

SAFETY AND SWITCHING PROCEDURES

FOR

LOW VOLTAGE ELECTRICAL INSTALLATIONS



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REGULATIONS AND DEFINITION OF COMPETENT PERSON:

1.1 REGULATIONS:

All persons who carry out or arrange for work of any description for the Department in connection with electrical apparatus shall make themselves acquainted with the Occupational Health and Safety Act (Act 85 1993) with particular reference to the *Electrical Machinery Regulations, Regulations 1 to 23 inclusive*.

Access to the above Act and its Regulations can be arranged with the Regional Manager.

1.2 DEFINITION OF COMPETENT PERSON:

“designate / competent person” in relation to machinery, means any person who—

- (a) has served an apprenticeship in an electrical high voltage experience / trade which included the operation and repairs of machinery and high voltage electrical installation, or has had at *least five years' practical experience* in the operation and repair work of machinery and electrical installation of high voltage installations, and who during or subsequent to such apprenticeship or period of practical experience, as the case may be, has had not less than one year's experience in the operation and repairs appropriate to the class of machinery he is required to supervise;
- (b) has obtained an engineering diploma in either the mechanical or electrotechnical (heavy current) fields with an academic qualification of at least T3 or N5, or of an equivalent level, and who subsequent to achieving such qualification has had not less than two years' practical experience in the operation and maintenance appropriate to the class of machinery he is required to supervise;
- (c) is a graduate engineer and has had not less than two years' post-graduate practical experience in the operation and maintenance appropriate to the class of machinery he is required to supervise and who has passed the examination on the Act and the regulations made there-under, held by the Commission of Examiners in terms of regulations E5 (2) of the regulations published under Government Notice R.929 of 28 June 1963; or
- (d) is a certificated engineer;

2 SAFETY EQUIPMENT

The following equipment required for working on electrical installations and distribution systems, must be maintained in good order and repair and must be made available:-

for and the Safety belt, overalls, hard hat, safety shoes or boots, rubber gloves, "Men Working" notice boards, locks locking off switches, buss bar shutters in truck-type switchgear, isolators or earthing links, rubber sheet length of rope with short circuiting earthing-chains, earthing sticks and testing/phasing sticks rated for voltage of the equipment to be tested.

Under no circumstances shall work be carried out on electrical apparatus unless the proper safety equipment is used.

With regard to overhead linesmen, no work shall be carried out unless use is made of a non-metallic ladder and the appropriate safety belt, rubber gloves, overalls, hardhat and safety shoes or boots are worn. The buddy system must also be implemented.

3 DEFINITION OF OPERATING TERMS

3.1 Alive or live

This means electrically connected to the power system and/or electrically charged.

Consider an isolated overhead line that is not earthed. An overhead line can be electrically connected to the system in the following ways:

- (a) By means of a metallic conductor such as links and breakers or switches. This is the normal way of transmitting electrical energy.
- (b) Electromagnetic induction or transformer action from a nearby current carrying line will induce a dangerous voltage in the isolated lines and are a hazard to all personnel that must work on or with the line.
- (c) Electrostatic induction or condenser action from a nearby live line will induce a dangerous voltage in any isolated, but not earthed, overhead line. Electrically charged means at a potential difference or voltage above zero

3.2 Dead

This means that any apparatus so described is isolated from the power system. Rotating plant shall not be regarded as dead until it is stationary or is being slowly rotated by means of barring gear and is not excited.

The Occupational Health and Safety Act define dead as: "dead" means at or about zero potential and isolated from any live system. Disconnected has the same meaning as isolated. An overhead line disconnected from all sources of supply but not earthed, cannot be regarded as dead because:

- (a) It can retain a static charge.
- (b) It can acquire a static charge due to atmospheric conditions.
- (c) It can accidentally be made alive.
- (d) Nearby lines continually induce voltage in them.

The regulations recognise only the following devices as disconnects or isolators:-

- (a) Links.
- (b) Fuses.
- (c) Truck type switchgear.

3.3 Earthing

This means the connecting of apparatus electrically to the general mass of earth in such a manner as will ensure at all times an immediate safe discharge of electrical energy. This is done through an earth bar or spike by means of a good metallic conductor.

To fully appreciate this definition we must refer to the Electrical Machinery Regulations, Regulation 3 of the Occupational Health and Safety Act which states:

"Work on Disconnected Electrical Machinery. —Without derogating from any specific duty imposed on employers or users of machinery by the Act, the employer or user shall, whenever work is to be carried out on any electrical machinery which has been disconnected from all sources of electrical energy but which is liable to acquire or to retain an electrical charge, as far as is practicable, cause precautions to be taken by earthing or other means to discharge the electrical energy to earth from such electrical machinery or any



adjacent electrical machinery if there is danger if there is danger there from before it is handled and to prevent any electrical machinery from being charged or made live while persons are working thereon.”

Electrical apparatus and in particular overhead lines may become charged due to:-

- (a) Direct lightning strokes.
- (b) Electro magnetically induced currents due to a lightning stroke in the immediate vicinity of the line.
- (c) Electro statically induced charges on the lines due to the presence of thunderclouds.
- (d) Electrostatic charges imparted to the line by the friction of dust or snow blowing past the conductors.
- (e) Electrostatic charges imparted to the line due to changes in line altitude"

These changes are responsible for tremendously high voltages between overhead lines and earth, in fact, sometimes high enough to cause a flash over on insulators. A spark may span several centimetres of air to a person's hand should he approach too closely to an isolated unearthed overhead line.

An overhead line or apparatus can be made alive by:

- (a) Unauthorised operating, i.e., closing the wrong links and breaker.
- (b) Faulty wiring on consumer's stand-by sets. (Back feed from consumer)
- (c) A broken overhead conductor from a different line falling onto the isolated line.
- (d) Synchronising plugs.

From the foregoing paragraphs it is clear that the purpose of earthing isolated lines and apparatus are:

- (a) To discharge them should there be a residual voltage or charge.
- (b) To prevent them acquiring a static charge.
- (c) To prevent danger to persons working on apparatus in the event of someone accidentally making it alive.
- (d) To dissipate induced voltages continuously and safely.

Earthing gear means the fixed or portable appliances used for earthing electrical apparatus. The dangers from inadequate or improper earth connections are:

- (a) Electrocution.
- (b) Burns from arcing.
- (c) Electric shock leading to falls.

Earthing may be done by the closing of earthing links, or by the attaching of fixed earthing devices or by the affixing of portable earthing straps. In each case the main idea is to ensure the safety of personnel.

In affixing portable earth straps, the connection to the earthbar or earthed metal or spike must be made first and in removing such earthing straps, the disconnecting from the earthbar or earthed metal or spike must be done last. Also, a link stick or an insulated stick should be used to connect the earth wires to the overhead lines or apparatus.

These requirements are most important because connecting the portable strap first to earth and then to the conductors by means of a link stick avoids the risk of a shock to the operator from static charges or induced voltages.

REMEMBER: Always safety test before applying earths.



3.4 Isolate

This means to disconnect from all Sources of electrical potential by means of opening of links or fuses or the withdrawal of truck-type circuit-breakers.

All sources of electrical potential mean all points or circuits from where the apparatus can be made alive. Links, fuses and truck-type switchgear can be regarded as isolators because:

- (a) They leave a visible air gap in a circuit when open, removed or withdrawn.
- (b) They contain no stored energy and will not close due to defects.
- (c) They can be locked in a physical condition and thus can only be operated by the person with the correct key.

Opening links and locking them in the open position; removing fuses and locking them away; withdrawing truck-type switchgear and locking the buss bar shutters are the only safe methods of isolating.

3.5 Circuit Breaker

This is a device designed to make or break electric current under normal and fault conditions. A breaker can make or break an electric current because it is designed to extinguish the arc very rapidly and effectively. It is also designed to withstand the tremendous forces under short circuit conditions. The arc-extinguishing medium for high-voltage breakers is normally air, oil or vacuum and should this medium be lost, the breaker becomes a link. Never use a breaker without an arc-extinguishing medium to interrupt current flow because the breaker will probably explode or it will sustain severe damage.

A fault condition is any condition that will cause an excessive amount of current flow. The normal fault conditions are:

- (a) Phase faults.
- (b) Earth faults.
- (c) Open circuit in one line of a three-phase system (Single-phasing).
- (d) Too low a voltage. (Motors will draw a large current or even stall).
- (e) Too high a voltage.
- (f) Overloading.

For the following reasons breakers cannot be regarded as isolators:

- (a) They leave no visible gap in a circuit.
- (b) They contain stored energy and can close on their own due to various defects.
- (c) It is normally not possible to lock them in an open position.
- (d) Oil circuit-breakers are subjected to carbon tracking which could cause a flash-over between contacts.

3.6 Link

This is a device for making or breaking a circuit when no load current is flowing.

Links differ from breakers and switches in the following respects:

- (a) They are not equipped with an arc extinguishing medium/device.
- (b) Their movement is very slow.

Should current be interrupted by means of links, an uncontrollable arc will be struck at the points where the contacts part.



The temperature of the arc is so high (+ 2 000°C) that it will simply melt the parting contacts. As the contacts move further apart, the arc will lengthen and burn everything away. Molten metal could splash onto the operator and cause severe injuries.

As the arc lengthens, considerable noise is generated and the light intensity is so severe that the operator could suffer from “welding flash” of the eyes.

When apparatus equipped with earthing links is required to be earthed at more than one place, the earthing links shall always be closed first and thereafter, any necessary portable earthing gear may be affixed to the apparatus.

In removing the earths in readiness for making the apparatus alive, all portable earthing gear shall first be removed and earthing links shall be opened last.

Closing the earthing links first ensures maximum safety to the operator. These links are easily operated, make good contact and the operating handles are at a safe distance from the contact points.

Locks and keys shall also be provided for links. The operating mechanism of all manually operated links shall be fitted with fastenings for locks. The operating mechanisms of each set of manually operated links shall normally be locked whether the links are in the open or in the closed position.

The locking of links provides a safeguard against their being opened or closed in error by other persons apart from the one with the correct key and a written instruction to operate.

3.7 Operating methods

This means switching, linking, safety testing and earthing. This definition also indicates the order of operating when making apparatus safe to work on.

- (a) Switching -
 - (i) Open breaker or switch to interrupt current flow safely, i.e. prevent arcs.
 - (ii) Close breaker or switch to start current flow - the only safe way.
- (b) Linking - open at least one set of links from where the apparatus can be made alive and lock the links in the open position. Always ensure that you are not going to start or interrupt current flow with the links by ensuring that the breaker or switch is open.
- (c) Safety test - test all three phases to ensure that the apparatus is disconnected from all sources of supply and that there is no back-feed from a consumer's standby set or other source.
- (d) Apply earths - ensure safety of the workers by:-
 - (i) Discharging the line or apparatus.
 - (ii) Preventing the line from acquiring a static charge.
 - (iii) Preventing the line or apparatus from being accidentally made alive.

Before applying portable earths, ensure that they are mechanically and electrically in good condition. There should be no broken strands, the clamps should be rigid and without defect and when applied properly, should make intimate contact with the conductors and earthbar or spike. The earthing cable tails should be as short as possible. The current carrying capacity of the portable earth is greatly reduced by broken strands. It will act as a fuse and increase the danger to workmen.

4. GENERAL SAFETY PRECAUTIONS

No person shall carry out work of any description (including, repairs, cleaning and testing) on any part of electrical apparatus unless such parts of the apparatus are:

- (a) dead;
- (b) disconnected, isolated and all practicable steps taken to lock off from live conductors;
- (c) efficiently connected to earth with the appropriate earthing sticks or gear designed for this purpose at all points of disconnection of supply;
- (d) screened where necessary to prevent danger, and caution and danger notices fixed;

and unless such person is fully conversant with the nature and extent of the work to be done.

It is the duty of the designated person in charge of the work to ensure that the foregoing provisions are complied with. He shall also ensure that when the work has been completed, the apparatus is safe to be made alive and that all earths and temporary danger notices have been removed.

Provided that cleaning and painting of earthed metal enclosures, connections or disconnections of circuits to or from live systems may be carried out in accordance with instructions issued by the competent person concerned.

Provided also that where the design of the apparatus precludes the strict compliance with all details of these precautions, the work shall be carried out to the instructions of the senior competent person present.

When any person receives instructions: regarding work on or the operation of high voltage apparatus he shall report any objection to the carrying out of such instructions to the designated person who shall have the matter investigated and, if necessary, referred to higher authority. **All these instructions and objection shall be kept safe in the Safety File.**

5. ACCESS TO LOW VOLTAGE ENCLOSURES AND APPARATUS

Enclosures, chambers, cubicles or cells containing low voltage conductors shall be kept locked and shall not be opened except by a competent person.

6. SWITCHING:

- (a) **No switching** shall be carried out without the sanction of the appropriate appointed designate except for agreed routine switching or in cases of emergency.

All telephone instructions / messages relating to the switching operation shall be written down and be repeated in full to the sender to ensure that the message has been accurately received. *And shall be kept in the Safety File*

- (b) When a switch shows any sign of distress after operating, its condition shall be immediately reported to the appropriate competent person, and it shall be examined before further operation.
- (c) The examination of and necessary adjustments including inspection and / or changing of oil of any high voltage oil immersed circuit-breaker which has operated under fault conditions shall be carried out if possible before the circuit-breaker is re-closed, or at the earliest available opportunity thereafter.

7. WORK IN SUBSTATIONS AND SWITCHING STATIONS CONTAINING EXPOSED LIVE CONDUCTORS.

7.1 Safety Clearances to Live Conductors:

Unless the whole equipment is "dead", the section which is made dead for work to be carried out shall be defined by the use of barriers or roping such that the minimum clearance from the nearest exposed conductor to ground level or platform or access way shall be:-

Rated Voltage	Clearance
Up to 11 kV	3.0 m.

The area at ground level shall be only that in which the work is to be carried out.

7.2 Insufficient Clearances

If the above clearances are not sufficient to avoid danger, other suitable arrangements shall be made to provide the requisite degree of safety.

7.3 Ladders and Other Long Objects

Ladders and other long objects shall not be used without the permission of the senior authorised person in charge of the work and the movement and erection of such ladders shall be under his/her direct supervision at all times.

8. WORK ON METAL CLAD SWITCHGEAR SPOUTS:

- (i) The section of bus bars on which work is to be carried out shall be made dead and isolated from all points of supply.
- (ii) The shutters of live spouts shall be locked closed.
- (iii) The busbars shall be earthed with approved earthing equipment if possible, at a panel other than that at which work is to be carried out. Temporary earths shall in any case be applied to all phases on the busbar at the point of work. These earths may then be removed one phase at a time for work to be carried out. Each phase earth shall be replaced before a second phase earth is removed.

For the earthing of metal clad switchgear, approved appliances only shall be used. The insertion of the hand or any other tool in contact spouts for this purpose is forbidden.

9. WORK ON TRANSFORMERS:

When work is carried out on transformers, both the primary and secondary switches and isolators shall be opened. The transformer shall also be isolated from all common neutral earthing equipment from which it may become live. This does not require the disconnection of solidly earthed neutrals.

10. WORK ON CABLES, CONDUCTORS AND OVERHEAD LINES:

10.1 Cables and Conductors

- (a) No person shall touch the insulation, which covers or supports any low voltage conductor unless the conductor is dead and earthed.
- (b) Before carrying out work involving cutting into a low voltage cable, the responsible person shall satisfy himself that the cable has been made dead, isolated and earthed where practicable and identified. In all cases of doubt, the cable shall be spiked in an approved manner.

10.2 Overhead Lines

- (a) All persons while at work on towers, poles and high structures or when working on live lines shall make proper use of their safety belts and safety equipment, and no man shall work alone at any tower or high structure, or on live equipment.
- (b) The senior authorised person in charge of the work shall satisfy himself that the line conductors are short circuited and earthed before work is commenced. When work has been completed, the responsible person shall ensure that all temporary earths have been removed and that the line is safe to be made alive.
- (c) When work is carried out on a low voltage line, earths shall be placed at the point or points where the work is being done in addition to the earths provided at the points of disconnection.
- (d) In the event of the near approach of a lightning storm, all work on overhead lines shall cease immediately and the authorised person in general charge of the work shall be informed.
- (e) For the safety of the public, strain insulators shall be placed in all stays on overhead lines.

11. TESTING PROCEDURES AND PRECAUTIONS FOR COMMISSIONING OF ELECTRICAL CABLES

The aim of this section is to create an awareness of the latest standards and testing procedures for the commissioning of new and the re-commissioning of repaired electrical cables.

Before commissioning or re-commissioning cables tests must be carried out to ensure the integrity of the cable/s and to ensure the safety of operating personnel.

1. Low voltage Cables

1.1 Initial Tests

Carry out a meter test to ensure that the insulation resistance complies with the manufactures and the relevant SANS requirements. For L.V. cables a 500V d.c. meter is adequate for this purpose.

1.2 Voltage Tests

This covers extruded solid dielectric cables (covered by SANS 1507), voltage ranges are as indicated in Table 1

After installation the cable has to be tested to ensure the integrity of the cable and the quality of the work. A.C. testing of solid dielectric cables is preferred. Very low frequency high voltage sinusoidal electrical testing methods are recommended to avoid the use of cumbersome large testing equipment.

Method: The test voltage should be applied between conductors and between each conductor and the metallic protection or earthed surroundings of the cable as appropriate. The voltage to be raised gradually to the specified values in the table and maintained for 15 minutes.

Table1 -Test Voltages After Installation

1	2	3	4
Cable operating voltage	Where test voltage is to be applied	Test Voltage V	
		a.c.(r.m.s)	d.c.
300/500	Between Conductors and conductors/earth	1 000	1 500
600/1000	Between Conductors and conductors/earth	2 000	3 000
1900/3300	Between conductors	6 000	9 000
1900/3300	Between Conductors and conductors/earth	3 500	5 000

2. Medium / High Voltage

Each section of the cable installation between substations shall be subjected to a preliminary voltage or insulation resistance test to prove the insulation resistance.

The installation resistance can be measured with a high voltage meter with a rating of 5000V.

2.1 Paper Insulated Lead covered Double Steel Tape or Wire Armoured Cable (covered by SANS 97), voltage ranges are as indicated in Table 2

The test voltage should be applied between conductors and between each conductor and the metal sheath, which should be held at earth potential. In each case, the voltage should be increased steadily to the stipulated value and maintained at this value for 15 minutes.

Table 2 in-situ test voltages.

1	2	3	4	5	6	7
Voltage Rating of Cable kV	Test Voltage					
	Belted Cables				Single-core and screened cables	
	Between conductors		From conductor to sheath		Between conductor and sheath or screen	
	a.c.	d.c.	a.c.	d.c.	a.c.	d.c.
3.3/3.3	7	9	7	9	-	-
3.8/6.6	13	19	8	11	8	11
6.6/6.6	13	19	13	19	-	-
6.35/11	22	31	13	19	13	19
11/11	22	31	22	31	-	-
12.7/22	-	-	-	-	25	36
19/33	-	-	-	-	38	54

2.2 XLPE-Insulated Cables covered by SANS 0198 Part 13.

NOTE: If circumstances necessitate testing that is not in accordance with the recommendations of this section, the cable manufacturer or a test expert should be consulted before any testing is carried out.



The use of inappropriate or excessive test voltages or of unsuitable fault location methods can damage XLPE-insulated cables. Cables that are particularly prone to damage during testing are those that have water trees and those that have a construction that differs from that specified in the 1981 and in subsequent editions of SANS 1339.

The Types of Test Waveforms to be applied are:

- a) Very low frequency (VLF): An Alternating waveform that is either sinusoidal or pseudo-square/cosine rectangular, of nominal frequency 0,1 Hz.
- b) Power frequency: An alternating sinusoidal waveform of frequency in the range 25 Hz to 100 Hz.
- c) Surge: A step waveform that has a rise time of a few microseconds and that gradually decays to zero within 5 s.

These waveforms are referred to in the various test tables below.

Note: Where the capacity of the test set permits, all three cores of a three-core cable may be tested together.

2.2.1 PRELIMINARY TESTS

2.2.1.1 Leakage Resistance.

Before carrying out any testing or fault location, determine and accurately record the leakage resistance to earth and, if relevant, between conductors. Use an instrument that generates a d.c test voltage of not less than 250 V and not more than 5 kV. Typical minimum values of leakage resistance are given in Table 3.

TABLE 3—MINIMUM LEAKAGE RESISTANCE

1	2	3	4	5
Cable Operating voltage U , kV	Minimum leakage resistance, $M\Omega$			
	Cable length, m			
	100	300	1 000	3 000
6,6	150	50	15	5
11	240	80	24	8
22	460	153	46	15
33	680	227	68	23

NOTE:

1 The value of leakage resistance multiplied by the cable length should not be less than $(2 U + 2) M\Omega.km$, where U is the voltage rating of the cable in kilovolt.

2 This test is repeated after the required sequence of tests (see 2.2.2.7).

2.2.2 TESTING

2.2.2.1 Over voltage Commissioning Tests.

When newly installed cables are being commissioned, they should be tested at the test voltages given in Table 4, appropriate to the test waveforms and test durations given in columns 1 and 2 of the table.

TABLE 4—COMMISSIONING TEST VOLTAGES (r.m.s.)

1	2	3	4	5	6
Test waveform (see 2.2)	Duration, Min	Commissioning test voltage, kV			
		Cable Operating voltage, kV			
		6.6	11	22	33
VLF (0,1 Hz)	60	11	19	38	57
Power frequency	60	8	13	25	38

NOTE:

1. Test sets for the above are commercially available.
2. Where the above test levels cannot be achieved, a reduced voltage for an extended time may be negotiated.

2.2.2.2 Overvoltage Maintenance/Repair Tests.

When cables are tested for maintenance or repair purposes, they should be tested at the test voltages given in Table 5, appropriate to the waveforms and test durations given in columns 1 and 2 of the table.

2.2.2.3 Surge Test Method (see Table 5).

The surge test is intended to be a practical basic safety test. It can be used as a non-damaging means of identifying fairly serious existing or potential faults when power frequency or VLF equipment is not available. The test avoids the application of a continuous d.c. voltage (see 2.2.2.4), but it is not as conclusive or rigorous as the other methods.

CAUTION: During the surge test, a peak voltage of up to twice the test voltage can be generated in the cable.

METHOD. Charge the surge generator to the appropriate test voltage given in Table 5. Using single-shot mode, release a surge into the cable and then soft-discharge the cable (see 2.2.5.5) within 5 s. Repeat the procedure up to five times and then fully discharge the cable by solidly earthing it for at least 5 min.

TABLE 5—MAINTENANCE/REPAIRS TEST VOLTAGES (r.m.s.)

1	2	3	4	5	6
Test waveform (see 2.2)	Duration	Maintenance/repair test voltage, kV			
		Cable operating voltage, kV			
		6.6	11	22	33
VLF (0,1 Hz)	15 min	8	13	25	38
Power frequency	15 min	7	11	22	33
Surge test (see 2.2.1.3)	5 surges, max.	7	11	22	33

2.2.2.4 D.c. Over voltage Testing.

D.c. over voltage testing is likely to cause irreversible damage to XLPE-insulated cable systems, particularly if the cables have water trees. It often fails to identify potentially hazardous conditions in the cable. If d.c. testing has to be carried out because no other test methods are available, the voltage and duration should be limited to the appropriate values given in Table 6, which are recommended for quick identification of gross

faults only. Use a d.c. test set or a surge generator in d.c. mode to apply the test voltage. After applying the voltage, soft-discharge the cable (see 2.2.2.5), using either the d.c. test set or a discharge stick. Fully discharge the cable by solidly earthing it for at least 8 h but preferably for 24 h.

TABLE 6—D.C. TEST VOLTAGES

1	2	3	4	5
Duration, s	D.c. test voltage, kV			
	Cable operating voltage, kV			
	6.6	11	22	33
10	6	10	20	30

2.2.2.5 SOFT DISCHARGE OF CABLE.

An XLPE-insulated cable should always be soft-discharged through a resistance of at least 200 k Ω , for example by using a discharge stick. Discharging a conductor direct to earth by short-circuiting it with a lead can severely damage the cable. After the initial discharge, a cable should be solidly earthed for at least 5 min. If the cable has been subjected to any form of d.c. test, it should be solidly earthed for at least 8 h, but preferably for 24 h.

2.2.2.6 CABLE SHEATH TESTING.

To avoid problems caused by the ingress of water into the cable, a cable should be subjected to sheath testing:

- a) at commissioning,
- b) annually, and
- c) after the location and repair of a fault.

Cable sheath testing can also be used to locate conductor earth faults that have punctured the outer sheath, provided that multiple sheath faults are not present. A direct current sheath test voltage of 5 kV should be applied for 1 min, with a leakage current of 1 mA/km being regarded as acceptable.

2.2.2.7 AFTER TESTING.

After completion of any of the above tests, the leakage test described in 2.2.1.1 should be repeated. A tenfold reduction in the value of leakage resistance could indicate a potential problem.



CIRCUIT-BREAKER CLOSURE

2.2.3.1 Faulty or Unknown Cable Conditions.

Closing a circuit-breaker on an untested cable can be hazardous to the operator and can damage the cable. A fault should never be re-established by repeated closing of a circuit-breaker.

2.2.3.2 Voltage Doubling.

During switch-in onto open circuit, voltage doubling occurs at the remote end of the cable. Voltages of up to 20 kV can occur on an 11 kV system. Switching onto a load such as a transformer avoids this voltage doubling.

DRPW – 03 (EC) TENDER DATA

Bid no: BL25/014

Bid/ Project Description: Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System

Paste Tender Data here

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 interest³ 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

(³) 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".

For External Use

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 declare 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 consortium⁴ 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.

⁴ 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.

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



- 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 DECLARE 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.

Name of Bidder	Signature	Date	Position

This form is aligned to SBD 4.

PA-15.1: RESOLUTION OF BOARD OF DIRECTORS

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

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

Held at _____ *(place)*

on _____ *(date)*

RESOLVED that:

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

(project description as per Tender Document)

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

- 2 *Mr/Mrs/Ms: _____

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

and who will sign as follows:

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



	Name	Capacity	Signature
1			
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20			

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must, where possible, be signed by *all* the Directors / Members / Partners of the Tendering 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 Tendering Enterprise (attach proof of shareholding / ownership hereto).
4. Directors / Members / Partners of the Tendering Enterprise may alternatively appoint a person to sign this document on behalf of the Tendering 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 Tendering 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 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 Tender Document)

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

- 1 *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.

- 2 The Enterprise accept 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.
- 3 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: _____

Postal Code _____



Postal Address: _____

Postal Code _____

Telephone number: _____ Fax number: _____

	Name	Capacity	Signature
1			
2			
3			
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10			

The tendering 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 Tendering 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 Tendering Enterprise (attach proof of shareholding / ownership hereto).
4. Directors / Members / Partners of the Tendering Enterprise may alternatively appoint a person to sign this document on behalf of the Tendering 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 Tendering 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 tender for the project mentioned below: *(legally correct full names and registration numbers, if applicable, of the Enterprises forming a consortium/joint venture)*

1	
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Held at _____ (place)

on _____ (date)

RESOLVED that:

- A. The above-mentioned Enterprises submit a tender in consortium/joint venture to the Department of Public Works & Infrastructure in respect of the following project:

(project description as per Tender Document)

Tender Number: _____ *(tender number as per Tender Document)*

B. Mr/Mrs/Ms: _____



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

and who will sign as follows: _____

be, and is hereby, authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any Contract, and any and all documentation, resulting from the award of the tender 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: _____

E-mail address: _____

	Name	Capacity	Signature
1			



	Name	Capacity	Signature
2			
3			
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13			

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

Note:

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

DPW-16. TENDER BRIEFING MEETING CERTIFICATE

Project title:	Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System		
Tender / Quotation no:	BL25/014	Reference no:	[Comments]

Date Bid Briefing Meeting: N/A

Time of Bid Briefing Meeting: N/A

Venue: N/A

This is to certify that I, _____

representing _____

attended the tender clarification meeting on: _____

I further certify that I am satisfied with the description of the work and explanations given at the tender clarification meeting and that I understand 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-21: RECORD OF ADDENDA TO TENDER DOCUMENTS

Project title:	Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System		
Tender / Quotation no:	BL25/014	Reference no:	[Comments]

1. I / We confirm that the following communications received from the Department of Public Works 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.		

Name of Tenderer	Signature	Date

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

Name of Tenderer	Signature	Date

PA- 40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

Tender Number: BL25/014

Name of Tenderer

☐ EME² ☐ QSE³ ☐ Non EME/QSE (tick applicable box)

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

Name and Surname #	Identity/ Passport number and Citizenship##	Percentage owned	Black	Indicate if youth	Indicate if woman	Indicate if person with disability	Indicate if living in rural / under developed area/township	Indicate if military veteran
1.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
2.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
4.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
5.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
6.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
7.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
8.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
9.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
10.			☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

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

² EME: Exempted Micro Enterprise

³ QSE: Qualifying Small Business Enterprise

1. 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, 2022, National Small Business Act 102 of 1996 as amended and all documents pertaining to this Tender were studied and understood and that the above form was completed according to the definitions and information contained in said documents;
- 3 The Tenderer understands that any intentional misrepresentation or fraudulent information provided herein shall disqualify the Tenderer's offer herein, as well as any other tender offer(s) of the Tenderer simultaneously being evaluated, or will entitle the Employer to cancel any Contract resulting from the Tenderer's offer herein;
- 4 The Tenderer accepts that the Employer may exercise any other remedy it may have in law and in the Contract, including a claim for damages for having to accept a less favourable tender as a result of any such disqualification due to misrepresentation or fraudulent information provided herein;
- 5 Any further documentary proof required by the Employer regarding the information provided herein, will be submitted to the Employer within the time period as may be set by the latter;

Signed by the Tenderer

Name of representative	Signature	Date

DPW-09 PARTICULARS OF TENDERER'S PROJECTS

Project title:	Fezile Dabi District: 36 Months Preventative Maintenance, Installation, Service and Repair of Low Voltage System		
Tender / Quotation no:	BL25/014	Closing date: Tuesday, 19 August 2025	Time: 11H00

Note: The Tenderer is required to furnish the following particulars and to attach additional pages if more space is required.

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 of Project	Scope of Services (Work stages appointed for – eg 1 to 6)	Work stages completed	Work stages in progress
1.						
2.						
3.						
4.						
5.						
6.						
7.						



1.2. Completed projects

Projects completed in the last 5 (five) years		Name of Employer or Representative of Employer	Contact tel. no.	Contract sum of Project	Scope of Services (Work stages appointed for – eg 1 to 6)	Date of appointment	Date of completion
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							

Name of Tenderer		Signature	Date

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

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

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

1. GENERAL CONDITIONS

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

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

1.2 Preference Points System to be applied

☒ The applicable preference point system for this tender is the **80/20** preference point system.

1.3 Points for this tender shall be awarded for:

1.3.1 Price: Maximum 80 points

1.3.2 Specific Goals: Maximum 20 points

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

Preference Points System to be applied	80/20
PRICE	80
SPECIFIC GOALS	20
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 R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals as listed in the table below are applicable:

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 black people	10	• SANAS Accredited BBBEE Certificate or sworn affidavit where applicable.
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area <i>Fezile Dabi DISTRICT</i>	2	• Official Municipal Rates Statement which is in the name of the bidder. - Or • Any Account or statement which is in the name of the Bidder. - Or • Permission To Occupy from local chief in case of rural areas (PTO) which is in the name of the bidder. - Or

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
			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	4	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	2	- SANAS Accredited BBBEE Certificate or sworn affidavit where applicable. and - Medical Certificate indicating that the disability is permanent or - South African Social Security Agency (SASSA) registration indicating that the disability is permanent Or - National Council for Persons with Physical Disability in South Africa registration (NCPDPSA)
5.	An EME or QSE or any entity which is at least 51% owned by black youth	2	ID Copy and SANAS Accredited BBBEE Certificate or sworn affidavit where applicable.

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

- “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;
- “price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- “rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- “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
- “the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

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:

80/20 or 90/10

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

Where

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

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

3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

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

4. POINTS AWARDED FOR SPECIFIC GOALS

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

Table 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 (80/20 system) (To be completed by the organ of state)	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)	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	
3. An EME or QSE or any entity which is at least 51% owned by women	4	
4. An EME or QSE or any entity which is at least 51% owned by people with disability	2	
5. An EME or QSE or any entity which is at least 51% owned by youth.*	2	

DECLARATION WITH REGARD TO COMPANY/FIRM

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

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

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

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs



1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

- (a) disqualify the person from the tendering process;
- (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution, if deemed necessary.

.....SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

SWORN AFFIDAVIT – B-BBEE EXEMPTED MICRO ENTERPRISE - GENERAL

This affidavit **must not** be used for Construction/ CIDB related projects/ services

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Director / Owner (**Select one**) of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Enterprise Physical Address:	
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	
Nature of Construction Business:	
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – (a) who are citizens of the Republic of South Africa by birth or descent; or (b) who 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 naturalization prior to that date;"
Definition of "Black Designated Groups"	"Black Designated Groups means: (a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution; (b) Black people who are youth as defined in the National Youth Commission Act of 1996; (c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act; (d) Black people living in rural and under developed areas; (e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011;"



3. I hereby declare under Oath that:

- ☐ The Enterprise is _____% Black Owned using the flow-through principle as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- ☐ The Enterprise is _____% Black Female Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- ☐ The Enterprise is _____% Black Designated Group Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- ☐ Black Designated Group Owned % Breakdown as per the definition stated above:

- Black Youth % = _____%
- Black Disabled % = _____%
- Black Unemployed % = _____%
- Black People living in Rural areas % = _____%
- Black Military Veterans % = _____%

☐ Based on the Audited Financial Statements/Financial Statements and other information available on the latest financial year-end of _____/_____/_____ the annual Total
Date/ month / year

Revenue was R10, 000,000.00 (Ten Million Rands) or less

☐ Please Confirm on the below table the B-BBEE Level Contributor, **by ticking the applicable box.**

100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At Least 51% black owned	Level Two (125% B-BBEE procurement recognition level)	
Less than 51% Black Owned	Level Four (100% B-BBEE procurement recognition level)	

4. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
5. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature _____

Date: _____

Commissioner of Oaths
Signature & stamp

Stamp Commissioner of Oaths



SWORN AFFIDAVIT – B-BBEE QUALIFYING SMALL ENTERPRISE – GENERAL

This affidavit **must not**
be used for Construction/
CIDB related projects/
services

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Director / Owner (**Select one**) of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Enterprise Physical Address:	
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	
Nature of Construction Business:	
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – (a) who are citizens of the Republic of South Africa by birth or descent; or (b) who 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 naturalization prior to that date;"
Definition of "Black Designated Groups"	"Black Designated Groups means: (a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution; (b) Black people who are youth as defined in the National Youth Commission Act of 1996; (c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act; (d) Black people living in rural and under developed areas; (e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011;"



I hereby declare under Oath that:

- ☐ The Enterprise is _____% Black Owned using the flow-through principle as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- ☐ The Enterprise is _____% Black Female Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- ☐ The Enterprise is _____% Black Designated Group Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- ☐ Black Designated Group Owned % Breakdown as per the definition stated above:

- Black Youth % = _____%
- Black Disabled % = _____%
- Black Unemployed % = _____%
- Black People living in Rural areas % = _____%
- Black Military Veterans % = _____%

☐ Based on the Audited Financial Statements/ Financial Statements and other information available on the latest financial year-end of _____ / _____ / _____
Day/ month / year

(the annual Total Revenue was between R10,000,000.00 (Ten Million Rands) and R50,000,000.00 (Fifty Million Rands),

☐ Please Confirm on the below table the B-BBEE Level Contributor, **by ticking the applicable box.**

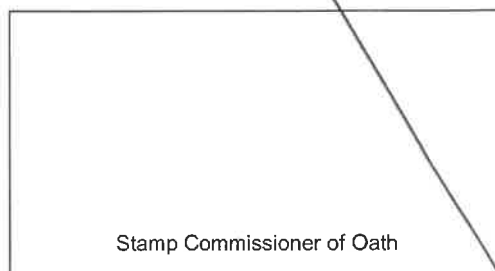
100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At Least 51% black owned	Level Two (125% B-BBEE procurement recognition level)	

3. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
4. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature _____

Date: _____

Commissioner of Oaths
Signature & stamp



B-BBEE EXEMPTED AFFIDAVIT FOR EXEMPTED MICRO ENTERPRISES (ISSUED IN TERMS OF THE AMENDED CONSTRUCTION SECTOR CODE)

(Gazette Vol. 630 No. 41287)

Issued in terms of paragraph 3.6.2.4.1 (B)

I, the undersigned,

This affidavit
must be used
for Construction/
CIDB related
projects/ service
only

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

- 1) The contents of this statement are to the best of my knowledge a true reflection of the facts.
- 2) I am a Member / Director / Owner of the following enterprise and am duly authorized to act on its behalf:

Enterprise Name:			
Trading Name (If Applicable):			
Registration Number:			
Enterprise Physical Address:			
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):			
Nature of Construction Business:	BEP (Built Environment Professional)	Contractor	Supplier
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – who are citizens of the Republic of South Africa by birth or descent; or who became citizens of the Republic of South Africa by naturalization before 27 April 1994; or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date."		
Definition of "Black Designated Groups"	"Black Designated Groups" means: (a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution; (b) Black people who are youth as defined in the National Youth Commission Act of 1996; (c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act; (d) Black people living in rural and under developed areas; (e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011;"		

3) I hereby declare under Oath that as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,

- The Enterprise is _____ % Black Owned
- The Enterprise is _____ % Black Female Owned
- The Enterprise is _____ % Owned by Black Designated Group (provide Black Designated Group Breakdown below as per the definition in the table above)

- o Black Youth % _____ %
- o Black Disabled % _____ %
- o Black Unemployed % _____ %
- o Black People living in Rural areas % _____ %

o Black Military Veterans % _____ %

4) Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of _____ / _____ / _____, the annual Total Revenue was less than the applicable amount confirmed by ticking the applicable box below.

BEP	R1.8 million	
Contractor	R3.0 million	
Supplier	R3.0 million	

If the turnover exceeds the applicable amount in the table above then this affidavit is no longer applicable and an EME certificate must be obtained from a rating agency accredited by SANAS or when applicable a B-BBEE Verification Professional Regulator appointed by the Minister of Trade and Industry.

Please Confirm on the below table the B-BBEE Level Contributor, **by ticking the applicable box below.**

100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned	Level Two (125% B-BBEE procurement recognition level)	
At least 30% Black Owned	Level Four (100% B-BBEE procurement recognition level)	
Less than 30% Black Owned	Level Five (80% B-BBEE procurement recognition level)	

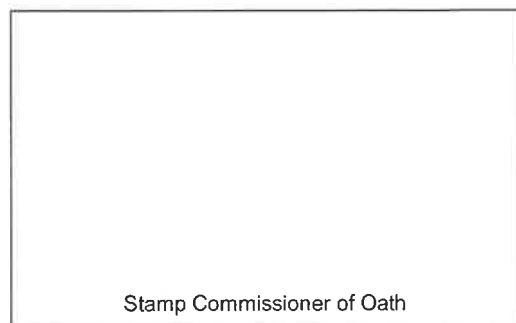
5) I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the Owners of the Enterprise which I represent in this matter.

6) The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature _____

Date: _____

Commissioner of Oaths
Signature & stamp





FACILITIES MANAGEMENT CONDITIONS OF CONTRACT (DPW)

SEPT. 2005 VERSION 1

PA-10 (FM): CONDITIONS OF CONTRACT

1. DEFINITIONS

- 1.1. *The following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:*
- 1.1.1. *"Additional Services" are increases in the quantity of the routine Services detailed in the Scope of Works.*
- 1.1.2. *"Bill of Quantities" means the document so designated in the Pricing Data that describes the Services and indicates the quantities and rates associated with each item which the Employer agrees to pay the Service Provider for the Services completed;*
- 1.1.3. *"Certificate of Completion" means the certificate issued by the Service Manager signifying that the Contract has expired;*
- 1.1.4. *"Commencement Date" means the date on when the Service Provider is notified of the Employer's acceptance of its offer;*
- 1.1.5. *"Contract" means the Contract signed by the Parties and of which these Conditions of Contract form part of, and such amendments and additions to the Contract as may be agreed in writing between the Parties;*
- 1.1.6. *"Contract Data" means the specific data, which together with these Conditions of Contract, Scope of Works and Pricing Data collectively describe the risks, liabilities and obligations of the contracting Parties and the procedures for the administration of the Contract;*
- 1.1.7. *"Contract Period" is from Commencement Date for the period stated in the Contract Data;*
- 1.1.8. *"Contract Price" means the price to be paid for the Services in accordance with the Pricing Data, subject to such additions thereto or deductions there from as may be made from time to time under the provisions of the Contract;*
- 1.1.9. *"Contract Sum" refers to the amount stated by the Service Provider in the Form of Offer and Acceptance;*
- 1.1.10. *"CPAP" means contract price adjustment provisions used for the adjustment of fluctuations in the cost of labour, plant and materials and goods as stated in the Contract Data;*
- 1.1.11. *"Day" means a calendar day;*
- 1.1.12. *"Drawings" means all drawings, calculations and technical information which are made available to the Service Provider for inspection at a venue and time to be announced by the Service Manager and any modifications thereof or additions thereto from time to time approved in writing by the Employer or delivered to the Service Provider by the Employer;*
- 1.1.13. *"Employer" means the contracting Party named in the Contract Data who appoints the Service Provider;*
- 1.1.14. *"Equipment" includes all appliances, tools implements, machinery, articles and things of whatsoever nature required in or for the rendering, completion or defects correction of the Services but does not include materials;*
- 1.1.15. *"Facilities" means the land and buildings, detailed in the Scope of Works, and any additions, or omission thereto, made available by the Employer for the purposes of the Contract, on, under, over, in or through which the Services are to be rendered or carried out;*

- 1.1.16. *"Form of Offer and Acceptance" means the written communication by the Employer to the Service Provider recording the acceptance of the Service Provider's offer;*
- 1.1.17. *"Identified Projects" means any projects, other than routine Services, identified and agreed to by the Parties during the Contract period or any extensions thereto, to be completed in terms of the Contract.*
- 1.1.18. *"Materials" includes all materials, commodities, articles and things required to be furnished under the Contract for the execution of the Services;*
- 1.1.19. *"Month" refers to the period commencing on a certain day of a month to the day preceding the corresponding day of the next month;*
- 1.1.20. *"Parties" means the Employer and the Service Provider;*
- 1.1.21. *"Pricing Data" means the document that contains the Bill of Quantities and provides the criteria and assumptions, which it will be assumed in the Contract were taken into account by the Service Provider when developing his prices;*
- 1.1.22. *"Services" means all the work to be performed by the Service Provider during the Contract Period in accordance with the Contract, as more fully set out in the Scope of Works, as amended from time to time by written agreement between the Parties;*
- 1.1.23. *"Service Provider" means the Tenderer, as named in the Contract Data, whose offer has been accepted by or on behalf of the Employer and, where applicable, includes the Service Provider's heirs, executors, administrators, trustees, judicial managers or liquidators, as the case may be, but not, except with the written consent of the Employer, any assignee of the Service Provider;*
- 1.1.24. *"Service Manager" means the representative of the Employer named as the Service Manager in the Contract Data. The Employer reserves the right to replace the said Service Manager, by written notice to the Service Provider, without the need to furnish reasons therefor;*
- 1.1.25. *"Scope of Work" refers to the document which defines the Employer's objectives and requirements and specifications and any other requirements and constraints relating to the manner in which the Services must, or may, be provided or performed;*
- 1.1.26. *"Service Period" refers to the period indicated in the Contract Data during which the Service Provider shall render the Services required in terms of the Contract;*
- 1.1.27. *"Transitional Stage" refers to the period indicated in the Contract Data, which commences immediately on the expiry of the Service Period, and during which the Services to be provided by the Service Provider shall include, inter alia, the provision and transfer to the incoming service provider of managerial support and information, as detailed in the Scope of Works.*

2. INTERPRETATION

- 2.1. *In this Contract, except where the context otherwise requires:*
- 2.1.1 *The masculine includes the feminine and the neuter, vice versa;*
- 2.1.2 *The singular includes the plural; and vice versa*
- 2.1.3 *Any reference to a natural person includes a body corporate, firm, association or consortium/joint venture/partnership, vice versa.*
- 2.2. *The headings to the clauses of this Contract are included for reference purposes only and shall not affect the interpretation of the provisions to which they relate.*



- 2.3. *Words and phrases defined in any clause shall bear the meanings assigned thereto.*
- 2.4. *The various parts of the Contract are severable and may be interpreted as such.*
- 2.5. *The expressions listed in clause 1 bear the meanings as assigned thereto and cognate expressions bear corresponding meanings.*
- 2.6. *If any provision in a definition clause is a substantive provision conferring rights or imposing obligations on any Party, effect shall be given to it as if it were a substantive clause in the body of the Contract, notwithstanding that it is only contained in the interpretation clause.*

3. DURATION

- 3.1. *The rights and obligations of the Parties to this Contract shall commence on the Commencement Date.*
- 3.2. *Subject to the terms of clauses 33 and 34 relating to breach and termination respectively, the Contract will commence on the Commencement Date and terminate on the expiry of the Contract Period, unless it is extended in terms of clause 3.3.*
- 3.3. *The terms or duration of the Contract may be extended as a result of bona fide negotiations between the Parties. No extension of term or duration of the Contract shall however be valid unless the terms and conditions of such extension has been reduced to writing and signed by the authorised representatives of both Parties.*

4. RIGHTS AND OBLIGATIONS OF THE EMPLOYER

- 4.1. *The Employer shall give access to or supply the Service Provider with:*
 - 4.1.1 *All relevant, available data and information required and requested by the Service Provider for the proper execution of the Services; and*
 - 4.1.2 *Such assistance as shall reasonably be required by the Service Provider for the execution of its duties under the Contract.*

5. RIGHTS AND OBLIGATIONS OF THE SERVICE PROVIDER

- 5.1. *The Service Provider shall, in executing his obligations, comply with the Service Manager's written instructions on any matter relating to the Services.*
- 5.2. *The Service Provider shall take instructions only from the Service Manager or other persons authorised by the Service Manager in terms of Clause 6.*
- 5.3. *The Service Provider shall not have the power of attorney or authority to enter into any contract or to otherwise bind or incur liability on behalf of the Employer, save where prior written authorisation has been obtained.*
- 5.4. *The Service Provider shall ensure that it, its employees, agents and representatives have the relevant experience and capacity necessary for rendering of the Services with the reasonable degree of skill, care and diligence that may be expected of professionals providing services similar to the Services.*
- 5.5. *Should any member of the Service Provider's team, in the opinion of the Service Manager or occupants of the Facilities, misconduct himself or is incompetent or negligent in the delivery of the Services, or whose presence on the Facilities is otherwise considered by the Service Manager, or occupants of the Facilities, on reasonable grounds, to be undesirable, the Employer may, in writing and together with reasons therefor, request that such person be removed. Such person shall not again be employed on the Services without the prior written consent of the Employer.*

- 5.6. *The Service Provider undertakes to effect such removal, as referred to in 5.5 above, within a day of receipt of the Employer's written request.*
- 5.7. *The Service Provider shall ensure that reasonable levels of care and responsibility are exercised when using items belonging to the Employer in the delivery of the Services.*
- 5.8. *During the ongoing provision of the Services the Service Provider shall at all times keep the Facilities clean and in a safe condition.*
- 5.9. *Notwithstanding anything herein contained to the contrary, it is specifically agreed that the appointment of the Service Provider shall not create an employment contract or relationship between the Parties and the Service Provider or his employees shall therefore not be entitled to any benefits to which the employees of the Employer may be entitled.*

6. SERVICE MANAGER

- 6.1. *The Service Manager shall administer the Contract on behalf of the Employer in accordance with the provisions of the Contract.*
- 6.2. *The Service Manager may delegate any of his powers and authority and may cancel such delegation, on the prior written notification thereof to the Service Provider.*
- 6.3. *Such delegation shall continue in force until the Service Manager notifies the Service Provider in writing that the delegation is terminated.*
- 6.4. *The Service Provider may at any time, prior to giving effect thereto, refer any written order or instruction of the Service Manager's delegatee to the Service Manager who shall confirm, reverse or vary such order or instruction.*

7. SECURITY

- 7.1. *The Service Provider shall provide to the Employer security in the amount and in the form set out in the Contract Data and any expenditure incurred in doing so shall be borne by the Service Provider.*
- 7.2. *Should the Service Provider fail to select the security to be provided or should the Service Provider fail to provide the Employer with the selected security within 21 days from Commencement Date, it shall be deemed that the Service Provider has selected a security in the form of a retention of 2.5 % of the Contract Sum (excl. VAT).*

8. SECURITY CLEARANCE

- 8.1. *In the event of security clearance becoming necessary, the Service Provider, any subcontractors and all human resources utilized by the Service Provider undertake to undergo security clearance, for which purpose the necessary forms will be made available to the Service Provider at the relevant time by the Employer. The Service Provider accepts that if he or any of his human resources refuses to undergo the required security clearance, they will not be allowed on the Facilities to render the Services.*
- 8.2. *It is required that all persons engaged in the rendering of the Services shall be easily identifiable and where required, security cleared.*

9. CONFIDENTIALITY

- 9.1. *The Service Provider undertakes to keep any and all information, of whatever nature, relating to the Contract or which he becomes privy to due to his presence at the Facilities, strictly confidential and such shall not be sold, traded, published or otherwise disclosed to anyone in*

any manner whatsoever, including by means of photocopy or other reproduction, without the Employer's prior written consent. As disclosure or improper use of the confidential information, without the Employer's prior written consent, will cause the Employer harm:

- 9.1.1 *the Service Provider shall be liable for any loss or damages suffered by the Employer and shall indemnify the Employer against any claims by third parties as a result of such unauthorised disclosure or use thereof, either in whole or in part; and/or*
- 9.2.1 *the Employer shall be entitled to cancel the Contract*
- 9.2. *The Service Provider shall be entitled to disclose such confidential information to the following persons, who have a clear need to know interest, in order to assist with the rendering of the Services on the Contract:*
 - 9.2.1 *employees, officers and directors of the Service Provider; and*
 - 9.2.2 *any professional consultant or agent retained by the Service Provider for the purpose of rendering the Services, provided that the identity of such consultant or agent is made known to the Employer in writing and the Employer acknowledges in writing that the confidential information may be disclosed to such person.*
- 9.3. *The Service Provider shall be responsible for ensuring that all persons to whom the confidential information is disclosed under this Contract shall keep such information confidential and shall not disclose or divulge the same to any unauthorised person.*
- 9.4. *The confidential information shall remain the property of the Employer and the Employer may demand the return or destruction thereof, at the cost of the Service Provider, at any time upon giving written notice to the Service Provider. Within ten (10) days of receipt of such notice, the Service Provider shall return all of the original confidential information and shall destroy all copies and reproductions (both written and electronic) in its possession or in the possession of persons to whom it was disclosed and furnish a certificate to the Employer stating as much.*
- 10. **AMBIGUITY IN DOCUMENTS**
 - 10.1. *The several documents forming the Contract are to be taken as mutually explanatory of one another and any ambiguity in or discrepancy between them shall be explained and, if necessary, rectified by the Service Manager who shall thereupon issue to the Service Provider a written explanation giving details of the adjustments, if any, and a written instruction directing what Service, if any, is to be delivered.*
- 11. **INSURANCES**
 - 11.1. *It is the responsibility of the Service Provider to assess his risks on this project and to ensure that he obtains and maintains the adequate insurances to cover such risks.*
- 12. **ACCESS TO THE FACILITIES AND COMMENCEMENT OF THE SERVICES**
 - 12.1. *The Service Provider shall provide the Employer, within 21 days of the Commencement Date, with an acceptable health and safety plan and such other information required in terms of the Occupational Health and Safety Act (85 of 1993).*
 - 12.2. *The Service Period shall commence 30 days from Commencement date, or on such other date as maybe specified in the Contract Data*
 - 12.3. *Notwithstanding the provision of 12.2, the Service Provider shall be given access to the Facilities or portions thereof, only after the provision by the Service Provider of an acceptable health and safety plan and of security clearance being obtained in terms of Clauses 12.1 and 8.1 respectively.*



- 12.4. *The Service Provider shall be given access to the Facilities or portions thereof and shall render the Services in accordance with its programme, referred to in clause 13 or after the receipt by him of a written instruction to this effect.*
- 12.5. *If the Employer fails to give the Service Provider access to the facility or any portion thereof for any reason other than default by the Service Provider and the Service Provider suffers additional costs as a result thereof, the Service Provider shall be entitled to make a claim therefor provided that the Service Provider is able to prove his claim and that he has taken all reasonable steps to mitigate the additional costs.*

13. PROGRAMME

- 13.1. *The Service Provider shall deliver to the Service Manager within 14 days from Commencement Date, a realistic programme and a cash flow for the delivery of the Services. The programme shall describe and detail the order in which the Services are to be rendered and shall be subject to the approval of the Service Manager, which written approval shall not be unreasonably withheld.*
- 13.2. *The Service Provider shall, on receipt of a written request from the Service Manager, furnish the Employer with any documents or information, of whatever nature, in support of the programme and/or in relation to the manner in which the Services are to be rendered and/or the resources to be supplied and used in the rendering of the Services and/or progress of the various parts of the Contract; and/or a detailed cash flow forecast.*
- 13.3. *A programme and the cash flow forecast will be submitted in terms of 13.1 and reviewed quarterly or as circumstances may require.*
- 13.4. *Agreement to the programme by the Service Manager or any adjustment thereto will not alter the responsibilities of the Service Provider in terms of this Contract.*

14. SUBCONTRACTING

- 14.1. *The Service Provider may subcontract any part of the Services at its discretion. The subcontracts shall incorporate the applicable terms, conditions and requirements of this Contract.*
- 14.2. *Subcontracting by the Service Provider shall not be construed as relieving the Service Provider from any obligations under the Contract or imposing any liability on the Employer.*

15. INTELLECTUAL PROPERTY RIGHTS INDEMNITY

- 15.1. *The Service Provider undertakes to obtain the necessary consent from the proprietors or their licensees should the Service Provider make use of the intellectual property of any other person.*
- 15.2. *The Service Provider further indemnifies the Employer against any claim or action (including costs on an attorney and client scale) caused by or arising from the failure to obtain such consent.*

16. COMPLIANCE WITH LEGISLATION

- 16.1. *This clause applies to legislation emanating from national and provincial government as well as that of any local authorities in whose area of jurisdiction the Facilities fall and which have a bearing on the delivery of the Services and Facilities under this Contract.*
- 16.2. *All the applicable legislation, which does not specifically allow discretion in respect of compliance by the Employer, shall be followed exactly as intended by such legislation regardless of any instructions, verbal or in writing, to the contrary.*



- 16.3. *Should any applicable legislation allow discretion in respect of compliance by the Employer it shall be followed exactly as intended by the relevant legislation as if no discretion is allowed until such time as specific instructions in writing are issued to the Service Provider by the Service Manager.*
- 16.4. *The Service Provider shall in the provision of the Services comply with the provisions of, and give all notices and pay all fees, taxes, levies and other charges required to be given or paid in terms of any legislation or imposed by any other body or person. The Service Provider hereby indemnifies the Employer against any liability for any breach of the provision of this clause.*
- 16.5. *It is the responsibility of the Service Provider to obtain the consents, permissions and/or permits, referred to in Clause 16.4, in the provision of the Services.*
- 16.6. *The Service Provider shall not have a claim against the Employer, and the Employer shall not be liable to refund the Service Provider for any of the fees, taxes, levies and other charges referred to Clause 16.4.*
17. **REPORTING OF INCIDENTS**
- 17.1. *In addition to the above, the Service Provider shall, as soon as possible, notify the Employer in writing of any incidents at the Facilities, which resulted or could have resulted in damage to property or injury or death to persons.*
- 17.2. *The Service Provider shall verbally notify the Service Manager of any of the incidents referred to in 17.1 immediately after the occurrence thereof.*
- 17.3. *The Service Provider shall follow up the verbal notification referred to in 17.2 with a detailed written report on such incidents to the Service Manager within the time frame indicated by the Service Manager, but in any event within 48 hours of the incident.*
- 17.4. *The written report referred to in 17.3 shall provide for all incidents, which resulted in injury, death or damage to property.*
- 17.5. *The Service Provider shall notify the Employer immediately, on becoming aware of the Contract requiring him to undertake anything that is illegal or impossible*
18. **NUISANCE**
- 18.1. *The Service Provider shall deliver the Services in a manner that shall not cause unnecessary noise, nuisance, or hinder the normal activities in the Facilities.*
- 18.2. *The Service Provider hereby indemnifies the Employer against any liability arising out of the Service Provider's non-compliance with his obligations in terms of Clause 18.1.*
19. **MATERIALS, WORKMANSHIP AND EQUIPMENT**
- 19.1. *All Services delivered, and materials and workmanship shall comply with the requirements of this Contract, the manufacturer's specification; good industry practice and the Service Manager's written instructions and shall be suitable for the purpose intended.*
- 19.2. *The Service Provider shall, in accordance with the Scope of Works or if instructed by the Service Manager, carry out tests demonstrating the acceptability of the relevant Services provided, or the suitability of materials or equipment to be used.*
- 19.3. *The Service Provider shall provide all necessary assistance, labour, materials, testing equipment and instruments for the purpose of such tests to be performed by himself or, if so instructed by the Service Manager, for the purposes of tests to be performed by any other person.*



- 19.4. *All costs for tests carried out shall be deemed to be included in the Service Provider's prices*
- 19.5. *Copies of the reports on the tests referred to in Clause 19.2 shall be forwarded by the Service Provider to the Employer within 10 days of the tests being completed.*

20. URGENT WORK

- 20.1. *The Employer may, by itself or through another service provider, effect any remedial or other repair work which becomes necessary due to no act or omission on the part of the Service Provider.*
- 20.2. *If the remedial or repair work became necessary due to an act or omission on the part of the Service Provider, its employees, agents or representatives, the Service Provider shall effect such remedial or repair work at its own cost.*
- 20.3. *If the remedial or repair work is urgently necessary due to an act or omission on the part of the Service Provider, its employees, agents or representatives and the Service Provider refuses to or is not available or able to effect such remedial or repair work, the Employer may effect such remedial or repair work either by itself or through another service provider.*
- 20.4. *If the Employer effects the remedial or repair work in terms of 20.3, then the Employer may recover such costs, losses or damages from the Service Provider or by deducting the same from any amount still due under this Contract or under any other contract presently or hereafter existing between the Employer and the Service Provider and for this purpose all these contracts shall be considered one indivisible whole.*

21. INDEMNIFICATIONS

- 21.1. *The Service Provider shall be liable for and hereby indemnifies the Employer against any liability, claim, demand, loss, cost, damage, action, suits or legal proceedings whether arising in common law or by statute consequent upon:*
- 21.1.1 *personal injuries to or the death of any person arising out of, related to, occasioned by, attributed to, or in the cause of or caused by the rendering of the Services;*
- 21.1.2 *loss of or damage to any movable or immovable or personal property or property contiguous to the Facilities whether belonging to or under the control of the Employer or any other body or person arising out of, related to, occasioned by, attributed to, or in the cause of or caused by reason of the rendering of the Services;*
- 21.1.3 *any liens, attachments, charges or other encumbrances or claims upon or in respect of any materials parts, work-in-process or finished work furnished to, or in respect of which any payment has been made by the Employer.*
- 21.2. *The Employer accepts liability for all acts or omissions of its employees, agents or representatives.*

22. VARIATIONS

- 22.1. *The Employer may at any time during the Contract Period, vary the Services by way of additions, omissions, or substitutions.*
- 22.2. *No variation by the Employer of whatever nature shall vitiate the Contract.*
- 22.3. *Any Services required by the Employer outside of the Services as referred to in the Scope of Works will be regarded as being Identified Projects and shall be dealt with under clause 23 and shall be executed as a variation order.*
- 22.4. *The Service Provider shall inform the Employer of any instructions that are deemed to be Additional Services prior to such instructions being executed.*

- 22.5. *Additional Services will only be executed by the Service Provider after receipt by him of a written instruction from the Service Manager.*
- 22.6. *If no prior written authorisation, as required in 22.5 above, has been obtained, the Employer shall not reimburse the Service Provider for the Additional Services so executed, and the Service Provider agrees that it shall not have a claim for payment for such Additional Services.*
- 22.7. *The Additional Services will be valued at the rates in the Pricing Data.*
23. **IDENTIFIED PROJECTS**
- 23.1. *The Service Provider shall inform the Employer of any instructions that are deemed to be Identified Projects prior to such instructions being executed.*
- 23.2. *The Employer is not obliged to engage the services of the Service Provider on Identified Projects. The Employer may, by itself, through another service provider or through the Service Provider effect the services/works under Identified Projects.*
- 23.3. *Identified Projects will only be executed by the Service Provider after receipt by him of a written instruction from the Service Manager.*
- 23.4. *If no prior written authorisation, as required in 23.3 above, has been obtained, the Employer shall not reimburse the Service Provider for the Identified Projects so executed, and the Service Provider agrees that it shall not have a claim for payment for such Identified Projects.*
- 23.5 *In respect of the Identified Projects, the written instruction referred to in 23.3 shall:*
- (a) *describe the services/works required to be executed by the Service Provider under the Identified Project;*
 - (b) *state the due commencement and completion dates of the relevant Identified Project;*
 - (c) *state the total cost of the relevant Identified Project as agreed to between the Parties;*
and
 - (d) *any additional requirements, conditions of contract and/or restrictions, other than those already stated in the Contract, that will be applicable.*
- 23.6 *Within 14 days of receipt of the written instruction referred to in 23.5, the Service Provider shall furnish the Employer with a realistic programme and a cash flow for the relevant Identified Project as required in 13.*
- 23.7 *Where an Identified Project comprises services/works that are of the same or similar character executed under the same or similar conditions as those to which the rates in the Pricing Data apply, it shall be valued at such rates.*
- 23.8 *Where an Identified Project comprises services/works that are not of the same or similar character executed under the same or similar conditions as those to which the rates in the Pricing Data apply, it shall be valued at market related rates to be agreed to in writing between the Employer and the Service Provider and in advance of executing the Identified Project. Failing agreement, the rates applicable shall be as determined by the Employer.*
- 23.9 *If the Service Provider fails to complete the Identified Project by the completion date specified in the written instruction referred to in 23.3, then the Service Provider will be liable for a penalty, at the rate stated in the Contract Data, for every day that lapses from the due completion date of the relevant Identified Project to the date of the actual completion of such Identified Project.*



- 23.10 *If the Identified Projects are delayed by variations, omissions, additions, substitutions or organised work stoppages by any workman not due to any action on the part of the Service Provider, exceptionally inclement weather, any substantial increase in provisional quantities or any other cause beyond the Service Provider's control, including delays caused by the Employer, then the Service Provider shall be entitled to apply in writing within 21 days of the cause of delay arising to the Service Manager for extension of the due completion date of the relevant Identified Project stating the cause of delay and period of extension applied for.*
- 23.11 *If during the period for completion of the Identified Project or any extension thereof abnormal rainfall or wet conditions occur, the formula below shall be used to calculate separately the delay for each calendar month or part thereof. It shall be calculated each month during the period referred to herein above, or until the issue date of the certificate of completion for the relevant Identified Project, whichever is the shorter period. The delay calculated for a given month shall be used to determine the interim extension of time granted for the month. At the end of the applicable period referred to above, the aggregate of the monthly delays will be taken into account for the final determination of the total extension of time for the Contract:*

$$V = \frac{(Nw - Nn) + (Rw - Rn)}{X}$$

V = Delays due to rain in calendar days in respect of the calendar month under consideration.

Nw = Actual number of days during the calendar month on which a rainfall of Y mm or more per day has been recorded

Rw = Actual rainfall in mm for the calendar month under consideration.

Nn = Average number of days in the relevant calendar month (as derived from existing rainfall records provided in the project specifications) on which a rainfall of Y mm or more per day has been recorded.

Rn = Average rainfall in mm for the calendar month, as derived from the rainfall records supplied in the project specifications.

X = 20, unless otherwise provided in the project specifications.

Y = 10, unless otherwise provided in the project specifications.

The total delay that will be taken into account for the determination of the total extension of time for the Contract shall be the algebraic sum of the monthly totals for the period under consideration. But if the grand total is negative, the time for completion shall not be reduced on account of abnormal rainfall. The total extension of time for any calendar month shall not exceed (Nc – Nn) calendar days, where Nc = number of days calendar days in the month under consideration

The factor (Nw – Nn) shall be considered to represent a fair allowance for variations from the average number of days during which rainfall equals or exceeds Y mm per day.

The factor (Rw – Rn) ÷ X shall be considered to represent a fair allowance for variations from the average for the number of days during which rainfall does not equal or exceed Y mm per day, but when wet conditions prevent or disrupt work.

This formula does not take into account any flood damage, which could cause further or concurrent delays and which should be treated separately in so far as extension of time is concerned.

Accurate rain gaugings shall be taken at a suitable point on the site daily at 08:00 unless otherwise agreed to by the Service Manager, and the Contractor shall, at his own expense,

take all necessary precautions to ensure that the rain gauges cannot be interfered with by unauthorized persons.

Information regarding existing rainfall records, if available from a suitable rainfall station near the site, will be supplied in the project specifications, together with calculations of rain delays for previous years in accordance with the above formula. The average of these delays will be regarded as normal rain delays which the Contractor shall accommodate in his programme, and for which no extension of time will be considered.

- 23.12 *Upon receipt of such written application, referred to in 23.10, the Employer may in writing extend the due completion date of the relevant Identified Project by a period to be determined by the Employer or may refuse to extend the due completion date of the relevant Identified Project. The due completion date of an Identified Project may not be extended beyond the end of the Contract Period stated in the Contract Data.*
- 23.13 *Any decision given by the Employer, in terms of 23.12, shall be final and binding on the Parties.*
- 23.14 *Should the Service Provider fail to apply in writing for an extension of the due completion date of the relevant Identified Projects within the 21 days referred to in 23.10, or should the Employer not grant an extension of the due completion date then the due completion date stipulated in the relevant written instruction referred to in 23.5 shall not be extended nor the Service Provider exonerated from liability to pay the penalty stipulated in 23.9 or from specific performance of the service/works within the period in the relevant written instruction.*

24. **SUSPENSION OF THE SERVICES**

- 24.1 *The Service Provider shall, on the written order of the Service Manager, suspend the provision of the Services or any part thereof for such time or times and in such manner as the Service Manager shall order and shall, during such suspension, properly protect the Services so far as is necessary.*
- 24.2 *If the Service Provider is instructed in writing by the Service Manager to suspend any or all of the Services, the Service Provider shall re-schedule the relevant Services. For the duration of such suspension all penalties applicable to that Service will be waived. Should the Service Provider suffer any additional costs resulting from such suspension, the Service Provider shall be entitled to make a claim therefor provided that the Service Provider shall prove his claim and that he has taken all reasonable steps to mitigate the additional costs.*
- 24.3 *If the Service Provider is unable to render any of the Services for any reason other than an instruction by the Employer to suspend the Services in terms of clause 24.1, the Employer shall not be liable for any claim of whatever nature, including a claim for costs, by the Service Provider.*

25. **PENALTY FOR NON-PERFORMANCE**

- 25.1 *The Service Provider shall be liable for a performance deduction, if the Service Provider in rendering any of the Services required under the Scope of Works, as amended from time to time,*
 - 25.1.1 *delays in performing any of the Services;*
 - 25.1.2 *fails to perform any of the Services;*
 - 25.1.3 *fails to perform any of the Services to the standard required in the Scope of Works, as amended from time to time.*
- 25.2 *The performance deduction shall be calculated in accordance with the formula detailed in the Scope of Works.*

25.3 *The Service Provider shall not be liable for a performance deduction, if the Service Provider is unable to perform due to no fault of his own, his employees, agents or representatives.*

26. PAYMENTS

26.1 *The Service Manager will evaluate the Service Provider's performance on a monthly basis.*

26.2 *The Service Provider shall submit a monthly certificate taking into account the following:*

26.2.1 *the assessment of the Services rendered during the assessment month, including routine services, management fees, and services using call down rates;*

26.2.2 *adjustments in terms of the pricing data;*

26.2.3 *additional work rendered by the Service Provider;*

26.2.4 *CPAP adjustment where stated in the Contract Data; and*

26.2.5 *VAT. Vat will be indicated separately in all documents.*

26.3 *If the Service Provider elects a security of 2,5% retention, or a 1,25% cash and 1,25% retention, then 5% of all moneys (excl. VAT) in the monthly certificate assessed by the Service Manager as being due to the Service Provider will be retained until such time as the amount retained equals 2.5% or 1,25%, whichever is applicable, of the Contract Sum (excl. VAT)*

26.4 *The monthly certificate shall be supported by a detailed report substantiating the Services rendered at each Facility during the month under assessment.*

26.5 *The monthly certificate shall be assessed by the Service Manager. If the Service Manager agrees with the certificate, he will issue a statement within 14 days of the receipt of the certificate, taking into account inter alia the following:*

- i. *Deductions for penalties;*
- ii. *Deductions for overpayments;*
- iii. *Deductions for retention*
- iv. *Deductions for damages.*

26.6 *The Service Provider shall, on receipt of the statement referred to in 26.5, issue to the Employer a tax invoice in the amount reflected in the statement. The Employer shall effect payment to the Service Provider within 16 days of receipt of the tax invoice.*

26.7 *If the Service Manager does not agree with the certificate issued by the Service Provider in terms of Clause 26.2, the Service Manager shall within 14 days of receipt of the certificate, issue a statement in the amount to which the Service Manager agrees and shall give reasons for rejecting the balance of the claim indicated in the statement.*

26.8 *The Service Provider shall furnish the Employer with a tax invoice in the amount indicated in the statement referred to in Clause 26.7.*

26.9 *With regards to the claim in dispute, the Service Provider may, within 14 days of the Service Manager issuing the statement referred to in 26.7, submit a revised certificate or a justification for his claim or declare a dispute in terms of 34.*

26.10 *If it is later resolved that the amount in dispute or any part thereof is owing to the Service Provider, the Employer shall be liable for interest thereon from 30 days after the issue of the relevant monthly certificate referred to in 26.2 until the date of payment at the interest rate determined from time to time, by the Minister of Finance in terms of section 80 (1)(b) of the Public Finance Management Act, 1999 (Act 1 of 1999), as amended.*

26.11 *All the work shall be evaluated in accordance with the provisions of the Pricing Data.*

26.12 *In assessing the quality of the work presented by the Service Provider, the Employer may enlist the assistance of third persons. In assessing the work the third person shall act reasonably. The selection of such third persons shall be in the absolute discretion of the Employer and the Service Provider shall abide by such selection.*

26.13 *Any and all extra costs incurred by the Service Provider, resulting from the Service Provider having to address and/or rectify queries arising from a claim submitted in respect of work done, shall be for the account of the Service Provider.*

27. RELEASE OF SECURITY

27.1 *If the Service Provider has furnished a security by way of a variable guarantee of 2.5% of the Contract Sum (excl. VAT), the security will be reduced and be released in accordance with the provisions of such variable guarantee.*

27.2 *If the Service Provider elects to furnish a security by way of a cash deposit of 2.5% of the Contract Sum (excl. VAT), then the security will be released as follows:*

27.2.1 *annually in equal portions, subject to 27.2.2 and 27.2.3;*

27.2.2 *95% of the last annual portion of retention shall be released within 30 days of the expiry of the Service Period;*

27.2.3 *the remaining retention shall be released within 30 days of the issue of the Certificate of Completion.*

27.3 *If the form of security selected is:*

- (a) *a retention of 2.5% of the Contract Sum (excl. VAT); or*
- (b) *a 1,25% cash deposit and a 1,25% retention of the Contract Sum (excl. VAT),*

then security will only be released after the 2,5% or 1,25% retention respectively has been accumulated, as follows:

27.3.1 *annually in equal portions, subject to 27.3.2 and 27.3.3;*

27.3.2 *95% of the last annual portion of retention shall be released within 30 days of the expiry of the Service Period;*

27.3.3 *the remaining retention shall be released within 30 days of the issue of the Certificate of Completion.*

28. OVERPAYMENTS

28.1 *If any overpayment of whatever nature is made to the Service Provider, the Service Provider shall be obliged to repay such amount to the Employer and the Employer shall be entitled to deduct such over payment from any amount due to the Service Provider, in respect of this Contract or any other contract, which the Employer may have with the Service Provider. The Employer shall be entitled to claim interest on any and all overpayments made to the Service Provider at the rate prescribed, from time to time, by the Minister of Finance in terms of section 80 (1)(b) of the Public Finance Management Act, 1999 (Act 1 of 1999), as amended.*

29. COMPLETION

- 28.1 *At the expiry of the Service Period the Service Manager shall furnish the Service Provider with a written list of Employer's Assets and Data handed over at commencement of the Contract and accumulated during the Contract Period.*
- 29.2 *At the expiry of the Contract Period, the Service Manager shall issue to the Service Provider a Certificate of Completion.*
- 29.3 *Upon the issue of a Certificate of Completion, unless otherwise provided in the Contract:*
- 29.3.1 *The Guarantee shall be returned, if applicable.*
- 29.3.2 *The final cash deposit or retention, whichever is applicable, shall be reduced to zero.*

30. ASSIGNMENT

- 30.1 *The rights and obligations of the Parties in terms of this Contract shall not be ceded, assigned, delegated, or otherwise transferred, by either Party to any person outside of the Service Provider and the Employer, save with the prior written consent of the other Party.*
- 30.2 *Each Party warrants that he is acting as a principal and not as an agent of an undisclosed principal.*

31. INDULGENCES

- 31.2 *No extension of time, latitude or other indulgences which may be given or allowed by either Party to the other shall constitute a waiver or alteration of this Contract, or affect such Party's rights, or prevent such Party from strictly enforcing due compliance with each and every provision of this Contract.*

32. OWNERSHIP AND PUBLICATION OF DOCUMENTS

- 32.1 *The Employer will become the owner of the information, documents, advice, recommendations and reports collected, furnished and/or compiled by the Service Provider during the course of, and for the purposes of executing this Contract, all of which will be handed over to the Employer, unless otherwise stipulated in the Contract, within ten (10) days of request therefor, but in any event on the termination and/or cancellation of this Contract for whatever reason. The Service Provider relinquishes its retention or any other rights to which it may be entitled.*
- 32.2 *The copyright of all documents, recommendations and reports compiled by the Service Provider during the course of and for the purposes of finalising Services, and the Contract as a whole, 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, notification to or payment to the Service Provider.*
- 32.3 *The copyright of all electronic aids, software programmes etc. prepared or developed in terms of this Contract shall be vested 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 Service Provider.*
- 32.4 *In case of the Service Provider providing documents or material to the Employer, the development of which has not been at the expense of the Employer, copyright shall not be vested in the Employer. The Service Provider shall be required to indicate to which documents and/or materials this provision applies.*
- 32.5 *The Service Provider hereby indemnifies the Employer against any action or claim that may be instituted against the Employer and for any damages suffered or legal costs (including costs on an attorney and client scale) incurred on the grounds of an alleged infringement of*



any copyright or any other intellectual property right in connection with the work outlined in this Contract.

- 32.6 *All information, documents, recommendations, programmes 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.*

33. *BREACH OF CONTRACT*

- 33.1 *In the event of a breach by the Service Provider of any of the terms and conditions of this Contract, the Employer shall issue a notice of non-compliance requiring compliance within 10 (ten) days. In the event that the Service Provider fails to remedy such breach on expiry of the notice period, then the Employer shall without prejudice to any other rights that it may have, be entitled to exercise any or all of the following rights:*

- 33.1.1 *Enforce strict compliance with the terms and conditions of the Contract;*
- 33.1.2 *To terminate this Contract without prejudice to any other rights it may have;*
- 33.1.3 *To suspend further payments to the Service Provider;*
- 33.1.4 *To appoint other service providers to complete the execution of the Services, in which event the Service Provider shall be held liable for costs incurred in connection with and arising from the appointment of such a service provider as well as damages suffered.*

- 33.2 *The Service Provider agrees to, within ten (10) days of written request from the Employer, give access to and to make available all information, documents, programmes, advice, recommendations and reports collected, furnished and/or compiled by them to enable the Employer to assume responsibility for and the benefit of the project as a whole.*

- 33.3 *In the event of breach by the Employer of the terms and conditions of this Contract, and in the event of the Employer remaining in breach after ten (10) days' written notice calling for rectification of the breach, the Service Provider shall be entitled to:*

- 33.3.1 *enforce strict compliance with the terms and conditions of the Contract; or*
- 33.3.2 *terminate the Contract by delivering written notice to the Employer to that effect to the extent that such breach is of a material term of this Contract.*

34. *STOPPAGE AND/OR TERMINATION OF CONTRACT*

- 34.1 *The Employer reserves the right to terminate this Contract or temporarily stop the Services, or any part thereof, at any stage of completion.*

- 34.2 *The Employer shall have the right to terminate this Contract without prejudice to any of its rights upon the occurrence of any of the following acts:*

- 34.2.1 *on breach of this Contract by the Service Provider as stipulated in Clause 33;*
- 34.2.2 *on commencement of any action for the dissolution and/or liquidation of the Service Provider, except for purposes of an amalgamation or restructuring approved in advance by the Employer in writing;*
- 34.2.3 *if the Service Provider receives a court order to be placed under judicial management or to commence liquidation proceedings that is not withdrawn or struck out within five (5) days;*



- 34.2.4 *if the Service Provider informs the Employer that it intends to cease performing its obligations in terms of this Contract;*
- 34.2.5 *if the Service Provider informs the Employer that it is incapable of completing the Services as described; or*
- 34.2.6 *if in the opinion of the Employer the Service Provider acted dishonestly;*
- 34.3 *The Employer reserves the right to, even in the absence of breach or the events referred to in 34, terminate this Contract at any time, by giving one (1) calendar month written notice to the Service Provider.*
- 34.4 *Further, the Contract shall be considered as having been terminated:*
- 34.4.1 *where the Employer stops the Contract and/or the Project and instructions to resume or reinstate the Services are not issued within twelve (12) months of the instruction; or*
- 34.4.2 *if instructions, necessary for the Service Provider to continue with the Services after a stoppage instruction, are not received from the Employer within three (3) months after such instructions were requested by the Service Provider.*
- 34.5 *Should the Contract between the Employer and the Service Provider, or any part thereof, be terminated by either of the Parties due to reasons not attributed to the Service Provider:*
- 34.5.1 *The Service Provider will be remunerated for the appropriate portion of the Services satisfactorily completed, calculated in accordance with the agreed rates.*
- 34.5.2 *Invoices for work done shall be submitted to the Employer within three (3) months after the termination of the Contract, failing which the Employer will not be obliged to pay same.*
- 34.5.3 *The Service Provider shall not be entitled to advance a right of retention or any similar right if this Contract is terminated and specifically agrees to, within ten (10) days of written request from the Employer, give access to and to make available all information, documents, programmes, advice, recommendations and reports collected, furnished and/or compiled by them to enable the Employer to assume responsibility for and the benefit of the Contract as a whole.*

35. **DISPUTE RESOLUTION**

- 35.1 *In the event of a dispute, the Parties shall endeavour to resolve such dispute through negotiation, in good faith.*
- 35.2 *If the Parties fail to resolve a dispute through negotiation as mentioned in 35.1, within 14 days of a dispute being declared, the Parties may by written agreement refer the matter to mediation.*
- 35.3 *The mediator shall be a person agreed to by the Parties, failing agreement, the President: South African Facilities Management Institute shall nominate the mediator.*
- 35.4 *Whether or not mediation resolves the dispute and irrespective of the outcome of thereof, the Parties shall bear their own costs arising from the mediation and shall equally share the costs of the mediator and related costs. The mediator and the Parties shall, before the commencement of the mediation, agree on a scale of fees on which the mediator's fees will be based.*
- 35.5 *The Parties shall appoint the mediator within 21 days of agreeing to mediate.*



- 35.6 *On appointment of the mediator, the Parties shall jointly with the mediator decide on the procedure to be followed, representation, dates and venue for the mediation.*
- 35.7 *If the dispute or any part thereof is settled, the agreement shall be recorded by the mediator and signed by both Parties. The agreement shall be binding on the Parties to the extent that it correctly records the issues agreed upon between the Parties.*
- 35.8 *If the dispute or any part thereof remains unresolved, it may be resolved by litigation proceedings.*
- 35.9 *If the mediator or any Party, at any time during the mediation process, is of the opinion that the mediation will not resolve the dispute, then he may in writing stop the mediation process. The dispute may then be dealt with in terms of 35.8.*
- 35.10 *Notwithstanding anything else herein contained to the contrary, it is agreed that irrespective of the fact that the dispute is referred to negotiation, mediation or litigation in court, the decision of the Employer on the dispute involved will immediately be given effect to by the Service Provider and the Service Provider shall proceed with the Services with all diligence unless the Parties agree otherwise in writing.*
36. **GENERAL**
- 36.1 *This is the entire Contract between the Parties and may only be amended if reduced to writing and signed by the duly authorised representatives of both Parties, whereafter such amendments will take effect.*
- 36.2 *The Contract shall be governed by, construed and interpreted according to the law of the Republic of South Africa.*
37. **DOMICILIUM CITANDI ET EXECUTANDI**
- 37.1 *The domicilium citandi et executandi of the Parties for all purposes arising from this Contract for the service of notices and legal process shall be as specified by the Parties in the Contract Data.*
- 37.2 *Each of the Parties shall be entitled at any time by way of written notice to the other Party, to change its domicilium citandi et executandi to another physical address.*
- 37.3 *Any notice in terms of the conditions of the Agreement must either be:*
- 37.3.1 *delivered by hand during normal business hours of the recipient; or*
- 37.3.2 *sent by prepaid registered post to the address chosen by the addressee.*
- 37.4 *A notice in terms of the provisions of this Agreement shall be considered to be duly received:*
- 37.4.1 *if hand-delivered on the date of delivery;*
- 37.4.2 *if sent by registered post as indicated in clause 37.3.2 above, ten (10) days after the date it was posted, unless the contrary is proved.*
- 37.5 *Notwithstanding anything to the contrary contained or implied in this Agreement, the written notice or communication actually received by one of the Parties from the other, including by way of facsimile transmission, shall be adequate written notice or communication to such Party.*



- 37.6 *Any notice, request, consent, or other communication made between the Parties pursuant to the Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or one day after being sent by facsimile to such Party at the number specified in the Contract Data or one week after being sent by registered post to the addressee specified in the Contract Data.*