

TENDER REFERENCE: EED 03-2024/25

TENDER TO APPOINT VARIOUS CONTRACTORS TO PROVIDE CONSTRUCTION WORK ON PUBLIC LIGHTING ELECTRICAL NETWORK INFRASTRUCTURE ON AS AND WHEN REQUIRED BASIS, FOR A THREE YEAR PERIOD

VOLUME 1

A Tender for Category 4EP or higher CIDB Registered Contractors

ISSUED BY:	PREPARED BY:
<u>The Divisional Head Supply Chain Management Unit</u>	<u>The Group Head Energy and Electricity Department</u>

Registered Name of Tenderer:	
Trading Name of Tenderer:	
Registration No. of Entity:	
Contact Person:	CoT Vendor No (Where Applicable):
Tel. No:	E-Mail Address:
Cell No:	Fax No:

CONTENTS

DESCRIPTION	
PORTION 1: TENDER	
PART T1	TENDERING PROCEDURES
	T1.1 Tender Notice and Invitation to Tender
	T1.2 Tender Data
PART T2	RETURNABLE DOCUMENTS
PORTION 2: CONTRACT	
PART C1	AGREEMENTS AND CONTRACT DATA
	C1.1 Form of Offer and Acceptance
	C1.2 Contract Data
PART C3	SCOPE OF WORK

Part T1: Tender Procedures

PORTION 1: TENDER

PART T1: TENDER PROCEDURES

TABLE OF CONTENTS

T1.1	TENDER NOTICE AND INVITATION TO TENDER.....	2
T1.2	TENDER DATA.....	3
T1.3	STANDARD CONDITIONS OF TENDER.....	10

Part T1: Tender Procedures

T1.1 TENDER NOTICE AND INVITATION TO TENDER

EED 03- 2024/25

**CITY OF TSHWANE
ENERGY AND ELECTRICITY DEPARTMENT**

TENDER TO APPOINT VARIOUS CONTRACTORS TO PROVIDE CONSTRUCTION WORK ON PUBLIC LIGHTING ELECTRICAL NETWORK INFRASTRUCTURE ON AS AND WHEN REQUIRED BASIS, FOR A THREE YEAR PERIOD.

Tenderers should have a Construction Industry Development Board CIDB contractor grading designation of 4EP or higher

Tenders will be evaluated on the basis of awarding points for B-BBEE Status of Contributor for the Construction Charter Scorecard and quality of the tenderer. The 90/10 Preference Point System will be applied to the all tenders

A COMPULSORY BRIEFING SESSION with a representative of the Employer will take place in the Princess park electricity depot, Cafeteria hall, 01 Nina Sita street, Pretoria on 13 September at 10H00

The closing time for receipt of bids is **10H00, 02 October 2024.**

The closing time for receipt of tenders is **10h00 on the 02 October 2024** Tenders will be received on the closing date and time shown, must be enclosed in sealed envelopes bearing the applicable tender heading and reference number, as well as the closing time and due date, and must be addressed to the Divisional Head, SUPPLY CHAIN MANAGEMENT, PRETORIA, 0001 and must be submitted in the tender box situated at **Tshwane House, 320 Madiba Street, Pretoria, 0002**. Tenders will be opened at the latter address at the time indicated

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

The lowest or any bid will not necessarily be accepted, and the Municipality reserves the right to accept a bid as a whole or in part

Bids must remain valid for a period of 90 days after the closing date.

ENQUIRIES: Representative: Japhta Makgatha
Tel (Office): 012 358 4217
E-Mail: japhtama@Tshwane.gov.za

**Johann Mettler
CITY MANAGER**

NOTICE 2 OF 2024/25

Part T1: Tender Procedures

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in **Annexure C of Standard for Uniformity in Engineering and Construction Works Contracts (Board Notice 423 Government Gazette No 42622 of 8 August 2019)**, bound into Section T1.2

The Standard Conditions of Tender makes several references to the Tender Data. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender to which it mainly applies.

CLAUSE NUMBER	TENDER DATA
C.1.1 Actions	The Employer is City of Tshwane Metropolitan Municipality
C.1.2 Tender Documents	<u>Volume 1: Tender Document</u> THE TENDER Part T1: Tendering Procedures T1.1 – Tender Notice and Invitation to Tender T1.2 – Tender data T1.2 – Standard Conditions of Tender Part T2: Returnable documents T2.1 – List of returnable documents T2.2 – Returnable schedules THE CONTRACT Part C1: Agreements and contract data C1.1 – Form of offer and acceptance C1.2 – Contract data Part C3: Scope of work C3 – Scope of work ANNEXURES
C.1.3 Interpretation	Add the following new clause:
C.1.3.4	<i>The tender documents have been drafted in English. The contract arising from the invitation to tender shall be interpreted and construed in English</i>
C.1.4 Communication and Employer's Agent	Agent: Japhta Makgatha Tel (Office): 012 358 4217 E-Mail: japhtama@tshwane.gov.za SCM Official: Mulondi Rasekgala Tel No: 012 358 6636 Email Address: mulondin@tshwane.gov.za

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA																
C.2.1 Eligibility	It is a mandatory requirement that tenderers must submit the following: Only those tenderers who are registered with the CIDB or are capable of being so prior to the evaluation of submissions, in a contract grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4EP <u>or higher class of construction work</u>, are eligible to submit tenders. Joint Ventures are eligible to submit tenders provided that: - every member of a joint venture is registered with the CIDB within 10 days of the closing date of tenderers; - the lead partner has a contractor grading designation in the 3EP <u>or higher class of construction work</u>; and The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor designation in accordance with the sum tendered for a 4EP <u>or higher class of construction work</u> or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations. <u>CIDB JOINT VENTURE GRADING TABLE</u> <table border="1"> <thead> <tr> <th>Designation</th><th>Deemed to satisfy joint venture arrangements</th></tr> </thead> <tbody> <tr> <td>3</td><td>Three contractors registered in contractor grading designation 2</td></tr> <tr> <td>4</td><td>Three contractors registered in contractor grading designation 3</td></tr> <tr> <td>5</td><td>Two contractors registered in contractor grading designation 4 One contractor registered in contractor grading designation 4 and two registered in contractor grading designation 3</td></tr> <tr> <td>6</td><td>Two contractors registered in contractor grading designation 5 One contractor registered in contractor grading designation 5 and two registered in contractor grading designation 4</td></tr> <tr> <td>7</td><td>Two contractors registered in contractor grading designation 6 One contractor registered in contractor grading designation 6 and two registered in contractor grading designation 5</td></tr> <tr> <td>8</td><td>Three contractors registered in contractor grading designation 7</td></tr> <tr> <td>9</td><td>Three contractors registered in contractor grading designation 8</td></tr> </tbody> </table>	Designation	Deemed to satisfy joint venture arrangements	3	Three contractors registered in contractor grading designation 2	4	Three contractors registered in contractor grading designation 3	5	Two contractors registered in contractor grading designation 4 One contractor registered in contractor grading designation 4 and two registered in contractor grading designation 3	6	Two contractors registered in contractor grading designation 5 One contractor registered in contractor grading designation 5 and two registered in contractor grading designation 4	7	Two contractors registered in contractor grading designation 6 One contractor registered in contractor grading designation 6 and two registered in contractor grading designation 5	8	Three contractors registered in contractor grading designation 7	9	Three contractors registered in contractor grading designation 8
Designation	Deemed to satisfy joint venture arrangements																
3	Three contractors registered in contractor grading designation 2																
4	Three contractors registered in contractor grading designation 3																
5	Two contractors registered in contractor grading designation 4 One contractor registered in contractor grading designation 4 and two registered in contractor grading designation 3																
6	Two contractors registered in contractor grading designation 5 One contractor registered in contractor grading designation 5 and two registered in contractor grading designation 4																
7	Two contractors registered in contractor grading designation 6 One contractor registered in contractor grading designation 6 and two registered in contractor grading designation 5																
8	Three contractors registered in contractor grading designation 7																
9	Three contractors registered in contractor grading designation 8																
C.2.2 Cost of Tendering	The employer <u>will not</u> compensate the tenderer for any costs incurred in attending interviews or making any submissions in the office of the employer.																
C.2.7 Clarification meeting	The arrangements for a <u>compulsory</u> clarification meeting are as stated in the tender notice and invitation to tender. Confirmation of attendance will be recorded on site in the attendance register to be signed by all tenderers. Addenda will be issued to and tenders received from those tendering entities appearing on the attendance register.																

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA
	Tender documents will not be made available at the clarification meeting
C.2.8 Seek clarification	Replace the clause with the following: <i>Request clarification of the tender documents, if necessary, by notifying the employer at least 7 (seven) working days before the closing time stated in the tender data.</i> The document is downloadable on the National Treasury website (www.etenders.gov.za) and City of Tshwane website (www.tshwane.gov.za)
C.2.9 Insurance	Add the following to the clause Be aware that the extent of insurance to be provided by the Employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.
C.2.12 Alternative offers	No alternative tender offers will be considered.
C.2.13 Submitting a tender offer	- The tender offer shall be completed in non-erasable black ink - Any entry made by the tenderer in the document which the tenderer desires to change, shall not be erased or painted out. A line shall be drawn through the incorrect entry and the correct entry shall be written above in non-erasable black ink and the full signature of the tenderer shall be placed next to the correction.
C.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original tender Document and a scanned copy in USB Each tenderer is required to submit the <u>fully completed and signed</u> tender submission document, attached to the original tender submission documents, adequately identifiable as belonging to the tenderer. Each tenderer is required to submit the <u>fully completed and signed</u> tender submission document, attached to the original tender submission documents, adequately identifiable as belonging to the tenderer.
C.2.13.4	Add the following to the clause <i>Only authorised signatories may sign the original and all copies of the tender offer where required.</i> <i>In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated.</i> <i>In the case of a COMPANY submitting a tender, include a copy of a resolution by its board of directors authorising a director or other official of the company to sign the documents on behalf of the company.</i> <i>In the case of a CLOSE CORPORATION submitting a tender, include a copy of a resolution by its members authorising a member or other official of the corporation to sign the documents on each member's behalf.</i> <i>In the case of a PARTNERSHIP submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such authorisation shall be included in the Tender.</i> <i>In the case of a JOINT VENTURE/CONSORTIUM submitting a tender, include a resolution of each company of the joint venture together with a resolution by its members</i>

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA
	<i>authorising a member of the joint venture to sign the documents on behalf of the joint venture.</i> <u>Accept that failure to submit proof of authorisation to sign the tender shall result in the tender offer being regarded as non-responsive.</u>
C.2.13.5	The identification details are: Tender Reference: EED 03- 2024/25 Tender Description: TENDER TO APPOINT VARIOUS CONTRACTORS TO PROVIDE CONSTRUCTION WORK ON PUBLIC LIGHTING ELECTRICAL NETWORK INFRASTRUCTURE ON AS AND WHEN REQUIRED BASIS, FOR A THREE YEAR PERIOD Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be submitted (HAND DELIVERED) at: Supply Chain Management Tshwane House 320 Madiba Street Pretoria CBD 0002 Please note that the tender box is open 24 hours Please ensure that all required compliance documents are included upon submission as no additional documents will be requested from bidders after closing.
C.2.13.9	Telephonic, telegraphic, telex, facsimile or e-mailed offers will <u>not</u> be accepted.
C.2.13.10	Add the following sub- clause C.2.13.10: <i>Accept that all conditions, which are printed or written upon any stationery used by the Tenderer for the purpose of or in connection with the submission of a tender offer for this Contract, which are in conflict with the conditions laid down in this document shall be waived, renounced and abandoned.</i>
C.2.14 Information and data to be completed in all respects	Add the following to the clause: <i>The Tenderer is required to enter information in the following sections of the document:</i> Section T2 : Returnable Schedules Section C1 : Form of Offer and Acceptance Section C1 : Contract Data Section C3 : Price Schedule <i>The above sections shall be signed by the Tenderer (and witnesses where required). Individual pages should only be initialled by the successful Tenderer and by the witnesses after acceptance by the Employer of the Tender Offer.</i> <i>The Tenderer shall complete and sign the Form of Offer prior to the submission of a Tender Offer.</i>

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA
	<i>The Schedule of Deviations (if applicable) shall be signed by the successful Tenderer after acceptance by the Employer of the Tender Offer.</i> <i>Accept that failure on the part of the Tenderer to submit any one of the Returnable Documents listed in Part T2 – Returnable Documents within the period stipulated, shall be just cause for the Employer to consider the tender offer as being regarded as non-responsive.</i> <i>Accept that the Employer shall in the evaluation of tender offers take due account of the Tenderer's past performance in the execution of similar engineering works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and the Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, and furnish details in Part T2 – Returnable Documents.</i>
C.2.15 Closing time	The closing time for submission of tender offers is stated in the tender notice and invitation to tender.
C.2.16 Tender offer validity	The tender offer validity period is 90 days .
C.2.16.5	Add the following new clause <i>If the tender validity period expires on a Saturday, Sunday or public holiday, the tender offer shall remain valid and open for acceptance until closure of business on the following working day.</i>
C.2.16.6	Add the following new clause: <i>Accept that should the Tenderer unilaterally withdraw his tender during the tender validity period, the Employer shall, without prejudice to any other rights he may have, be entitled to accept any less favourable tender for the Works from those received, or to call for fresh tenders, or to otherwise arrange for execution of the Works, and the Tenderer shall pay on demand any additional expense incurred by the Employer on account of the adoption of the said courses, as well as either the difference in cost between the tender withdrawn (as corrected in terms of clause 3.9 of the Conditions of Tender) and any less favourable tender accepted by the Employer, or the difference between the tender withdrawn (as corrected) and the cost of execution of the Works by the Employer as well as any other amounts the Employer may have to pay to have the Works completed</i>
C.2.18 Provide other material	The tenderer shall, when requested by the employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.
C.2.19 Inspections, tests and analysis	Add the following at the end of the clause: <i>....or upon written request.</i>
C.2.20 Submit securities, bonds, policies, etc.	The tenderer is required to submit with his tender proof of his Professional Indemnity Insurance.
C.2.23 Certificates	Refer to Part T2 of this procurement document for a list of the documents that are to be returned with the tender.
C.2.24 Canvassing and obtaining of	<i>The Tenderer shall not make any attempt either directly or indirectly to canvass any of the Employer's officials or the Project Coordinator or Deputy Directors (Regional Project</i>

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA
<i>additional information by tenderers</i>	<i>Managers)/ Employer's Agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.</i> <i>The Tenderer shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders</i>
C.2.25 <i>Prohibitions on awards to persons in service of the state</i>	Add the following new clause <i>The Employer is prohibited to award a tender to a person -</i> <i>who is in the service of the state; or</i> <i>if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or</i> <i>a person who is an advisor or consultant contracted with the municipality or municipal entity.</i> In the service of the state means to be - <i>a member of:-</i> <i>any municipal council;</i> <i>any provincial legislature; or</i> <i>the National Assembly or the National Council of Provinces;</i> <i>a member of the board of directors of any municipal entity;</i> <i>an official of any municipality or municipal entity;</i> <i>an employee of any national or provincial department;</i> <i>provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);</i> <i>a member of the accounting authority of any national or provincial public entity; or</i> <i>an employee of Parliament or a provincial legislature.</i> In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed
C.2.26 <i>Awards to close family members of persons in the service of the state</i>	Add the following new clause <i>Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent of a person in the service of the state (defined in clause F2.25), or has been in the service of the state in the previous twelve months, including -</i> <i>the name of that person;</i> <i>the capacity in which that person is in the service of the state; and</i> <i>the amount of the award.</i> In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.
C.2.27 <i>Vendor registration</i>	Add the following new clause <i>The contractor will be required to register as a supplier/ service provider on the City of Tshwane's vendor register before any payment can be done.</i> <i>If the tenderer is already registered as a vendor, it is required to record the vendor number in space provided on the cover page of this Tender document.</i> <i>Vendor registration documents are available from the Procurement Advice Centre or can be downloaded from:</i>

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA
	https://www.tshwane.gov.za/sites/business/RegistrationofSuppliers/pages/registration-of-suppliers.aspx <i>All parties of a joint venture or consortium submitting a tender shall comply with the requirements of this clause.</i>
C.2.28 Tax	Add the following new clause National Treasury SCM Instruction no. 7 of 2017/18 clause 4 application during SCM Processes state that: <i>The designated official(s) must verify the tenderer's tax compliance status prior to the finalisation of the award of the tender or price quotation.</i> <i>Where the recommended tenderer is not tax compliant, the tenderer should be notified of their non-compliant status and the tenderer must be requested to submit to the municipality or municipal entity, within 7 working days, written proof from South African Revenue Services of their tax compliance status or proof from SARS that they have made an arrangement to meet their outstanding tax obligations. The proof of tax compliance status submitted by the tenderer to the municipality or municipal entity must be verified via the Central Supplier Database or eFiling</i> <i>Accept that the tenderer will be rejected if such tenderer fails to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no. 7 of 2017/18</i>
C.3.1 Respond to requests from the tenderer	
C.3.1.1	The employer will respond to requests for clarification up to 7 (seven) working days before the tender closing time.
C.3.4 Opening of tender submissions	Upon request tenders will be opened immediately after the closing time for tenders. Bidders are also requested to refer to the City's website where the closing register will be published
C.3.11 Evaluation of tender offers	The tender will be evaluated in 4 stages namely: Stage 1: Administrative compliance Stage 2: Mandatory requirements Stage 3: Functionality Criteria Stage 4: Preference Points System
C.3.11.1 General	Method 2 will be used to evaluate all responsive tender offers in terms of Clause C.3.11.2 of the Standard Conditions of Tender Add the following new clause: 1. STAGES OF EVALUATION This bid will be evaluated in four evaluation stages namely: • Stage 1: Administrative compliance • Stage 2: Mandatory requirements

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA															
	• Stage 3: Functionality Criteria • Stage 4: Preference Points System 1.1 Stage 1: ADMINISTRATIVE COMPLIANCE Bidders shall be evaluated for administrative compliance as requested by the City of Tshwane’s Supply Chain Management requirements. <table><tr><th>Compulsory Returnable Documentation (Submission of these are compulsory)</th><th>Submitted (YES or NO)</th><th>Checklist (Guide for Bidder and the Bid Evaluation Committee)</th></tr><tr><td>a) To enable The City to verify the bidder’s tax compliance status, the bidder must provide; • A copy of their Tax Clearance Certificate (TCS); - or • Indicate their tax compliance status PIN. </td><td></td><td>TCS must be in the same business name as the bidding company. TCS must be valid. Tax status must be compliant before the award.</td></tr><tr><td>b) A copy of their Central Supplier Database (CSD) registration; or indicate their Master Registration Number / CSD Number;</td><td></td><td>CSD must be valid. Tax status must be compliant before the award.</td></tr><tr><td>c) Confirmation that the bidding company’s rates and taxes are up to date: Original or copy of Municipal Account Statement of the Bidder (bidding company) not older than 3 months and account must not be in arrears for more than ninety (90) days; or ,signed lease agreement or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are operating in that area</td><td></td><td>Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder’s statement correspond with CIPC document, Address on CSD or Company profile? Are all payment(s) up to date (i.e. not in arrears for more than 90 days?</td></tr><tr><td>d) In addition to the above, confirmation that all the bidding company’s owners / members / directors / major shareholders rates and taxes are up to date: • Original or copy of Municipal Account Statement of all the South African based owners / members / directors / major shareholders not older than 3 months and the account/s may not be in arrears for more than ninety (90) days; or a signed lease agreement of owners / members / directors / major shareholders</td><td></td><td>Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder’s statement correspond with CIPC document, Address on CSD or</td></tr></table>	Compulsory Returnable Documentation (Submission of these are compulsory)	Submitted (YES or NO)	Checklist (Guide for Bidder and the Bid Evaluation Committee)	a) To enable The City to verify the bidder’s tax compliance status, the bidder must provide; • A copy of their Tax Clearance Certificate (TCS); - or • Indicate their tax compliance status PIN.		TCS must be in the same business name as the bidding company. TCS must be valid. Tax status must be compliant before the award.	b) A copy of their Central Supplier Database (CSD) registration; or indicate their Master Registration Number / CSD Number;		CSD must be valid. Tax status must be compliant before the award.	c) Confirmation that the bidding company’s rates and taxes are up to date: Original or copy of Municipal Account Statement of the Bidder (bidding company) not older than 3 months and account must not be in arrears for more than ninety (90) days; or ,signed lease agreement or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are operating in that area		Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder’s statement correspond with CIPC document, Address on CSD or Company profile? Are all payment(s) up to date (i.e. not in arrears for more than 90 days?	d) In addition to the above, confirmation that all the bidding company’s owners / members / directors / major shareholders rates and taxes are up to date: • Original or copy of Municipal Account Statement of all the South African based owners / members / directors / major shareholders not older than 3 months and the account/s may not be in arrears for more than ninety (90) days; or a signed lease agreement of owners / members / directors / major shareholders		Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder’s statement correspond with CIPC document, Address on CSD or
Compulsory Returnable Documentation (Submission of these are compulsory)	Submitted (YES or NO)	Checklist (Guide for Bidder and the Bid Evaluation Committee)														
a) To enable The City to verify the bidder’s tax compliance status, the bidder must provide; • A copy of their Tax Clearance Certificate (TCS); - or • Indicate their tax compliance status PIN.		TCS must be in the same business name as the bidding company. TCS must be valid. Tax status must be compliant before the award.														
b) A copy of their Central Supplier Database (CSD) registration; or indicate their Master Registration Number / CSD Number;		CSD must be valid. Tax status must be compliant before the award.														
c) Confirmation that the bidding company’s rates and taxes are up to date: Original or copy of Municipal Account Statement of the Bidder (bidding company) not older than 3 months and account must not be in arrears for more than ninety (90) days; or ,signed lease agreement or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are operating in that area		Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder’s statement correspond with CIPC document, Address on CSD or Company profile? Are all payment(s) up to date (i.e. not in arrears for more than 90 days?														
d) In addition to the above, confirmation that all the bidding company’s owners / members / directors / major shareholders rates and taxes are up to date: • Original or copy of Municipal Account Statement of all the South African based owners / members / directors / major shareholders not older than 3 months and the account/s may not be in arrears for more than ninety (90) days; or a signed lease agreement of owners / members / directors / major shareholders		Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder’s statement correspond with CIPC document, Address on CSD or														

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA		
	or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are residing in that area		Company profile? Are all payment(s) up to date (i.e. not in arrears for more than 90 days?
	e) Duly Signed and completed MBD forms (MBD 1, 4, 5, 8 and 9) The person signing the bid documentation must be authorized to sign on behalf of the bidder. Where the signatory is not a Director / Member / Owner / Shareholder of the company, an official letter of authorization or delegation of authority should be submitted with the bid document. NB: Bidders must ensure that the directors, trustees, managers, principal shareholders, or stakeholders of this company, declare any interest in any other related companies or business, whether or not they are bidding for this contract. See Question 3.14 of MBD 4. Failure to declare interest will result in a disqualification		All documents fully completed (i.e. no blank spaces)? All documents fully signed? Signature authorized (any director / member / trustee as indicated on the CIPC document, alternatively a delegation of authority would be required? Documents completed in black ink (i.e. no "Tippex" corrections, no pencil, no other color ink, or non-submission of the above, will be considered)?
	f) Financial Statements for the most recent three (3) years or financial statements from date of existence for companies less than three years old. NB: The bidder must submit signed audited annual financial statements for the most recent three years, or if established for a shorter period, submit audited annual financial statements from date of establishment. If the bidder is not required by law to prepare signed annual financial statements for auditing purposes, then the bidder must submit proof that the bidder is not required by law to prepare audited financial statements.		Applicable for tenders above R10m in conjunction with MBD 5) Are Audited financial statements provided (Audited financials must be signed by auditor)? Or proof that the bidder is not required by law to prepare audited financial statements.
	g) Joint Ventures (JV) – (Only applicable when the bidder tenders as a joint venture) Where the bidder bids as a joint venture (JV), the required or relevant documents as per (a) to (f) above must be provided for all JV parties. In addition to the above the		If applicable. JV agreement provided? JV agreement complete and relevant?

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA		
	bidder must submit a Joint Venture (JV) agreement signed by the relevant parties. NB: It is a condition of this bid that the successful bidder will continue with the same Joint Venture (JV) for the duration of the contract unless prior approval is obtained from the City.		Agreement signed by all parties? All required documents as per (i.e. a to f) must be provided for all partners of the JV.
	n) Bidder attended a compulsory briefing session where applicable		A compulsory briefing register must be signed by the bidder. Bidders will be disqualified should they fail to attend compulsory briefing session
	) Pricing schedule (All items must be quoted for in pricing schedule and if not, all items are quoted the bidder will be disqualified). Unless the tender is awarded per item or per section where the bidder only quoted the items or sections, they are interested in.		Incomplete pricing schedule results in totals being incomparable. Bidder must be disqualified. Bidder will be disqualified should they make corrections on the price schedule without attaching a signature thereto. Bidder will be disqualified should they use tippex/ correction ink, on the price schedule.
	1.2 Stage 2: MANDATORY REQUIREMENTS i. Bidders must submit Compensation for Occupational Injuries and Diseases Act (COIDA) letter of good standing. Failure to submit COIDA letter of good standing shall disqualify the Bidder from further evaluation. ii. Bidders must submit proof of valid CIDB grading (4EP or higher). ▪ The tenderer must have already obtained the minimum CIDB grade at the time of submitting the bid document. ▪ The tenderers CIDB registration must be valid at the time of submitting the bid document and also during the evaluation of the tender. ▪ Proof of CIDB registration and grading must be submitted as part of mandatory requirements.		

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA																					
	Failure to submit proof of valid CIDB registration, minimum 4EP or higher grading shall disqualify the Bidder from further evaluation. iii. Bidders must complete returnable form RD.D.2 (Schedule of plant, equipment, machinery and personnel) in full and sign. Proof of ownership/lease agreement and proof of vehicle registration for vehicles listed in RD.D.2. The bidders must meet the required quantities in schedule A (CoT minimum requirements) of RD.D.2 .Failure to meet the minimum requirements of RD.D.2 shall disqualify the Bidder from further evaluation. Failure to complete RD.D.2 in full and sign shall disqualify the Bidder from further evaluation. iv. Project Manager (National Diploma or higher: Electrical Engineering (with minimum 3 years). Submit certified copies of qualification and CV. v. Test Technician (National N Diploma or higher: Electrical Engineering or Qualified Artisan with minimum 3 years experience) (NQF Level 6). Submit certified copies of qualification and CV vi. Installation and construction specialist (National N Diploma: Electrical with red seal certificate or higher qualifications with red seal certificate or Qualified artisan with minimum 3 years experience) with red seal certificate. Submit certified copies of qualification and CV vii. Construction Health and Safety Officer (registered with South African Council for Projects and Construction Management Profession (SACPCMP). Submit certified copies of qualification, registration and CV viii. Environmental Officer (National Diploma /higher in Environmental management). Submit certified copies of qualification and CV Failure to comply with the mandatory requirements shall disqualify the tenderer from further evaluation. 1.3 Stage 3: FUNCTIONALITY CRITERIA <table><tr><th></th><th>CRITERIA</th><th>SUB-CRITERIA</th><th>SCALE</th><th>WEIG HT</th><th>HIGHEST POSSIBLE SCORE</th></tr><tr><td>1</td><td rowspan="4">Relevant Experience of Company: i.e. Construction of Public lighting electrical network infrastructure. (Years of relevant experience). Copies of testimonials or reference letters or completion certificates from the contactable clients to be</td><td>1 to 2 Years</td><td>1</td><td rowspan="3">10</td><td rowspan="3">Max50</td></tr><tr><td>Above 2years – 5 Years</td><td>3</td></tr><tr><td>Above 5 years</td><td>5</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>		CRITERIA	SUB-CRITERIA	SCALE	WEIG HT	HIGHEST POSSIBLE SCORE	1	Relevant Experience of Company: i.e. Construction of Public lighting electrical network infrastructure. (Years of relevant experience). Copies of testimonials or reference letters or completion certificates from the contactable clients to be	1 to 2 Years	1	10	Max50	Above 2years – 5 Years	3	Above 5 years	5					
	CRITERIA	SUB-CRITERIA	SCALE	WEIG HT	HIGHEST POSSIBLE SCORE																	
1	Relevant Experience of Company: i.e. Construction of Public lighting electrical network infrastructure. (Years of relevant experience). Copies of testimonials or reference letters or completion certificates from the contactable clients to be	1 to 2 Years	1	10	Max50																	
Above 2years – 5 Years		3																				
Above 5 years		5																				

CLAUSE NUMBER

attached. Failure to submit will result in zero score allocated.

2

Experience of key staff:

General	Experience	and qualifications
Key Staff's experience that is relevant to the scope of work (i.e. technical support, installation and commissioning)		
Key Staff as Indicated Below:		

Max 50

1. Project Manager (National Diploma or higher: Electrical Engineering (Minimum 3 years

3 to 5 yrs
Above 5yr

- 1
- 2

5

10

2. Test Technician (National Diploma or higher: Electrical Engineering or Qualified artisan with minimum 3 years + practical experience)

3 to 4 yrs
Above yrs to 5 yr
Above 5yr

- 1
- 2
- 3

5

15

3. Installation and construction specialist (National Diploma: Electrical with red seal certificate or higher qualifications with red seal certificate or Qualified artisan with minimum 3 years + practical experience) with red seal certificate.

3 to 4 yrs
Above yrs to 5 yr
Above 5yr

- 1
- 2
- 3

5

15

4. Occupational Health and Safety)

1 to 3yrs
Above 3yr

- 1
- 2

2

5

5. Environmental Officer (National Diploma /higher in Environmental management)

1 to 3yrs
Above 3yr

- 1
- 2

2

5

HIGHEST POSSIBLE SCORE

100

- Part T1: Page 14 of 31

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA												
	• Please note should any of the nominated staff be replaced, the successfully appointed service provider will be required to ensure that such replacements must have equivalent criteria as above and this need to be approved by the City of Tshwane. 1.4 Stage 4: PREFERENCE POINT SYSTEM The preferential point system used will be the 90/10 points system in terms of the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) Regulations 2022. • 90 points for price • 10 points for Specific goals SPECIFIC GOALS 1) Bidders are required to submit supporting documents for their bids to claim the specific goal points. 2) Non-compliance with specific goals will not lead to disqualification but bidders will not be allocated specific goal points. Bidders will score points out of 90 for price only and zero (0) points out of 10 for specific goals. 3) Cot shall act against any bidder or person when it detects that the specific goals were claimed or obtained on a fraudulent basis. The specific goal for this bid is outlined below. <table><tr><th>Specific goals</th><th>90/10 preference point system</th><th>Proof of specific goals to be submitted</th></tr><tr><td>BB-BEE score of companies • Level 1 • Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Non-compliant </td><td> • 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Point • 0.5 Points 0 Points</td><td>Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate.</td></tr><tr><td>EME and/ or QSE</td><td>1 Point</td><td>Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate</td></tr><tr><td>At least 51% of Women-owned companies</td><td>1 Point</td><td>Certified copy of Identity Document/s</td></tr></table>	Specific goals	90/10 preference point system	Proof of specific goals to be submitted	BB-BEE score of companies • Level 1 • Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Non-compliant	• 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Point • 0.5 Points 0 Points	Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate.	EME and/ or QSE	1 Point	Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate	At least 51% of Women-owned companies	1 Point	Certified copy of Identity Document/s
Specific goals	90/10 preference point system	Proof of specific goals to be submitted											
BB-BEE score of companies • Level 1 • Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Non-compliant	• 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Point • 0.5 Points 0 Points	Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate.											
EME and/ or QSE	1 Point	Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate											
At least 51% of Women-owned companies	1 Point	Certified copy of Identity Document/s											

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA		
			and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)
	At least 51% owned companies by People with disability	1 Point	Medical Certificate with doctor's details (Practice Number, Physical Address, and contact numbers) and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)
	At least 51% owned companies by Youth	1 Point	Certified copy of Identity Document/s and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)
	Local Economic Participation - City of Tshwane - Gauteng - National	2 Points 1 Point 1 Point	Municipal Account statement/Lease agreement.
For points to be allocated as per above the tenderers will be required to submit proof of documentation as evidence for claims made. Any tenderer that does not submit evidence as stated in the bid document to claim applicable points will be allocated zero points. Note The City of Tshwane reserve the right to accept proposed offered prices or to average proposed offered prices of the acceptable bidders who are successful on all four stages in accordance to the budget availability and benchmarking with other municipalities.			

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA
	The City of Tshwane reserve the right to make a counteroffer process and the City of Tshwane prices shall be final.
C.3.13 Acceptance of Tender Offer	Tender offers will only be accepted if: - a.) the tenderer has complied in full with the all eligibility criteria; - b.) the tenderer is able to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no. 7 of 2017/18; - c.) the tenderer is not in arrears for more than 3 months with municipal rates and taxes and municipal service charges; - d.) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; - e.) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect. - f.) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract; - g.) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer.
C.3.17 Copies of Contract	One signed copy of contract shall be provided by the Employer to the successful Tenderer.

Part T1: Tender Procedures

T1.3 STANDARD CONDITIONS OF TENDER

TABLE OF CONTENTS

C.1	General	20
C.1.1	Actions.....	20
C.1.2	Tender Documents	20
C.1.3	Interpretation	20
C.1.4	Communication and Employer's agent	21
C.1.5	Cancellation and re-invitation of tenders.....	21
C.1.6	Procurement procedures	21
C.1.6.1	General	21
C.1.6.2	Competitive negotiation procedure	21
C.1.6.3	Proposal procedure using the two stage-system	22
C.2	Tenderer's obligations.....	22
C.2.1	Eligibility	22
C.2.2	Cost of tendering.....	22
C.2.3	Check documents.....	22
C.2.4	Confidentiality and copyright of documents	23
C.2.5	Reference documents	23
C.2.6	Acknowledge addenda	23
C.2.7	Clarification meeting.....	23
C.2.8	Seek clarification	23
C.2.9	Insurance	23
C.2.10	Pricing the tender offer	23
C.2.11	Alterations to documents	23
C.2.12	Alternative tender offers	23
C.2.13	Submitting a tender offer	24
C.2.14	Information and data to be completed in all respects	24
C.2.15	Closing time.....	24
C.2.16	Tender offer validity.....	25
C.2.17	Clarification of tender offer after submission	25
C.2.18	Provide other material	25
C.2.19	Inspections, test and analysis	25
C.2.20	Submit securities, bonds, policies, etc.	25
C.2.21	Check final draft	26
C.2.22	Return of other tender documents.....	26
C.2.23	Certificates	26
C.3	The employer's undertakings.....	26
C.3.1	Respond to requests from the tenderer.....	26
C.3.2	Issue addenda.....	26
C.3.3	Return late tender offers	26
C.3.4	Opening of tender submissions	27
C.3.5	Two-envelope system	27
C.3.6	Non-disclosure	27
C.3.7	Grounds for rejection and disqualification	27
C.3.8	Test for responsiveness	27
C.3.9	Arithmetical errors, omissions and discrepancies	28
C.3.10	Clarification of a tender offer.....	28
C.3.11	Evaluation of tender offers.....	28
C.3.11.1	General	29
C.3.12	Insurance provided by the employer	29
C.3.13	Acceptance of tender offer	30
C.3.14	Prepare contract documents.....	30
C.3.15	Complete adjudicator's contract	30
C.3.16	Notice to unsuccessful tenderers.....	30

Part T1: Tender Procedures

C.3.17	Provide copies of the contracts	31
C.3.18	Provide written reasons for actions taken	31

Part T1: Tender Procedures

C.1 General

C.1.1 Actions

C.1.1.1 The Employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in C.2 and C.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

C.1.1.2 The Employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the Employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note:

- 1) *A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.*
- 2) *Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.*

C.1.1.3 The Employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

C.1.2 Tender Documents

The documents issued by the Employer for the purpose of a tender offer are listed in the tender data.

C.1.3 Interpretation

C.1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

C.1.3.2 These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

C.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

a) **conflict of interest** means any situation which:

- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
- ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
- iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.

b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;

c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the Employer or his staff or agents in the tender process;

Part T1: Tender Procedures

- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the Employer, including collusive practices intended to establish prices at artificial levels;

C.1.4 Communication and Employer's agent

Each communication between the Employer and a tenderer shall be to or from the Employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The Employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the Employer's agent are stated in the tender data.

C.1.5 Cancellation and re-invitation of tenders

C.1.5.1 An organ of state may, prior to the award of the tender, cancel the tender if-

- (a) due to changed circumstances, there is no longer a need for the services, works or goods requested; or
- (b) funds are no longer available to cover the total envisaged expenditure;
- (c) no acceptable tenders are received; or
- (d) there is a material irregularity in the tender process.

C.1.5.2 The decision to cancel the tender must be published in the same manner in which the original tender invitation was advertised.

C.1.5.3 An Employer may only with the prior approval of the relevant treasury cancel a tender invitation for a second time.

C.1.6 Procurement procedures

C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

C.1.6.2 Competitive negotiation procedure

C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the Employer shall announce only the names of the tenderers who make a submission. The requirements of C.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

C.1.6.2.2 All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of C.2.17, the Employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers

Part T1: Tender Procedures

- or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.
- C.1.6.2.3** At the conclusion of each round of negotiations, tenderers shall be invited by the Employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.
- C.1.6.2.4** The contract shall be awarded in accordance with the provisions of C.3.11 and C.3.13 after tenderers have been requested to submit their best and final offer.
- C.1.6.3 Proposal procedure using the two stage-system**
- C.1.6.3.1 Option 1**
- Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The Employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.
- C.1.6.3.2 Option 2**
- C.1.6.3.2.1** Tenderers shall submit in the first stage only technical proposals. The Employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.
- C.1.6.3.2.2** The Employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.
- C.2 Tenderer's obligations**
- C.2.1 Eligibility**
- C.2.1.1** Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with Employer.
- C.2.1.2** Notify the Employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the Employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the Employer's written approval to do so prior to the closing time for tenders.
- C.2.1.3** Only those tenderers who can submit all mandatory requirements under Form RD.D.1 are eligible to submit a tender.
- C.2.2 Cost of tendering**
- C.2.2.1** Accept that, unless otherwise stated in the tender data, the Employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.
- C.2.2.2** The cost of the tender documents charged by the Employer shall be limited to the actual cost incurred by the Employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.
- C.2.3 Check documents**
- Check the tender documents on receipt for completeness and notify the Employer of any discrepancy or omission.

Part T1: Tender Procedures

C.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the Employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

C.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

C.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the Employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

C.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the Employer at least five (5) working days before the closing time stated in the tender data.

C.2.9 Insurance

Be aware that the extent of insurance to be provided by the Employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

C.2.10 Pricing the tender offer

C.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.

C.2.10.2 Show VAT payable by the Employer separately as an addition to the tendered total of the prices.

C.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

C.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

C.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the Employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

C.2.12 Alternative tender offers

Part T1: Tender Procedures

- C.2.12.1** Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.
- C.2.12.2** Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the Employer.
- C.2.12.3** An alternative tender offer may only be considered in the event that the main tender is the winning tender.
- C.2.13 Submitting a tender offer**
- C.2.13.1** Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
- C.2.13.2** Return all returnable documents to the Employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.
- C.2.13.3** Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the Employer.
- C.2.13.4** Sign the original and all copies of the tender offer where required in terms of the tender data. The Employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the Employer shall hold liable for the purpose of the tender offer.
- C.2.13.5** Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the Employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.6** Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the Employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.7** Seal the original tender offer and copy packages together in an outer package that states on the outside only the Employer's address and identification details as stated in the tender data.
- C.2.13.8** Accept that the Employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- C.2.13.9** Accept that tender offers submitted by facsimile or e-mail will be rejected by the Employer, unless stated otherwise in the tender data.
- C.2.14 Information and data to be completed in all respects**
- Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the Employer as non-responsive.
- C.2.15 Closing time**

Part T1: Tender Procedures

C.2.15.1 Ensure that the Employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

C.2.15.2 Accept that, if the Employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

C.2.16 Tender offer validity

C.2.16.1 Hold the tender offer(s) valid for acceptance by the Employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

C.2.16.2 If requested by the Employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

C.2.16.3 Accept that a tender submission that has been submitted to the Employer may only be withdrawn or substituted by giving the Employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the Employer evaluating tender, the Contractor reserves the right to review the price based on Consumer Price Index (CPI).

C.2.16.4 Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

C.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the Employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: *Sub-clause C.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.*

C.2.18 Provide other material

C.2.18.1 Provide, on request by the Employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the Employer for the purpose of a full and fair risk assessment.

Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the Employer's request, the Employer may regard the tender offer as non-responsive.

C.2.18.2 Dispose of samples of materials provided for evaluation by the Employer, where required.

C.2.19 Inspections, test and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

C.2.20 Submit securities, bonds and policies

Part T1: Tender Procedures

If requested, submit for the Employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

C.2.21 Check final draft

Check the final draft of the contract provided by the Employer within the time available for the Employer to issue the contract.

C.2.22 Return of other tender documents

If so instructed by the Employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.

C.2.23 Certificates

Include in the tender submission or provide the Employer with any certificates as stated in the tender data.

C.3 The Employer's undertakings

C.3.1 Respond to requests from the tenderer

C.3.1.1 Unless otherwise stated in the Tender Data respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who collected tender documents.

C.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

C.3.2 Issue addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three (3) working days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who collected tender documents.

C.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

Part T1: Tender Procedures

C.3.4 Opening of tender submissions

C.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.

C.3.4.3 Make available the record outlined in C.3.4.2 to all interested persons upon request.

C.3.5 Two-envelope system

C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

C.3.6 Non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

C.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

C.3.8 Test for responsiveness

C.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

C.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

Part T1: Tender Procedures

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

C.3.9 Arithmetical errors, omissions and discrepancies

C.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

C.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with C.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate;
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
 - i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - ii) the summation of the prices.

C.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

C.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
- c) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

C.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

C.3.11 Evaluation of tender offers

Part T1: Tender Procedures

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the Employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require Employers to conduct the process of offer and acceptance in terms of a set of standard procedures

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:	
Requirement	Qualitative interpretation of goal
Fair	The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.
Equitable	Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.
Transparent	The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.
Competitive	The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.
Cost effective	The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

The activities associated with evaluating tender offers are as follows:

- a) Open and record tender offers received
- b) Determine whether or not tender offers are complete
- c) Determine whether or not tender offers are responsive
- d) Evaluate tender offers
- e) Determine if there are any grounds for disqualification
- f) Determine acceptability of preferred tenderer
- g) Prepare a tender evaluation report
- h) Confirm the recommendation contained in the tender evaluation report

C.3.11.1 General

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

C.3.12 Insurance provided by the Employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the Employer to provide.

Part T1: Tender Procedures

Be aware that the extent of insurance to be provided by the Employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

C.3.13 Acceptance of tender offer

Accept the tender offer, if in the opinion of the Employer, it does not present any unacceptable commercial risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the Employer's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- e) complies with the legal requirements, if any, stated in the tender data, and
- f) is able, in the opinion of the Employer, to perform the contract free of conflicts of interest.

C.3.14 Prepare contract documents

C.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the Employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents, and
- c) other revisions agreed between the Employer and the successful tenderer.

C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

C.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

C.3.16 Registration of the award

An Employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the CIDB Register of Projects.

C.3.16.2 After the successful tenderer has been notified of the Employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

Part T1: Tender Procedures

C.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the tender data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

C.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

PART T2: RETURNABLE DOCUMENTS

TABLE OF CONTENTS

T2.1	LIST OF RETURNABLE DOCUMENTS.....	2
T2.2	RETURNABLE SCHEDULES	5

T2.1 LIST OF RETURNABLE DOCUMENTS

RD.A RETURNABLE DOCUMENTS FOR TENDER EVALUATION PURPOSES

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

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Form of offer and acceptance	Section C1.1	
MBD 4: Declaration of interest in tender of persons in service of state	Form RD.A.1	
MBD 8: Declaration of tenderer's past supply chain management practices	Form RD.A.2	

RD. B RETURNABLE DOCUMENTS REQUIRED FOR PREFERENTIAL PROCUREMENT EVALUATION PURPOSES

Note: *Failure to submit the applicable documents will result in the tender offer being awarded 0 (zero) preference points*

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Valid B-BBEE Status Level of Contributor Certificate		
MBD 6.1: Preference points claim form in terms of the Preferential Procurement Regulations, 2022	Form RD.B.1	
Valid B-BBEE Status Level of Contributor Certificate	Form RD.B.2	
B-BBEE Exempted Micro Enterprise – Sworn Affidavit	Form RD.B.3	
Promotion of local enterprises (Local Economic Participation)	Form RD.B.4	
Certified copy of Identity Document/s proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	Form RD.B.5	
Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers) proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	Form RD.B.6	

RD.C ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: *Failure to submit the applicable document will result in the Tenderer having to submit same upon request within 7 days and if not complied with, will result to the tender offer being disqualified from further consideration [See also clause 2.18 of the Standard Conditions of Tender]*

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
MBD 9: Certificate of independent tender determination	RD.C.1	
Record of services provided to organs of state	RD.C.2	
Status of concern submitting tender	RD.C.3	
Classification of business	RD.C.4	
MBD 5: Declaration for procurement above R10 million (all applicable taxes included)	RD.C.5	
Certificate of authority of signatory	RD.C.6	
Certificate of authority of signatory for joint ventures and consortia	RD.C.7	

RD.D RETURNABLE DOCUMENTS REQUIRED FOR QUALITY EVALUATION PURPOSES

Note: *Failure to submit the applicable documents will result in the Tenderer receiving a 0 (zero) score for the applicable evaluation schedule.*

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Evaluation Schedule: Tender's experience	RD.D.1	
Evaluation Schedule :Schedule of plant, equipment, machinery and personnel	RD.D.2	
Key Personnel	RD.D.4	
Curriculum vitae of key personnel	RD.D.5	

RD.E OTHER DOCUMENTS THAT WILL FORM PART OF THE CONTRACT

Note: *Failure to submit or fully complete the applicable documents will result in the tender offer being disqualified from further consideration*

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Data provided by the contractor	Section C1.2	
Record of addenda to tender documents	RD.E.1	
Certificate confirming that bidder has CIDB grading 4EP or higher		
An organogram with all staff that will be assigned to the project		
Copies of Certified Qualifications of all staff to be assigned to the project		
Safety, health, Environmental management and Quality plan (SHEQ)		
3 years audited financial statements		

T2.2 RETURNABLE SCHEDULES

FORM RD.A.1: MBD 4 DECLARATION OF INTEREST IN TENDER OF PERSONS IN SERVICE OF STATE

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
3. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**
 - 3.1 Full Name of bidder or his or her representative:
 - 3.2 Identity Number:
 - 3.3 Position occupied in the Company (director, trustee, hareholder²)
 - 3.4 Company Registration Number:
 - 3.5 Tax Reference Number:
 - 3.6 VAT Registration Number:
 - 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
 - 3.8 Are you presently in the service of the state? **YES / NO**
 - 3.8.1 If yes, furnish particulars.
.....

¹ MSCM Regulations: "in the service of the state" means to be –

- (a) a member of –
 - (i) any municipal council;
 - (ii) any provincial legislature; or
 - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

² Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

3.9 Have you been in the service of the state for the past twelve months? **YES/NO**

3.9.1 If yes, furnish particulars.

.....

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.10.1 If yes, furnish particulars.

.....

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.11.1 If yes, furnish particulars.

.....

3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

3.12.1 If yes, furnish particulars.

.....

3.13 Are any spouse, child or parent of the company's directors trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

3.13.1 If yes, furnish particulars.

.....

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract. **YES / NO**

3.14.1 If yes, furnish particulars:

.....

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number

.....

Signature

.....

Date

.....

Capacity

.....

Name of Bidder

FORM RD.A.2 MBD 8: DECLARATION OF TENDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This Municipal Bidding Document (MBD) must form part of all tenders invited.
2. It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
3. The tender of any tenderer may be rejected if that tenderer, or any of it's directors have:
 - a. abused the municipality's/municipal entity's supply management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. wilfully neglected, reneged on or failed to comply with any government, Municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004).
4. In order to give effect to the above, the following questionnaire must be completed and submitted with the tender:

Item	Question	Response	
4.1	Is the tenderer, any of it's directors listed on the National Treasurer's database as a company or persons prohibited from doing business with the public sector? (Companies for persons who are listed on this database were informed in writing of this restriction by the National Treasury after the audi alteram partem rule was applied)	YES ☐	NO ☐
	If so, furnish particulars:		
4.2	Is the tenderer or any of it's directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004)? (To access this register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number 012-326-5445)	YES ☐	NO ☐
	If so, furnish particulars:		
4.3	Was the tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	YES ☐	NO ☐
	If so, furnish particulars:		

Item	Question	Response	
4.4	Does the tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality/municipal entity, or to any other municipality/municipal entity, that is in arrears for more than three months?	YES ☐	NO ☐
	If so, furnish particulars:		
4.5	Was any contract between the tenderer and the municipality/municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	YES ☐	NO ☐
	If so, furnish particulars:		

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

It is a condition of tender that the taxes of the successful tenderer must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the tenderer's tax obligations.

1. In order to meet this requirement tenderers are required to complete in full the form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
2. SARS will then furnish the tenderer with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
3. **The original Tax Clearance Certificate must be submitted together with the tender. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the tender. Certified copies of the Tax Clearance Certificate will not be acceptable.**
4. In tenders where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
5. Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
6. Applications for the Tax Clearance Certificates may also be made via e-Filing. In order to use this provision, taxpayers will need to register with SARS as e-Filers through the website www.sars.gov.za

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

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

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

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

1. GENERAL CONDITIONS

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

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

1.2 **To be completed by the organ of state**

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the 90/10 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
(b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	Points
PRICE	90
SPECIFIC GOALS	10
TOTAL POINTS FOR PRICE AND SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to

preferences, in any manner required by the organ of state.

2. DEFINITIONS

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

- Ps = Points scored for price of tender under consideration
 Pt = Price of tender under consideration
 Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below 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.)

Specific goals	90/10 preference point system	Number of points claimed (90/10 system) (To be completed by the tenderer)
BB-BEE score of companies • Level 1 • Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Non-compliant	• 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Point • 0.5 Points • 0 Points	
EME and/ or QSE	1 Point	
At least 51% of Women-owned companies	1 Point	
At least 51% owned companies by People with disability	1 Point	
At least 51% owned companies by Youth	1 Point	
Local Economic Participation • City of Tshwane	2 Points	

Specific goals	90/10 preference point system	Number of points claimed (90/10 system) (To be completed by the tenderer)
- Gauteng - National	1 Point 1 Point	

N.B For points to be allocated as per above the tenderers will be required to submit proof of documentation as evidence for claims made. Any tenderer that does not submit evidence as stated in the bid document to claim applicable points will be allocated zero points.

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:

.....

.....

.....

FORM RD.B.2 VALID B-BBEE STATUS LEVEL OF CONTRIBUTOR CERTIFICATE

Submit B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA).

NOTE:

1. Attach original copy of B-BBEE Verification Certificate to this page.
2. In the case of a joint venture / consortium parties must each attach original copy of their B-BBEE Verification Certificates.

7. Attach original or certified copy of CSD registration certificate to this page.

8. In the case of a joint venture / consortium (excluding consulting engineering partners) the joint venture / consortium must attach original or certified copy of their CSD registration certificate to this page.

FORM RD.B.4 PROMOTION OF LOCAL ENTERPRISES

The City of Tshwane has mandated the promotion of local enterprises. To comply with this the tenderer must provide proof of the type of business unit and whether the unit resides within the Tshwane and will be scored as follow:

If 90/10 preference point system applies:

	Promotion of local enterprises
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Satisfactory (score 1)	The tenderer operates a head office or fully staffed office or his sole office outside the boundaries of Gauteng Province. (I.e. no business unit or office resides within the boundaries of Tshwane Metropolitan Municipality)
Good (score 1)	The tenderer's office resides within the boundaries of Gauteng Province. (I.e. no business unit or office resides within the boundaries of Tshwane Metropolitan Municipality)
Very good (score 2)	The tenderer's office resides within the boundaries of the Tshwane Metropolitan Municipality.

Municipal Rates & Taxes not older than three months from tender advertisement date or Valid Lease Agreement should be attached as evidence.

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.	
<u>Person authorized to sign the tender:</u>	
Full name (in BLOCK letters):	_____
Signature:	_____
Date:	_____

FORM RD.B.5 At least 51% Women owned companies and At least 51% owned companies by Youth

The City of Tshwane has mandate for the promotion At least 51% Women owned companies and At least 51% owned companies by youth. To comply with this the tenderer must provide Certified copy of Identity Document/s that proof that company is 51% owend by Women or youth

	promotion At least 51% Women owned companies and At least 51% owned companies by youth
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Good (score 1)	Certified copy of Identity Document/s that proof that company is 51% owned by Women and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership
Good (score 1)	Certified copy of Identity Document/s that proof that company is 51% owned by youth and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.B.6 At least 51% owned companies by People with disability

The City of Tshwane has mandate for the promotion of At least 51% owned companies by People with disability. To comply with this the tenderer must provide Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers that proof that company is 51% owned by People with disability

	Promotion of At least 51% owned companies by People with disability
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Good (score 1)	Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

**Person authorized to sign the
tender:**

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

1. This Municipal Bidding Document (MBD) must form part of all tenders¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive tendering (or tender rigging)². Collusive tendering is a *per se* prohibition meaning that it cannot be justified under any grounds.
3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. Take all reasonable steps to prevent such abuse;
 - b. Reject the tender of any tenderer if that tenderer or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. Cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the tendering process or the execution of the contract.
4. This MDB will serve as a certificate of declaration that would be used by institutions to ensure that, when tenders are considered, reasonable steps are taken to prevent any form of tender-rigging.
5. In order to give effect to the above, the attached Certificate of Tender Determination must be completed and submitted with the tender.

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

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

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying tender:

EED 03-2024/25: TENDER TO APPOINT VARIOUS CONTRACTORS TO PROVIDE CONSTRUCTION WORK ON PUBLIC LIGHTING ELECTRICAL NETWORK INFRASTRUCTURE ON AS AND WHEN REQUIRED BASIS, FOR A THREE YEAR PERIOD

in response to the invitation for the tender made by

City of Tshwane Metropolitan Municipality

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

I certify, on behalf of _____ that:
(Name of tenderer)

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

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

8. In addition, there have been no consultations, communications, agreements or arrangement with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this tender invitation relates.
9. The terms of the accompanying tender have not been, and will not be, disclosed by the tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or to the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act 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.

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.C.2 RECORD OF SERVICES PROVIDED TO ORGANS OF STATE

Tenderers are required to complete this record in terms of the Supply Chain Management Regulations issued in terms of the Municipal Finance Management Act of 2003.

Include only those contracts where the tenderer identified in the signature block below was directly contracted by the employer. Tenderers must not include services provided in terms of a sub-contract agreement.

Where contracts were awarded in the name of a joint venture and the tenderer formed part of that joint venture, indicate in the column entitled "Title of the contract for the service" that was in joint venture and provide the name of the joint venture that contracted with the employer. In the column for the value of the contract for the service, record the value of the portion of the contract performed (or to be performed) by the tender.

Complete the record or attach the required information in the prescribed tabulation

ALL SERVICES COMMENCED OR COMPLETED TO AN ORGAN OF STATE IN THE LAST FIVE YEARS				
	Organ of state, i.e. national or provincial department, public entity, municipality or municipal entity.	Title of contract for the service	Value of contract for service incl. VAT (Rand)	Date completed (State current if not yet completed)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				

(Attach additional pages if more space is required.)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.C.3 STATUS OF CONCERN SUBMITTING TENDER

1. General

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner, a joint venture/consortium or a co-operative

Public Company

Private Company

Closed Corporation

Partnership

Sole Proprietary

Joint Venture / Consortium

Co-operative

(Mark the appropriate option)

2. Information to be provided

If the Tendering Entity is a:		Documentation to be submitted with the tender
1	<u>Closed Corporation</u> , incorporated under the Close Corporation Act, 1984, Act 69 of 1984	CIPRO CK1 or CK2 (Certified copies of the founding statement) and list of members
2	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (Including Companies incorporated under Art 53 (b))	Certified copies of: a) CIPRO CM 1 - Certificate of Incorporation b) CIPRO CM 29 – Contents of Register of Directors, Auditors and Officers c) Shareholders Certificates of all Members of the Company, plus a signed statement of the Company's Auditor, certifying each Member's ownership/shareholding percentage relative to the total.
3	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 in which any, or all, <u>shares are held by another</u> Closed Corporation or company with, or without, share capital.	Certified copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies
4	<u>Public Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (Including Companies incorporated under Art 21)	A signed statement of the Company's Secretary confirming that the Company is a public Company.
5	<u>Sole Proprietary</u> or a <u>Partnership</u>	Certified copy of the Identity Document of: a) such Sole Proprietary, or b) Each of the Partners in the Partnership Certified copy of the Partnership agreement.
6	<u>Co-operative</u>	CIPRO CR2 - Certified copies of Company registration document.

If the Tendering Entity is a:		Documentation to be submitted with the tender
7	<u>Joint Venture / Consortium</u>	All the documents (as described above) as applicable to each partner in the joint venture / consortium as well as a certified copy of the joint venture / consortium agreement.

Note:

1. If the shares are held in trust provide a copy of the Deed of Trust (only the front page and pages listing the trustees and beneficiaries are required) as well as the Letter of Authority as issued by the Master of the Supreme Court wherein trustees have been duly appointed and authorised
2. Include a certified copy of the Certificate of Change of Name (CM9) if applicable.

3. Registered for VAT proposes in terms of the Value-Added Tax Act (89 of 1991)

Yes

☐

No

☐

(Make an X in the appropriate space)

REGISTRATION NO: _____

FORM RD.C.4 CLASSIFICATION OF BUSINESS

1. The Small Businesses are defined in the National Small Business Act, 1996 (Act 102 of 1996).

2. Information furnished with regard to the classification of Small businesses

- (a.) Indicate whether the company/entity is defined as a small, medium or micro enterprise by the National Small Business Act.

YES	NO
-----	----

(Tick appropriate box)

- (b.) If the response to 2.(a.) is **YES**, the following must be completed:

- i. Sector/sub-sector in accordance with the Standard Industrial classification:

- ii. Size or class:

- iii. Total full-time equivalent of paid employees:

- iv. Total annual turnover:

- v. Total gross asset value (fixed property excluded):

(A schedule indicating the different sectors is attached to this form.)

- (c.) The tenderer should substantiate the information provided by submitting the following documentation:

- i. A letter from the tenderer's auditor or an affidavit from the South African Police Services confirming the correctness of the abovementioned information,
- ii. Company profile indicating the tenderer's staff compliment, and
- iii. 3 year financial statement or since their establishment if established during the past 3 years.

1. The tenderer is required by law to prepare annual financial statements for auditing their audited annual financial statements:

- i) for the past three years; or
ii) Since the establishment if established during the past three years.

Indicate whether these have been included in the tender:

YES	NO
-----	----

2. Does the tenderer have any undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days?

YES	NO
-----	----

If so, state particulars _____

3. Has any contracts been awarded to the tenderer by an organ of state during the past five years?

YES	NO
-----	----

If so, state particulars _____

4. Has there been any material non-compliance or dispute concerning the execution of such contract?

YES	NO
-----	----

If so, state particulars _____

5. Is any portion of the goods or services expected to be sourced from outside the Republic?

YES	NO
-----	----

If, so state what portion and whether any portion of payment from the municipality is expected to be transferred outside of the Republic.

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.C.6 CERTIFICATE OF AUTHORITY OF SIGNATORY**RESOLUTION** of the 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 Tshwane Metro Municipality in respect of the following project:

Tender Number:

EED 03 -2024/25

Tender Description:

TENDER TO APPOINT VARIOUS CONTRACTORS TO PROVIDE CONSTRUCTION WORK ON PUBLIC LIGHTING ELECTRICAL NETWORK INFRASTRUCTURE ON AS AND WHEN REQUIRED BASIS, FOR A THREE YEAR PERIOD

2. *Mr/Ms:

in *his/her capacity as

and who will sign as follow:

Proof signature	Proof signature
-----------------	-----------------

be, and is hereby authorized to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender for the enterprise mentioned above

NAME	CAPACITY	SIGNATURE

Note:

- *Delete which is not applicable.
- IMPORTANT: This resolution must be signed by all the directors/members/ partners of the tendering enterprise.
- 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

FORM RD.C.7 CERTIFICATE OF AUTHORITY OF SIGNATORY FOR JOINT VENTURES AND CONSORTIA

*Joint venture/consortium name: _____

We, the undersigned, are submitting this tender in a *joint venture/consortium and hereby authorize *Mr/Ms

_____ authorized signatory of the enterprise

_____ acting in the capacity of lead partner

to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender for the *joint venture/consortium mentioned above.

Registered name of enterprise	Registration number	% of contract value	Address	Duly authorized signatory	Mark with (x) for lead partner

Note:

1. *Delete which is not applicable.
2. IMPORTANT: This resolution must be signed by all the parties of the joint venture/consortium and every duly authorized signatory for each party to the joint venture/consortium must complete a Form RD.C.15.
3. Should the number of directors/members/partners exceed the space available above, additional names and signatures must be supplied on a separate page.

TERMS OF REFERENCE FOR QUALITY EVALUATION

The quality evaluation for this tender will be based on the following project.

EED 03-2024.25 - TENDER TO APPOINT VARIOUS CONTRACTORS TO PROVIDE CONSTRUCTION WORK ON PUBLIC LIGHTING ELECTRICAL NETWORK INFRASTRUCTURE ON AS AND WHEN REQUIRED BASIS, FOR A THREE YEAR PERIOD

1. PROJECT SCOPE

The scope of works of the tender to appoint various contractors to provide construction work on public lighting electrical network infrastructure on as and when required basis, for a three year period Specifications and bill of quantities

2. MANDATORY REQUIREMENTS

- Bidders must submit Certificate confirming that bidder has CIDB grading **4EP** or Higher
- An organogram with all staff that will be assigned to the project
- Bidders must submit the copies of Certified Qualifications of all staff to be assigned to the project

- Safety, health, Environmental management and Quality plan (SHEQ)
- 3 years audited financial statements
- Compensation for Occupational Injuries and Diseases Act (COIDA) letter of good standing
- RD.D.1 (Proof of relevant experience)
- RD.D.2 (Schedule of plant, equipment, machinery and personnel)

Failure to submit the above documents will lead to disqualification. The bidder will not be evaluated further

3. COMPULSORY BRIEFING SESSION

A compulsory briefing session will be required.

Failure to attend the session will lead to disqualification.

4. SCORING FORMULA FOR PRICING AND BBBEE

The preferential point system used will be the 90/10 points system in terms of the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) Regulations 2022.

- 90 points for price
- 10 points for Specific goals

SPECIFIC GOALS

- 1) Bidders are required to submit supporting documents for their bids to claim the specific goal points.
- 2) Non-compliance with specific goals will not lead to disqualification but bidders will not be allocated specific goal points. Bidders will score points out of 90 for price only and zero (0) points out of 10 for specific goals.
- 3) Cot shall act against any bidder or person when it detects that the specific goals were claimed or obtained on a fraudulent basis.

The specific goal for this bid is outlined below.

Specific goals	90/10 preference point system	Proof of specific goals to be submitted
BB-BEE score of companies • Level 1 • Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Non-compliant	• 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Point • 0.5 Points • 0 Points	Valid Certified copy of BBBEE certificate. For EME's and QSE's copy of a valid Sworn affidavit.
EME and/ or QSE	1 Point	Valid Sworn affidavit
At least 51% of Women-owned companies	1 Point	Certified copy of Identity Document/s
At least 51% owned companies by People with disability	1 Point	Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers)
At least 51% owned companies by Youth	1 Point	Certified copy of Identity Document/s
Local Economic Participation • City of Tshwane • Gauteng • National	2 Points 1 Point 1 Point	Municipal Account statement/Lease agreement.

For points to be allocated as per above the tenderers will be required to submit proof of documentation as evidence for claims made. Any tenderer that does not submit evidence as stated in the bid document to claim applicable points will be allocated zero points.

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.	
<u>Person authorized to sign the tender:</u>	
Full name (in BLOCK letters):	_____
Signature:	_____
Date:	_____

RD.D.1: SCHEDULE OF TENDERER'S PREVIOUS SIMILAR EXPERIENCE

(The previous experience must be relevant to the technical specification.)

EMPLOYER, CONTACT PERSON AND TELEPHONE NUMBER	DESCRIPTION OF CONTRACT	DATE STARTED	DATE COMPLETED	TOTAL CONTRACT AMOUNT
1 _____ (company or Client) _____ (contact person) _____ (telephone)				
2 _____ (company or Client) _____ (contact person) _____ (telephone)				
3 _____ (company or Client) _____ (contact person) _____ (telephone)				
4 _____ (company or Client)				

(contact person) _____ (telephone)				
5 _____ (company or Client) _____ (contact person) _____ (telephone)				
6 _____ (company or Client) _____ (contact person) _____ (telephone)				
7 _____ (company or Client) _____ (contact person) _____ (telephone)				

RD.D.2 SCHEDULE OF PLANT, EQUIPMENT, MACHINERY AND PERSONELL

The following are lists of major items of relevant resources that may be required from time to time during the execution of this contract. The tenderer must fill in the details in Schedule B. The tender further declares that all equipment/resources as furnished will be made available for this contract. The tenderer must demonstrate a tentative agreement/quotation/similar which may be subject to this contract being awarded for items that will be hired. The CoT shall reserve a right to inspect the premises of the contractor to verify the furnished information.

Schedule A: CoT's specific minimum requirements

Schedule B: Tenderer's offer and guarantees. Must be filled in by tenderer/contractor

Failure to complete this form in full will result in the tenderer being disqualified.

Failure to meet the minimum requirements shall disqualify the tender.

Item	Description	Document proof to be submitted with the tender	Schedule A (CoT minimum requirements)	Schedule B (Tenderer's offer and guarantees)		
				Owned by Contractor	To be leased by the Contractor	Total
1	Cherry Pickers	Certified Copies of vehicle registration and or agreement to lease	Min 1			
2	TLB	Certified Copies of vehicle registration and or agreement to lease	Min 1			
3	8 Tonne or higher crane Truck	Certified Copies of vehicle registration and or agreement to lease	Min 2			

NB: Where the tenderer does not meet the minimum requirements RD.D.2, the tenderer will be disqualified

FORM RD.D.4 KEY PERSONNEL

The tenderer shall list in the table below the key personnel to be engaged for this project.

Note: Form RD.D.5 must be complete for each person listed below.

	PROPOSED POSITION	NAME	YEARS OF EXPERIENCE
1	Project Manager		
2	Test Technician		
3	Installation and construction specialist		
4	Occupational Health and Safety Officer		
5	Environmental Officer		

(Attach additional pages if more space is required)

FORM RD.D.5 CURRICULUM VITAE OF KEY PERSONNEL (Project Manager)

Note: This form should be completed for each key person listed in Form RD.D.4

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification:	
I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.	
_____	_____
(Signature of person named in schedule)	Date:

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.D.5 CURRICULUM VITAE OF KEY PERSONNEL (Test Technician)

Note: This form should be completed for each key person listed in Form RD.D.4

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience. _____ _____ (Signature of person named in schedule) Date:	

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.D.5 CURRICULUM VITAE OF KEY PERSONNEL (Installation and construction specialist)

Note: This form should be completed for each key person listed in Form RD.D.4

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification:	
I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.	
_____ (Signature of person named in schedule)	_____ Date:

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.D.5 CURRICULUM VITAE OF KEY PERSONNEL (Occupational Health and Safety Officer)

Note: This form should be completed for each key person listed in Form RD.D.4

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience. _____ _____ (Signature of person named in schedule) Date:	

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.D.5 CURRICULUM VITAE OF KEY PERSONNEL (Environmental Officer)

Note: This form should be completed for each key person listed in Form RD.D.4

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience. _____ _____ (Signature of person named in schedule) Date:	

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.E.1 RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before submission of this tender, amending or amplifying the tender documents, have been taken in account in this tender offer:

	DATE	REFERENCE	TITLE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters):

Signature:

Date:

PORTION 2: CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

TABLE OF CONTENTS

C1.1	FORM OF OFFER AND ACCEPTANCE.....	2
	FORM OF OFFER.....	2
	FORM OF ACCEPTANCE.....	4
	SCHEDULE OF DEVIATIONS	5
C1.2	CONTRACT DATA.....	7

C1.1 FORM OF OFFER AND ACCEPTANCE

STAMP

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

EED 03-2024/25: TENDER TO APPOINT VARIOUS CONTRACTORS TO PROVIDE CONSTRUCTION WORK ON PUBLIC LIGHTING ELECTRICAL NETWORK INFRASTRUCTURE ON AS AND WHEN REQUIRED BASIS, FOR A THREE YEAR PERIOD

The tenderer, identified in the offer signature block below, 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 authorised, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS

.....Rand (in words); R(in figures) (or other suitable wording)

Acceptance of this offer will not guarantee that the tenderer will be invited to submit a price for any task order or be allocated any task order during the duration of the appointment. Invitation and allocation of task orders will be done solely at the discretion of the employer.

FOR AND ON BEHALF OF THE TENDERER:

NAME:
(in BLOCK letters)

CAPACITY:
(of authorized agent)

SIGNATURE:
(of authorized agent)

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____

2. _____

ACCEPTANCE

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

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data

Part C3 Scope of Work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto 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 letter of acceptance, contact the employer's agent (whose details are given in the contract data) to arrange the delivery of guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:

(in BLOCK letters)

CAPACITY:

(of authorized agent)

SIGNATURE:

(of authorized agent)

SIGNED at

on this

day of

WITNESSES:

(Full name in BLOCK letters and signature)

1.

2.

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the employer prior to the tender closing date is limited to those permitted in terms of the conditions of tender;
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such, letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of, offer and acceptance, the outcome of such agreement shall be recorded here;
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the parties becomes an obligation of the contract shall also be recorded here;
4. Any change or addition to the tender documents arising from the above agreements and recorded here shall also be incorporated into the final draft of the contract.

4.1	Subject:	
	Details:	
4.2	Subject:	
	Details:	
4.3	Subject:	
	Details:	
4.4	Subject:	
	Details:	
4.5	Subject:	
	Details:	

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 the 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 change 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, 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.

FOR AND ON BEHALF OF THE TENDERER:

NAME:

(in BLOCK letters)

CAPACITY:

(of authorized agent)

SIGNATURE:

(of authorized agent)

SIGNED at

on this

day of

WITNESSES:

(Full name in BLOCK letters and signature)

1.

2.

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:

(in BLOCK letters)

CAPACITY:

(of authorized agent)

SIGNATURE:

(of authorized agent)

SIGNED at

on this

day of

WITNESSES:

(Full name in BLOCK letters and signature)

1.

2.

C1.2 CONTRACT DATA

C1.2.1 GENERAL CONDITIONS OF CONTRACT

The general conditions of contract applicable to this contract shall be **NEC3 Engineering and Construction Contract, April 2013** as well as the Data provided by Employer.

Tenderers, contractors and subcontractors shall obtain their own copies of the document **NEC3 Engineering and Construction Contract, April 2013** for tendering purposes and for use for the duration of the contract and shall bear all expenses in this regard.

Note: The copy of the NEC3 Engineering and Construction Contract, 2005 and all the conditions of this contract shall be regarded as the Service Level Agreement (SLA) between the appointed service provider and City of Tshwane.

Engineering Contracting Strategies (ECS)

Telephone: 011 803 3008

E-Mail: admin@ecs.co.za

Web: www.ecs.co.za

OR

Consulting Engineers South Africa (CESA)

Telephone: 011 463 2022

E-Mail: general@cesa.co.za

Web: www.cesa.co.za

OR

South African Institution of Civil Engineering (SAICE)

Telephone: 011 80505947 / 48 / 53

E-Mail: civilinfo@saice.org.za

Web: www.saice.org.za

C1.2 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for Main Option	B: Priced contract with schedule of rates
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation

Clause	Statement	Data
		X2: Changes in the law
		X5: Sectional Completion
		X7: Delay damages
		X13: Performance Bond
		X16: Retention
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Engineering and Construction Contract (June 2005) ¹	
10.1	The <i>Employer</i> is (Name):	City of Tshwane P.O Box 423 Pretoria 0001 Represented by: Group Head Energy and Electricity Department
	Address	4th Floor Middestad Building Pretoria CBD
	Tel No.	012 358 3773/4217
	Fax No.	012 358 0790
10.1	The <i>Project Manager</i> is:	Director / Deputy Director of Energy and Electricity Division

¹ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009

Clause	Statement	Data
	Address	4th Floor Middestad Building Pretoria CBD street Tshwane
	Tel	012 358 4217
	Fax	012 358 4134
10.1	The <i>Supervisor</i> is: (Name)	A person to be appointed by the <i>Employer</i>. Municipal inspectors from the Tshwane Energy and Electricity Department will assist the <i>Supervisor</i> as may be necessary.
	Address	Of person appointed as supervisor for the specific project.
	Tel No.	N/A
	Fax No.	N/A
	e-mail	N/A
11.2(13)	The <i>works</i> are	The <i>works</i> are the construction of public lighting network infrastructure in the CoT areas of jurisdiction as and when required.
11.2(14)	The following matters will be included in the Risk Register	As prescribed per specific project/work.
11.2(15)	The <i>boundaries of the site</i> are	Boundaries of the specific CoT depot Jurisdiction area.
11.2(19)	The Works Information is in	The Scope of Work in Part C3 of the Document
12.2	The <i>law of the contract</i> is the law of	The Republic of South Africa subject to the jurisdiction of the Courts of South Africa.
13.1	The <i>language of this contract</i> is	English

Clause	Statement	Data
13.3	The <i>period for reply</i> is	The period of reply, if not stated in the letter of appointment, shall be 14 days.
2	The Contractor's main responsibilities	The <i>Contractor's</i> liability, for Defects due to his design that are not listed on the Defects Certificate, is unlimited.
3	Time	
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> and sections.	The completion date for the whole of the works is 36 months subject to specific projects requirements, whichever is shorter. During this period the construction projects will be allocated to the contractor. The completion period for the specific project shall be specified by the deputy director.
30.1	The <i>access date</i> is	Date of appointment as per the letter of acceptance and / or official purchase order.
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	When required to do so per specific project and the deadline for submission is no longer than <i>period of reply</i>.
31.2	The <i>starting date</i> is.	Date of appointment as per the letter of acceptance and / or official purchase order
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 weeks.
35.1	The <i>Employer</i> is willing to take over each project allocated on completion.	
4	Testing and Defects	
42.2	The <i>defects date</i> is	Twelve (<u>12</u>) Months after the Completion date of the whole construction <i>works per specific purchase order</i>.

Clause	Statement	Data
43.2	The <i>defect correction period</i> is	<u>Two (2) weeks</u>, unless stated otherwise in the appointment letter or official purchase order.
5	Payment	
50.1	The <i>assessment interval</i> is	Minimum 2 weeks (for project schedule of a period of a month and more) or at the completion of each project.
51.1	The <i>currency of this contract</i> is the	South African Rand (R)
51.2	The period within which payment is made is	30 days from date of invoice, subject to the payment process and policy of the CoT Finance Department.
51.4	The <i>interest rate</i> is	Prime Bank Rate
6	Compensation events	
60.1(13)	The <i>weather measurements</i> to be recorded for each calendar month are:	the cumulative rainfall (mm)

Clause	Statement	Data
		the number of days with rainfall more than 10 mm & date
		the number of days with minimum air temperature less than 0 degrees Celsius
		the number of days with snow lying at 08:00 hours South African Time
		and these measurements:
	The place where weather is to be recorded (on the Site) is:	Site Office or point of supply for the specific site (mini-sub or transformer installation point)
	The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at:	De Wildt
	and which are available from:	Weather SA
7	Title	No data is required for this section of the <i>conditions of contract</i> .
8	Risks and insurance	
84.2	The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the <i>works</i> , Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract for any one event is	R10 million.

Clause	Statement	Data
	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is	As set out in COIDA (WCA) as well as a group life insurance for at least three times the employee's total annual earnings.
84.1	The <i>Employer</i> provides these insurances from the Insurance Table	
	1 Insurance against:	Loss of or damage to the <i>works</i>, Plant and Materials.
	Cover / indemnity:	R10 million.
	The deductibles are:	According to the Declaration Form from Insurance and Risk Management of CoT.
	2 Insurance against:	Liability for loss of or damage to property (except the <i>works</i>, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract.
	Cover / indemnity	R10 million.
	The deductibles are	According to the Declaration Form from Insurance and Risk Management of CoT
9	Termination	There is no Contract Data required for this section of the <i>conditions of contract</i>.
10	Data for main Option clause	
A	Priced contract with bill of quantities	
60.6	<i>The method of measurement is</i>	As indicated in the schedule of rates/quantities.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is (Name)	In the event that a first dispute is referred to adjudication, the referring Party at the same time applies to the South African Institution of Electrical Engineering or any other relevant representative body to appoint an <i>Adjudicator</i>. All disputes are handled without transgressing stipulations from the MFMA and other relevant legislation for Local Government.

Clause	Statement	Data
	Address	
	Tel No.	
	Fax No.	
	e-mail	
W1.2(3)	The <i>Adjudicator nominating body</i> is:	
	If no <i>Adjudicator nominating body</i> is entered, it is	The South African Institution of Electrical Engineering or any other relevant representative body.
W1.4(2)	The <i>tribunal</i> is:	Arbitration
W1.4(5)	The <i>arbitration procedure</i> is	The Rules of the Association of Arbitrators
	The place where arbitration is to be held	Pretoria
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	Arbitrator to be mutually agreed by the Parties The Association of Arbitrators
12	Data for secondary Option clauses	
X1	Price adjustment for inflation	
X1.1(a)	Tenderers are required to register with SEIFSA (Steel and Engineering Industries Federation of South Africa) and obtain periodic SEIFSA rates for various categories applicable to this contract. Contractors and Subcontractors shall obtain their own copies (at their own cost) of the SEIFSA rates documents for contract management purposes and for use for the duration of the Contract. City of Tshwane or its representative may request such rates at any time during the contract and	

Clause	Statement	Data
	Prices/Rates tendered shall remain fixed for the every 12 months of the contract. The first 12 months is the rates as they are tendered while the second and third 12 months are calculated using SEIFSA index stated below.	
	Thereafter the proportions used to calculate the Price Adjustment Factor are:	
X1.1(c)	For Material price calculation:	
	1.00 linked to the index in	Table C-3(a) of the SEIFSA Index
	0.00	Table O of the SEIFSA Index
	0.00	Table L-1 of the SEIFSA Index
X1.1(c)	For Unit Rates and hourly tariff calculation;	
	0.70 linked to the index in	Table C-3(a) [field force] of the SEIFSA Index
	0.20 linked to the index in	Table P of the SEIFSA Index (Plant and Machinery before installation)
	0.10	Table L-1 (freight cost) of the SEIFSA Index
	The indices are those prepared by Steel and Engineering Industries Federation of South Africa (SEIFSA)	
X2	Changes in the law	No data is required for this Option
X7	Delay damages	
X7.1	Delay damages for Completion of the works are	Projects with planned execution period shorter or equal to one month and not capital projects: R500.00 per day. Projects with planned execution period between one and three months and not capital projects: R1000.00 per day. Capital projects and any other projects with planned execution longer than three months: R2500.00 per day. The reimbursement to the employer is in a form of credit note against the invoice of the specific project.

Clause	Statement	Data
X13	Performance bond	
X13.1	The amount of the performance bond is	Retention (See also clause Z3)
X16	Retention	
X16.1	The <i>retention free amount</i> is	R0.00.
	The <i>retention percentage</i> is	10%. Claimable at the expiry of defects certificate per specific project
Z	<i>Additional conditions of contract</i>	
	The <i>additional conditions of contract</i> are:	
Z1	Compensation Events	The provisions of 60.1(5) do not apply to this contract.
Z2	Insurance policies	Replace Clause 85.2 with the following: “Insurance policies arranged by the Contractor/Sub-contractor to include a waiver by the Insurers of their subrogation rights against the Employer except where there is fraud.”
Z3	X13 Performance Bond (Secondary option X13)	Add: X13.2 Should the contractor not comply with the terms and conditions of this contract and/or appointment under this contract, he shall be warned in writing by the employer or the representative of his failure to perform. As a result of three warning letters being provided under the same contract, the employer shall have the sole right to take one or more of the steps against the contractor: a. Terminate the contract between the contractor and the employer for the remainder of the contract period. b. Suspend the contractor for the remaining period of the contract. The contractor shall qualify to bid for the same contract with the same scope of works but only after the

Clause	Statement	Data
		contract for which he was suspended has expired. c. If the performance bond clause is applied, the retention amount for the specific project for which the clause is applied or the total retention amount already withheld by CoT for other projects, whichever is higher, shall be forfeited. ALL decisions made shall be recommended and implemented by the Project Manager. The Group Head: Utility Services shall approve such recommendation prior to implementation. The recommendation(s) will be processed through Supply Chain Management (SCM) process.
Z4	91 Reasons for Termination	<i>Add the following to clause 91.2:</i> - The contractor may not refuse any work allocated to them other than for the following reasons: a. The works are not according to the works information and there is no rate tendered for in the Pricing Data or the new rate (provided by CoT) is not market related, b. The contractor does not have capacity to provide the works using the new scope which is not part of the contract. - If the contractor refuses work for any other reason, such refusal is noted and can be used as a reason for non-performance and ultimately termination of this contract.”
Add		

1.

C3. DESCRIPTION OF THE SERVICES

C3.1. PURPOSE

The Energy and Electricity Department (EED) of City of Tshwane (CoT) aims to appoint various contractors who will provide construction works on Public Lighting electrical network infrastructure on as and when required basis, for a three year period. The appointed contractors will only be required to provide construction work only and not the material. Materials for the works shall be provided by the CoT. It is the responsibility of the contractors to have, at their own costs; the tools, equipment, machinery and personnel that will enable them to perform the works.

C3.2. BACKGROUND

EED is responsible for the development of the electricity network and public lighting infrastructure as part of its mandate to provide services to the community of the City of Tshwane.

The EED has a variety of skilled personnel which deals with the energy and electricity matters on a daily basis. Due to the ever growing demand for infrastructure improvement, the personnel of CoT alone might not be adequate to address all the growing needs, therefore the assistance from various electrical contractors is required in order to increase the capacity of the workforce where necessary.

The estimated amount of construction work in the seven (7) Regions of the City is not equal. The workload is dependent on the size of the Region, infrastructure age, how developed the Region is, number of new developments, and other factors. The workload in the seven (7) Regions is estimated to be in the order as indicated in the table below. The Regional workload order starts with the Region which has the highest to the Region with the lowest amount of construction work.

Allocation of bidders to Regions shall therefore follow Regional workload sequence. This tender aims to appoint 14 bidders. The City reserves the right to appoint more than one bidder per region and up to a maximum of 14 contractors for the tender. Allocation of contractors will be according to the 90/10 preferential point system.

Region 1	First and second highest scoring bidders
Region 6	Third and fourth highest scoring bidders
Region 3	Fifth and sixth highest scoring bidders
Region 4	Seventh and eighth highest scoring bidders
Region 2	Ninth and tenth highest scoring bidders
Region 7	Eleventh and twelve highest scoring bidders
Region 5	Thirteenth and fourteenth highest scoring bidders

The City reserves the right to negotiate prices with the successful bidders based on the prices obtained from the market analysis. The City reserves the right to use the prices of the lowest acceptable bidder per region to make a counter offer to other appointed bidder in the same region.

The contractors appointed in the same region will be allocated equal amount of work.

C3.3. CIDB REGISTRATION REQUIREMENT

The minimum CIDB requirement for this tender is grade 4EP. Tenderers who are registered with the CIDB in a contractor grading designation equal to or higher than 4EP Class of electrical construction work, are eligible to submit tenders.

For the contractors to be considered for this tender they must meet the minimum CIDB requirements as stated above.

C3.4. SCOPE OF WORKS

DESCRIPTION OF TASKS

The following are brief descriptions of the tasks which must be performed under this contract. There are material and installation specifications that must be read together with this part of the contract for better understanding of the items described herein. The clauses in this section refer to the various items to be priced for in the schedule of rates.

The fact that the tender process will take place prior to the actual appointments and job executions shall not limit the contractor from obtaining the latest standards and specifications.

The attention of the tenderer is also drawn to the fact that CoT specifications are constantly revised to improve service delivery and the safety of both the infrastructure and the public. Where contradiction between this document and the Specifications has been identified, the Project Manager or the relevant Deputy Director will have the final decision. All decisions taken after contradictions must be reported to Group Head (GH) EED for recording.

Tasks or projects to be executed

The contractor shall as and when required by the employer, perform any one or more of the items as described in the particular specifications in C3.4.1. The contractor provides the works in accordance with the scope given to him/her by the employer. The contractor must take the following into account:

1. After the contract had been awarded and the need to use a contractor by the employer arises,
 - a. The employer will evaluate the work to be done, the time it will take to complete the work as well as the cost thereof.
 - i. The cost is calculated from the specific rates of each item referred to in the schedule of rates in C2.2.
 - b. The contractor must complete the tasks within the prescribed time as per the purchase order. In cases where the contractor is overloaded by current work already allocated to him, he must inform the employer of his reason not to accept the work allocated. The following is done:
 - i. The contractor and the employer decide on the best possible date and time for the said project to commence based on the urgency and the type of project.
 - ii. Failure to complete the tasks within the prescribed time shall activate performance management action as per C3.9 in this document.
2. The allocated work is in the area for which the contract is awarded.
3. The work must be done according to specification and within the time prescribed in the purchase order. Payment is certified for work done according to specification(s).
4. The employer may charge the contractor penalty fee(s), should the contractor not provide the works by the completion date (See C1.2 Contract data).
5. During the contract period which is also the period of work allocation to the contractor by the employer, the contractor complies with all the conditions of contract and applicable policies of the CoT.
6. The contractor may be expected, depending on the urgency of the work, to start the work immediately after the appointment letter has been issued or after the agreement has been signed. That is not exercised by derogation to conditions of contract.
7. The type of work that will be done under this contract is:
 - a. Construction of Public Lighting Infrastructure.
 - i. The construction will include construction of new network infrastructure and upgrading of public lighting network to improve service delivery.

8. Payment will be done on completion of the specific works. The currency of this contract is the South African Rand (ZAR).
9. The period within which payment is made is 30 days from date of invoice, subject to the payment process and policy of the CoT Finance Department

C3.4.1. PARTICULAR SPECIFICATIONS

This section contains the particular specifications which gives full descriptions of all the items in the schedule of rates in C2.2. It is important that the tenderers make reference to this section when pricing.

1. Tenderers must note that the unit rates supplied in this tender for all the items in the schedule of rates in C2.2 shall include, unless stated otherwise in this document, all items listed below:
 - 1.1. all labour costs,
 - 1.2. all administrative expenses,
 - 1.3. Setting out of Works
 - 1.4. Transportation (fixed cost, running cost and driver cost) of employees, material and/or any other item required to be transported (within a specific depot area) to execute the contract to and from site where work is executed and supervision fees. (The main project store for material is in Soshanguve, however material can be collected from all the operational stores within the CoT area of jurisdiction).
 - 1.5. tools, equipment and auxiliary equipment,
 - 1.6. safety equipment (*see OHS of the schedule of rates*),
 - 1.7. all notifications to consumers when a power failure is going to occur
 - 1.8. the execution of tasks,
 - 1.9. Testing and Commissioning of complete installation
 - 1.10. all tariffs, levies, taxes payable by the bid,
 - 1.11. all expenses to restore the workplace/site to its original condition (where changing the site was not part of the works),
 - 1.12. all equipment needed to conform with the Regulations of the Occupational Health and Safety Act and the by-laws of the CoT.
 - 1.13. payments in terms of Royalties and Patent Rights (if the need arise).
 - 1.14. Compliance to OHS Act and Construction Regulations.
 - 1.15. For all excavations, the unit rate shall include traffic accommodation tools and safety tools which are not limited to safety fence with reflective layers, safety signs, cones and flags.

DEFINITIONS:

- Packable ground is defined as follows: Ground which can be removed with spades and pickaxes and includes loose gravel, loose or soft shale, loose ferricrete and stones (<75 mm diameter). Provision was made in the bid to do the work mechanically or by hand tools. Mechanical excavations will however only be allowed with the consent of the Project Manager.
- Soft rock is defined as follows: Rocks or stones which can be loosened by hand tools and includes shale, compact ferricrete and rocks with a diameter of 75 mm or bigger. (0.03 m³ in volume).
- Compacted ground is defined as follows: Ground which had been compacted previously and can only be excavated by the use of a jack-hammer or any other mechanical means. The decision if the ground is compacted lies with the project manager.
- Hard rock is defined as follows: Granite, quartz sandstone, slate and any other rock with the same hardness or size, solid shale and rocks more than 0.03 m³ in volume and where the use of a jack-hammer/pneumatic tools or any other mechanical means is necessary.
- Pictures of the soil must be taken as proof of the type of the soil.
- City's Engineer or the representative must approved the hard rock prior in writing.

PUBLIC LIGHTING INFRASTRUCTURE CONSTRUCTION

TABLE OF CONTENTS

SECTION 1: CONTRACT ADMINISTRATION

SECTION 2: CONTRACTOR'S SITE ESTABLISHMENT

SECTION 3: BREAKING, DRILLING, CROSSING AND REPAIR OF SURFACE COVERINGS

SECTION 4: POLES

SECTION 5: TREES AND PLANTS

SECTION 6: LOW VOLTAGE CABLE NETWORK

SECTION 7: AERIAL BUNDLE NETWORK

SECTION 8: STREETLIGHTS

SECTION 9: CABLE SLEEVE PIPES AND DUCTS

SECTION 10: COMPLIANCE TO OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

Note: Each tendered rate shall include full compensation for Setting out of works, Testing and Commissioning of complete installation works by a qualified person.

HANDOVER, TESTING AND COMMISSIONING

CONTENTS

2.16.1	SCOPE
2.16.2	TESTING SEQUENCE
2.16.3	SITE TESTING OF EQUIPMENT PRIOR TO COMMISSIONING
2.16.4	COMMISSIONING
2.16.5	MEASUREMENT AND PAYMENT

2.16.1 SCOPE

This section covers the factory and on site testing and commissioning requirements for all equipment supplied and installed under this contract. The procedures described are the minimum required and additional tests/requirements are specified in the relevant standard and detail specifications.

2.16.2 TESTING SEQUENCE

The testing to be performed on site is divided into two sections as follows:

- (a) Before official commissioning commences the contractor shall test his equipment as described below to ensure that the plant or equipment have been installed correctly.
- (b) After the contractor has been satisfied that his equipment is in good and running order, the commissioning of the plant or equipment will commence as described below.

2.16.3 SITE TESTING OF EQUIPMENT PRIOR TO COMMISSIONING

- (a) The contractor shall timeously inform the engineer when he intends to perform his first tests and start-up of equipment in order to allow the engineer to witness the tests.
- (b) Before starting up and section of the mechanical plant or filling tanks and sumps with liquid, the contractor shall clean out the tanks, pipes, fittings, equipment or structures, and, if necessary, make arrangements with other contractors to remove their building rubble from the structures, check that all safety devices and alarms have been set and activated, all nuts have been tightened correctly, that all the equipment is complete and ready for start-up, that the plant has been installed correctly, and that three copies of the operating manuals have been handed over to the engineer.
- (c) Each section of the equipment shall be started up by the contractor, who shall ensure that all oil fillings, lubrication, vibration monitoring, etc, have been correctly completed. In addition, he shall be responsible for the first re-filling of all the lubricating oils as well as for adjusting the plant to operate according to specification. Before any equipment is started or energized, the contractor shall ensure that it is safe for personnel and equipment on site to do so. Allowance for these costs shall be made in his tendered rates and sums.
- (d) The contractor shall conduct his own tests on the equipment and, only when he is satisfied that these tests meet the requirements of the specifications, shall he notify the engineer that he is ready to conduct the official tests on completion. The contractor shall not conduct an official test without the engineer being present. All equipment tested shall conform to the requirements specified.
- (e) The contractor must provide his own test equipment and electrical supply. Cost thereof to be included in tender amount.
- (f) Test equipment to be approved by COT before testing commences.

- (g) Procedures of COT must be strictly followed when testing ie when testing MV cable the cable must be alive on the same day when the pressure test is completed.
- (h) Test equipment must have valid test certificates by the time testing is conducted.

2.16.4 COMMISSIONING

- (a) The contractor shall be responsible for commissioning all sections of the works and shall perform all of the tasks set out below:
 - (i) Prior notice of and proper arrangements for the commissioning shall be made with the employer, engineer, supply authority, and all electrical contractors and suppliers of equipment which will be affected by the commissioning operation.
 - (ii) If plant and equipment which has been supplied by others has to be installed and commissioned, the supplier's specific permission thereto, naming the contractor to commissioning.
 - (iii) All sections of the works shall be carefully inspected by the contractor to ensure that all construction and installation work has been properly completed.
- (b) Commissioning and testing on site shall be carried out by experienced personnel under the contractor's supervision.
- (c) All re-commissioning tests and checks shall be agreed with the engineer prior to the commencement therewith.
- (d) When all the tests required before commissioning, or tests before tests on completion, have been completed and accepted by the engineer, the commissioning may proceed. During this period the contractor shall instruct the operating and maintenance staff in the correct procedures of operating the plant under all circumstances of operation, including emergency conditions, the correct servicing of every part, the type of oil or grease to be used, and similar instructions. This shall be done by demonstration and confirmation, in writing, and operating manuals shall be referred to for this purpose.
- (e) At least one week before commissioning commences the engineer will be requested to provide the contractor with commissioning sheets for all the equipment installed by the contractor. These forms shall be completed by the contractor during the commissioning period and all items listed shall be entered. Final handover certificates will not be issued for equipment with incomplete commissioning reports. Information that is not available or applicable, or reasons for not performing certain tests shall be agreed with the engineer.
- (f) Commissioning of the plant shall include operating under conditions which shall adequately prove that all the specifications are met. All safety devices, stand-by plant, automatic controls and protection devices shall be adequately tested for reliability and correct functioning. The contractor may be called upon to repeat testing during the maintenance period if the performance of any equipment supplied under this contract is suspected to be substandard by the engineer. Such tests shall be for the contractor's account and shall comply with the requirements specified. Copies of updated commissioning reports

- shall be provided to the engineer within two days after a test has been performed.
- (g) After the contractor has provided training to the employer and provided all other contractual requirements have been met, the latter will sign the commissioning report.
 - (h) Once a commissioning report is complete, the engineer and the contractor will sign and date the report, the maintenance for that particular piece of equipment from then on is the responsibility of COT in compliance with the general conditions of contract.
 - (i) Programs for the tests, and instruction/training sessions with the COT shall be prepared by the contractor and provided to the engineer no less than two weeks before the commissioning period commences. Weekly updates to these schedules shall be provided by the contractor for the duration of the commissioning period.
 - (j) Note that if any equipment should fail during the commissioning period, the equipment shall be repaired or replaced by the contractor, and testing and commissioning will commence from scratch.
 - (k) During the commissioning period, the contractor shall be responsible for providing all labour and materials (including testing equipment) and shall carry out all the servicing and any adjustment of the plant required for ensuring that it operates as specified. Valid calibration certificates shall be available for all testing equipment on site during the commissioning period.
 - (l) The contractor shall conduct all the tests required to satisfy the engineer (in the presence of the Engineer) that the plant is capable of performing in accordance with the specification, and shall make allowance therefore in his tendered rates and prices. Any defects detected during the commissioning period shall be made good by and at the expense of the contractor, including all additional costs incurred by the COT and the engineer. These tests shall be conducted to certify that the plant, as installed, is operating in accordance with the specified requirements. Note that all equipment will be tested as part of a system, where appropriate, and will not be passed if all protection devices, interlocking with other equipment, etc, are not fully functional.

STANDARD SPECIFICATION

SECTION 1

CONTRACT ADMINISTRATION AND REQUIREMENTS

CONTENTS

- 2.1.1 SCOPE
- 2.1.2 RELEVANT ACT, REGULATIONS AND STANDARDS
- 2.1.3 RESPONSIBLE PERSON ON SITE
- 2.1.4 SAFETY
- 2.1.5 QUALITY
- 2.1.6 QUALITY ASSURANCE
- 2.1.7 APPROVAL OF DRAWINGS, MATERIAL AND EQUIPMENT
- 2.1.8 CONSTRUCTION PROGRAMME
- 2.1.9 SETTING OUT OF WORKS
- 2.1.10 CONTRACTOR'S SITE REPRESENTATIVE
- 2.1.11 SITE MEETINGS
- 2.1.12 SUBCONTRACTORS
- 2.1.13 HANDLING AND STORAGE OF EQUIPMENT
- 2.1.14 FACTORY TESTING AND INSPECTION
- 2.1.15 INSPECTIONS
- 2.1.16 SECTION COMPLETION
- 2.1.17 SITE TESTING AND COMMISSIONING
- 2.1.18 HANDING OVER
- 2.1.19 "AS-BUILT" DRAWINGS AND MANUALS
- 2.1.20 OPERATING AND MAINTENANCE MANUALS

2.1.21 SPARES

2.1.22 MEASUREMENT AND PAYMENT

2.1.1 SCOPE

This standard specification covers the general, administrative, legal and organisational requirements as well as general technical requirements relating to quality of materials, installation, testing, commissioning and maintenance of the installation applicable to this contract.

2.1.2 RELEVANT ACT, REGULATIONS AND STANDARDS

The whole of the installation shall comply and the work shall be executed in accordance with the latest edition of the following:

- a) The Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the regulations promulgated in terms of the Act or the Factories Machinery and Building Works Act of 1941, whichever is applicable and their respective Regulations;
- b) The Code of Practice for the Wiring of Premises SABS 10142, with the latest amendments, issued by the South African Bureau of Standards;
- c) The regulations and by-laws of CoT;
- d) The local Fire Department Regulations;
- e) The applicable regulations of the relevant Telecommunication authority;
- f) The relevant SABS, BS, NRS and IEC supporting specifications referred to in the Standard Specifications.

2.1.3 RESPONSIBLE PERSON ON SITE

The contractor shall, before establishing on site, appoint and submit to the CoT in writing the name(s) of the person(s) who is/are the responsible person(s) in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the regulations promulgated in terms of the Act within 14 days from being appointed.

2.1.4 SAFETY AND TRAFFIC ACCOMODATION

- a) From date of site handover to the contractor until the completed work is handed back to the CoT, the contractor shall be responsible for maintaining safe conditions on site. As the "owner" of the site, the contractor shall bear all responsibilities in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the regulations

promulgated in terms of the Act or Factories, Machinery and Buildings Work Act, whichever is applicable.

- b) The contractor shall be responsible for supplying and installing the required safety signs as determined by the Occupational Health and Safety Act, 1993 (Act No85 of 1993) and the regulations promulgated in terms of the Act of Factories, Machinery and Building Works Act, whichever is applicable, both during the construction phase and for the completed works.
- c) All safety signs shall comply with the requirements of the latest edition of SABS 1186 as applicable.

The contractor must make provision for an identification sign, which should indicate the following:

- contractor name and contacts
- CoT Project Manager and contacts
- Project name and
- Wayleave number

Include the dimension of the board please

2.1.5 QUALITY

a) Material and equipment

All material and equipment shall conform in respect of quality, manufacture, tests and performance, with the relevant requirements of the South African Bureau of Standards or where no such standards exist, with the relevant current specification of the British Standards Institution and/or relevant IEC publications.

All material and equipment shall be suitable for the conditions on site. These conditions shall include weather conditions as well as conditions under which materials are installed, stored and used. Should the materials not be suitable for use under temporary site conditions, then the contractor shall, at his own cost, provide suitable protection until these unfavourable site conditions cease to exist.

The contractor shall, were requested to do so, submit samples of equipment and material to the engineer for approval prior to installation. The engineer may retain these samples until the contract is completed after which they will be returned.

b) Proprietary materials

Where proprietary materials are specified, it is to indicate the quality or type of materials or articles required, and where the terms "or other approved" or "approved equivalent" are used in connection with proprietary materials or articles, it is to be understood that the approval shall be at the sole discretion of the engineer after the appropriate samples have been submitted to the engineer for his evaluation.

c) Voltage rating of appliances and equipment

The voltage rating of all appliances and equipment to be installed shall be in accordance with the nominal supply voltage of CoT except where otherwise laid down in the detail specification.

2.1.6 QUALITY ASSURANCE

The contractor shall implement a quality assurance system to ensure adequate control of the total construction process including those off-site activities that will have an impact on quality of the final constructed product. Before coming with any procurement or construction work, the contractor shall furnish the engineer with details of a quality management system which will be used by the contractor. Safety file and safety plan as the sites gets allocated.

2.1.7 APPROVAL OF DRAWINGS, MATERIAL AND EQUIPMENT

a) Engineer's drawings and specifications

The drawings prepared by the engineer show the general layout of all equipment and systems, complete with schematic arrangements. These, together with the specification, give sufficient information to enable the contractor to estimate the cost and to determine how the system must be installed, tested, inspected, operated, serviced and maintained.

These drawings are not dimensioned installation drawings, and cannot be used as construction/shop drawings. Location dimensions shown are only indicative of the routes and zones in which the service shall be installed.

b) Contractor's drawings

(I) Preparation of drawings

Three paper print drawings of all equipment or plant to be manufactured shall be submitted to the engineer for approval. These drawings shall indicate all equipment, distribution systems, instrumentation positions and access requirements.

The contractor may, if he so desires, purchase copies of the engineer's drawings on 0,08 mm thick polyester film for modifications and updating if required. These drawings shall be retitled in accordance with the contractors system and shall thereafter be submitted as contractor drawings. No portion of the contractor's work shall be commenced until the drawings have been approved by the engineer.

The contractor shall at all times keep an updated as built drawing in the site office. This completely marked up drawing shall be handed to COT when area's are handed over.

(ii) Submission of workshop drawings

Submission for approval will consist of the following activities executed by the contractor and other parties involved:-

Three copies of the drawings shall be submitted to the engineer for approval.

The contractor shall review, stamp, date and sign to signify his approval and submit in the manner required by the engineer and with reasonable promptness and in orderly sequence so as to cause no delay in the work, all contractor drawings and samples required by the contract documents or subsequently by the engineer. Contractor drawings shall be properly identified and numbered to the COT standard.

At the time of submission the contractor shall inform the engineer in writing of any deviation in the contractor drawings or samples from the requirements of the contract documents.

By submitting drawings and samples, the contractor signifies that he has determined and verified all site measurements, site instruction criteria, materials, catalogue numbers and similar data, or will do so, and that he has checked and coordinated each contract's drawing and sample with the requirements of the works and of the contract documents.

The engineer will review and approve construction drawings and samples with reasonable promptness (but within 21 days) so as to cause no delay, but only for conformance with the design concept of the works and with the information given in the contract documents. The engineer's approval of a separate item shall not indicate approval of an assembly in which the item functions.

The contractor shall make any corrections required by the engineer and shall re-submit the required number of corrected copies of contractor drawings or new samples until approved. When re-submitting drawings, the contractor shall specifically direct the engineer's attention (in writing) on revisions other than corrections required by the engineer on previous submissions.

No portion of the contract works requiring a contractor drawing or sample submission shall be commenced until the submission has been approved by COT.

c) Samples of material and equipment

The contractor shall, prior to placing orders, submit samples of all material and equipment to the engineer for written approval prior to commencing with the tender installation.

For large equipment such as high voltage switchgear, transformers, standby generators, pumps, compressors and lifts, catalogues and brochures shall be submitted for approval with the tender document.

d) Compliance with national and international standards

For all material and equipment that are required to conform to any national or international specification or publication, the contractor shall submit a certificate to the engineer, issued by a accredited testing laboratory clearly stating that the material and/or equipment complies with the required specification or publication whenever requested by the engineer and it shall be for the contractors cost.

2.1.8 CONSTRUCTION PROGRAMME

The contractor shall submit his programme of work to the engineer not later than 14 days after the contractor has been notified of the acceptance of his tender. If necessary, the engineer may instruct the contractor to adjust his programme to suit other activities.

The programme shall not be in the form of a bar chart only, but shall be based on a network technique and shall show clearly the anticipated quantities of work to be performed each week,

together with the manner in which the listed plant is to be used, as well as the cash flow for the various sections of work. (Missing critical path route)

If, during the progress of the work, the quantities of work performed per week fall below those shown on the programme, or if the sequence of operations is altered, or if the programme is deviated from in any other way, the contractor shall, within two days after being notified by the engineer, submit a revised programme.

If the programme has to be revised by reason of the contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the works within the time for completion as defined in the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant on site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the contractor to submit or to work according to the programme or revised programmes shall be sufficient reason for the engineer to take steps as provided for in the General Conditions of Contract.

The approval by the engineer of any programme shall have no contractual significance other than that the engineer will be satisfied if the work is carried out according to such programme and that the contractor undertakes to carry out the work in accordance with the programme. It shall not limit the right of the engineer to instruct the contractor to vary the programme should circumstances make this necessary.

Progress will be monitored weekly. If the contractor is behind schedule, COT will notify the contractor. The contractor must bring the program back to schedule within one week at his own cost.

2.1.9 SETTING OUT OF WORKS

The contractor shall arrange for the setting out of the works by a competent person.

2.1.10 CONTRACTOR'S SITE REPRESENTATIVE

In terms of the General Conditions of Contract, the contractor shall advise the engineer in writing of the name of the person the contractor intends using to supervise the carrying out of the works on site. The contractor shall furthermore submit the qualifications and details of the experience of the person the contractor intends using on site. The engineer reserves the right to accept or reject the employment of the proposed representative of the contractor on site. Such representative shall have full powers to act on behalf of the contractor.

The approved representative on site shall be on site at all times while the contractor is established on site and shall not be removed from the site and replaced by any other person without the prior approval of the engineer. The engineer reserves the right to stop all work on site in the event of the site representative not being on site at all times or if the approved site representative is removed from site without the engineer's approval, until this condition is complied with.

Both the contractor and the contractor's representative on site shall sign a declaration that they are conversant with the requirements of the contract document and that they are aware of the details of the contract. No excuses will be accepted for material or work which does not comply with the standards and specifications in the contract document.

2.1.11 SITE MEETINGS

The contractor and his authorized representative shall attend all meetings held on the site with representatives of the main contractor and professional team at dates and times to be determined by the engineer. Such meetings will be held to evaluate the progress of the contract and to discuss matters pertaining to the contract which any of the parties represented may wish to raise. It is not the intention of such meetings to discuss matters concerning the normal day-to-day running of the contract.

2.1.12 SUBCONTRACTORS

The appointment of subcontractors shall be subject to the approval of the Engineer. In line with regulation of the 30~~25~~5% of the project cost should be subcontracted to local SMMEs. Preference will be given to subcontractors situated in the region where the project takes place. CoT policy on appointing subcontractors shall be followed.

Proposed subcontractors shall first be introduced to the engineer before he (the subcontractor) commences work. The subcontractor shall have a thorough knowledge of the work to be carried out under his portion of the contract. The engineer will make payments in favour of the main contractor alone. The contractor shall mutually arrange payments between himself and the subcontractor.

The responsibility for communication, standard and quality of workmanship or material remains the responsibility of the main contractor.

2.1.13 HANDLING AND STORAGE OF EQUIPMENT

Payment items have been provided for the storage of equipment either on site or at a location determined by the engineer. These items shall only be applicable if the engineer has confirmed in writing that the equipment is ready to be installed, but that the other work on site has not advanced sufficiently to enable the equipment to be installed.

Facilities for extended storage at site for plant may not always be available and the contractor shall therefore make his own arrangements and at his own cost for any off-site storage which may be required for plant which became available before installation thereof can commence. The contractor must plan his work program so that the site work and factory items correspond to prevent any unnecessary storage.

A layout plan of the site camp must be handed in by the contractor within one week after the start of the project. Equipment shall be stacked in neat rows ie one row for 25x3c and another row for 10x3c Cu Cable. The contractor shall keep the site camp clean and ordered.

The equipment stored on site shall be adequately protected and insured against damage resulting from weather, vandalism, theft, etc. This also applies to tools and equipment required for installation. Appointment of site security as responsibility of the service provider.

The Engineer reserves the sole authority to determine when equipment is damaged and what remedial actions, if any, are required. If the damage is extensive, the equipment shall be rejected and removed from site. Previous payments can then be revoked until the contractor has replaced all such damaged equipment or material.

The contractor shall be responsible for the necessary maintenance of the equipment during the period of storage eg the maintenance of breathers, rotation of gearboxes, etc. All equipment shall, where necessary, be protected against the elements and corrosion.

Should the contractor claim payment of a portion of the value of some or all of the plant and equipment held in off-site stores, the items concerned must be clearly marked: "The property of COT and a certificate from the supplier of the plant or equipment to this effect shall

accompany his claim detailing the items and serial numbers included in his claim as well as the street address of the store where the plant material or equipment is held. In addition, a certificate must also be furnished by the company with whom the plant or equipment has been insured in terms of the requirements of the general conditions of contract, in which it is certified that the plant and equipment for which the contractor is claiming payment is fully covered by the insurance policy concerned while the plant and equipment is stored away from the site (street address of store to be stated).

Payment under this item will be done in terms of the General Conditions of Contract.

The tendered rate shall include for double handling of the equipment, all packing material, insurance, maintenance, repair work where such repair work is not claimed from the insurance, storage costs, corrosion protection, administrative costs, additional transport, etc.

2.1.14 FACTORY TESTING AND INSPECTION

- a) The engineer reserves the right to visit and enter the manufacturer's works during the design and manufacturing stages for the purposes of interim and final inspections and for progress information acquisition. Where the contractor makes use of third parties for the manufacturing and/or procurement of equipment, the contractor shall ensure that this requirement is agreed with the third party.
- b) The engineer reserves the right to be present to witness at all or any of the tests (or, at the engineer's discretion repeats of such tests) conducted on the equipment or plant.
- c) One calendar week's notice of pending tests shall be given to the engineer in writing.
- d) Three copies of all test records are to be submitted to the engineer for approval before the equipment or plant are delivered to site.

2.1.15 INSPECTIONS

The contractor shall give the engineer at least 24 hours' notice in writing to inspect, measure, test or commission any section of the works. In the event of the contractor requesting the engineer to inspect, measure, test or commission any sections of the works where the contractor has not completed such sections of the works and is not ready for the engineer to inspect, measure, test or commission the sections of the works or where the testing of the works fails due to the neglect of the contractor to test such sections of the works prior to notifying the engineer to witness the tests, the contractor shall pay the engineer an amount of R200,00 per hour for his travelling time and time spent on site and R1,00 per kilometre for the distance travelled to and from site by the engineer.

The contractor shall furthermore be liable for the engineer's costs as specified above for all inspections, measurements, tests and commissioning that the engineer has to undertake after the expiry of the completion period allowed for in this contract and where no extension of time has been granted.

Previous payments can then be resolved to cover the cost of such inspection.

2.1.16 SECTION COMPLETION

It is a specific requirement of this contract that the contractor shall, after acceptance of his tender, submit a program in accordance to clause 2.1.8 which shall provide completion dates for the section as stated below. These dates shall be the official completion dates for these sections. Each section, when completed, shall be fully functional with all parts of the installation completed, useable and requiring no further work or material.

- a) MV network for the complete area.

- b) The low voltage network must be divided in zones consisting of three minisub areas. State completion dates for these zones.

Completion shall be calculated from the date on which the contractor is advised that his tender is accepted.

2.1.17 SITE TESTING AND COMMISSIONING

- a) The contractor shall be responsible for commissioning all sections of the works and shall perform all of the tasks set out below and as detailed in the relevant standard and detail specifications.
 - (i) Prior to any tests and commissioning, all sections of the works shall be carefully inspected by a qualified electrician representing the contractor to ensure that all construction and installation work has been properly completed.
 - (ii) Prior notice of and proper arrangements for the commissioning shall be made with the engineer and all contractors and suppliers of equipment which will be affected by the commissioning operation.
 - (iii) If plant and equipment, which has been supplied by others, have to be commissioned, the supplier's specific permission thereto, together with any specific requirements relating to commissioning shall be obtained prior to commissioning and the contractor shall arrange that the commissioning shall be attended by a representative of the equipment supplier.
- b) Commissioning and testing on site shall be carried out by experienced qualified personnel under the manufacturer's supervision in the presence of the City's Engineer or representative, and shall be contractor's responsibility.
- c) All equipment necessary for the purpose of the tests must be provided by the contractor, within active validity period and remains the property of the contractor.
- d) All tests and checks to be carried out shall be approved by the engineer prior to the commencement thereof.
- e) All tests and checks are to be recorded in writing. All test certificates and records to be handed to the engineer prior to the "handing over" of the work.
- f) Commissioning
 - (i) Carry out all necessary adjustments to ensure correct operation of the equipment, mechanisms and interlocks.
 - (ii) Adjust all the protective devices to the setting required.
 - (iii) Operate all circuits and check that all interlocks and controls operate correctly. Check that all meters are reading correctly.
 - (iv) Instruct the CoT staff in the operation and servicing of the equipment.
 - (v) Hand over all loose items together with lists of such items and obtain a receipt from the engineer.
 - (vi) Clean all equipment and thoroughly clean plant rooms, substations etc. and leave in neat and tidy condition.

- (vii) All low voltage networks shall be checked and tested as set out in clause 2.9.6 by an experienced qualified person provided by the contractor prior to commissioning.
- (viii) Medium voltage cable networks shall prior to commissioning be tested and phased between mini subs by an experienced qualified person provided by the contractor as set out in clause 2.7.7.

When phasing into the existing network is required, the contractor will arrange with the CoT test department to test the installation. The contractor will pay all test fees as requested by the CoT. Any faults found by the CoT electrical test department will be the responsibility of the contractor to repair. A fee for the retest will be payable by the contractor.

2.1.18 HANDING OVER

The handing over of completed sections of the works to the CoT and the energizing/- putting into operation of the completed sections of the works will only take place once the following documents and drawings have been submitted to the engineer:

- A certificate of compliance in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the regulations promulgated in terms of the Act of Factories, Machinery and Building Works Act, whichever is applicable.
- A certificate issued by the contractor that the installation complies with the contract and specifications.
- A certificate of acceptance which shall be specified and signed by the engineer after the inspection, acceptance and approval of the completed sections of the works has taken place.
- "As-built" drawings, signed by the contractor, of the completed installation.
- Written application to energize the completed sections of the works.
- The payment of all outstanding service fees as required by the COT.
- The payment or setting of all outstanding claims for service damage by the contractor from any third party.

The contractor shall be responsible for timeously arranging all tests and inspections with the engineer, submitting the necessary documents and drawings to the engineer and applying for the energizing of the completed sections of the works.

2.1.19 "AS-BUILT" DRAWINGS AND MANUALS

COT will provide the contractor with one set of A4 drawings which will show each minisub area on its own. On commissioning of such minisub area the contractor will update any changes to the original planning on this drawing. These drawings shall be handed to the engineer to form the "as-built" record drawings. The works shall not be certified complete, unless these drawings and any specified operating and maintenance manuals have been submitted to COT.

2.1.20 OPERATING AND MAINTENANCE MANUALS

2.1.20.1 Submission of Manuals

- a) A complete set of Provisional Operation and Maintenance manuals shall be handed over to the engineer at least one month before any commissioning tests commence. The manuals will be checked by the engineer and returned to the contractor with comments. The contractor shall make the necessary changes and amendments to the manuals to incorporate the engineer's comments in the manuals.
- b) Portions of the information required in terms of this section may only be omitted with approval of the engineer.
- c) After the Operation and Maintenance manuals have been approved by the engineer, four sets of the manuals shall be provided by the contractor for distribution by the engineer.
- 4) On completion of the contract, all drawings required for the manuals shall be prepared and included in the manuals as specified.

2.1.20.2 Format of the Manuals

- a) Physical appearance
 - (i) Manuals shall be bound in hard cover lever-arch files with plastic coatings. The files shall be clearly labelled on the outer front cover and on the edge with the following information:
 - The contractor's name (logo optional)
 - The project title
 - The title "Operation and Maintenance Manuals"
 - The month and year during which the manuals are finally handed over to the engineer.
 - (ii) Pamphlets and bound leaflets/booklets from suppliers shall be placed in plastic sachets, especially if they are of non-standard size.
 - (iii) Large format drawings shall be folded and placed in plastic sachets such that they can be easily removed.
 - (iv) Systems and/or functional units on the site shall be treated as units in the manuals, even if different types of the equipment occur on such units. Cross-referencing may be used.
- b) Contents

The manual shall contain the following:

- (i) Title page
- (ii) Contents list
- (iii) List of drawings and appendices
- (iv) The main body of manual divided into sections with each section covering a system and/or functional unit. Each of these sections shall contain the following:
 - (1) Title page
 - (2) Contents list

- (3) Technical description and specification of the system / functional unit.
- (4) Operating instructions for the system / functional unit. These operating instructions shall include clear instruction for the procedures to be followed during starting and stopping of the system and shall include all operating requirements as well as all safety procedures.
- (5) Technical description and specification of the components /equipment making up the system / functional units. This description and specification shall include the following:

Plant tag numbers, technical description, drawings, design details, operation curves, range of operation limits, materials of construction, installation procedures, limits of misalignment, power output, supply requirements and noise and vibration specification.
- (6) System maintenance requirements, which shall be presented in a single maintenance schedule which shall clearly identify all daily, weekly, monthly and running hour based maintenance requirements. A similar schedule is required for each major piece of equipment. The maintenance schedule shall be supplemented by full maintenance instructions.
- (7) Schedule of spare parts and consumable. This schedule shall contain the following minimum information:

Specification and illustration where necessary, correct identification of components for ordering replacements, alternative manufacturer details, supplier details and an alternative supplier detail.
- (8) Erection, installation and commissioning instruction.
- (9) As-built circuit and layout paper print drawings.

2.1.21 SPARES

At tender stage for a plant, system or functional unit, shall the contractor submit a detail priced list of recommended spares and consumables required for the system before the system will be approved for installation. The list shall indicate which spares are consumable spares and which are strategic spares together with an expected monthly consumption.

2.1.22 MEASUREMENT AND PAYMENT

2.1.22.1 Services of a land surveyor

<u>Item</u>	<u>Unit</u>
2.1.22.1.2 Stand pegs	Each

The unit of measurement shall be a number of stand pegs. The land surveyor will be used when stand pegs cannot be found and it is necessary to install services only when approved by the Engineer.

<u>Item</u>	<u>Unit</u>
2.1.22.2 Storage of equipment where storage space is provided by:	
2.1.22.2.1 The contractor	per month

The unit of measurement shall be per month.

The tendered rate shall include full compensation for all double handling of the equipment, all packing material, insurance, maintenance, repair work where such repair work is not claimed from the insurance, storage costs for free issued material, corrosion protection, administrative costs, additional transport, etc of the equipment as specified and security.

<u>Item</u>	<u>Unit</u>
2.1.22.7 Remove and return redundant material to COT stores	per km

In upgrading projects this item must include for all the old material that was removed, like overhead lines, streetlights, etc. This item must also include for labour and all material which COT paid for after the installation is completed. The item must include for loading, transport, off-loading at stores, etc. The vehicles classification are as follows; Light vehicle of mass of up to 3500 kg, Medium Vehicle of mass of 3501 kg to 9000 kg and Heavy Vehicles of mass of 9001 kg and over.

<u>Item</u>	<u>Unit</u>
2.1.22.10 Liaison Officer	Per Month

The unit of measurement shall be a monthly salary of the Liaison Officer paid (CoT minimum T5-level salary)

The payment unit shall include full compensation for a Liaison Officer's per hour. Liaison Officer's hourly rate must be per hour and monthly hours must not exceed 176 hours per month. The contractor must approve a daily timesheet for the Liaison Officer which means that the contractor will only claim for the hours that the Liaison Officer was on duty. Pro-rata payment shall be effected as and when required

STANDARD SPECIFICATIONS

SECTION 2

CONTRACTOR'S ESTABLISHMENT ON SITE

CONTENTS

- 2.2.1 SCOPE
- 2.2.2 SITE REQUIREMENTS
- 2.2.3 NOTICES, SIGNS AND ADVERTISEMENTS
- 2.2.4 CLAIMS FOR EXTENSION OF TIME OR FINANCIAL CLAIMS
- 2.2.5 MEASUREMENT AND PAYMENT

2.2.1 SCOPE

This specification covers all work and costs involved in the establishment of the contractor's organisation, camp and plant on the site and the removal thereof after completion of the contract. Payment for the contractor's general obligations, liabilities and risks which are not covered elsewhere, is also provided for in this section.

2.2.2 SITE REQUIREMENTS

The magnitude of the Public lighting projects does not warrant the erection of the site camp and in such cases provision shall be made for handling material by the service provider.

a) Camps, personnel and plant

The contractor shall establish his construction camp, including all accommodation, maintenance and testing facilities necessary for his personnel, plant, stores, process control etc. on the site.

Accommodation must comply in all respects with the requirements of CoT who shall have free access at all times for inspection purposes.

The contractor shall also move all necessary personnel and plant to the site preparatory to starting work, and from the site after completion of the work, leaving the camp clean, tidy and free from obstructions. All buildings as well as the whole camp area and fencing shall be maintained during the contract.

The contractor shall provide and maintain suitable facilities within his office complex for the holding of site meetings. This will include a table and $\pm$ 8 chairs.

The positioning and layout (including information such as site office position and storage areas for different materials) of the camp on the site shall be shown on a drawing subject to the approval of the engineer. This must be handed in two weeks after letter of acceptance.

The contractor shall install a rain meter in the site camp with a logbook to record information such as quantity of rain (mm), date and time etc.

b) Tidiness of camp If the camp is not tidy or not laid out according to the drawing, a site instruction will be given to rectify this within one week.

Off loading of cable drums shall be in such a way as to arrange cables of the same size together ie 10mm² x 3 core shall be in one row and 25mm² x 3 core in another row etc.

Drums provided by CoT remain the property of CoT and the contractor must include in his tender amount for delivery of these drums to CoT stores after completion of the contract (or during the contract period).

The contractor shall also make suitable arrangements to protect the property of CoT ie MV cable off cuts must be capped.

c) Legal relations and responsibility to the public

The contractor shall take steps necessary to comply with the terms of the General Conditions of Contract, particularly in respect of the insurance, guarantees and indemnities required, and shall comply with all the regulations of the CoT.

d) Delivery Notes

The contractor shall keep a file of all the delivery notes. If the contractor arranges material from his stores, suitable delivery notes must be supplied. The file must be maintained throughout the contract period and must be arranged in sections for the different materials.

e) Facilities

Temporary removable and chemical latrines (long drops are not allowed) shall be provided by the contractor. One latrine shall be provided for every 15 people.

f. Handling of the free issued material

The contractor shall make provision to handle the free issued material on its own premises and unit rate shall be monthly. Pro-rata basis shall apply.

2.2.3 NOTICES, SIGNS AND ADVERTISEMENTS

The contractor shall not erect any notices, signs or advertisements on or near the site without the written approval of the engineer.

As part of his general obligations, the contractor shall erect the official name board(s), the details of which are shown on the drawings. The name board(s) shall be erected in the position(s) indicated by the engineer.

All signboards, notices, the official name boards(s) and advertisements shall be removed by the contractor on completion of the works or by the end of the maintenance period, as may be directed by the engineer.

2.2.4 CLAIMS FOR EXTENSION OF TIME OR FINANCIAL CLAIMS

Payment for this item falls under 2.5.1.2.

The contractor must hand in a written claim (financial or time extension) within 14 days after the event that caused the claim. The contractor must make due allowance for this in his contract under item 2.5.1.2 and must include for salary of liaison officer(s), all labourers and any cost that may be incurred as a result of extension of time.

2.2.5 MEASUREMENT AND PAYMENT

<u>Item</u>	<u>Unit</u>
2.2.5.1. Contractor's establishment on site	
2.5.1. 1 Provision of minimum rudimentary services	per month
The tendered rate shall include full compensation for provision and maintenance of movable flushable chemical toilet and clean drinking water services.	
2.5.1.2 Handling of the free issued material	per month

he tendered rate shall include full compensation for provision handling material in safety of its premises between the collection and installation of construction site.
2.5.1.3 Provision of a site camp per month

<u>Item</u>	<u>Unit</u>
2.2.5.3 Sign Board	Each

The contractor must allow for delivery, off-loading, erection and all material for the sign board STD 001. The board forms part of the traffic accommodation plan (TMP) which is a requirement for compliance. Refer to Annexure A

STANDARD SPECIFICATIONS

SECTION 3:

BREAKING, DRILLING, CROSSING AND REPAIR OF SURFACE COVERINGS

3.1 BREAKING :

The unit rate for the breaking of tar, concrete or in-print paving includes the breaking of the tar, concrete or in-print paving by means of a jack-hammer as well as the removal of all unwanted material to a suitable dumping site.

The unit rate for the lifting of paving includes the cost to lift any form of paving (bricks, tiles, blocks etc.). Any material that is damaged will be on the account of the Contractor.

3.2 HORIZONTAL DRILLING

In all horizontal drilling crossings, the contractor must supply HDPE pipe and this pipe will be a standard pipe usable on all projects of CoT.

Horizontal drilling includes the drilling of the holes, the supply and installation of sleeves and 4mm steel wire and the placing of the end seal. Water for the drilling process must be supplied by the Contractor.

- At tarred road intersections a minimum of 4 spare sleeves must be installed.
- An accurate hole is defined as a hole which is drilled in a way that the sleeves installed are at the same height at both ends. Inaccurate holes are unacceptable and no payment will be made for such holes. Payment will only be made for sleeves that were successfully installed.

Note: All sleeves and/or drilling must be at 1m depth from ground level at all times.

Drill pit: The unit rate for the digging of a drilling pit includes the digging of the hole and the removal of all unwanted material to a suitable dumping site. It also includes the filling of the hole with suitable ground, the compacting and getting the compacted area to its original condition.

3.3 CROSSINGS

3.3.1. Railway line and oil pipe crossings:

The contractor bidding for this section must also bid for the following sections: Horizontal drilling, Excavations and the installation of sleeves.

The Contractor also must make the necessary arrangements with the relevant institutions for assistance. The installation of the sleeves under and/or over the crossings must be according to the specifications of the institution involved.

3.3.2. Tarred, concrete or paved road crossings, entrance roads or ramps where drilling is

impossible. :

The Contractor must bid under the following sections: Breaking of tar or concrete, excavations, installation of sleeves and the repair of surface coverings to its original condition.

At road crossings, the Project Manager will specify the number of sleeves required to be installed as per installation standards of CoT.

The Contractor must make the relevant arrangements with all the relevant Service Providers which include the following: City Electrical Project Manager, Project Manager: Roads, Traffic Department and the Provincial Administration, to comply with their requirements and for supervision by one of their representatives when necessary.

3.3.3. Tunnel and bridge crossings :

The Contractor must bid under the following sections: Breaking of tar or concrete, excavations, installation of sleeves and the repair of surface coverings to its original condition.

At tunnel and bridge crossings, the Project Manager will specify the number of sleeves required to be installed as per installation standards of CoT.

The Contractor must make the relevant arrangements with all the relevant Service Providers which include the following: City Electrical Project Manager, Project Manager: Roads, Traffic Department and the Provincial Administration, to comply with their requirements and for supervision by one of their representatives when necessary

3.3.4. Mounting of racks or cable clamps:

The unit rate shall include the mounting of the racks or cable clamps in the tunnels or to the sides of the bridge.

3.4 REPAIR OF SURFACE COVERINGS.

3.4.1 and 3.4.2. Channel covering tiles, paving- stones/ tiles and bricks.

The unit rates for the repair of tiles or bricks include the compacting of the ground and the restoration thereof to the original condition. Any bricks or tiles that break, will be for the account of the Contractor.

3.4.3. And 3.4.4. The Concrete (per m³)

NOTE: The concrete must be restored to the original thickness.

The unit rate for the compaction of the ground, repair of concrete includes the supply, delivery and casting of the concrete to the satisfaction of the Project Manager.

3.4.5. Tarred pavement (per m³)

The unit rate for the repair of tar pavements includes the supply, delivery and placing of the tar and the finishing thereof to the standards set by the Project Manager.

3.4.6. In-print concrete paving (per m³)

The unit rate for the repair of in-print concrete paving includes the supply, delivery and placing of the concrete paving and the finishing thereof to the satisfaction of the Project Manager.

4.1. SECTION 4: POLES (A. General, Section 4) Planting of poles (Section 4.1):

4.3.1. The unit rate includes the installation of the poles, aligning of the poles and the filling of the holes with appropriate soil and the compacting thereof.

4.3.2. In the case of steel poles, the unit rate shall include one or all of the following (depending on type of pole):

4.1.2.1. the mounting of the base plate,

4.1.2.2. the installation of the stubby and the fastening of the pole to the stubby.

4.1.2.3. The unit rate for the planting of robot poles includes the following:

4.1.2.3.1. the installation of the base and the bolting down of the poles,

4.1.2.3.2. the filling of the holes:

4.1.2.4. In the case of short robot poles the hole must be filled with cement. The measurements of the holes are: depth 600 mm and width 250 mm.

4.1.2.5. In the case of overhead robot poles the hole must be filled with concrete with strength 20 MPA to a depth of 900 mm. The dimension of the hole is: 1m x 1m x 1m (L x W x D). The prices must include the supply and delivery of cement and concrete and casting.

4.1.2.6. The price of the cement and concrete must be provided in "Material Cost" column.

4.2. Anchoring of poles (Section 4.2):

4.2.1. The anchors are divided into 3 groups: Stays, struts and pedestals.

4.2.2. The Stay: the unit rate includes the mounting of the base plate and the installation thereof in the ground.

4.2.3. The Strut pole: the unit rate includes the installation of the strut pole in the ground and the fastening thereof to the pole being supported.

4.2.4. The Pedestal: the unit rate includes the excavation of the hole. The hole must be filled with concrete and the price of the supply, delivery and casting of the concrete must be included with the rate.

4.2.5. The price of the concrete must be provided in "Material Cost" column.

4.2.6. The fastening of the stay, to the pedestal and the pole; and/or the fastening of the stay to the pole being supported must be included in all unit rates above.

4.3. Removal of poles (Section 4.3):

4.3.1. The unit rate of the removal of poles includes the opening of the holes, removal of the redundant poles and the delivery of the redundant poles to the store. The backfilling of the holes and the clearing of the site must be included in the price.

STANDARD SPECIFICATIONS

SECTION 5: TREES AND PLANTS

Applicable definitions:

- 5.1. First round: 80% or more of trees/branches must be 100mm in diameter.
- 5.2. Second round: 20% or more of trees/branches must be less than 100mm in diameter.
- 5.3. A bay is an area between two consecutive poles of an overhead line.

Items

5.4. Clearance of a new 11 kV servitude, removal of trees and other vegetation on a strip of 6m wide:

- 5.4.1. Due to the fact that no line is in existence, the measurement shall be in metres (m).
- 5.4.2. The unit rate includes trimming, cutting and/or complete removal of trees and other vegetation in a strip of 6m (3m on each side of the new line's route) wide on the planned route of the 11 kV overheads.

5.5. Clearance of existing 11kV servitudes, cutting of grass and vegetation on a strip of 6 m wide.:

- 5.5.1. The measurement shall be made 3m from each side of the existing line in a bay.
- 5.5.2. The unit rate includes cutting of grass and vegetation for the dimension described above. The maximum height of the grass and vegetation after completion of the work must be 20 mm. The trees must be treated with a suitable substance to prevent them from growing again.

5.6. Clearance of 132 kV servitudes, trees and other vegetation on a strip of 32m wide:

- 5.6.1. The unit rate includes the cutting and removal of any trees and other vegetation underneath the 132 kV lines. The trees and vegetation must be cut to a level lower than ground level and fill the area with a suitable chemical to prevent the growth of such plantation. The work must be finished before the 31st of May each year.

5.7. Clearance of 132 kV servitudes, cutting of grass and vegetation on a strip of 32m wide:

- 5.7.1. The unit rate includes the cutting of the grass and other vegetation underneath the 132 kV lines. The maximum height of the grass and vegetation after completion of the work must be 100mm. The work must be finished before the 31st of May each year.

5.8. Clearance of overheads:

- 5.8.1. The unit rate includes the cutting away of trees and other vegetation in a radius of 1m minimum and 3m maximum. Prices must be given for first rounds and second rounds. The Project Manager will determine which cutting must be done, being first or second round cutting.
- 5.8.2. Different unit rates for urban and peri-urban areas shall be scheduled. The typical urban network consists mostly of low voltage overhead conductors. The peri-urban networks are mostly 11kV overhead conductors and the bay and other distances must be considered in unit rates. Low voltage overheads in peri-urban areas will be considered as urban.

5.9. Clearance of streetlights

- 5.9.1. The unit rate for the clearing of streetlights includes the cutting away of trees and other vegetation. The cutting must be done in a way that there is no vegetation or trees obstructing the light radiation. Prices must be given for first rounds and second rounds.

5.10. Clearance around the pole, treatment of weeds around the pole and treatment of the pole (Section

5.11. For all activities above the restoration and the clearing of the route of all unwanted material must be included in the unit price.

STANDARD SPECIFICATIONS

SECTION 6

LOW VOLTAGE CABLE NETWORK

CONTENTS

- 6.1 SCOPE
- 6.2 MATERIALS
- 6.3 EXCAVATIONS
- 6.4 INSTALLATION OF CABLES
- 6.5 JOINTING AND TERMINATION OF LOW VOLTAGE CABLES
- 6.6 TEST BEFORE ACCEPTANCE
- 6.7 INFORMATION REGARDING THE COMPLETED NETWORK
- 6.8 CLEARING OF SITE
- 6.9 MEASUREMENT AND PAYMENT

6.1 SCOPE

This section covers the installations of the low voltage cables.

6.2 MATERIALS

(a) Low voltage cable

Low voltage cables shall be in accordance with SABS 150 of 1970, SABS 1411 : Part I to Part VI and shall be PVC insulated, with either stranded or solid copper or aluminium conductors as specified in the Project Specification, PVC bedded, steel wire armoured and PVC sheathed.

The armouring shall consist of one layer of round galvanized steel wire.

(b) Cable drums

The cable drums shall be capable of taking a round spindle and be lagged with strong, closely fitted battens, at the inner and outer circumference so as to prevent damage to the cables. The spindle bearing plates shall be steel. The dimensions of the drum shall not exceed 1 100 mm width, 2 000 mm diameter and the spindle bearing plate shall not be less than 9 mm thick. Each drum shall be clearly marked on both sides with the following particulars:

- (a) Voltage
- (b) Actual cable length
- (c) Conductor size (cross-sectional area and stranding)
- (d) Number of cores
- (e) Finish.
- (f) Drum number
- (g) Gross mass
- (h) Nett mass
- (i) Direction of rotation
- (j) Manufacturers project or job number

The ends of the PVC sheathed cable shall be sealed to avoid penetration of moisture.

The end protruding from the drum shall be protected against mechanical damage. The requirement of Section 7 of SABS 97 shall be adhered to.

(c) Low voltage cable joints and terminations

Low voltage joints shall be of the epoxy-resin type.

Cable glands shall be of the adjustable type, equal or similar to the Pratley type gland and shall be suitable for use with PVC PVC SWA PVC cable complying with SABS 150 of 1970. All glands shall be installed with non-deteriorating neoprene shrouds.

Bi-metallic aluminium-copper lugs, equal or similar to SIMEL type ACX, shall be used according to the manufacturer's specifications, where solid aluminium conductors are terminated onto copper bus bars or circuit breakers.

(d) Earth continuity conductors

Earth continuity conductors shall comprise of stranded copper conductors of cross-section indicated in the Project Specification.

A single earth conductor may be used where two or more cables run together, providing the earth conductor cross-sectional area is based on the largest size cable in the run. All earth conductors shall be terminated using crimped cable lugs.

Only cadmium plated bolts, nuts and spring washers shall be used for fixing earth conductors to earth bars.

Joining of earth conductors shall be done using the Cad weld process.

(f) Concrete protective slabs

Concrete protective slabs shall have the following dimensions:

Length	1 000 mm
Width	350 mm
Thickness	50 mm

The slabs shall be constructed of 20 MPa concrete and each slab shall be reinforced with one longitudinal and three transverse mild steel rod of minimum diameter 8 mm. The slabs shall be manufactured in such a way that the slabs interlock with each other thus avoiding shifting of the slabs after installation.

(g) Cable sleeves

Cable sleeves shall be manufactured from PVC the standard size to be used is 110 mm diameter. Refer to cable sleeve specification.

6.3 EXCAVATIONS

For all excavations the unit rate shall include traffic accommodation tools and safety tools which are not limited to safety fence with reflective layers, safety signs, cones and flags.

(a) General

The contractor shall preserve the site as far as possible. Only the minimum of trees, shrubs, rocks, etc. shall be removed and cleared for the cable routes.

Where surplus material has to be disposed of the Contractor shall dump the material in the area provided by COT to stockpile his material, in 25 km radius from the site.

The contractor shall at his own cost load and transport to the abovementioned site all surplus material, unsuitable material for backfilling, etc.

(b) Trench routes

The cable trench shall be excavated along the routes indicated on the plan.

The trench shall be absolutely straight and shall comply with all requirements. The Engineer shall determine the length of the trench to be excavated, which shall not exceed 400 m, before the cable is installed and the trench backfilled. If any obstacle or interference should be encountered which may require alterations to the trench or routes, such alterations shall receive prior written approval of the Engineer.

Contractor to make provision for cross over at car entrances etc.

(c) Cable trench

The trench shall be excavated to a depth below final ground level as specified :

-Feeder cables + sleeves	1500 mm
-House connections - bus routes	1000 mm
-House connections – road crossings	1000mm
-House connections - non bus routes (including pavements)	800 mm
-House connections - inside stands	600 mm

The excavation of all trenches for the low voltage cables in the road reserves shall be undertaken by the Contractor.

The bottom of the trench shall be level and shall follow the contours of the final road level. Where the excavation is in excess of the required depth, the excavation shall be backfilled and compacted with suitable material to the required depth.

The contractor shall trim the trenches and clean up the bottom of the trenches after he has completed the required excavation. Bedding and cables shall not be laid until the trench has been approved by the Engineer. Where bedding has already been laid the Engineer may instruct the contractor to demonstrate that the minimum thickness of bedding has been provided for before authorizing cable laying to proceed.

The contractor shall remove all sharp projections which could damage the cable where the trench is excavated through rocky formations, and shall remove all loose rocks, material, etc. from the bottom of the trench.

(d) Excavated material

No excavated material shall be left closer than 300 mm from the side of the excavation. The excavated material which is considered by the Engineer to be suitable for bedding material for the cable shall be placed separately on one side of the trench so that it is available when required. The excavated material shall take up as small an area as possible with the safety of the workmen and Works taken into consideration.

(e) Inspection and measurement of excavations

Once the excavations for cable trenches and jointing pits have been completed, the Contractor shall give the Engineer 24 hours notice to inspect the trench and to be present when the measurements are made. No inspections shall be undertaken on Saturdays, Sundays and public holidays and after 14:00 in the afternoon.

(f) Maintenance of excavations

The contractor shall maintain the excavation in a good condition, free of water, mud, loose ground, rocks, stones, gravel and other strange material until the cables are installed and the excavation is backfilled and compacted.

6.4 INSTALLATION OF CABLES

(a) Sand bed for cables

A sand bed layer of soft soil shall be installed and levelled at the bottom of each trench after the trench has been approved by the Engineer, and prior to cable laying. A minimum thickness of the sand bed layer is 50 mm.

If the material that has been excavated is not suitable for the sand bed layer then suitable soil shall be imported for this purpose. The cost thereof shall be included in the unit price for the excavation unless otherwise specified.

An adequate quantity of soil similar to the sand bed material shall be available next to the excavation for the sand bed cover before an inspection of the cables is called for. The sand bed cover shall be a minimum of 100 mm thick and shall be placed directly after the cable has been inspected.

If the soil for the sand bed and sand cover has to be sifted, a sieve with holes not larger than 10 mm shall be used.

(b) Cables shall be laid without delay

The cable shall, after the completion of the trench, be laid with the minimum of delay so that the trench can be backfilled. The contractor shall, however, not backfill the trench until each length of cable has been inspected and approved by the Engineer.

Only one cable shall be laid at a time and the contractor shall take precautions that the cables which are already installed are not damaged.

(c) Laying of cables

The method to be used for laying cables shall be approved by the Engineer prior to the commencement of the laying of the cables.

If the contractor intends using a winch to draw the cable into the trench, a cable stocking shall be used or the draw wires shall be soldered to the cable so that the tension is exerted on all the cores and steel wire armouring at the same time.

The maximum tension on a cable during laying operations shall not exceed the value specified by the manufacturer. The tension force shall not be more than the force needed to pull 50m of the applicable cable, but if this value is more than that is specified by the manufacturer, the manufacturer's value will apply.

Should the Engineer not be satisfied with the manner or method employed to lay the cable he shall have the authority to instruct the contractor to lay the cable by hand or in accordance with approved standards.

1,5 Metre extra lengths of cable shall be left at the beginning and end of the cable routes to allow for the termination of the cables. Where necessary the Engineer shall decide on what length of cable is to be left. The contractor shall take the necessary precautions to protect the cable ends until they are terminated. The cable ends shall be sealed by means of lead sealing caps to ensure that the cable is waterproof. No PVC sealing caps to be used.

Where cables are drawn through sleeves, care shall be taken that they are not kinked or excessively bend. No bend in a cable shall have a radius less than the minimum bending radius specified by the cable manufacturer.

The contractor shall keep accurate records of each length of cable laid. The following information shall be recorded:

- Cable drum number
- Size of cable
- Laid from where to where
- Length of cable
- Date laid

The contractor shall be liable for the repair of the cable due to the faulty manufacture of the cable, should this information not be recorded directly after the cable has been laid.

Every cable shall be marked by means of a lead label on which the size of cable and its source or destination is punched. The label shall be installed around the inner PVC sheath immediately above the cable gland.

(d) Road crossings

The cable sleeves shall be installed 1,5 m below ground level to avoid damage when the roads are constructed.

Unless otherwise specified, two additional sleeves shall be installed for future use at each road crossing.

Sleeves used for crossings shall be straight and undamaged. Bends shall not be allowed in road crossings.

The sleeves shall be meticulously backfilled so that no air pockets are left. The trench shall thereafter be backfilled in layers of 150 mm and compacted with mechanical vibrators to 95% modified AASHTO density.

The contractor shall lay and join the cable sleeves and compact the trench to the satisfaction of the Engineer. The sleeves shall be meticulously backfilled so that no air pockets are left. The trench shall thereafter be backfilled in layers of 150 mm and compacted with mechanical vibrators to 95% modified AASHTO density. After installation, the sleeves shall be cleaned and a galvanized steel draw wire installed in the sleeve prior to the sleeve ends being sealed by means of plastic plugs.

Where specified cable route markers shall be installed to indicate the cable sleeves. The markers shall be buried in the ground directly over the sleeve with the top protruding 50 mm above the finished ground level.

(e) Crossing of other services

Where a cable crosses over other services, the cable shall not be installed at a depth less than 500 mm below ground level and if this is not possible the cable shall be installed underneath the other service and shall be protected by means of concrete slabs. The depth of the cable shall be maintained for one metre on either side of the crossing.

If it is not possible to cross over or underneath a service in the prescribed manner, the matter shall be referred to the Engineer for a decision.

The following minimum clearances shall be maintained between electrical cables and other services:

	<u>Horizontal</u>	<u>Vertical</u>
Water pipes	0,3 m	0,3 m
Sewer pipes	0,3 m	0,8 m
Storm water pipes	0,3 m	0,6 m
Other electrical cables	0,15 m	0,15 m

(f) Backfilling of trenches

When the cable has been laid, inspected and approved and the sand bed cover has been installed, the trench shall be backfilled with soil containing not more than 40% rock or shale which shall be able to pass through a 75 mm sieve and which is approved by the Engineer.

Where more than 40%, but less than 70% rock occurs, the Contractor shall replace the rock with imported soil. However, should more than 70% rock occur then all the backfilling material shall be imported.

- The contractor may import further stone-free material to the site or sieve the excavated material for sand bedding and cover but payment shall only be compensated for the actual quantity of imported material required as determined by the Engineer.

The compaction factor shall be 95%

The quantity of imported material required shall be calculated from the nominal trench width.

- The excavated material shall be backfilled in layers of 300 mm and shall be well compacted and consolidated. Where necessary the Engineer may require that a mechanical vibrator be used for compacting the trench.
- The contractor shall maintain the completed sections of the cable trench in a proper safe condition for the duration of the contract. The contractor shall refill and compact the trench where subsidence occurs.
- After completion of the work the route of the cable shall be neatly finished off and cleared. All stones bigger than 25 mm as well as all loose organic material and rubble shall be removed.

(g) Cable Warning Tape

Danger tape shall be installed 300mm above the installed cable on all main LV feeder cables from the ABC network or distribution kiosks.

The plastic cable warning tape shall consist of a strip of poly-ethylene of thickness 0,04mm and a normal width 230mm, completely impregnated, colour yellow, according to SABS 1091 having printed at 1 metre intervals a black triangle, an electric flash symbol and the words "DANGER, GEVAAR, INGOZI".

6.5 JOINTING AND TERMINATION OF LOW-VOLTAGE CABLES

No joints shall be allowed in the new low-voltage cables without the prior approval of the Engineer.

The main low-voltage cables shall be terminated on the same side of the distribution kiosk from where the cable feeds from or supplies to.

The termination of low-voltage cables to overhead line or bundle conductor systems will be done by bi-metal (AL/CU) groove or IPC clamps and cable ties, and for main low-voltage feeder cables double clamps shall be used to insure good termination.

6.6 TESTS BEFORE ACCEPTANCE

After the completion of the electrical installation, the contractor shall test the installation in accordance with the SABS 1507.

The Engineer shall have the right to call for or to carry out any additional tests which may be necessary to prove that the requirements of the specification have been met. The contractor shall assist with the conducting of these tests without delay. All tests shall be conducted in the presence of the Engineer.

(a) General

The test hereinafter described comprises only the site tests and tests before acceptance or handing over of the installation. Where cables and other material are supplied by the contractor the factory and manufacturing tests shall be as specified in the specification.

After the installing and completion of the installation, before the service is taken over, the following tests shall be undertaken. These tests shall form an integral part of the erection, construction or installation of the various items and the costs thereof shall be included in the unit rates for the erection, construction or installation of the various items.

(b) Tests on low-voltage cables

(i) Phase and continuity tests

The phasing and continuity of each circuit shall be determined by meggering between each phase and earth while the phase is short circuited to earth at the far end of the cable route.

(ii) Voltage insulation tests

The insulation resistance shall be determined by imposing a 1 000 volt DC test voltage between each individual phase and earth at the miniature substations. The insulation resistance shall not be less than 50 mega ohm.

6.7 INFORMATION REGARDING THE COMPLETED NETWORK

The contractor shall submit the "as built" drawings on which complete information of the installation, as installed, is indicated after the completion of the installation and before the installation is handed over to the Engineer.

6.8 CLEARING OF SITE

The contractor shall remove everything that he brought onto the site or handled on the site in the execution of the contract as well as all excess excavated material and rubble so as to leave the site in a neat and clean condition to the satisfaction of the Engineer after the completion of the contract and after the Engineer's approval has been obtained.

6.9 MEASUREMENT AND PAYMENT

6.9.1 Excavation

<u>Item</u>	<u>Unit</u>
6.9.1.1 and 6.9.1.2 Excavate in all materials for trenches, backfill, compact and dispose of surplus material	m ³

The unit of measurement shall be the cubic metre of material excavated in trenches, classified according to the depth and width specified listed. The width classification shall be in accordance with the authorized dimensions and the depth classification in accordance with the total depth of the trench and not with the depth range in which the material is situated before excavation. The depth of excavation shall be measured to the underside of the bedding.

The tendered rate shall include full compensation for clearing and grubbing the trench areas and the temporary removal of improvements from the line of the trench, for excavating the trench, preparing the bottom of the trench, separating material unsuitable for backfill, keeping the excavations safe, dealing with any surface or subsurface water, and for separating topsoil and selected backfill material where necessary.

The rate shall furthermore cover the costs of installing the sand bed and sand cover, backfilling, compacting and disposing of the surplus material.

<u>Item</u>	<u>Unit</u>
6.9.1.3 Extra over for excavating in hard material	m ³

The unit of measurement shall be the cubic metre of material excavated and classified as hard, in accordance with the classification set out hereunder.

The tendered rate shall be paid over and above the rate tendered for excavation in respect of items 6.9.1 in full compensation for the additional cost of excavating in hard material instead of soft.

The tendered rate shall include full compensation for any over-break as well as the additional backfilling required, reinstating the trench bottom, and for any other incidentals resulting from over-break.

The materials excavated shall be classified as follows for payment purposes:

a) Hard rock:

Material classified as hard rock shall mean such as granite, quartzite, sand stone, solid shale, slate and rock of similar or greater hardness and boulders exceeding 0,15 cubic metre in volume, but more than 70% of the excavation encountered per cubic metre must comply to size (smaller than 0,15 cubic metre), excavated with the use of pneumatic tools, or blasting.

b) Soft rock:

Material classified as soft rock shall mean rock can be loosened by hand pick, crowbar wedging or splitting, material such as hard-shale, compact "ou klip", stone or material of similar hardness and boulders exceeding 75mm in diameter but not exceeding 0,15 cubic metre, but more than 70 % of the excavations encountered per cubic metre must comply to size (bigger than 0,15 cubic metre).

The decision of the Engineer as to the classification of the material shall be final and binding and any objection as to the classification shall be made before the excavation has been backfilled.

<u>Item</u>	<u>Unit</u>
6.9.1.4 Excavate by hand in all materials	m ³

The unit of measurement shall be the cubic metre of trench material excavated by means of hand tools as instructed or authorized in writing by the Engineer where the use of conventional excavating equipment is either impractical or likely to cause damage to services, trees or property or where the Contractor has to excavate by hand where he cannot excavate by machine.

The volumes of the trench excavation will be computed from the length and the depth to the bottom of the specified bedding layer and the minimum base widths specified in the Detail Specifications. The rate shall cover the cost of complying with the safety and protection requirements specified except where particular items are scheduled to cover particular costs for the excavation.

<u>Item</u>	<u>Unit</u>
6.9.1.5 Extra over item 6.9.1 for using backfill material obtained from	m ³
(a) borrow areas	
(b) sources provided by the Contractor	m ³

The unit of measurement shall be the cubic metre of imported backfill material.

The tendered rate for item 6.9.1.5(a) paid extra over item 6.9.1 shall be in full compensation for the additional cost of excavating and selecting of suitable material and the moving of the material to the backfilling site.

Items 6.9.1.5(a) and (b) above will not be measured for payment unless importation has been ordered in writing. The volume will be computed from the trench width and the depth from ground level to the top of the sand bed cover as shown on the tender drawings. The rate for material from designated borrow pits shall cover the cost of excavation and selection of suitable material, the moving of the material to the backfilling site, and the disposal of the material that becomes surplus as a result of the importation, all within 25 km.

The tendered rate for item 6.9.1.5(b) paid extra over item 6.9.1 shall cover the cost of the acquisition of the material and of the disposal of the surplus material resulting from the importation together with all the costs of transporting the material to the site regardless of distance.

<u>Item</u>	<u>Unit</u>
6.9.3 Lay LV cable	m
The tendered rate shall include full compensation for the handling, inspecting, laying, cutting and testing the cable. Cables shall be measured linearly over all lengths laid. Separate items shall be scheduled for each size and each type of cable laid.	

<u>Item</u>	<u>Unit</u>
6.9.4 Termination of LV cables	Each

The tendered rate shall include full compensation for providing the cable glands and shrouds, the costs of handling, fitting and cutting the cable. Separate items shall be scheduled for each size and type of cable.

<u>Item</u>	<u>Unit</u>
6.9.5 Jointing of LV cable	Each

The tendered rate shall include full compensation for the cost of providing the kits, the cost of cutting the cable, handling and fitting the kits and the costs of testing the joints. Separate items shall be scheduled for each size and type of cable.

<u>Item</u>	<u>Unit</u>
6.9.6 lay earth continuity conductor	m

The tendered rate shall include full compensation for laying the specified earth continuity conductor. Separate items shall be scheduled for each size of cable laid.

<u>Item</u>	<u>Unit</u>
6.9.7 Terminate and connect earth continuity conductor	Each

The tendered rate shall include full compensation for supplying all the material required such as brass clamps, lugs, etc, to terminate and connect the earth continuity conductors and the connecting thereof to the earth bars in the miniature substations, distribution kiosks, meter board or earth spike.

<u>Item</u>	<u>Unit</u>
6.9.8 Install cable markers	Each

The tendered rate shall include full compensation for the handling and installation of cable markers as specified.

<u>Item</u>	<u>Unit</u>
6.9.9. Install protective slabs or covers	Each

The tendered rate shall include full compensation for the handling and installing of the concrete slabs or Fibre tiles.

STANDARD SPECIFICATIONS

SECTION 7

AERIAL BUNDLE NETWORK

CONTENTS

- 7.1 SCOPE
- 7.2 STANDARDS AND REGULATIONS
- 7.3 MATERIAL SAFETY FACTORS
- 7.4 CLEARANCES AND CROSSING OF SERVICES
- 7.5 AERIAL BUNDLE INSTALLATION MATERIALS
- 7.6 ERECTION OF AERIAL BUNDLE CONDUCTOR
- 7.7 SETTING OUT THE WORKS
- 7.8 TESTING AND COMMISSIONING THE SYSTEM
- 7.9 MEASUREMENT AND PAYMENT

7.1 SCOPE

This specification provides the installation and commissioning of equipment required for the erection of low voltage aerial bundle network.

7.2 STANDARDS AND REGULATIONS

All work and materials shall comply with the terms and directions of the latest amendment or addition of the following:

- (a) Occupational Health and Safety Act, Act No 85 of 1993 and Regulations of the Republic of South Africa.
- (b) Post Office Act No 44 of 1958 and the requirements of the Department of Post and Telecommunications.
- (c) Electricity Act, No 41 of 1987 of the Republic of South Africa.
- (d) The Code of Practice for Overhead Power lines for Conditions Prevailing in South Africa.
- (e) SABS and BS supporting specifications.

7.3 MATERIAL SAFETY FACTORS

Each structure used on this project shall have the following factors of safety:

<u>Description</u>	<u>Factor</u>
(a) Wooden structures not continually loaded	3,5
(b) Wooden structures continually loaded	5,5
(c) Line conductors, based on ultimate strength	3,0
(d) Suspension clamps	12 kN
(e) Tension clamps (horizontal)	25 kN

No failure or permanent distortion shall occur to any structure when subjected to a load equivalent to 1,5 the maximum unbalanced load due to a broken conductor or clamp condition. A broken conductor or clamp condition shall be assumed when any one conductor or clamp breaks without restriction as to the span in which the condition occurs.

7.4 CLEARANCES AND CROSSING OF SERVICES

I) Clearances

The minimum clearances of the aerial bundle conductor of other services shall be the following:

<u>Description</u>	<u>Clearances</u>
* Above ground in townships	4 m
* Above streets in townships	4,8 m
* Above proclaimed roads outside township	6,1 m
* To buildings, poles and structures not forming part of the ABC line	1,0 m
* Above Telecommunication lines (MIDSPAN)	0,25 m

ii) Crossing of services

The following conditions shall apply when crossing other services, like, communication lines proclaimed roads, etc.

- * Structures supporting crossing spans shall be as close as possible and be so located that they will not touch the service crossed, should they over turn.
- * The deviation from a right angle when crossing a communication line shall not be greater than 30°.
- * No joints shall be made in a span crossing a service.
- * Care shall be taken not to damage any other service while installing the ABC conductor.

7.5 AERIAL BUNDLE INSTALLATION MATERIALS

I) Wooden poles

All wooden poles shall be Silgna class A to SABS 753 and eucalyptus to SABS754 and the pole shall be of the 55MPA quality.

The standard pole length shall be 7.2 metres (mounting height) with a top diameter of 120 to 140 mm.

All poles shall be subject to inspection in accordance with SABS 753-1982 or SABS 754 -1982 to ensure compliance with the specification. Each pole shall bear a SABS marked tag indicating such compliance.

All poles shall be securely bound or secured with punched plates at both ends or double wound steel wire.

All wooden poles shall be impregnated with a creosote mixture conforming to the requirements of SABS 1290 or BS 144.

Unless otherwise approved, the average moisture content of poles at the time of treatment shall not exceed 150 g/kg.

Impregnation shall be carried out by means of either of the following methods:

- (i) Hot/cold open tank process
- (ii) Full cell pressure process
- (iii) Empty cell pressure process.

Where poles are drilled or cut on site the wood shall be impregnated with high temperature creosote immediately after drilling or cutting. Where holes are drilled into the wood a maximum clearance of 2 mm of the drill hole and bolt size shall be allowed to avoid the exposure of thinly treated wood. No hole shall be drilled within 150 mm from the end of a pole.

Where specified the pole shall be fitted with a washing line type anti-climb device, fixed at a vertical height above ground level of not less than 2,5 metres.

Skew poles are not acceptable.

ii) LV stay assembly

a) Pole stays

Pole stays shall comprise of the following:

- preformed pole make-off
- galvanised multi-strand steel wire, 3 x 3,35mm (SABS 182)
- galvanised steel stay rod, M16 x 1,5 m, assembly including thimble (SABS 464) and Guy grip dead end. (SABS 462)
- galvanised steel base plate 450 mm x 450 mm x 6 mm
- porcelain stay insulator
- stay bracket
- in sandy conditions use a 600mm x 600mm galvanised base plate.

The central part of the "make-off" shall be double-wrapped onto the pole top, after which the two legs shall be wrapped over the unformed wire to form a seven strand stay of similar strength and diameter to that of the normal stay wire.

Pole stay to be installed as indicated on the drawing and on every run longer than 9 poles.

b) Flying stay

Flying stays shall be installed where shown on drawings and shall comprise of the following:

- * Stay attachment (SABS 0162) including, eye nut, thimble and dead end (BS 462)
- * Galvanized multi-strand steel wire 3 x 3,35mm (SABS 182)
- * Stay insulator with guy grip/dead ends
- * Stay bracket, rod M20 x 450 mm with 4 nuts and eye nut M20
- * 7m pole and completed pole stay as listed above.

The clearance above road crossing shall be 5,1m above main roads and streets in town area.

c) Strut pole

Strut pole stays shall be installed where shown on drawings and shall comprise of the following:

- * 10 m wooden pole with top diameter of 120 to 140 mm
- * Soil anchor mounted on structure pole (1,5m in-hole, kicking plate)
- * Rod threaded M20 x 450 with nuts (galvanized)
- * Steel base plate (400 mm x 400 mm x 5 mm)
- * Anti climb - blade wire – 6 turns rapped around the pole, saddled to the pole.
- * The strain point on the tension structure must not be 150 mm lower than the strut pole connection point.
- * All stays and strut poles shall be taken down at an angle to the pole of approximately 45 degrees consistent with adequate stay tension.
- * Galvanized steel brackets as per drawing.

d) Fly Stay

Fly stays shall be installed where shown on drawings and shall comprise of the following:

- * Stay attachment (SABS 0162) including, eye nut, thimble and dead end (BS 462)
- * Galvanized multi-strand steel wire 3 x 3,35mm (SABS 182)
- * Stay insulator with guy grip/dead ends
- * Stay bracket, rod M20 x 450 mm with 4 nuts and eye nut M20

The clearance above road crossing shall be 5,1m above main roads and streets in town area.

e) Stub stay

Stub stay stays shall be installed where shown on drawings and shall comprise of the following:

- * Stay attachment (SABS 0162) including, eye nut, thimble and dead end (BS 462)
- * Galvanized multi-strand steel wire 3 x 3,35mm (SABS 182)
- * Stay insulator with guy grip/dead ends
- * Stay bracket, rod M20 x 450 mm with 4 nuts and eye nut M20
- * 3m steel pole and cement

iii) Bolts and nuts

All metal parts shall be secured by means of bolts and nuts with minimum diameter of 16 mm. All bolts, nuts and screw threads shall comply with SABS 135. Bolts and nuts shall be of galvanized steel with hexagen heads. The nuts of all bolts for attaching to the stays brackets or tension and suspension clamps droppers to earth clamps shall be locked by approved means.

Unless otherwise approved, all bolts and screwed rods shall be galvanized including the threaded portions; all nuts shall be galvanized with the exception of the threads, which shall be greased. Galvanizing shall be according to SABS 763.

When in position all bolts or screwed rods shall project through corresponding nuts, but such projection shall not exceed 20mm.

Where different grades of steel are used, bolts or rods of any given diameter and length shall be the same grade of steel.

iv) Erection of poles

Before the contractor intends erecting the structures, conductors or stays across public roads, telephone lines or other power line servitudes, he shall be responsible for giving adequate notice (seven (7) days) to COT authorities of the date and time at which he proposes to perform the work.

The contractor shall ensure that the structures are not strained or damaged in any way during the erection thereof.

All structures shall be vertical within a tolerance at the structure top of 0,3% of the overall structure height, before erection of the conductors.

Poles shall not exhibit either twisting or bowing greater than the approved tolerance which will not exceed 2% of the mast length. After erection of the conductors the vertical tolerance of the structures shall not exceed 0,5% of the height.

Proper precautions shall be taken to ensure that poles are not strained or damaged in any way during handling, off loading or erection.

Suitable ladders shall be used whenever necessary during erection of the structures. All ladders shall be removed when erection work is not in progress.

Once the structure has been erected aligned and the stays installed, excavations shall be backfilled and compacted in layers of 150 mm to 95% MOD AASHO.

v) Excavations of poles

The holes for ABC poles shall be excavated or drilled to a depth of 600mm + 10% of the total length of the pole.

vi) LV aerial bundle conductor (ABC)

The supply and installation of Low Voltage aerial bundle conductors shall comply with the SABS Code of Practice 1418, Parts 1 and 2 and the relevant NSI Standards.

The bundle shall have a bare neutral supporting core with a cross sectional area of not less than 54 mm² for a phase cross-sectional area of up to 95 mm², and 70 mm² for a phase cross-sectional area of 120 mm². The street lighting core shall have a cross-sectional area of 25 mm², where specified.

Samples of equipment and material intended for use in the installation shall be requested by the Engineer before work commences. Copies of the relevant SABS Test Reports shall also be submitted on request.

All apparatus shall be of a similar make and type for each item throughout the installation.

vii) Structure earths

All structure earths' position shall be according to the layout drawings.

a) LV earth

The LV earth shall be one pole away from the transformer or minisub. The LV earth resistance value shall be less than 10 ohm. The LV earth shall consist of a steel down wire connected to a 1,5m copper earth consist spike and be connected to the ABC neutral conductor. To bring down the earth resistance value by installing a 3m/6m/6m/6m crow foot with, 4 (four) 1,5m earth spikes.

Approved alternative methods may be used to bring down the earth resistance even more such as a trench earth of 50 metres, conductive cement or drilling for 6 m earth rods. CoT shall be present to witness all earth tests done.

b) Pole Earths

The pole earths shall be installed where specified and on the end of every ABC feeder circuit and at every T-off point. The pole earths shall consist of steel down wire connected to the ABC neutral conductor with PG clamps and shall rap around the ground end of the pole four (4) times, stapled to the pole.

viii) Cable protection

The LV feeder cable from the minisub to the ABC shall be protected with a 3 m steel galvanized kick pipe or a steel galvanized V-plate strapped to the pole with stainless steel straps 500mm apart. The kick pipe or V-plate shall extend 300mm under the ground.

ix) Aerial bundle conductor accessories

All connectors and accessories used on low voltage aerial bundle conductor systems shall be 6000V insulated.

a) Insulation Piercing Connectors

The insulation piercing connectors allow the connection of covered conductor and bare neutral conductor ranging from 10 to 120 mm², either for tapping or splicing. The connectors shall be of insulation piercing type on main and tap conductors. When used for splicing, connectors shall be used without mechanical load or tension.

The insulation piercing connector shall not have looseable parts. The housing shall be made entirely of mechanical and weather resistant plastic insulating material. No metallic part outside the housing except the tightening bolt is acceptable. The tightening bolt must include an over-torque shear head which allows a clamping torque in conformity with the manufacturers' recommendations without the use of any special tool. After the head is sheared off, it must remain possible to remove the connector. No energised parts shall be exposed or accessible by the operators during connector installations.

Insulation piercing connectors shall be di-electrically waterproof in the same manner as cables.

These connectors shall be rated to 6kV and similar and equal to the range of SICAME or SIMEL type connectors.

b) Junctions Sleeves

For jointing of aerial bundle conductors special 6kV pre-insulated junction sleeves shall be used. No mid-span ABC joints shall be allowed all ABC joints shall be at a pole. These lugs shall be pre-insulated aluminium or aluminium alloy covered inside with contact grease for phase and neutral conductors respectively. The method and type of joint shall be approved prior to jointing by COT. Junction sleeves shall be similar and equal to SICAME type.

c) Phase labelling

All conductors must be individually identified by raised markings on the outer sheath, spaced at not more than 50 mm apart. Letters shall be 5 mm high for conductors up to and including 35 mm² and 6 mm high on all other sizes. The phase shall be identifiable by means of continuous single ridges next to each other, one for line one, two for line two three for line three and neutral to be bare. The ridges shall be not less than 1 mm high as measured between the surface of the insulation and the apex of the ridge.

d) Tension and suspension clamps

The tension clamp shall be of wedge type where no bolts for clamping the conductor, and where no looseable parts are allowed. No tools shall be required for its installation. The tension clamps must be made entirely of mechanical and weather resistant plastic insulating material. The tension clamp must be for bare conductor and include a flexible attachment onto the bracket. Flexible attachment shall be made of stainless steel and fitted with a wear resistant buckle, the flexible attachment shall hook onto the pigtail or bracket.

The suspension clamp and its articulated link is a device where no bolts for tightening the conductor and no looseable parts are allowed. Clamping of conductor shall be made without need of any tool and shall be of controlled slippage. This device must have the capacity for the suspension and the tightening of bare conductors from 25 to 70 mm². This device must be made entirely and exclusively of mechanical and weather resistant plastic insulating material.

The suspension clamp shall have a vertical strength of 12 000 N without failure. When specified the tension clamps and suspension assemblies shall be similar and equal to SICAME or SIMEL manufacture. The clamps attachment hole must be able to take a M16 bolt.

e) Bridge connectors

All bridging from on circuit to another shall be done with the correct type and size of parallel groove and piercing connectors. The bridging leads shall be the same size as the circuit it bridge from and the connectors and clamps shall be double installed (two (2) per phase).

f) Other installation material

- * The tension and suspension clamps shall be hooked to a galvanized "pigtail bolt", M16 with two flat washers (60 mm x 60 mm). spring washers and two nuts.
- * PVC sleeves to protect ABC cable when tied with "bandit" strap at end termination poles
- * "End caps" pre-manufactured caps to protect the end points of the ABC conductors from 25 to 120mm² at termination points. The end leads to be bent up, to prevent moisture to enter the caps
- * Plastic cable tie straps (NRS020: 1991) to be used at all connection, termination, tension or suspension and jointing points, as indicated on drawings
- * Identification sign or numbers shall be of the approved UV resistance type with white reflector lettering of 50mm on a green background mounted with two galvanized nails, or stainless steel straps where specified, at the LV termination points for all the ABC feeders. (See drawing no. E/T/STD/44)
- * Warning signs shall comply with the Occupational Health and Safety Act 85 (1993). The sign will be a black flash, in a red triangle, on a yellow background with red lettering on white background. All writing shall be in English, Afrikaans and Zulu.

7.6 ERECTION OF AERIAL BUNDLED CONDUCTOR

Aerial bundle cable shall be erected in accordance with the Manufacturers Standards and recommendations and also with SABS 0198.

Bending radius, tension and sag charts shall be in accordance with the sag and stress tables provided by the manufacturer of the particular systems selected. The contractor shall provide the engineer with the manufacturer's sag and stress tables before commencing with the erection of the ABC.

The contractor shall employ staff who have completed a recognised training course for the erection of Aerial Bundle Conductors, failing which he shall employ a competent erector to equip his crew with the necessary skills.

Running out Roller blocks of adequate diameter shall be used to ensure that the minimum bending radius is not exceeded. Blocks must have the correct groove width to accommodate the cable size being used.

Manufacturers recommended construction procedure shall be followed, together with recommended tools and equipment.

No mid span joint shall be made on any ABC run. The joints may be made on a strain structure with a loop and the insulated ferrules on the non-tension part. These joints shall only be used with written approval from COT and not more than one per minisub area.

The minimum required tool kit shall consist of the following and prior to commencing with the erection of ABC will be inspected by the engineer.

	<u>Quantity</u>
Running-out wide groove Roller Block (Pulleys)	1 per pole
Pulling sock (Inner and Outer)	1 each
Come Along - suitable for use with Insulated Cable	2
Pilot Rope	300 m
Crimping Tool	1
Nylon Slings	5
Pulling swivel to prevent twist	1
Phase Separators	2

7.7 SETTING OUT OF WORKS

The contractor shall arrange for the setting out of the works by a competent person.

The developer shall hand in surveyor certificates prior to the work commencing.

The contractor shall hand in surveyor certificates at the hand over stage.

7.8 TESTING AND COMMISSIONING THE SYSTEM

The entire bundle system, including all the accessories shall withstand all the tests as specified in SABS 1418.

The following test shall be done by a qualified electrician employed by the contractor prior to the handing-over of the system to COT.

- a) Insulation test with a 1000V Megger between the phases and Neutral/earth for 2 minutes the entire LV bundle system shall be tested on every feeder line at the transformer. The Contractors to insure that all circuit breakers in the pole top boxes are switched off to prevent damage to any electrical equipment. In the event of damage to any equipment due to the wrong testing methods or connections, to the sole

discretion of the engineer, then the contractor shall cover the cost of the claims for the damage equipment immediately and then only recover cost from his insurance.

- b) Phase rotation tests shall be done on all LV bundle ends, to test the correct phasing of termination points;
- c) Voltage test shall be done on every pole top box to test for voltage drop and a three(3) phase error and;
- d) An inspection shall be done on all the equipment by the contractor of every termination, connection, joint and Pole top box (Neutral Link to earth) prior to handing over the installation;

Test certificates and inspection forms shall be handed to the engineer prior to handing-over and the installation and the COT shall witness all the tests. The contractors shall inform COT in writing two (2) days before the date of the test.

The contractor shall do or redo all other tests requested by the engineer. The cost of testing equipment, testing staff or any other tests costs shall be that of the contractor and must be allowed for in the tendered amount.

7.9 MEASUREMENT AND PAYMENT

<u>Item</u>	<u>Unit</u>
-------------	-------------

Each

7.9.1 Excavate in all material for holes for poles, stays and backfill, compact and dispose of surplus material.

The unit of measurement shall be the number of holes excavated or drilled.

The tendered rate shall include full compensation for excavating the holes for poles in accordance with the dimensions as specified, backfilling the hole with suitable material, compacting the backfill material in layers of 150 mm to 95% MOD AASHO and disposing of any surplus material.

<u>Item</u>	<u>Unit</u>
-------------	-------------

7.9.2. Excavate in hard material for holes for poles and stays, backfill, compact and dispose of surplus material	Each
---	------

The unit of measurement shall be the number of holes excavated and classified as hard, in accordance with the classification set out hereunder.

The tendered rate shall include full compensation for any over break as well as the additional backfilling required, reinstating the trench bottom, and for any other incidentals resulting from over break and shall include for the supply of any additional backfill material required due to the disposing of suitable material excavated from the hole.

The materials excavated shall be classified as follows for payment purposes:

- a) Hard Rock

Material classified as hard rock shall mean such as granite, quartzite, sand stone, solid shale, slate and rock of similar or greater hardness and boulders exceeding 0,15 cubic metre in volume, but more than 70% of the excavation encountered per cubic metre must comply to size (smaller than 0,15 cubic metre, excavated with the use of pneumatic tools, or blasting).

b) Soft Rock

Material classified as soft rock shall mean rock can be loosened by hand pick, crowbar wedging or splitting, material such as hardshale, compact "ou klip", stone or material of similar hardness and boulders exceeding 75mm in diameter but not exceeding 0,15 cubic metre, but more than 70% of the excavations encountered per cubic metre must comply to size (bigger than 0,15 cubic metre).

The decision of the Engineer as to the classification of the material shall be final and binding and any objection as to the classification shall be made before the excavation has been backfilled.

<u>Item</u>	<u>Unit</u>
7.9.3 Erect wood pole structures	Each

The unit of measurement shall be the number of wooden poles erected.

The tendered rate shall include full compensation for transporting the poles to site, drilling all holes in poles as required on site, hot impregnating the newly drilled holes with high temperature creosote, assembling the structure and erecting the structure in the holes and shall include for all the labour, material and equipment required to erect the structure and to keep the structure erect while the hole is backfilled and compacted. The rate shall furthermore include for the installing of all material not specified in the other rates to complete the structure and shall include for the supply and installing of all bolts, nuts and washers required. Separate items will be allowed for the various structures.

<u>Item</u>	<u>Unit</u>
7.9.4 String ABC Conductor	m

The unit of measurement shall be the circuit length of ABC conductor stringed.

The tendered rate shall include full compensation for the delivery to site, the ABC and the stringing of the ABC conductor and shall include for temporary staying any of the structures during the stringing operations, terminating and fastening the ABC conductor as specified. Each ABC conductor size (25mm², 35mm², 95mm²) shall be specified separately and the contractor shall be responsible to determine the correct lengths before cutting the ABC.

<u>Item</u>	<u>Unit</u>
7.9.5 Install suspension assembly	Each

The unit of measurement shall be the number of suspension assemblies installed.

The tendered rate shall include full compensation for drilling the pole and fixing the pigtail and complete suspension assembly with the pigtail, washers, nuts, suspension clamp, cable ties and all installation equipment needed to complete the installation as specified.

<u>Item</u>	<u>Unit</u>
7.9.6 Install tension assembly	Each

The unit of measurement shall be the number of tension assemblies installed.

The tendered rate shall include full compensation for the drilling of pole and fixing the pigtail and complete tension cable ties and all installation equipment needed to complete the installation as specified.

<u>Item</u>	<u>Unit</u>
7.9.7. Install bridge connectors between in between circuits	Each

The unit of measurement shall be the number of Install all bridge connectors between circuit connections to the ABC conductor per pole and connect the top pole box or control box .

The tendered rate shall include full compensation for installing of the conductors, the parallel groove clamps and piercing connectors at either end of the bridge connectors, top pole box and the circuit breaker

<u>Item</u>	<u>Unit</u>
7.9.8. Install bridge connectors between circuits of a control box	Each

The unit of measurement shall Install bridge connectors between circuits connections to the and connect the Control box and testing of the whole unit and issuing a COC.

<u>Item</u>	<u>Unit</u>
7.9.9 Install LV cables terminating on to the circuit structure	Each

The unit of measurement shall be the number of LV cables terminations installed on to the circuit structure.

The tendered rate shall include full compensation for the installation of the specified cable and shall include for the termination and connection the cable and the fixing of the cable onto the structure. Each cable shall be specified separately and the contractor shall be responsible to determine the lengths of cable on site.

<u>Item</u>	<u>Unit</u>
7.9.10. Install stays, struts, stub stay, flying and fly stay	Each

The unit of measurement shall be the number of stays installed.

The tendered rate shall include full compensation for the installation of the pole, stay plate, stay rod, stay wire, guy grips, stay strain insulator and whatever other material is required to make off the stay. Separate items shall be scheduled for each type of stay.

<u>Item</u>	<u>Unit</u>
7.9.11 Install earth structure	Each

The unit of measurement shall be the number of earth structure installed.

The tendered rate shall include full compensation for the installation of the material to complete earth structure.

<u>Item</u>	<u>Unit</u>
7.9.12 Install signs	Each

The unit of measurement shall be the number of identification and danger signs installed.

The tendered rate shall include full compensation for the installation of the identification and danger signs.

<u>Item</u>	<u>Unit</u>
7.9.13 Install pole numbering	Each

The unit of measurement shall be the number of pole numbers installed.

The tendered rate shall include full compensation for the installation of pole numbers

<u>Item</u>	<u>Unit</u>
7.9.14 Install ABC structures	Each

The unit of measure shall include the installation of the ABC structure using binding strap and buckles.

STANDARD SPECIFICATIONS

SECTION 8

STREETLIGHT INSTALLATION

CONTENTS:

8.1 SCOPE

8.2 MEASUREMENT AND PAYMENT

8.1 SCOPE

This section covers the installation, testing and commissioning of all material and equipment for streetlight installations.

8.2 MEASUREMENT AND PAYMENT

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.1. Excavate for trenching across tarmac roads	m ³
---	----------------

The tendered rate shall be in full compensation for the additional cost of cutting the tarmac by means of a grinder or pneumatic tool, after obtaining written approval the excavation thereof and the reinstatement of the road complete with all courses. The tendered rate shall exclude the cost of laying the bitumen premix.

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.2 Laying bitumen premix of varying thickness in roadway.	m ³
--	----------------

The tendered rate shall be in full compensation for the additional cost of supplying, laying and compacting of bitumen premix of varying thicknesses in roads to reinstate in road surfaces to its original state.

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.3 Install cable sleeves	m
-----------------------------	---

The tendered rate shall include full compensation for the handling and installing of the cable sleeves including the steel draw wire and all material needed to complete the installation.

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.4 Cable record drawings	Each
-----------------------------	------

The tendered rate shall cover the cost of preparing and furnishing the drawings as specified in low voltage cable specification.

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.5 Excavate for streetlight pole	Each
-------------------------------------	------

The tendered rate shall include full compensation for excavating the hole for the pole as specified and the backfilling compacting and cleaning of the excavations once the pole has been erected.

<u>Item</u>	<u>Unit</u>
-------------	-------------

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.6 Install streetlight pole brackets	Each
---	------

The tendered rate shall include full compensation for the handling and installation of the streetlight pole bracket complete with brackets, bolts washers and nuts and internal wiring as specified.

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.7 Install new streetlight luminaries	Each
--	------

The tendered rate shall include full compensation for the installing of the luminaries on the poles, including the electrical connections from the circuit breakers or pole box to the luminaries and all the earth connections. Separate items shall be scheduled for the different size and type of luminary.

<u>Item</u>	<u>Unit</u>
-------------	-------------

18.2.8 Install photo electric light sensitive switches	Each
--	------

The tendered rate shall include full compensation for the installing, wiring, connecting, testing and commissioning of the photo electric light switches where specified, include any mounting materials required and the connecting up to the control cable or internal luminary wiring. The rate shall furthermore where specified include for the drilling of the required hole in the luminary housing so that the Nema socket protrudes into the control gear compartment. The tendered rate shall furthermore include for the maintenance of the photocell for a period of 12 months.

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.9 Lay streetlight cable	m
-----------------------------	---

The tendered rate shall include compensation for the handling, inspecting, laying, cutting and testing the cable. Cables shall be measured linearly over all lengths laid. Separate items shall be scheduled for each size and each type of cable laid.

<u>Item</u>	<u>Unit</u>
-------------	-------------

8.2.10 Termination of streetlight cable	Each
---	------

The tendered rate shall include full compensation for termination of all (incomer and outcomer) the cables in a pole, installing glands and shrouds, installing the circuit breaker and wiring between the circuit breaker and the luminaire, and earthing the pole.

The costs of handling, fitting and cutting the cable. Separate items shall for each size and type of cable.

This is a duplicate.

<u>Item</u>	<u>Unit</u>
8.2.11 Issuing of a Certificate of Compliance	Each

The tendered rate shall include full compensation for issuing a Certificate of Compliance (CoC) per circuit .

<u>Item</u>	<u>Unit</u>
8.2.12 Intall piercing connectors for streetlight connections	each

<u>Item</u>	<u>Unit</u>
8.2.13 install ABC structures for streetlight conductor	each

PART 2: STANDARD SPECIFICATIONS

SECTION 9

CABLE SLEEVE PIPES AND DUCTS

CONTENTS

- 9.1 GENERAL
- 9.2 BORE AND JOINTING
- 9.3 STANDARD TESTS
- 9.4 PIPE POSITION
- 9.5 PIPE LENGTHS
- 9.6 DEPTHS
- 9.7 INSTALLATION
- 9.8 INSPECTION
- 9.9 MEASUREMENT AND PAYMENT

9.1 GENERAL

The pipes shall be PVC, polyethylene, class "c" or approved alternative pipes complying with this specification. The Engineer shall approve all samples of proposed cable sleeves prior to the ordering thereof.

9.2 BORE AND JOINTING

The nominal outside diameter of the pipes shall be between 110 and 160 mm with a wall thickness of 5mm. The bore shall be accurate, smooth and without ridges or surface cracks and the inside edges shall be edged or rounded.

The edging or rounding shall be such that no ridge is formed when two pipes are joined and with the edges of the jointed pipes.

Joints shall be carried out with suitable couplings to prevent movement between pipe ends.

A suitable slip collar or other simple device shall be provided to maintain a minimum of 5mm spacing after the jointing of the sleeves. The joints shall be flexible enough and have enough play to allow for 5° adjustment in adjacent pipe lengths during installation or in the case of subsequent subsidence of the ground. The joints need not be watertight but shall stop sand, stones and other materials entering the sleeves. Flexible black sleeves or similar approved by COT to be used.

9.3 STANDARD TESTS

All pipes shall withstand a shock test conforming to the requirements of BS3505.

All pipes shall furthermore pass the break resistance test specified below and the contractor shall submit a test certificate of a test carried out. COT reserves the right to request that the tests be repeated in the presence of their representative.

Compression test shall withstand a load of 2,25kN/m with maximum compression of 15mm/min and 5% deflection.

9.4 PIPE POSITIONS

The positions and number of sleeves shall be indicated on the drawings. The sleeves must be installed strictly in accordance with the stand pegs and drawings. The position of every crossing shall be marked with "E" cut in the kerb and painted "RED" or cable marker to indicating crossing.

The distance between pipes shall be not less than 50mm where more than one pipe is installed.

Pipes shall be installed in two staggered layers with a minimum distance of not less than 50mm between pipes where more than four pipes are specified for a road crossing.

9.5 PIPE LENGTHS

The pipes shall be extended 1m on either side of the tarmac, road surface or service to be crossed.

9.6 DEPTHS

The pipes shall be installed at a depth of not less than 1,5 m below the top of the road surface or other depth specified by COT. Where other services are to be crossed within one metre from the pipe end and the specified clearance between services cannot be maintained, the pipes shall be installed at a depth to allow crossing underneath the other service maintaining the minimum specified clearance and without the bending of the cables.

The minimum clearance between electric cables and other services shall be as follows:

Water pipes	:1 m
Other pipes	:0,3 m
Sewerage pipes	:0,3 m
Storm water pipes	:0,3 m
Other electric cables	:0,15m
Gas pipes	:1 m

9.7 INSTALLATION

The pipe shall be bedded onto a 50 mm layer of sifted sand. A 100mm sand cover shall be backfilled over the pipes and thoroughly compacted.

The pipes shall be laid straight without kinks, and cross the road or other service vertical and horizontally.

After the installation of the sleeve, it shall be cleared out of all foreign material such as sand, etc. with a hand drill or cap.

A 2,5mm diameter galvanized steel wire extending 1 m on either side of the pipe crossing shall be installed in every sleeve.

The sleeve pipes shall be sealed with PVC plugs to prevent the entry of sand prior to backfilling the trench. The necessary precautions during further construction activities shall be made to prevent damage to the sleeve pipes.

Drilling or cutting of tarmac for road crossings shall be done only with the prior written approval by the Engineer.

9.8 INSPECTION

The contractor shall arrange with the Engineer and/or COT to inspect the cable sleeves after the sleeves have been installed and before the trench is backfilled and compacted.

9.9 MEASUREMENT AND PAYMENT

<u>Item</u>	<u>Unit</u>
9.9.1 Install cable sleeves	m

The unit of measurement shall be the length in metre of the cable sleeves installed.

The tendered rate shall include full compensation for the handling and installation of the cable sleeves including all the couplings, steel draw wire and plugs.

<u>Item</u>	<u>Unit</u>
9.9.2 Drilling of sleeves under roads	m

The unit of measurement shall be the length in metre of sleeve holes drilled.

The tendered rate shall include full compensation for the drilling of 110mm dia sleeve holes. The rate further more shall include for all cost the drilling team may have, supervision, site establishment, water and diesel to be used. Separate items shall be schedule for hard rock,

soft rock and soil. The rate also include the supply, installation of these 110mm dia sleeves, including all the couplings, steel draw wire and plugs.

Item

Unit

9.9.3 Cutting and repair tarmac m³

The unit of measurement shall be the cubic metre of tarmac cut and repaired.

The tendered rate shall include full compensation for the cut, removal, excavating under road, backfill, compacting to specification and repair of tarmac. This item only to be used with written approval of the Engineer if drilling is not successful.

STANDARD SPECIFICATIONS

SECTION 10

COMPLIANCE TO OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

Notwithstanding any laws stated in any part of this tender document and the contract, the contractor is required to comply with the Occupational Health and Safety (OHS) Act and regulations as amended from time to time.

1. Provision of Health and Safety file [Once off]

The unit of measurement shall be number of health and safety files provided.

The cost component shall include full compensation for the provision and maintenance of a health and safety plan, risk assessment, permit applications, notifications and a health and safety file on site containing all the documentation required in terms of the act and applicable regulations. The safety plan must always be specific to the project for which it is going to be applied.

2. Provision of Safety Officer [Per month]

The unit of measurement shall be number of days worked per 30 days calendar month. Where the safety officer has worked for less than 30 day calendar month, a pro rata rate shall be calculated and used. (Normal hour rate shall apply)

The cost component shall include full compensation for the provision of one or more competent and experienced safety officer as may be necessary for the duration of the contract.

3. Occupational Health and Safety training [Each]

The unit of measurement shall be per each person trained.

The cost component shall include full compensation for the provision of training programs for the contractor's employees and also, where applicable, for sub-contractors. Training shall include first aid training and/or OHS representative training as per the requirements of OHS regulations.

4. Provision of personal protective clothing and equipment [Per Set]

The unit of measurement shall be per set of PPE for each person.

The cost component shall include full compensation for the provision, maintenance, repair and/or replacement of damaged or unsuitable protective clothing and equipment for use by the contractor's employees. Provision of PPE must be in accordance to HIRA or PPE study.

The set of PPE shall include the following items: Safety hard hat, protective work suits, safety boots, safety gloves and accessories

C3.4.2 STANDARD SPECIFICATIONS

The following are tables listing CoT specifications which may be made available on a disc upon request.

Table 1

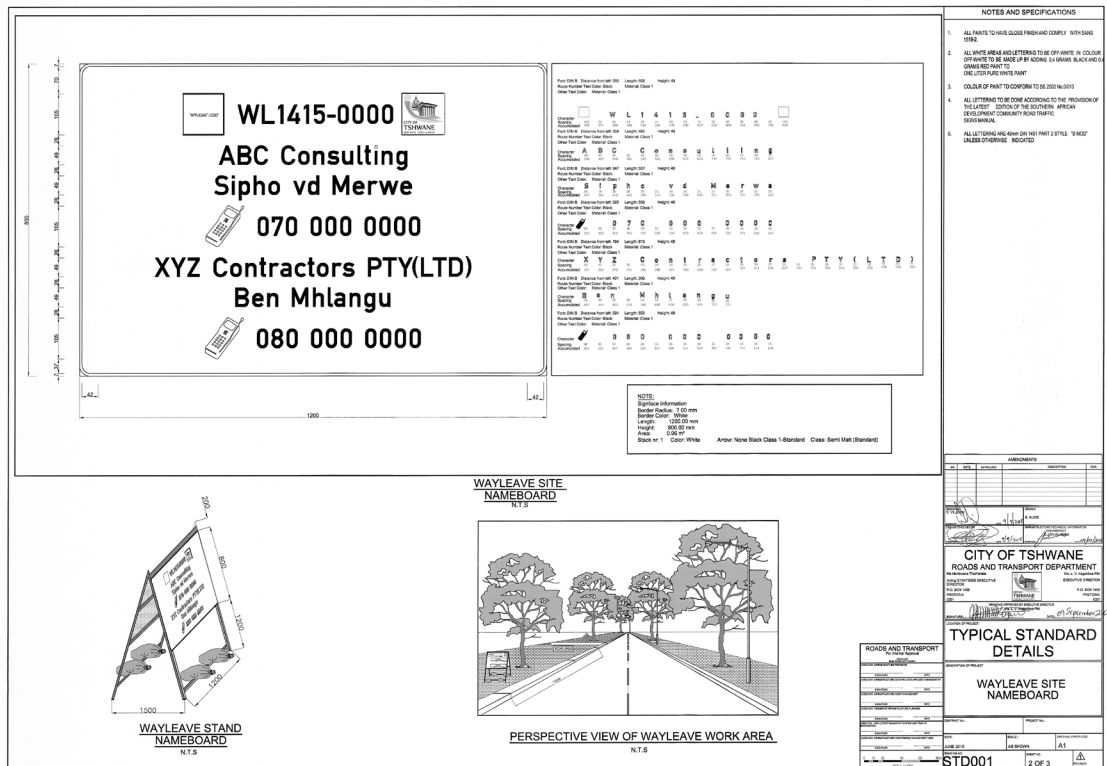
CITY OF TSHWANE REWORKING OF INSTALLATION SPECIFICATIONS	
SPECIFICATION REGISTER	
Document no.	Description
CTMME-IS-01	General Rev 1
CTMME-IS-02	Positioning of services Rev 1
CTMME-IS-10	Miniature substations Rev 1
CTMME-IS-20	Low voltage distribution boxes Rev 1
CTMME-IS-30	Underground cable reticulation Rev 1
CTMME-IS-40	Earthing Rev 1
CTMME-IS-50	Overhead lines Rev 1
CTMME-IS-60	Streetlights Rev 1
CTMME-IS-70	Substations Rev 1
CTMME-IS-80	Inspection Forms Rev 1

Table 2

CITY OF TSHWANE REWORKING OF INSTALLATION SPECIFICATIONS		
DRAWING REGISTER		
Old Dwg. no.	New Dwg. no.	Description
A-1718	A-1800	11kV overhead line three phase t-off – Staggered Vertical Construction (Front view)
A-1720	A-1801	11kV overhead line Two phase t-off to the left & three phase T-off to the right – Staggered Vertical Construction
A-1722	A-1802	11kV overhead line Three phase t-off to the left vertical in-line strain construction (side view)
A-1724	A-1803	11kV overhead line three phase t-off to the Right – Staggered Vertical Construction
A-1727	A-1804	11kV overhead line strain assembly 30° - 90° (vertical) (type B)
A-1728	A-1805	11kV overhead line in-line strain assembly 0° - 10° (vertical)
A-1729	A-1806	11kV overhead line terminal assembly
A-1730	A-1807	11kV overhead line strain assembly 30° - 90° (vertical) (typeA)
A-1731	A-1808	11kV overhead line strain assembly vertical (30° deviation)
A-1732	A-1809	11kV overhead line intermediate assembly (small deviation)
A-1733	A-1810	11kV overhead line intermediate assembly 0° (staggered vertical)
A-1734	A-1811	11kV overhead line stay rod installation for wooden poles
A-1735	A-1812	11kV overhead line wooden pole stay assembly
A-1736	A-1813	Pole mounted 3-phase 11kV/400/230V transformer and earthing installation details
A-1740	A-1814	Earth mat Manufacturing details
A-1743	A-1815	Pole mounted single phase 11kV/230V transformer and earthing installation details
A-1744	A-1816	11kV overhead line two stay needed
A-1745	A-1817	11kV overhead line road crossing
A-1748	A-1818	11kV overhead line change from vertical to horizontal
A-1749	A-1819	11kV overhead line with section switches
A-1752	A-1820	11kV overhead line with slack span connection
A-0356	A-1821	LV Neutral surge arrester installation
A-1000	A-1822	Open wire assemblies – earthing bracket
A-1002	A-1823	CT/VT installation (Front & side view)
A-1004	A-1824	4 pole auto-recloser structure (Front view)
A-1005	A-1825	11kV overhead line automatic recloser or sectionalizer installation (4-pole) with LV control

CITY OF TSHWANE REWORKING OF INSTALLATION SPECIFICATIONS DRAWING REGISTER		
Old Dwg. no.	New Dwg. no.	Description
A-1006	A-1826	LV-pole mounted meter box
A-1007	A-1827	Service connection from open wire system
A-1008	A-1828	LV intermediate assembly – open wire system
A-1100	A-1829	LV ABC three phase bare neutral suspension assembly (0 - 30°) wood pole
A-1120	A-1830	LV ABC three phase terminal assembly (wood pole)
A-1121	A-1831	LV ABC three phase strain assembly (0 - 60°) wood pole
A-1122	A-1832	LV ABC three phase strain assembly (60 - 90°) wood pole
A-1140	A-1833	LV ABC three phase T-off assembly from intermediate (wood pole)
A-1141	A-1834	LV ABC three phase cross assembly from intermediate (wood pole)
A-1142	A-1835	LV ABC three phase T-off assembly from strain (wood pole)
A-1143	A-1836	LV ABC three phase cross intermediate – strain assembly from intermediate (wood pole)
A-1168	A-1837	Overhead (flying) stay arrangement for wood pole
A-1850	A-1838	Section/equipment links cut/out 1300 steel crossarm/single pole
A-3000	A-1839	8m wood pole with stay
A-3001	A-1840	8m wood pole with strut pole
A-3002	A-1841	Transformer pole

ANNEXURE A – STD 001



C3.6. CERTIFICATIONS

There are specific services or activities which would require only certified persons to perform them and such certification shall be issued by the CoT with the written consent of the project manager. The procedure to obtain certification is given below:

- a. An application must be made, in writing, to the relevant section/depot. In the application it must be stipulated if the Contractor/Sub-contractor want to:
- b. Be tested or
- c. Do the training which includes testing.
 - i. The application must be send by the section to Consulting Engineer: Technical Training Operations or appointed person with the same authority.
 - ii. If the Contractor/Sub-contractor need only be tested, a test date must be organized with the relevant representatives.
 - iii. Both the theoretical and practical test must be passed before the certificate will be issued. The Contractor/Sub-contractor must provide his own equipment, material and tools for the practical test.
 - iv. If the Contractor/Sub-contractor requests to do the course, the course date and the invoice will be provided to the Contractor/ Sub-contractor by the Technical Training Operations. Both the theoretical and practical tests must be passed before the certificate will be issued.
 - v. The certificate will be issued by the Technical Training Operations and a copy will be send to the section involved after the invoice has been paid. The certificate must always be available when requested.
 - vi. and the invoice will be provided to the Contractor/ Sub-contractor by the Technical Training Operations. Both the theoretical and practical tests must be passed before the certificate will be issued.
 - vii. The certificate will be issued by the Technical Training Operations and a copy will be send to the section involved after the invoice has been paid. The certificate must always be available when requested.

C3.7. ADMINISTRATIVE ARRANGEMENTS

3.7.1 The administrative tasks and conditions as set out in the audit trail policy of the CoT must be carried out by each contractor. If the Contractor does not abide by these conditions, his/her contract may be suspended. The following submissions shall form part of the contractor's report:

- a. The contractor will be requested to report on progress on site as required by the project manager.
- b. The contractor must submit a signed "Approved Appointment Form with Approved Unit Rates" together with the invoice where applicable.
- c. The contractor shall be required to produce a Certificate of Compliance for the work completed and requiring such certification by law.

3.7.2 A project appointment letter or purchase order is a document/form stating that the contractor has been appointed for a specific stated project. The document shall further state:

- a. The duration of the project, i.e. starting and completion dates,

- b. Total cost of the part of the project for which the contractor has been appointed,
- c. The reply period,
- d. Project supervisor and other matters that may be relevant for the project at the time of the appointment.

3.7.3 The employer may at any time require any and all information about the contractor's employees. If any irregularity is found, the employer may order the removal of such employee from the project and such person shall have no involvement with the contractor (for the specific project) under the awarded contract from the next day after the notification has been served.

The employee may be re-appointed provided that the employer agrees and that whatever information that was not available, is available and acceptable.

3.7.4 The contractor must comply with all the applicable CoT's procurement policies.

C3.8. APPOINTMENT OF COMMUNITY LIAISON OFFICER (CLO)

C3.8.1 Appointment process

C3.8.1.1 Project Steering Committee (PSC)

Section 6.1.3.1 of the Expanded Public Works Programme (EPWP) Recruitment Framework requires the Office of the Speaker, in consultation with the Ward Councillor, to hold a public meeting, and elect a project steering Committee (PSC).

Project Steering Committees will be limited to a minimum of four (4) members and a maximum of six (6) members, to avoid a situation of too many potential interest groups preventing the PSC from functioning.

C3.8.1.2 Community Liaison Officer (CLO)

After the election of the PSC, at the same meeting, residents and stakeholders in attendance are to vote for a pool of three (3) potential CLOs, coming from the community concerned.

In the event that a PSC is not constituted by public meeting, or cannot proceed with its work, as contemplated by section 6.1.3.5 of the Framework, the appointed Project Steering Committee should nominate potential CLOs.

It is from this pool that the contractor, after interviewing the three (3) nominees and consultation with the Project Steering Committee, appoints the CLO.

This renders the CLO selection process less arbitrary and gives the community a voice in the selection process.

C3.8.1.3 Role of Councillors

Councillors are not permitted to interfere in the EPWP or CLO recruitment process.

Ward Councillors, in conjunction with the Office of the Speaker, convene the first meeting to establish PSC and to establish a pool of potential CLOs.

Ward councillors may be invited to the selection of beneficiaries for projects in their wards, provided that they do not risk the integrity of the selection process.

C3.8.1.4 Role of City of Tshwane (CoT) officials

Only designated CoT officials may assist in organising public meetings and coordinating Expanded Public Works Programme (EPWP) lotteries.

City of Tshwane officials may not approach Ward Councillors to appoint CLOs, or perform other tasks inconsistent with the Framework.

City of Tshwane officials must provide the Office of the Speaker and Ward Councillors' sufficient notice of at least ten (10) working days to arrange for public meetings to elect PSC members, and a further fourteen (14) days' notice for the appointment of a Community Liaison Officer (CLO).

C3.8.1.45 Administrative processes for appointment of Community Liaison Officers

Minutes and an attendance register must be kept as evidence of the proceedings of the election meeting.

The Office of the Speaker must submit the results (minutes) and attendance register of the Community Liaison Officer (CLO) election meeting to the chairperson of the PSC, the contractor and the Expanded Public Works Programme (EPWP) Division.

The elected Community Liaison Officer (CLO) will be appointed by the contractor for the duration of the project and also be remunerated by the contractor. Where the Community Liaison Officer (CLO) is no longer available and another is appointed, the exiting Community Liaison Officer (CLO) shall cease to receive remuneration.

An employment agreement containing the general terms and conditions of the contract, will be issued to the Community Liaison Officer (CLO) and must be signed by the Community Liaison Officer (CLO) before his/her commencement of duties.

Sometimes works is undertaken in more than one ward at a time. A Community Liaison Officer (CLO) may be appointed for each ward. However, the number of wards affected does not increase the work performed by each Community Liaison Officer (CLO). Therefore it is proposed that the remuneration amount be divided among the number of CLO's if more than one is appointed in the same project.

The Community Liaison Officer (CLO) will be remunerated according to the entry-level basic salary of an Administrative Officer position of the City of Tshwane (CoT). No fringe benefits will be applicable.

C3.8.2 SUB-CONTRACTING

Any other work beside the activities deemed to be core functions and responsibility of the main contractor shall be allocated to subcontractors.

Before work can commence with the successful Bidder, City of Tshwane will insist on being provided with copies of formal signed subcontracting agreements. All agreements to state that City of Tshwane will not be held responsible or liable should the successful Bidder breach contract with the subcontracted entities or enterprises.

The work to be sub contracted shall include among others but not limited to.

- Excavations
- Construction of the guard house
- Paving
- Security Services
- Transportation of material
- Installation of electrical equipment (if not done by main contractor)
- etc

C3.9. INSURANCE

The Contractor shall ensure that all the works performed under this contract are insured. The insurance shall be against public liability and professional indemnity.

The Contractor must provide proof of such insurance to the Project Manager within 14 (fourteen) days after the notification of acceptance of the tender. Should the renewal of an existing policy fall within the period prior to the Defects Certificate being issued, a letter of confirmation from the insurance company that such a policy will be renewed and that all premiums have been paid must be attached and the copy of the renewed policy be submitted within 2 (two) months of renewal to the Project Manager.

The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the works, Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) caused by activity in connection with this contract for any one event is ten million Rands (R 10 000 000.00)

The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract for any one event is as set out in Compensation for Occupational Injuries and Diseases Act (COIDA) as well as a group life insurance for at least three times the employee's total annual earnings.

The cover shall provide these insurances from the table	
Insurance against:	Loss of or damage to the works, Plant and Materials.
Cover / indemnity:	R10 million.
The deductibles are:	According to the Declaration Form from Insurance and Risk Management of CoT.
Insurance against:	Liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) caused by activity in connection with this contract.
Cover / indemnity	R10 million.
The deductibles are	According to the Declaration Form from Insurance and Risk Management of CoT

C3.10. PERFORMANCE BOND, GUARANTEES AND RETENTIONS

C3.10.1. PERFORMANCE BOND AND GUARANTEES

Should the contractor not comply with the terms and conditions of this contract and/or appointment under this contract, he shall be warned in writing by the employer or the representative of his failure to perform.

As a result of three warning letters being provided under the same contract, the employer shall have the sole right to take one or more of the steps against the contractor:

- a. Terminate the contract between the contractor and the employer for the remainder of the contract period.
- b. Suspend the contractor for the remaining period of the contract. The contractor shall qualify to bid for the same contract with the same scope of works but only after the contract for which he was suspended has expired.
- c. If the performance bond clause is applied, the retention amount for the specific project for which the clause is applied or the total retention amount already withheld by CoT for other projects, whichever is higher, shall be forfeited.

ALL decisions made shall be recommended and implemented by the Project Manager. GH USD shall approve such recommendation prior to implementation. The recommendation(s) will be processed through supply chain management process.

The contractor may not refuse any work allocated to them other than for the following reasons:

- A). The works are not according to the works information and there is no rate tendered for in the contract data or the new rate (provided by CoT) is not market related,
- B). the contractor does not have capacity to provide the works using the new scope which is not part of the contract.

If the contractor refuses work for any other reason, such refusal is noted and can be used as a reason for termination of this contract.”

C3.10.2 RETENTION

The CoT reserves the right to retain a certain percentage of the invoiced amount until the defect period has lapsed.

The retention percentage is 10% of the total invoice amount (VAT Exlc), claimable at the expiry of defects certificate per specific project.

The defect period for construction work is 12 months after the Completion date of the whole construction work per specific purchase order.

The defect correction period is two weeks for constructions work, unless stated otherwise in the appointment letter.

C3.11. PRICE ADJUSTMENTS FOR INFLATION

Tenderers are required to register with SEIFSA (Steel and Engineering Industries Federation of South Africa) and obtain periodic SEIFSA rates for various categories applicable to this contract. Contractors and Subcontractors shall obtain their own copies (at their own cost) of the SEIFSA rates documents for contract management purposes and for use for the duration of the Contract. City of Tshwane or its representative may request such rates at any time during the contract and contractors should provide them within the response time stipulated in this document. The base date for indices is the month prior to the month in which the tender was awarded.

Prices/Rates tendered shall remain fixed for the every 12 months of the contract. The first 12 months is the rates as they are tendered while the second and third 12 months are calculated using SEIFSA index stated below.

The proportions used to calculate the Price Adjustment Factor are:

For Material price calculation:		
1.00	linked to the index in	Table C-3(a) of the SEIFSA Index
0.00		Table O of the SEIFSA Index

0.00		Table L-1 of the SEIFSA Index
For Unit Rates and hourly tariff calculation;		
0.70	linked to the index in	Table C-3(a) [field force] of the SEIFSA Index
0.20	linked to the index in	Table P of the SEIFSA Index (Plant and Machinery before installation)
0.10		Table L-1 (freight cost) of the SEIFSA Index
The indices are those prepared by Steel and Engineering Association of South Africa.		

C3.12. CONTRACT DOCUMENTS:

The document “NEC3 Engineering and Construction Contract”, April 2013.

Tenderers, Contractors and Subcontractors shall obtain their own copies (at their own cost) of this document for tendering purposes and for use for the duration of the Contract from the Secretary of the South African Institution of Civil Engineering, Private Bag X200, Halfway House, Midrand, 1685 and shall bear all expenses in this regard. This document shall form part of the contract.

PART C2: PRICING DATA

CONTENTS

C2.1	PRICING INSTRUCTIONS	2
C2.2	PRICING SCHEDULE.....	Error! Bookmark not defined.

C2.1

C2.1 PRICING INSTRUCTIONS

a. Preamble

i. This preamble to the Schedule of Rates provides the tenderer with guidelines and requirements with regard to the completion of the Schedule of Rates. **The Schedule must be completed in black ink** and the tenderer is referred to the Tender Data regarding the correction of errors.

ii. The Schedule of Rates shall be read with all the documents which form part of this Contract.

iii. The following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work in terms of the Conditions of Contract and Special Conditions of Contract, the Specifications, and the Project Specifications.

Quantity: The number of units of work for each item.

Rate: The payment per unit of work at which the tenderer tenders to do the work.

Amount: The product of the quantity and the rate tendered for an item.

Schedule of Rates: Schedule of quantities

iv The quantities set out in the schedule of rates are approximate quantities. The quantities of work accepted and certified for payment, and not the quantities given in the schedule of quantities, will be used to determine payments to the contractor. The validity of the contract shall in no way be affected by differences between the quantities in the schedule of quantities and the quantities certified for payment. Work will be valued at the rates tendered, subject only to the provisions of the general conditions of contract and this preamble.

v The tendered rates shall include full compensation for overheads, profits, incidentals, duties, levies, taxes (except VAT), and for the completed items of work as specified. Full compensation for completing and maintaining (during maintenance period) the work shown on the drawings and specified in the standard specifications and project specifications, and for the risks, obligations and responsibilities specified in the general conditions of contract, special conditions of contract, standard specifications and project specifications, shall be deemed collectively provided for in the payment items in the schedule of rates, except that the quantities in the schedule of rates are approximate quantities only.

vi Reference shall be made to the Conditions of Contract and Special Conditions of Contract regarding Provisional and Prime Cost Sums.

- **Tenders are required to quote for ALL the items in the schedule of rates from section 1 to 12 for construction, failure to follow this instruction will result in disqualification.**

b. Pay Items

iv. The abbreviated descriptions of the payment items given in the Schedule of Rates are only for the purposes of identifying the items and providing specific details. Reference shall be made, inter alia, to the Drawings, Specifications, Particular Specifications, Project Specifications, Conditions of Contract and Special Conditions of Contract for more detailed information regarding the extent of the work entailed under each item.

- ii. The amount of work or the quantities of materials stated in the schedule of rates shall not restrict or extend the amount of work to be done or the quantities of materials to be supplied by the contractor.

The quantities of materials or the amount of work listed in the schedule of rates shall not be regarded as authorization for the contractor to order materials or to execute work. The contractor shall obtain the employer's detailed instructions (purchase order) for all work before ordering any materials or executing work or making arrangements. [See *Material Rates for conditions of supply of materials*].

- iii. The item numbers appearing in the Schedule of Rates refer to the corresponding item numbers in the Particular Specifications and in the Project Specifications.

- iv. The units of measurement indicated in the Schedule of Rates are metric units and other as described in the schedule. The following abbreviations may be used in the pay items of the Schedule of Rates:

mm	=	millimetre
m ³	=	cubic metre
%	=	percent
V	=	volt
l	=	litre
W	=	watt
kl	=	kilolitre
kW	=	kilowatt
h	=	hour
u/mth	=	unit per month
P C sum	=	prime cost sum
prov sum	=	provisional sum
m	=	metre
kg	=	kilogram
km	=	kilometre
t	=	ton (1 000 kg)
No	=	number
m ²	=	square metre
MN	=	meganewton
Nm	=	meganewton-metre
ha	=	hectare
kPa	=	kilopascal

c. Rates (general)

v.

vi. The tenderer must fill in a rate for each item where provision is made for it, even where no quantities are given. Items against which a word or phrase such as "included" or "provided elsewhere" have been entered, will be accepted as a rate, percentage or rate of nil (R0,00) having been entered against such items.

Any work executed to which such a pay item applies, shall be measured under the appropriate item in the Schedule of Rates and valued at a rate or percentage of nil (R0,00). The rates of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.

Item(s) against which no rate or phrase such as "included" or "provided elsewhere" is entered will be regarded as non-responsive and will lead to the whole tender being disqualified.

vii. The tenderer shall fill in a rate against all items where the words "rate only" appear in the amount column. The intention is that, although no work is foreseen under such item and no quantities are consequently given in the quantity column (if any), the tendered rate shall apply should work under this item be actually required.

The tendered rates shall be valid irrespective of any change in the quantities during execution of the contract.

Estimated quantities provided are for evaluation purposes only(indicative) and not the actual contract quantities.

This is a rate only tender.

viii. The tenderer shall not group together a number of items and tender one rate for such group of items.

ix. All rates and sums of money quoted in the Schedule of Rates shall be in South African Rands (ZAR).

x. A tender may be rejected if the unit rates or percentage for some of the items in the schedule of rates are unreasonable or out of proportion in the opinion of the employer.

xi. Subject to the conditions stated in *paragraph Error! Reference source not found.*, the rates filled in by the tenderer in the schedule of rates shall be final and binding. Should there be discrepancies between the tender sum and the correctly extended and totaled schedule of Rates, the correction method as stated in the tender data shall be applied. In such an event the contractor may be consulted where-after failing agreement to the adjusted rate(s) by the tenderer, the decision of the employer will be final and binding otherwise the tender as a whole shall be disqualified. In their own interests tenderers should make sure of the correctness of their tendered rates, the extensions and the tender sum.

d. Method of Measurement

i. The work shall be measured in accordance with the methods described in the documents which form part of this Contract. Attention is directed to the provisions of the Specifications, Particular Specification and Project Specifications regarding the measurement of quantities.

ii. Unless otherwise stated, items are measured in accordance with the Drawings, Specifications, Particular Specification, and Project Specifications and no allowance is made for waste or work in excess of that specified.

e. Rates

1. The tenderer must take into consideration that there are no guarantees that there will be work for them during the contract period as well as that all rates must be treated independently and at a quantity of **ONE (1)**, unless indicated otherwise in the schedule.
2. The site is the site indicated when the project is allocated (through the purchase order) and it shall be the site in the jurisdiction of City of Tshwane. That also includes Eskom licensed areas within such boundaries and which are serviced by CoT.
3. The tenderer shall tender for *Normal Hours. The After-hours, Saturdays, Sundays and Public holidays will be paid as follows as and when required:*
 - 3.1. Maintenance
 - 3.1.1. *Overtime and Saturdays = Normal hours unit rate x 1.5*
 - 3.1.2. *Sunday and Public Holidays = Normal hours unit rate x 2*
 - 3.2. Construction
 - 3.2.1. No overtime, Saturday, Sunday and Public Holidays rates shall be paid for construction work, e.g. Capital Projects.
 - 3.3. Shift allowance or compensation shall not apply to this contract except to the employees of the contractor for which the contractor shall be fully liable.

NOTE: *That only work instruction issued by employer after the employer's normal working hours or on a Saturday will be considered for payment at one and half or double time. Work issued during normal working hours and that can be completed during normal working hours either the same day or the consecutive day(s) shall not be included for payment.*
4. Unit rates supplied in this tender shall include, unless stated otherwise in this document, all items listed below:
 - 4.1. all labour costs,
 - 4.2. all administrative expenses,
 - 4.3. Setting out of Works
 - 4.4. Transportation (fixed cost, running cost and driver cost) of employees, material and/or any other item required to be transported (within a specific depot area) to execute the contract to and from site where work is executed and supervision fees.
 - 4.4.1 The main project store for material is in Soshanguve, however material can be collected from all the operational stores within the CoT area of jurisdiction. tools, equipment and auxiliary equipment,
 - 4.5. safety equipment (*see OHS of the schedule of rates*),
 - 4.6. all notifications to consumers when a power failure is going to occur
 - 4.7. to the execution of tasks,
 - 4.8. Testing and Commissioning of complete installation
 - 4.9. All tariffs, levies, taxes payable by the bid,
 - 4.10. all expenses to restore the workplace/site to its original condition (where changing the site was not part of the works),
 - 4.11. all equipment needed to conform with the Regulations of the Occupational Health and Safety Act and the by-laws of the CoT.
 - 4.12. payments in terms of Royalties and Patent Rights (if the need arise).
 - 4.13. Compliance to OHS Act and Construction Regulations, 2003.

Part C2.2: Pricing Data

- 4.14. Traffic accommodation plan implementation
5. The hourly rate shall include the following:
 - 5.1. all administrative expenses
 - 5.2. safety equipment
 - 5.3. all tariffs, taxes and levies payable by the bid,
 - 5.4. all equipment necessary to conform with the Occupational Health and Safety Act and the by-laws of CoT and
 - 5.5. all other cost required to provide the specific service, goods or equipment.
6. In ALL items/activities for which the tenderer must provide a unit rate, the tenderer must also include in his/her unit rate, the restoration of the site to its original condition. The *original condition* means that the state which the site was found prior to the commencement of the works.
7. The Community Liaison Officer (CLO):
 - 7.1. The CLO shall be appointed by the contractor but will be provided to the contractor by The Office of the Speaker through public participation.
 - 7.2. The CLO shall be appointed for a period not exceeding the complete period of project implementation and handing over to CoT.
 - 7.3. The CLO shall be remunerated for the period of employment within the period indicated in 7.1 above.
 - 7.4. He/She will not be entitled to payment if the project has been halted by the employer,
 - 7.5. He/she will not be entitled for payment beyond the handing over date of the project unless the agreement between the contractor and the CLO extends beyond the actual project's period. In such cases, CoT will not be liable for any payment arising from such agreement.
 - 7.6. The remuneration of the CLO shall be equivalent to CoT administration officer's basic hourly salary (as indicated in the Part C3 of the contractor's employees.) and his/her salary shall be payable on an hourly rate.
8. Sub-contracting.

Any other work beside the activities deemed to be core functions and responsibility of the main contractor shall be allocated to subcontractors.

Before work can commence with the successful Bidder, City of Tshwane will insist on being provided with copies of formal signed subcontracting agreements that make up the legislated 30% of the contract value. All agreements to state that City of Tshwane will not be held responsible or liable should the successful Bidder breach contract with the subcontracted entities or enterprises.
9. **When the tenderer completes the schedule of rates, he/she refers to this part of the tender document and the following additional parts:**
 - 9.1. **Pricing data or Pricing instructions**
 - 9.2. **C3 Scope of works**
 - 9.3. **C3.4.1 Particular specifications**
 - 9.3.1. **Herein the tenderer will notice that the schedule of rates table is divided into major sections.**
 - 9.3.2. **Furthermore, the major sections have sub-sections to provide the necessary detail for the tenderer to make his/her pricing. The tender is furthermore having the schedule of rates for the works.**
 - 9.4. **C3.4.2 Standard specifications**

Part C2.2: Pricing Data

9.5. C3.4.3 Health and safety specification

f. Site establishment

10. The project manager shall determine the suitable and most economical method of storing material, delivering it to site and other logistics required when implementing a project. Minimum rudimentary services (i.e. movable sanitation, lavatory and clean drinking water,) must be provided by the contractor, as and when required

CORRECTION OF ENTRIES MADE BY TENDERER

Any entry made by the Tenderer in the Schedule of Rates, forms, etc., which the tenderer desires to change, shall not be erased or painted out. A line shall be drawn through the incorrect entry and the correct entry shall be written above in black ink and the full signature of the Tenderer shall be placed next to the correction.

Public Lighting Infrastructure Construction Contract

C2.2 SCHEDULE OF RATES - CONSTRUCTION

Note

- The City of Tshwane reserve the right to make a counter offer process and the City of Tshwane prices shall be final.
- The estimated quantities are for evaluation purposes and not a reflection of what the Department use in the contract.

TABLE OF CONTENTS

SECTION 1: CONTRACT ADMINISTRATION

SECTION 2: CONTRACTOR'S SITE ESTABLISHMENT

SECTION 3: BREAKING, DRILLING, CROSSING AND REPAIR OF SURFACE COVERINGS

SECTION 4: POLES

SECTION 5: TREES AND PLANTS

SECTION 6: LOW VOLTAGE CABLE NETWORK

SECTION 7: AERIAL BUNDLE NETWORK

SECTION 8: STREETLIGHTS

SECTION 9: CABLE SLEEVE PIPES AND DUCTS

SECTION 10: COMPLIANCE TO OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

Part C2.2: Pricing Data

Refer to Part C3.4.1 of this tender document for full description of each item.

ITEM [section in C3.4]	DESCRIPTION		Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
SECTION 1: CONTRACT ADMINISTRATION- Refer to Part C3.4.1 Section 1 (Public lighting Infrastructure Construction)						
2.1.22.1	1	Provide and maintain a quality system				
2.1.22.1	1.1	DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
2.1.22.1.2	1.1.2	Land surveyo r pegs	Each	50		
2.1.22.2	1.2	Storage of equipment where storage space is provided by:				
2.1.22.2.1	1.2.1	The contractor	Per month	35		
2.1.22.10	1.7	Liaison Officer	Per Month	36	CoT minimum T5-level salary)	
SUB-TOTAL FOR SECTION 1 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)						
VAT						
SUB-TOTAL FOR SECTION 1 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)						

Part C2.2: Pricing Data

SECTION 2 : CONTRACTOR'S SITE ESTABLISHMENT -Refer to Part C3.4.1 Section 2 (Public lighting Infrastructure Construction)						
2.2.5.1	2.1	Contractor's establishment on site				
		DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
2.5.1.1	2.1.3	Provision of minimum rudimentary services	per month	36		
2.2.5.3	2.2	Supply and install sign board refer to draw. STD 001	Each	35		
SUB-TOTAL FOR SECTION 2 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)						
VAT						
SUB-TOTAL FOR SECTION 2 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)						

Part C2.2: Pricing Data

SECTION 3: BREAKING, DRILLING , REPAIR OF SURFACE COVERINGS AND CROSSINGS						
Refer to Part C3.4.1 Section 3 (Public lighting Infrastructure Construction)						
	3.1	BREAKING				
		DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
	3.1.1	Breaking of concrete paving per cubic meter	per m ³	50		
	3.1.2	Breaking of tar per cubic meter	per m ³	50		
	3.1.3	Lifting of in-print paving per cubic meter	per m ³	50		
	3.1.4	Lifting of paving stones per meter squared	per m ²	50		
	3.1.5	Cutting of tarmac per meter squared	per m ²	400		
	3.2	HORIZONTAL DRILLING				
		DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
	3.2.1	Horizontal drilling for 1 x 110mm sleeve	per meter	200		
	3.2.2	Horizontal drilling for 1 x 150mm sleeve	per meter	50		
	3.2.3	Horizontal drilling for 3 x 110mm sleeve	per meter	200		
	3.2.4	Horizontal drilling for 4	per meter	200		

Part C2.2: Pricing Data

		x 110mm sleeve				
	3.2.5	Digging of single drilling pit	per set	20		
	3.3	CROSSINGS	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
	3.3.1	Construction per meter of railway and oil pipe crossing	per meter	50		
	3.3.2	Construction per meter of road crossing	per meter	50		
	3.3.3	Construction per meter of tunnel and bridge crossing	per meter	50		
	3.3.4	Mounting of racks or cable clamps per meter in a tunnel or bridge crossing	per meter	50		
	3.4	Repair of surface coverings				
			Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
	3.4.1	Repairing of surfurce covering per square meter with paving tiles or stones	per square meter (m²)	100		
	3.4.2	Repairing of surfurce covering per square meter with channel covering	per square meter (m²)	100		

Part C2.2: Pricing Data

	3.4.3	Repairing of surfurce covering per square meter with 100mm thick concrete slab	per square meter (m ²)	100		
	3.4.5	Repairing of surfurce covering per square meter with tarred pavement	per square meter (m ²)	100		
	3.4.6	Repairing of surfurce covering per square meter with 100mm thick inprint paving	per square meter (m ²)	100		
		Repairing of surfurce covering per square meter with tarmac	per square meter (m ²)	400		
SUB-TOTAL FOR SECTION 3 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)						
VAT						
SUB-TOTAL FOR SECTION 3 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)						

Part C2.2: Pricing Data

Section 4 POLES						
Steel poles						
		DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
	4.1.2.1.	Planting of a single Post Top steel pole - Normal hours (LI/EPWP)	Each	50		
	4.1.2.2	Planting of a single 7.5m steel pole - Normal hours (LI/EPWP)	Each	150		
	4.1.2.3.	Planting of a single 9.75m steel pole - Normal hours (LI/EPWP)	Each	150		
	4.1.2.4.	Planting of a single 10.5m steel pole - Normal hours (LI/EPWP)	Each	300		
	4.1.2.5.	Planting of a single 12m steel pole - Normal hours (LI/EPWP)	Each	100		
	4.1.2.6.	Planting of a single 15m steel pole - Normal hours (LI/EPWP)	Each	50		
4.1.3 WOODEN POLES:						
	4.1.3.1	Planting of a single 5m wooden pole - Normal hours (LI/EPWP)	Each	100		
	4.1.3.2	Planting of a single 8m wooden pole - Normal hours	Each	100		

Part C2.2: Pricing Data

	4.1.3.3	Planting of a single 11m wooden pole - Normal hours	Each	100		
	4.1.3.4	Planting of a single 12m wooden pole - Normal hours	Each	100		
4.1.4 CONCRETE POLES						
	4.1.4.1	Planting of a single 5m concrete pole - Normal hours (LI/EPWP)	Each	50		
	4.1.4.2	Planting of a single 8.5m concrete pole - Normal hours	Each	50		
	4.1.4.3	Planting of a single 12m concrete pole - Normal hours	Each	100		
	4.1.4.4	Planting of a single 14.4m concrete pole - Normal hours	Each	100		
	4.1.4.4	Planting of a single 15m concrete pole with stubby - Normal hours	Each	100		
4.2 ANCHORING OF POLES:						
	4.2.1	Anchoring of a single pole with a stay - Normal hours	Each	30		
	4.2.2	Anchoring of a single pole with a strut pole - Normal hours	Each	30		
	4.2.3	Anchoring of a single pole with a flying stay - Normal hours	Each	30		

Part C2.2: Pricing Data

	4.3	REMOVAL OF POLES				
	4.3.1	STEEL POLES:				
	4.3.1.1	Removal of a single 4.5m steel pole - Normal hours (LI/EPWP)	Each	100		
	4.3.1.2	Removal of a single steel pedestal - Normal hours (LI/EPWP)	Each	100		
	4.3.1.3	Removal of a single 8.5m steel pole - Normal hours	Each	100		
	4.3.1.4	Removal of a single 9.75m steel pole - Normal hours	Each	100		
	4.3.1.5	Removal of a single strut pole - Normal hours (LI/EPWP)	Each	100		
	4.3.1.6	Removal of a single 12m steel pole - Normal hours)	Each	100		
	4.3.1.7	Removal of a single 15m steel pole - Normal hours (LI/EPWP)	Each	100		
	4.3.1.8	Removal of a single standard/short robot pole - Normal hours (LI/EPWP)	Each	100		
	4.3.1.9	Removal of a single overhead robot pole - Normal hours	Each	100		

Part C2.2: Pricing Data

	4.3.2 wooden poles					
	4.3.2.1	Removal of a single 5m wooden pole - Normal hours (LI/EPWP)	Each	100		
	4.3.2.2	Removal of a single 8m wooden pole - Normal hours	Each	100		
	4.3.2.3	Removal of a single 11m wooden pole - Normal hours	Each	100		
	4.3.2.4	Removal of a single 12m wooden pole - Normal hours	Each	100		
	4.3.2.5	Removal of a single strut pole - Normal hours (LI/EPWP)	Each	100		
	4.3.2.6	Removal of a single wooden pedestal - Normal hours (LI/EPWP)	Each	100		
4.3.3 CONCRETE POLES:						
	4.3.3.1	Removal of a single 5m concrete pole - Normal hours (LI/EPWP)	Each	100		
	4.3.3.2	Removal of a single 8.5m concrete pole - Normal hours	Each	100		
	4.3.3.3	Removal of a single 10.5m concrete pole - Normal hours	Each	100		

Part C2.2: Pricing Data

	4.3.3.4	Removal of a single 12m concrete pole - Normal hours	Each	100		
	4.3.3.5	removal of a single 15m concrete pole with stubby - Normal hours	Each	100		
SUB-TOTAL FOR SECTION 4 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)						
VAT						
SUB-TOTAL FOR SECTION 4 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)						

5	TREES AND PLANTS				
	DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY	RATE (Unit Price) VAT Excl.	Total Amount A x B
			A	B	
5.4	Removal of trees for a 6m wide 11kV servitude per bay - Normal hours	Per bay	20		
5.5	Cutting of grass for a 6m wide 11kV servitude per bay - Normal hours (LI/EPWP)				
5.5.1.	Cutting of grass for a 6m wide 11kV servitude per bay that is 45m long - Normal hours (LI/EPWP)	Each	20		
5.5.2.	Cutting of grass for a 6m wide 11kV servitude per bay that is greater than 45m long - Normal hours (LI/EPWP)	Each	20		
5.9	Pruning of trees for a servitude	Per bay	20		

Part C2.2: Pricing Data

	per bay - Normal hours				
SUB-TOTAL FOR SECTION 5 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)					
VAT					
SUB-TOTAL FOR SECTION 5 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)					

SECTION 6 : LOW VOLTAGE CABLE NETWORK- Refer to Part C3.4.1 Section 6 (Public lighting Infrastructure Construction)						
6.9.1.		Excavations				
		DESCRIPTION	Unit of Measure	ESTIMATE D QUANTITY	RATE (Unit Price) VAT Excl. B	Total Amount A x B
				A		
	6.9.1.1	Excavate in all materials for trenches, backfill, compact and	m ³	350		
	6.9.1.2	dispose of surplus material by excavation equipment	m ³	400		
	6.9.1.3	Extra over for excavating in hard material :				
	6.9.1.3.a	(a) Hard rock	m ³	20		
	6.9.1.3.b	(b) Soft rock	m ³	30		
	6.9.1.3	(c) Compacted ground	m ³	70		
	6.9.1.4.	Excavating by hand in all materials	m ³	30		
	6.9.1.5.	Extra over for using backfill material obtained from:				

Part C2.2: Pricing Data

	6.9.1.5.a	(a) borrow areas	m ³	30		
	6.9.1.5.b	(b) sources provided by the contractor	m ³	30		
		DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY	RATE (Unit Price) VAT Excl.	Total Amount A x B
				A	B	
6.9.3		Lay LV cable				
	6.9.3.1	16 x 4c Cu,swa,pvc	m	150		
	6.9.3.2	25 x 4c Al,swa,pvc	m	150		
	6.9.3.3	35 x 4c Cu,swa,pvc	m	50		
	6.9.3.4	120 x 4c Al,swa,pvc	m	50		
	6.9.3.5	150 x 4c Cu,swa,pvc	m	50		
6.9.4.		Termination of LV cables				
	6.9.4.1	16 x 4c Cu,swa,pvc	Per pole	40		
	6.9.4.2	25 x 4c Al,swa,pvc	Per pole	40		
	6.9.4.3	35 x 4c Cu,swa,pvc	Per pole	10		
	6.9.4.4	120 x 4c Al,swa,pvc	Per pole	10		
	6.9.4.5	150 x 4c Cu,swa,pvc	Per pole	10		
6.9.5.		Jointing of LV cable				
	6.9.5.1	16 x 4c Cu,swa,pvc	Each	5		
	6.9.5.2	25 x 4c Al,swa,pvc	Each	5		

Part C2.2: Pricing Data

	6.9.5.3	35 x 4c Cu,swa,pvc	Each	5		
	6.9.5.4	120 x 4c Al,swa,pvc	Each	5		
	6.9.5.5	95 x 4c Cu,swa,pvc	Each	5		
	6.9.5.6	150 x 4c Cu,swa,pvc	Each	5		
	6.9.5.7	185 x 4c Cu,swa,pvc	Each	5		
	6.9.5.8	240 x 4c Cu,swa,pvc	Each	5		
6.9.6		Lay earth continuity conductor				
	6.9.6.1	70mm ² Cu, pvc covered	m	50		
6.9.7		Terminate earth continuity conductor				
	6.9.7.1	70mm ² Cu, pvc covered	m	5		
6.9.8.		Install cable markers	Each	100		
6.9.9.		Install protective slabs	Each	10		
6.9.10.		Install cable sleeves	each	50		
SUB-TOTAL FOR SECTION 6 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)						
VAT						
SUB-TOTAL FOR SECTION 6 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)						

Part C2.2: Pricing Data

SECTION 7: AERIAL BUNDLE NETWORK- Refer to Part C3.4.1 Section 7 (Public lighting Infrastructure Construction)						
7.9.3. Erect wood pole structures						
		DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount A x B
	7.9.3.1	5m	Each	50		
	7.9.3.2	7m	Each	100		
	7.9.3.3	9m	Each	100		
	7.9.3.4	11m	Each	100		
	7.9.3.5	12m	Each	50		
7.9.4		Stringing Conductors				
		DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount A x B
	7.9.4.1	String bundle conductor (ABC)	m	3000		
	7.9.4.2	String ACSR Gopher conductor	m	3000		
7.9.5		Install suspension assembly	Each	60		
7.9.6		Install tension assembly	Each	60		
7.9.7		Install bridge connectors between ABC conductors , dressing the pole box	Per box	1500		
7.9.8		Install bridge connectors between ABC and dress the Control box	Per box	50		
7.9.9		Install LV cables termination for the structure				

Part C2.2: Pricing Data

		DESCRIPTION	Unit of Measur e	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount A x B
	7.9.9. 1	120mm ² x 4 c pvc swa Al cable	Each	10		
7.9.10		Install stays, struts, stub stay, flying and fly stay	Each	40		
7.9.11		Install earth structure				
		DESCRIPTION	Unit of Measur e	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount A x B
	7.9.11.1	LV earth	m	20		
	7.9.11.2	Pole earth	Each	100		
7.9.12		Install signs	Per pole	100		
7.9.13		Install Pole numbering	Per pole	500		
7.9.14		Install ABC structures				
		DESCRIPTION	Unit of Measur e	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount A x B
	7.9.14.1	Suspension structure (0- 30deg.)	Each	60		
	7.9.14.2	Strain structure (0- 60deg.)	Each	60		
	7.9.14.3	Strain structure (60- 90deg.)	Each	20		
	7.9.14.4	Terminal structure	Each	20		
	7.9.14.5	Terminal structure (2way,schackl e off)	Each	20		
	7.9.14.6	Suspension structure (T- off)	Each	20		

Part C2.2: Pricing Data

	7.9.14.7	Strain structure (T-off)	Each	20		
	7.9.14.8	Suspension structure (4way cross)	Each	20		
	7.9.14.9	Strain structure (4way cross)	Each	20		
	7.9.14.10	Midway (4-way cross)	Each	20		
SUB-TOTAL FOR SECTION 7 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)						
VAT						
SUB-TOTAL FOR SECTION 7 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)						

Part C2.2: Pricing Data

ITEM [section in C3.4]	DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
SECTION 8 : STREETLIGHTS- Refer to Part C3.4.1 Section 8 (Public lighting Infrastructure Construction)					
8.2.1	Excavate for trenching across tarmac roads	m ³	60		
8.2.2	Laying bitumen premix of varying thickness in roadway	m ³	30		
8.2.3	Lay/install cable sleeves	M	50		
8.2.6	Install streetlight pole bracket	Each	1500		
8.2.7	Install & connect streetlight luminaires (HPS)				
	8.2.7.1	70W HPS and outreach arm 500mm	Each	200	
	8.2.7.2	150W HPS and outreach arm 500mm	Each	200	
	8.2.7.3	250W HPS and outreach arm 500mm	Each	200	
	8.2.7.4	400w HPS and outreach arm 500mm	Each	100	
	8.2.7.5	1000w HPS and outreach arm 500mm		100	
	Install & connect streetlight luminaires (LED)				
	8.2.7.6	LED SL (≤35W) equivalent of 70W HPS and outreach arm 500mm	Each	200	

Part C2.2: Pricing Data

	8.2.7.7	LED SL ($\leq 75W$) equivalent of 150W HPS and outreach arm 500mm	Each	200		
	8.2.7.8	LED SL ($\leq 125W$) equivalent of 250W HPS and outreach arm 500mm	Each	200		
	8.2.7.9	($\leq 200W$) equivalent of 400W HPS and outreach arm 500mm	Each	100		
	8.2.7.10	LED FLOODLIGHT ($\leq 500W$) equivalent of 1000W HPS and outreach arm 500mm	Each	100		
8.2.8		Install photo electric light sensitive switch (Nema type)	Each	50		
8.2.9		Lay/Install Streetlight cable				
	8.2.9.1	25 X 4c Cu ,swa,pvc	M	500		
	8.2.9.2	16 X 4c Cu,swa,pvc	M	500		
	8.2.9.3	25 x 2 ABC for streetlight (insulated neutral)	M	500		
	8.2.9.4	25 x 4 ABC for streetlight (insulated neutral)	M	500		
	8.2.9.5	25 X 4c Al ,swa,pvc	M	500		
8.2.10		Termination of Streetlight cable.				

Part C2.2: Pricing Data

	8.2.10.1	25 X 4c Cu ,swa,pvc	Each	200		
	8.2.10.2	16 X 4c Cu,swa,pvc	Each	200		
	8.2.10.3	25 X 4c Al ,swa,pvc	Each	200		
	8.2.10.4	35 X 4c Cu,swa,pvc	Each	100		
8.2.11		Issue a certificate of compliance (CoC)	Per circuit	50		
8.2.12		Install insulated piercing connectors for streetlight connections				
	8.2.12.1	6-35mm ²	Each	200		
SUB-TOTAL FOR SECTION 8 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)						
VAT						
SUB-TOTAL FOR SECTION 8 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)						

Part C2.2: Pricing Data

ITEM [section in C3.4]	DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
SECTION 9 : CABLE SLEEVE PIPES AND DUCTS -Refer to Part C3.4.1 Section 9 (Public lighting Infrastructure Construction)					
9.9.1	Install cable sleeves				
	9.9.1.1	110mm dia.FLEX pvc	M	50	
	9.9.1.2	160mm dia.FLEX pvc	M	20	
	9.9.1.3	40mm HPDE duct for fibre optic	M	20	
	9.9.1.4	Drilling pits (Complete) both side	Each	30	
SUB-TOTAL FOR SECTION 9 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)					
VAT					
SUB-TOTAL FOR SECTION 9 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)					

Part C2.2: Pricing Data

ITEM [section in C3.4]	DESCRIPTION	Unit of Measure	ESTIMATED QUANTITY A	RATE (Unit Price) VAT Excl. B	Total Amount (A x B)
SECTION: 10 COMPLIANCE TO OCCUPATIONAL HEALTH AND SAFETY REGULATIONS					
Refer to Part C3.4.1 Section 10 (Public lighting Infrastructure Construction)					
1	Provision of OHS file	Each- Once off	35		
2	Occupational Health and Safety Officer (full time)	Per Month	70		
3	Occupational Health and Safety training				
3.1	First Aid Training (per person)	Each	20		
3.2	OHS representative Training(Per person)	Each	20		
4	Provision of personal protective clothing and equipment (per set-per person)	Each	200		
SUB-TOTAL FOR SECTION 10 CARRY FORWARD TO THE SUMMARY (VAT EXCLUSIVE)					
VAT					
SUB-TOTAL FOR SECTION 10 CARRY FORWARD TO THE SUMMARY (VAT INCLUSIVE)					

Public Lighting Infrastructure Construction Contract

CONSTRUCTION SCHEDULE OF RATES SUMMARY

SCHEDULE OF RATES SUMMARY (CONSTRUCTION)

SECTION	DESCRIPTION	TOTAL PER SECTION (VAT INCLUSIVE)
1	CONTRACT ADMINISTRATION	
2	CONTRACTOR'S SITE ESTABLISHMENT	
3	BREAKING, DRILLINNG , REPAIR OF SURFACE COVERINGS AND CROSSINGS	
4	POLES	
5	TREES AND PLANTS	
6	LOW VOLTAGE CABLE NETWORK	
7	AERIAL BUNDLE NETWORK	
8	STREETLIGHTS	
9	CABLE SLEEVE PIPES AND DUCTS	
10	COMPLIANCE TO OCCUPATIONAL HEALTH AND SAFETY REGULATIONS	
GRAND TOTAL		

Note

- The City of Tshwane reserve the right to make a counter offer process and the City of Tshwane prices shall be final.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 1 of 71

General Notification

This document forms an integral part of the tender document and, in particular, shall constitute the Client's (City of Tshwane.) Occupational Health & Safety Specification, as required by the Construction Regulations, 2014, as promulgated under the Occupational Health and Safety Act (Act no. 85 of 1993).

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

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

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 2 of 71

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

1. Definition of Terms

- I. Client-Means any person for whom construction work is performed and or undertaken (City of Tshwane for the purposes of this project)
- II. Construction site means a workplace where a construction work is being performed
- III. Construction supervisor means a competent person responsible for supervising construction activities on a construction site.
- IV. Competent person means a person who –
 - a) Has in respect of the work or task to be performed the required knowledge, training and experience and where applicable, qualifications, specific to that work or task:
Provided that where appropriate qualifications and training are registered in terms of the provision of the National Qualification Framework Act 2000 (Act 67 of 2000), those qualifications and that training must be regarded as the required qualification and training and
 - b) Is familiar with the Act.
- V. Principal Contractor-Means an employer, as defined by Section 1 of the OHSACT who performs construction work and is appointed by the client to be in overall control and management of the construction site and works
- VI. Agent-Means a competent person who acts as a representative for a client in this case MIH Projects.
- VII. Occupational 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 working ,visiting, passing, staying and working close to the construction site and or other applicable areas such as the site camp

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 3 of 71

VIII. Risk-means the probability that injury or damage may occur

IX. Hazard-means a source of or exposure to danger

2. Introduction

In terms of the Construction Regulation 5 (1) of the OHS ACT, the client is required to compile an Occupational Health and Safety Specification for an intended project. This specification has an objective to ensure that the principal contractor entering into a contract with the client achieves and maintain an acceptable level of Occupational Health and Safety performance and compliance.

This document forms an integral part of the contract between the client and the principal contractor.

The Principal Contractor and its Contractors shall furthermore implement any reasonable practicable means to ensure compliance to this Occupational Health and Safety Specification and any other applicable legislation on their organization and/or activities performed by or for them. Compliance with this document does not absolve the principal contractor from complying with any other minimum legal requirement and the principal contractor remains responsible for the health and safety of his employees, those of his mandatories as well as any person coming on site or on adjacent properties as far as it relates to the construction activities.

Bidders must submit Compensation for Occupational Injuries and Diseases Act (COIDA) letter of good standing with the tender document. Failure to submit COIDA letter of good standing with the tender document shall disqualify the Bidder from further evaluation.

3. The Client`s commitment to Occupational Health and Safety Management

City of Tshwane is committed to responsible occupational health, safety management. This commitment is essential to protect the environment, employees, mandatories, visitors and

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 4 of 71

provide a work environment conducive to health and safety. Principal Contractors and their Contractors shall demonstrate their commitment and concern by:

- Ensuring that decisions and practices affecting occupational health and safety performance are consistent with the issued specification;
- Ensuring adequate resources are made available for the effective implementation of occupational health and safety control and mitigation measures;
- Participating in hazard identification and risk assessments and design safety reviews;
- Communicating occupational health and safety management processes, strategies and control measures with all levels of employees, contractor and/or visitors;
- Ensuring visible leadership at all sites;
- Promoting and enforcing the use of correct types of Personal Protective Equipment (PPE);
- Reporting and investigation of incidents and accidents and ensuring actions are identified and implemented to prevent similar types of incidents reoccurring;
- Participating in Client audits and meetings and ensuring required actions are implemented within reasonable time frames on the site/project;
- Recognizing and commending safe work practices and coaching employees who require guidance;
- Applying and enforcing consequence management from deviations and transgressions of/from compliance to this OHS Specification noted and/or observed, where applicable;
- Carrying out safety observations, implement corrective and preventative actions and giving immediate feedback;
- Encouraging employee participation in the formulation of work instructions and safety rules.

4. Scope

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 5 of 71

To develop a project specific Occupational Health and Safety Specification that addresses the reasonable and foreseeable, risks, exposures and aspects of Occupational Health and Safety as affected by CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE:

The specification will provide the requirements that the principal contractor and other contractors will have to comply with in order to reduce the risk associated with the above mentioned contract work and that may lead to incidents causing injury and/or ill health to a level as low as reasonable practicable and possible.

5. Omissions from OHS Specification

Where any omission from the OHS Specification is identified, applicable legal requirements will constitute the minimum standard for compliance to the relevant omission. The responsibility will be on the Principal Contractor to provide assurance to the client (City of Tshwane) on compliance to the applicable legal requirements related to the activity / task / process.

6. Change or Review of Specifications

Whenever the client (City of Tshwane) identifies the need to change or review the OHS Specification, approved changes and revisions will be communicated to the Principal Contractor. A cost analysis on the implementation of the proposed changes / revisions will be calculated through a collaborative processes between the Client and the Principal Contractor – where the approved changes and/or revisions has no cost implication for the Principal Contractor the Principal Contractor will be required to accept the approved changes / revisions and ensure implementation within the OHS Plan .

7. Safety Files

7.1. Preparation and Submission of safety file

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 6 of 71

The Principal Contractor shall prepare a safety file containing the processes / procedures and templates to be applied during the project period for the scope of work. The Principal Contractor will be evaluated during the contract period against the submitted safety file.

At a minimum the safety file shall contain the following documentation and in accordance with the specification:

1. Notification of construction work to the relevant Department of Labour (stamped on each page / no faxed copies);
2. Scope of work to be performed;
3. Public Liability
4. Personnel list (Principal Contractor employees);
5. OH&S Policy and other procedures;
6. Updated copy of the Occupational Health and Safety Act (Act no. 85 of 1993) and its Regulations.
7. Updated copy of the Compensation for Occupational Injuries and Diseases Act (Act no. 130 of 1993) and its Regulations;
8. Proof of valid registration and good standing with the Compensation Commissioner or another licensed Insurer;
9. OHS Plan approved by the Client.
10. Agreement with Mandatory in terms of Section 37(1) &2 of the OHS Act.
11. Approved risk assessments, review and monitoring plans and safe work procedures (method statements);
12. A list of contractors (sub-contractors) including copies of the agreements between the parties and the type of work being done by each contractor;
13. Designs and/or drawings;
14. All written designations and appointments for project scope of work (CV and competency copies);
15. Management structure (inclusive of OH&S responsibility & meeting structure);

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 7 of 71

16. Induction training and site OHS rules;

17. Occupational health and safety training matrix / plan;

18. Arrangements with contractors and/or mandatories;

19. The following registers (as applicable to contract scope of work):

- Accident and/or incident notifications, investigation & control register;
- Occupational health and safety representatives inspection register;
- Construction vehicles and mobile plan inspections;
- Daily inspections templates of vehicles, plant and other equipment by the operator, driver and/or user;
- Daily inspections templates of excavations by competent person;
- Template for entry into confined space;
- Toolbox talks pro-forma;
- Designer's inspections and structures record template;
- Inspection and maintenance template of explosive powered tools;
- Inspection template of electrical installations (including inspection of portable electrical tools, electrical equipment and other electrical appliances);
- Fall protection inspections template;
- First-aid box content template;
- Record of first-aid treatment template;
- Fire equipment inspection and maintenance template;
- Record of hazardous chemical substances template kept and used on site;
- Ladder inspection template;
- Machine safety inspections template (including machine guards, lock-outs etcetera);
- Inspection templates for lifting machines and –tackle (including daily inspections by drivers/operators);
- Inspection templates of scaffolding;

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 8 of 71

- Inspection templates of stacking and storage;
- Inspections templates of structures;
- Inspections templates of vessels under pressure;
- Inspection templates of welding equipment; and
- Templates of issuing of Personal Protective Equipment;
- Monthly reporting and recording of statistics templates;
- Keeping of any other record in terms of applicable legislation falling within the scope of OHS Legislation applicable to the project and the Principal Contractor / Contractor's activities and organization.
- Emergency preparedness and response programmes;

7.2. Evaluation and approval of Safety file

The client (City of Tshwane) will conduct an initial inspection and evaluation of the Principal Contractor's OHS file for approval purposes to commence work. The Principal Contractor is required to submit the OHS file within 5 days after receiving the induction training from the Client. The Client will evaluate the file and give feedback to the Project manager and the Principal contractor. If the file has not been approved, the Principal contractor shall ensure that the outstanding documents are submitted for re-evaluation within 3 working days.

NOTE: The construction work cannot commence until the safety file is approved. The approval letter from the Client must be kept in the OHS file and any letter issued concerning the evaluation of the file. Principal Contractors are required to achieve at least 80% (Eighty Per cent) compliance on the entire safety file documentation to obtain approval by the Client.

7.3. Principal Contractor engagement phase

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 9 of 71

The Principal Contractor shall commence with the construction work after approval of the safety file. The following processes will be applied to the Principal Contractors on a monthly basis for the duration of the contractual period:

- Monthly Compliance Assessments;
- Site Inspections;
- Progress meetings;
- Contractor's forum OHS meetings held at City of Tshwane

An initial site establishment inspection will be conducted by the Client after approval of the safety file / plan.

7.4. Project close-out and submission of consolidated Health & Safety File.

On completion of a construction work/ project the Principal Contractor shall submit all documentation required for the consolidated safety file to City of Tshwane as part of the project hand over documentation.

At a minimum, the safety file will contain the following records:

1. Approval letter by City of Tshwane on contents of Health and Safety file including plan;
2. A construction work permit issued by the Department of Labour as contemplated in Construction Regulation 3 of the Construction Regulations 2014 (when applicable).
3. Scope of work performed;
4. OHS Policy and other procedures;
5. Proof of registration and good standing with the Compensation Commissioner or another licensed Insurer;
6. OHS plan approved by the Client including the underpinning risk assessment(s) and method statements;

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 10 of 71

7. A list of contractors (sub-contractors) including copies of the agreements between the parties and the type of work done by each contractor;
8. Notifications of new projects /extension of scope received;
9. Designs and/or drawings;
10. Occupational health and safety committee meeting agenda and minutes;
11. Copies of written designations and appointments (CV and competency copies);
12. Management structure (inclusive of OHS responsibility & meeting structure);
13. Induction training conducted and site OHS rules;
14. Occupational health and safety training provided;
15. Arrangements with contractors and/or mandatories;
16. Description of security measures;
17. All applicable registers;

8. OHS Specification Requirements

8.1.General Requirements of Health and Safety Plan

Construction Regulation 7 (1) stipulates that the principal contractor must provide and demonstrate to the client a suitable sufficiently documented and coherent site specific health and Safety Plan, based on the client's documented Health and Safety Specification contemplated in Regulation 5(1) (b), which plan must be applied from the date of commencement of and for the duration of the construction and which must be reviewed and updated by the principal contractor as work progresses.

It is expected from the Contractor to include in his safety plan method statements on how to accomplish the requirements relating to the Construction Regulations, 2014 and related incorporated standards and regulations.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 11 of 71

Principal Contractors should describe how their safety management systems will work and what control procedures they plan on using to ensure safety on the construction site

The following generic aspects should be covered in the Safety plan:

- What administrative procedures the Principal Contractor envisages to use in the implementation and maintenance of the safety plan with reference to the construction site
- How continuous assessment of the safety plan will be assessed and implemented with respect to construction site
- What control systems the Principal Contractor envisages to implement on site to support his safety program
- How the Principal Contractor will ensure that he adheres to the construction regulations in respect of competent persons for appointments
- What external resources the Principal Contractor envisages on using to ensure successful implementation and sustainability of the safety plan
- What training to employees the Principal Contractor envisages and how he would go about to execute it
- The Principal Contractor should indicate which competent persons he plans on employing based on the scope of work.

8.2. Outline of Health and Safety Plan

The Principal Contractor's Health and Safety Plan prepared in accordance with this specification shall consist of at least the following sections and sub-sections:

1. Aim and Scope of Plan,
2. Risk Assessment,
 - a. Alternative Forms of Risk Assessment,
 - b. Methodology of Risk Assessment,

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 12 of 71

- c. Elements of Risk Assessment,
 - i. Scope of assessment,
 - ii. Risks Identified,
 - iii. Risk Analysis,
 - iv. Risk Evaluation,
 - v. Risk Treatment(safe working procedures)
 - vi. Monitoring and reviewing,
3. Resources,
 - a. Health and Safety Staffing Organogram,
 - b. Supervisors, Inspectors and Issuers,
 - c. Employees,
 - d. Subcontractors inclusive of their scope of work and their core resources,
 - e. Training,
 - f. Plant,
 - g. Vehicles,
 - h. Equipment
4. Materials,
 - a. Temporary Materials
 - b. Permanent Materials
5. Categories of Work
6. Implementation of Health and Safety Plan,
 - a. Administrative systems,
 - b. Training,
 - c. Reporting,
 - d. Monitoring,
 - e. Inspections,
7. Auditing,
 - a. Internal audits,

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 13 of 71

- b. Follow-up audits,
8. Financial Aspects,
9. Emergency procedures and response

8.3. Risk Assessment

8.3.1 General

This section of the specification provides guidelines for the Contractor in preparation of risk assessments in order to ensure compliance with Regulation 9 of the Construction Regulations, 2014. According to SANS 31000:2009, Risk is the overall process of risk identification, risk analysis, and risk evaluation. This section highlights the principles related to the preparation of suitable and sufficient risk assessments. Contractor Staff intending to prepare risk assessments should be trained and suitably experienced in the application envisaged.

A suitable and sufficient risk assessment is an assessment which:

- Accounts for risks that are likely to arise during the construction of the Works,
- Enables the development and implementation of systems to manage the risks,
- Remains valid for a reasonable period of time,
- Provides a basis for training of employees, and
- Improves working procedures and introduce long term controls.

The requirements of the Construction Regulations will not be satisfied by a single risk assessment exercise that holds good for all time. The risk assessment process on the Works is an ongoing process.

The objectives of risk assessments are to:

- Identify the risks that are mostly in need of reduction,
- Identify the various options for achieving such reduction,
- Identify the risks that require careful ongoing management, and
- Identify the nature of the required ongoing attention.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 14 of 71

8.3.2 Forms of Risk Assessment

In order to ensure compliance with the Construction Regulations, the Contractor will be required to carry out the following three forms of risk assessment:

8.3.2.1 Activity based risk assessment

The Contractor will be required to carry out activity based risk assessment before the commencement of construction activities on the Works. This risk assessment will form part of the Contractor's Health and Safety Plan. The risks and hazards to which persons, plant, vehicles and facilities may be exposed during the construction of the Works should be identified and evaluated. Measures to reduce or control these risks or hazards should be defined during this assessment. The effectiveness of the measures defined and the baseline risk assessment prepared shall be monitored and reviewed from time to time to ensure that it remains relevant and accurate.

8.3.2.2 Issue based risk assessments

The Contractor will be required to carry out separate risk assessments during construction of the Works when methods and procedures are varied, for example when:

- Designs are amended,
- New machines are introduced,
- Plant is periodically cleaned and maintained,
- Plant is started-up or shut-down,
- Systems of work change or operations alter,
- Incidents or near-misses occur, or
- Technological developments invalidate prior risk assessments

8.3.2.3 Continuous risk assessments

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 15 of 71

The Occupational Health and Safety Act specifically requires that employers shall provide and maintain working environments that are safe and without risk to health. The general awareness of hazards needs to be raised as work ethic to maintain a safe and risk free environment on an ongoing basis. This is achieved by continuous risk assessments, the most important form of risk assessment that takes place as an integral part of day-to-day management. Examples of continuous risk assessments include:

- Regular audits,
- Maintaining general hazard awareness,
- Pre-work risk assessment

8.3.4 Methodology for the Preparation of Risk Assessments

The Contractor shall in the preparation of risk assessments, follow the following general principles:

- Appoint in writing a suitably competent risk assessor
- The appointed risk assessor shall lead the risk assessment process
- Provide the team with background data, scope of work, potential hazards and underlying causes, and
- Where necessary employ experts for complex risk assessments and aspects of risk assessments that require experiential judgment,
- Institute an ongoing system of identifying aspects of the work that require risk assessment.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 16 of 71

8.3.5. Elements of a Risk Assessment

The process of carrying out a risk assessment consists of a number of well-defined steps. These steps improve decision-making by providing a greater understanding of the risks and their impacts.

The main steps or elements of the risk assessment process are as follows:

- 1) Consider scope and nature of risks involved, determine purpose and physical and legal bounds of assessment and define risk evaluating criteria,
- 2) Systematically identify risks,
- 3) Analyze risks with regard to causes, likelihood of occurrence and possible consequences against the background of existing controls and its effectiveness,
- 4) Evaluate risks in terms of pre-established criteria to determine need and priority for attention,
- 5) Treat risks through a process of risk elimination, substitution, controlling risk at source, risk mitigation such as training and as far as risk remains, provide personal protective equipment (PPE),
- 6) Monitor and review progress and performance in terms of management system, and
- 7) Communicate and consult.

The above steps are as depicted in Figure 1, below.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 17 of 71

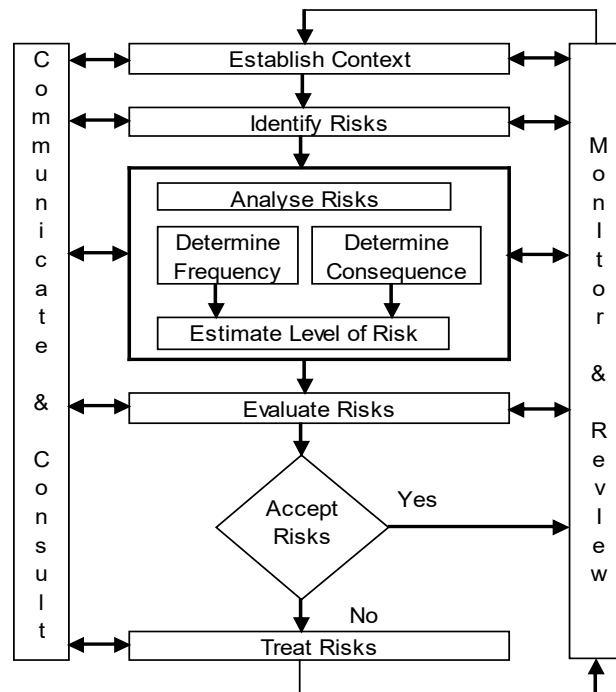


Figure 1: Risk Management Process

The Contractor shall ensure that the risk assessment compiled as part of his Health and Safety Plan contains at least these items.

Refer to Baseline Risk Assessment Annexure 2 of this specification..

8.3.5.1 Risk Identification

The Contractor should regard this step of the risk assessment as the most important. Subsequent analysis and evaluation of risks and the development of risk control measures are wasted if the risks or hazards on the Works are not carefully identified.

The Contractor should bear the following principles in mind when identifying the risks:

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 18 of 71

- i) Systematically address all risks or hazards on the Works,
- ii) Review all aspects of the work, but consider only those that have a potential to cause harm,
- iii) Rank the risks identified in order of importance and then use appropriately advanced techniques to deal with major risks,
- iv) Deal mainly with major risks and don't obscure these with unimportant information, especially minor risks,
- v) Address what actually happens in the workplace during the work activity
- vi) Consider all persons that may be affected,
- vii) Highlight those groups and individuals who may particularly be at risk, and
- viii) Review the adequacy and effectiveness of existing safety controls and measures

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 19 of 71

8.3.5.2 Risk Analysis

In this step, the Contractor will be required to analyze the risks identified by determining each risks frequency and magnitude or severity of the consequence of the risk or hazard.

The frequency of occurrence of a hazard may be expressed as the number of times that it may occur in year, decade, lifetime, century, or longer period, according to comparative human experience. The magnitude of the likely consequence of a hazard may be expressed in terms of the degree of incapacitation, number of people or costs involved. The frequency of occurrence of a hazard and the magnitude of its consequence may be compounded as the risk that it poses as shown in the “risk matrix” in Figure 2 below.

Frequency of Occurrence of Hazard	Severity of Consequences of Potential Hazard					
	1 Medically treatable injury	1 Compensable injury	10 Compensable injuries	1 Permanently disabling injury	1 Fatality	10 Fatalities
Frequent; 1 or more occurrences per year	Medium	High	Very high	Severe	Severe	Severe
Several times during a career; 0.1 occurrences per year	Medium-low	Medium	High	Very high	Severe	Severe
Unlikely, but possible during a career; 0.01 occurrences per year	Low	Medium-low	Medium	High	Very high	Severe
Very unlikely during a career; 0.001 occurrences per year	Low	Low	Medium-low	Medium	High	Very high
Barely credible; 0.0001 occurrences per year	Low	Low	Low	Medium-low	Medium	High

Figure 2: Compounded Risk Matrix

The columns in the table represent the likely consequence of the hazard and the rows, the frequency of occurrence. The scales for both quantities represent consistent progressions, able they qualitative. The risks evidently range from low to severe. Note that diagonals in the matrix represent the risks of the identified hazards, taking the effectiveness of controls into consideration.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 20 of 71

The table represents a typical risk matrix that need not necessarily be adopted by the Contractor. The Contractor may use an alternative risk matrix provided that it is approved as part of his Health and Safety Plan.

8.3.5.3 Risk Evaluation

In this step the Contractor will be required to compare the risks found during the analysis process with similar risks previously experienced for the purpose of deciding how to treat the risk. A useful systematic approach for this purpose is as follows:

- If the assessed risk exceeds similar risks that have occurred in the past and that are considered to be unacceptable, the assessed risk would require treatment depending upon its magnitude as discussed in Section 4.4.5, or
- If the assessed risk exceeds similar historical risks that are acceptable, treatment of the assessed risk will depend on the extent by which it exceeds the historical risks, or
- If the assessed risk is less than historical risks that are unacceptable, treatment of the assessed risk will depend on the extent by which it is less than the historical risks, or
- If the assessed risk is less than historical risks that are acceptable, the assessed risk would also be acceptable and would not require any treatment.

8.3.5.4. Risk Treatment

The contractor must select one or more options of modifying risks, and implementing those options. The option(s) selected must be covered in the safety plan and be followed as prescribed. Reference can be made to SANS31000:2009 for different risk treatment options. SANS 31000:2009, clause 5.5.3 may be consulted in preparing and implementing risk treatment plans.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 21 of 71

8.3.6. Reporting and Recording of Risks

The Principal Contractor shall ensure that the risk assessment process is recorded and included in the Health and Safety Plan. The risk assessment document should be easily accessible to the Contractor's employees, their representatives, to inspectors, the Employer or his Safety Agent. The essential contents of the document should be as follows:

- Objectives and expected outcomes,
- Description of the Works under assessment,
- Summary of context of study
- Composition of risk assessment team, (including qualifications and relevant experience),
- Approach used to systematically identify risks,
- Identified risks (ranked in order of priority),
- Method adopted for assessing frequencies and consequences of risks,
- Consequences (ranked in order of magnitude),
- Identification of individuals and groups who may be affected by major hazards and risk and who may especially be at risk,
- Basis for defining safety standards to be achieved,
- Contractor's resources devoted to risk assessment,
- Actions proposed to reduce unacceptably high risks,
- Review effectiveness of existing safety measures to control risks, and
- Implementation of program of selected treatments (including controls to manage unacceptably high risks).

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 22 of 71

8.3.7. Monitoring and Review

The contractor must indicate in the safety plan the monitoring and review plan to be used during the construction work.

8.3.8. Communication and Consultation

The Principal Contractor will be required to communicate and consult with internal and external stakeholders during each step of the risk assessment process. Stakeholders will include the Client or Safety Agent, the Engineer and the Contractor's employees and consultants.

8.4 Resources

8.4.1 General

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 85 of 1993 and all its Regulations and related incorporated standards with regards to the resources and facilities intended for use on the project (construction work)

3.3.5.2 Employees

The Principal Contractor shall provide in his Health and Safety Plan his intended Staffing Organogram for the construction work. The organogram should include all applicable legal appointments and supervisors as contemplated in the Construction Regulations 2014.

Copies of the supervisory staffs' curriculum vitae or portfolio of evidence, proof of competence and their appointment letters should be appended to the Contractor's Health and Safety Plan.

The Principal Contractor's Health and Safety Plan should in addition cover at least the following aspects:

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 23 of 71

- The number of unskilled, semi-skilled and skilled (including Foreman, Charge hands, Artisans, Operators, Drivers, Clerks, Store man and Team Leaders) employees he intends employing on the Works,
- The health and safety training to be provided to the Contractor's employees,
- The program of the health and safety training,
- Systems for the review of the effectiveness of the training provided, and
- Systems to determine further training requirements throughout the construction period.

Pro-forma letters of appointment for the various inspectors, supervisors and issuers as contemplated in the Construction Regulations, 2014 are included in Annexure 1 to this specification for use by the Contractor. The Contractor shall ensure that he includes in his Health and Safety Plan the appointment letters for all his inspectors, supervisors and issuers appointed for the Works.

The Contractor may make other additional legal appointments that are applicable to the project.

8.4.3. Competencies

The Principal Contractor shall appoint competent person to perform duties that require competency.

8.4.4. Physical and Psychological Fitness

The Principal contractor shall ensure that all employees are in possession of a valid medical certificate of fitness to work in such an environment and issued by an occupational health practitioner in the form of Annexure 3 of the Construction regulations.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 24 of 71

8.4.5 Subcontractors

The Contractor shall with reference to the use of subcontractors on the Works and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- The steps intended to ensure that his Subcontractors prepare, implement and maintain Health and Safety Plans,
- How health and safety information will be made available to his Subcontractors when changes are brought about to the design,
- How he intends determining that his Subcontractors are registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works,
- How he intends determining if his Subcontractors have made provision in their tenders for the cost of health and safety measures during the construction of the Works,
- How he intends satisfying himself on the competencies and resources of Subcontractors he intends appointing, and
- How he intends ensuring that his Subcontractors perform risk assessments prior to commencing their respective portions of the Works.

8.5 Fall Protection Equipment

The Contractor shall with reference to Section 10: Fall Protection Equipment of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Compilation of a fall protection plan,
- How the fall protection plan will be implemented and maintained,
- How employees will be screened and declared medically fit to work in areas where fall protection equipment is needed,

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 25 of 71

- How the safeguarding of persons, plant, vehicles, equipment and facilities on the construction site is contemplated,
- Training of staff working at heights and in the use of fall protection equipment,
- How a continuous assessment of the situation will be executed,
- How fall protection equipment will be inspected for safety, and
- How corrective actions will be implemented
- Emergency plans and procedures for treatment of incidents relating to falls from height.

8.8 Excavation work

Principal Contractor is required to adhere to Section 13: Excavation work, of the Construction Regulations, 2014.

The Principal Contractor must discuss the following in detail in his safety plan:

- How will the Principal contractor ensure competent supervision of excavation work
- How will the Principal Contractor establish the stability of ground prior to excavations,
- What steps will the Principal Contractor follow to ensure that bolstering, shoring and bracing is sufficient to ensure the safety of the excavation, and
- What steps will the Contractor follow to ensure the equipment used to safeguard an excavation is sufficient and safe?

8.15. Cranes

This section of the specification shall be read in conjunction with the provisions of the Driven Machinery Regulations, 1988.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 26 of 71

The Principal Contractor shall with reference to Section 22: Cranes, of the Construction Regulations 2014 and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How will environmental factors be taken into account in respect to the use of cranes,
- What systems he intends using to ensure the safety of all cranes in use,
- How he intends maintaining cranes in use,
- What tests will be performed to establish the safety of all cranes in use,
- What safety procedures and precautions are envisaged to ensure the safe operation of all cranes in use,
- How he will proof the medical fitness of the tower crane operators,
- How he will document the design, testing, maintenance and inspections of all cranes in use, and
- The Principal contractor shall proof compliance of the Driven Machinery Regulation, 1988, with reference to the lifting machinery and tackle being used.

8.16. Construction vehicles and mobile plant

The Principal Contractor shall with reference to Section 23: Construction vehicles and mobile plant of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends ensuring that construction vehicles and mobile plant are:
 - Of acceptable design and construction,
 - Maintained and in good working order,
 - Used according to design specifications, and
 - Are protected from falling into excavations, water or areas lower than the working surfaces,

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 27 of 71

- How he intends ensuring that workers are competent, authorised and physically fit to operate construction vehicles and mobile plant,
- What traffic arrangements and safety precautions will be implemented to ensure safe operation of construction vehicles and mobile plant on the Works,
- How he intends to comply with the National Road Traffic Act 1996, and
- How he intends safeguarding employees against construction vehicles and mobile plant moving on the construction site.

8.17. Electrical Installation and Machinery on construction sites

This section of the specification shall be read in conjunction with the provisions contained in the Electrical Installation Regulations, 1992.

The Principal Contractor shall with reference to Section 24: Electrical Installation and machinery on construction sites of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Appointment of competence person for all temporary control and inspection of all temporary electrical installations,
- How he intends safeguarding employees against electrical cables or apparatus under, over or on site, and
- How he will ensure that electrical installations are of adequate strength to withstand working conditions on a construction site.

8.20. Housekeeping and general safeguarding on construction sites

Principal Contractors will be required to adhere to Section 27: Housekeeping and general safeguarding on construction sites, of the Construction Regulations, 2014.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 28 of 71

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).

The Principal Contractor must discuss the following in detail in his safety plan:

- How will contractors ensure the neatness of construction sites
- What measures does the Contractor envisage to
 - Store and/or stack materials,
 - Remove debris from site,
 - Prevent unauthorized entrance to the site
 - Protect employees or passers-by from falling objects

8.21. Stacking and storage on construction site

This section of the specification shall be read in conjunction with the provisions for the stacking of articles contained in the General Safety Regulations.

The Contractor shall with reference to Section 28: Stacking and storage on construction sites of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Who will supervise the stacking and storage of materials on site,
- What systems are intended to ensure the safe stacking and storage of materials on the site ,and
- How he will keep the storage areas neat and under control

8.22. Fire precaution on construction sites

Principal Contractors will be required to adhere to Section 29: Fire precautions on construction sites, of the Construction Regulations, 2014.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 29 of 71

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).

The Principal Contractor must discuss the following in detail in his safety plan:

- How the Principal Contractor will minimize the risk of fire on the site
- How the Principal Contractor will identify potential fire hazards
- What prohibitions the Contractor will implement to manage risk areas
- How many employees the Principal Contractor will train in firefighting as per risk assessment
- What organization the Principal Contractor envisage to combat fires on sites
- What precautions and procedures will be followed to evacuate employees in the case of a fire

8.23. Project employees' facilities

Principal Contractors will be required to adhere to Section 30: Construction welfare facilities of the Construction Regulations, 2014.

This regulation must be read in conjunction with the provisions of the Facilities Regulations, 1990 (as amended) and SANS 10400.

The Principal Contractor must discuss the following in detail in his safety plan:

- How will the Principal Contractor establish the amount of facilities required for employees to shower, change, eat and attend to sanitary needs

What measures will the employer take to house employees on site who lives far from their residences or for the provision of transport?

8.24. Operational Control of the Construction Site

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 30 of 71

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993 and all its regulations and related incorporated standards with regards to the execution of all categories of work.

•

8.24.1. Personnel Safety Equipment and Facilities

The Contractor shall comply with Section 2 of the General Safety Regulations, and shall in particular provide all necessary personnel protective equipment for his personnel for the duration of the construction period. To this end the Contractor shall without limiting his obligations indicate in his Health and Safety Plan:

- Identify training requirements in the use and maintenance of personal protective equipment,
- The type of personnel safety equipment he will provide,
- How he intends issuing it to his employees, and

How he will maintain the personnel safety equipment issued.

8.24.2. Display of substituted notices and Signs

The following notices and signs are, where applicable, compulsory on the construction site as well as the contraction yards.

Area/Activity where construction sign is needed	Notice or sign required in
Display of notices and signs	General Safety Regulation 2b
Entry	General Safety Regulation 2 (c)
First Aid box	General Safety Regulation 3 (6)
Toilets and Change rooms	Facilities Regulation 2(5).4 (2) (f)

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 31 of 71

Hazardous and Chemical Storage area	General Safety Regulation 4 (8) (i) and (ii)
Machinery	General Machinery Regulation 9
Prohibition of smoking and eating or drinking at workplaces where high risk substances are stored or handled	Facilities Regulation 7

8.24.3. First Aid, Emergency Equipment and Procedures

The Principal Contractor shall comply with Section 3 of the General Safety Regulations regarding first aid, emergency equipment and procedures.

- How he intends to ensure competence of first aiders and
- What emergency equipment will be used

8.24.6 Ladders

The Principal Contractor shall with reference to Section 13A of the General Safety Regulations and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends ensuring that ladders used are safe and constructed of materials approved for its intended use, and
- What precaution will be made to ensure the stability of ladders in use?

8.24.7. Environmental Conditions

The Principal Contractor shall comply with the Environmental Regulations for Workplaces, 1987, and shall address the following aspects as described in the regulations in his Health and Safety plan:

- Thermal requirements,

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 32 of 71

- Lighting,
- Windows,
- Ventilation,
- Housekeeping,
- Noise and hearing conservation,
- Precautions against flooding, and
- Fire precautions and means of egress.

8.25. Implementation of Contractors' Health and Safety Plan

8.25.1. General

The Principal Contractor shall describe in his Health and Safety Plan how he intends implementing his OHS plan.

The Principal Contractor shall indicate the methods he intends using to ensure accurate record keeping of all critical elements identified in his risk assessment and covered in his Health and Safety Plan.

The Principal Contractor shall indicate:

- How internal audits will be carried out,
- How audit findings will be addressed,
- How he would implement the corrective measures and recommendations of internal audits or inputs of employees.
- How he intends to review the safety plans,
- How he would train staff and keep training records

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 33 of 71

8.25.2 Administrative Requirements

The Principal Contractor shall comply with the administrative requirements of the Occupational Health and Safety Act and Regulations 85 of 1993 and other legal requirements. The Principal contractor's administrative system will without limiting his obligations cover the following:

- Keeping of a safety file on site,
- Maintenance of his Health and Safety plan,
- Procedures to follow for the appointment of competent persons,
- Construction work permits (where applicable)
- Procedures to follow for notifications,
- Injury on duty [IOD] administration,
- Minutes of safety meetings,
- Inspection checklists/registers,
- Safe keeping of checklists/registers, and
- Internal audits documentation.

The Principal Contractor shall in particular ensure that at least one copy of the Occupational Health and Safety Act, 1993 and its Regulations is available on site for every 5 employees employed.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 34 of 71

8.25.3. Incident Reporting, Investigation and Recording

The Principal Contractor shall comply with Section 9 of the General Administrative Regulations, 1996 and shall in particular (in accordance with section 12) furnish an inspector with information relating to health and safety on the construction site, when requested to do so.

The Principal Contractor shall report all incidents and or occurrences to the Client, investigate and keep record as contemplated by the Occupational Health and Safety Act 85 of 1993 and Regulations.

8.25.4. Training

The Principal Contractor shall train all his employees in accordance with the requirements of section 13 of the Occupational Health and Safety Act, 1993. The Principal Contractor shall ensure that every employee is informed of the following:

- The hazards of any work he has to perform or plant machinery or equipment he is permitted to use, and
- The precautionary measures which should be taken regarding the above.

The Principal Contractor shall, without limiting his obligations, indicate in his Health and Safety Plan how he intends:

- Identifying the training needs of the personnel he intends employing, and
- Implementing the training identified
- What proof of induction training will be carried by his employees

8.25.4.1. General induction Training

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 35 of 71

- All members of the contractor's management as well as all the people appointed as responsible for Occupational Health and Safety in terms of the OHS Act, Construction Regulations and other Regulations are required to attend a general safety Induction
- All employees of the principal contractor and other contractors must be in possession of proof of Induction Training
- All subsequent and newly appointed employees must also be subjected to the Induction Training as soon as possible after the appointment but prior to start work on site.
- All visitors must undergo an induction training on arrival to site

8.25.4.2. Site Specific Induction Training

The principal contractor will be required to prepare the Task based Induction training based on the risk assessment for the contract work and train all employees who will be involved in the selected task. All employees must have a proof of such training and copies in the Safety File

8.25.4.3. Other Training

1. All operators, drivers and users of construction vehicles and mobile plants must be in possession of a valid proof of training and where applicable licenses and proof of competency
2. All employees in jobs requiring competence in terms of the OHS Act and Regulations must be in possession of valid proof of training.

8.25.4.4. Awareness and Promotion

The Principal Contractor is required to have a promotion and awareness program in place to create an Occupational Health and Safety culture within employees as well as subcontractors.

The following are some of the methods that may be used:

- Toolbox Talks
- Posters

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 36 of 71

- Videos
- Competitions
- Participative activities such As Occupational Health and Safety Circles

8.26. Safety Meetings

The Principal Contractor shall conduct at least one formal safety meeting per month with his employees to ensure safety awareness and shall maintain appropriate records of attendance and meeting content. Such records shall be included in the safety file. The meetings shall address at least the following:

- Accident / safety incidents
- Hazardous conditions
- Hazardous materials / substances
- Job or work projections
- Safe Work procedures
- Protective clothing / equipment
- Housekeeping
- Inspections
- General safety topics

8.27. Occupational Health and Safety Committees

The principal contractor must establish Occupational Health and Safety committees consisting of all designated Occupational Health and Safety Representatives together with a number of

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 37 of 71

management Representatives that are not allowed to exceed the number of Safety Reps on the committee. The members of the Safety Committee must be appointed in writing and the appointment letters must be in the Safety File.

The Safety Committee must meet but at least twice a month and consider at least the following agenda items:

- Opening and Welcome
- Members present, apologies and absent
- Minutes of previous meeting
- Matters arising from the previous meeting
- Safety Representatives inspection reports
- Incident and/or accident investigation reports
- Incident, accident and /or injury statistics
- Audit feedback
- Medical surveillance
- Endorsement of legal OHS registers and other statutory documents by a duly authorized representative of the principal contractor
- General
- Close and next meeting

8.28. Inspections and Monitoring

The Principal Contractor shall be required to inspect each workplace prior to works commencing to ensure that minimum control measures and protective equipment are in place and that by entering the workplace no person will be exposed to any hazard which could affect his health or safety. The Principal Contractor shall without limiting his obligations, indicate the following in his Health and Safety Plan:

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 38 of 71

- The inspection and monitoring procedures he intends employing to determine the safety of workplaces, and
- Who will be responsible for the checking of each workplace at the commencement of each shift?

The Principal Contractor shall include in his Health and safety Plan all the checklists he intends using during the inspection and monitoring of the implementation of his Health and Safety Plan.

The Principal Contractor can expect inspections of the works by any of the following parties:

- The Client or Safety Agent,
- Department of Labour Inspector or any authorized person appointed by the Minister as Chief Inspector or his representative.

The Client, Safety Agent or his representative will stop the work at any time under the following conditions:

- If the Contractor is not compliant with his Health and Safety Plan
- Imminent threat to the health and safety of any person on site
- Continuous non-conformance to corrective action requests.
- In the occurrence of section 24 incident

8.29. Auditing

8.29.1. Internal Audits

The Principal Contractor shall conduct periodic site audits as contemplated in section 7.(1.c.vii) of the Construction Regulations 2014

The Principal Contractor will ensure that the same arrangement detailed above be implemented with his Sub Contractors to ensure his compliance with the Construction Regulations.

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 39 of 71

8.29.2. Audits by Client or Safety Agent

The Client or Safety Agent will carry out period audits or follow-up audits, as the case may be, at any time during the construction period provided that:

- i) The audit or follow-up audit are carried out during ordinary working hours, and
- ii) The Client or Safety Agent gives the Contractor at least 48 hours' notice of his intention to carry out such audits.

The audits described above only constitutes part compliance by the Client or the Safety Agent with section 5.(1)(o) of the Construction Regulations, 2014.

The Principal Contractor's employees as indicated in the OHS organogram and the Client's project manager will be present during any audit carried out by the Employer or his Safety Agent.

NB: The office space of the Principal contractor utilized for the project duration will be audited in line with the requirements of the Occupational Health and Safety Act 85 of 1993 and Regulations.

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 40 of 71

ANNEXURE 1 LEGAL APPOINTMENTS TEMPLATES

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 41 of 71

Attention: *(Assistant Construction Manager's Name)*

APPOINTMENT OF THE ASSISTANT CONSTRUCTION MANAGER IN TERMS OF CONSTRUCTION REGULATION 8(2)

I, *(contractor's name)* hereby appoint you *(assistant construction manager's name)* as the assistant manager responsible for *(site address)* to carry out the construction work of *(description of construction work and area of responsibility)*.

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all persons are aware and understand the hazards attached to the work being carried out;
3. That the required risk assessments are carried out;
4. That precautionary measures are identified and implemented;
5. That discipline is enforced at the construction site at all times;
6. That all identified statutory requirements are met; and
7. That any other interest in terms of health and safety with respect to the responsible area is met.
8. You will accept the duties of the Construction manager in his absence.

You are required to report any deviations of the above-mentioned instruction to *(construction manager's name)* and in his absence to the contractor's representative.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 42 of 71

This appointment is valid from **(date)** to the completion of the stipulated construction work.

You shall submit a written weekly report or any non-compliance with the Construction Regulations, 2014.

_____	_____	_____
Contractor's Representative full name	Signature	Date
..... 		

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(assistant construction manager)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Assistant construction Manager	Signature	Date

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 43 of 71

Attention: *(Safety Officer's Name)*

APPOINTMENT OF THE CONSTRUCTION HEALTH AND SAFETY OFFICER IN TERMS OF CONSTRUCTION REGULATION 8(5)

I, *(contractor's name)* hereby appoint *(safety officer's name)* as the Construction Health and Safety Officer responsible for *(site address)* to manage all the health and safety issues as required in terms of the Act by establishing a health and safety program with elected health and safety Representatives.

You shall ensure that all the requirements in terms of the Act and in particular in terms of the Construction Regulations, 2014 are met. You shall also ensure that all appointed sub-contractors comply with the requirements as stipulated in the Construction Regulations, 2014.

You shall further ensure that all records, registers and required lists are maintained and shall stop construction work upon identifying any non-compliance by any contractor; this includes stopping any work should the competency of the person carrying out such work be questionable.

This appointment is valid from *(date)* to the completion of the stipulated construction work.

Contractor's Representative full name Signature Date

.....

Kindly confirm your acceptance of this appointment by completing the following:

I, *(construction health and safety officer's name)* understand the implications of the appointment as detailed above and confirm my acceptance.

Construction Health & Safety Officer's full name Signature Date

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 44 of 71

Attention: (*Construction Vehicle and Mobile Plant Inspector*)

APPOINTMENT OF THE CONSTRUCTION VEHICLE AND MOBILE PLANT INSPECTOR IN TERMS OF CONSTRUCTION REGULATION 23(1) (d)

I, (*contractor's name*) hereby appoint (*construction vehicles and mobile plant inspector's name*) as the construction vehicles and mobile plant inspector responsible for (*site address*) to inspect on a daily basis all construction vehicles and mobile plant, as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to construction vehicles and mobile plant that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2014 are at all times met.

This appointment is valid from (*date*) to the completion of the stipulated construction work.

Contractor's Representative full name	Signature	Date

.....

Kindly confirm your acceptance of this appointment by completing the following:

I, (*construction vehicles and mobile plant inspector's full name*) understand the implications of the appointment as detailed above and confirm my acceptance.

Construction vehicles and mobile plant	Signature	Date

Inspector's full name

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 45 of 71

Attention: *(Sub-Contractor's Name)*

APPOINTMENT OF SUB-CONTRACTOR IN TERMS OF THE CONSTRUCTION REGULATION 7(c)

I, *(contractor's name)* hereby appoint *(sub-contractor's name)* as the sub-contractor responsible for *(site address)* to carry out the construction work of *(description of construction work)*.

You shall ensure that you meet all the requirements in terms of the Act and in particular in terms of the section 37(2) agreement and the Construction Regulations, 2014. You shall also ensure that all contractors appointed by yourself and reporting to you comply with the requirements as stipulated in the Construction Regulations, 2003.

You shall also ensure that all the information and specifications to ensure that the construction work is carried out in a safe manner are carried over to all contractors appointed and reporting to you.

You shall further ensure that all records, registers and required lists are maintained and that all persons appointed to carry out tasks as stipulated by these regulations are competent and have the necessary resources to complete their tasks effectively in such a manner that health and safety is not in any manner compromised.

This appointment is valid from *(date)* to the completion of the stipulated construction work.

You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

Contractor's Representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, *(sub-contractor's name)* understand the implications of the appointment as detailed above and confirm my acceptance.

Sub-Contractor's Representative full name Signature Date

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 46 of 71

Attention: *(Construction Manger's Name)*

APPOINTMENT OF THE CONSTRUCTION MANAGER IN TERMS OF CONSTRUCTION REGULATION 8(1)

I, *(contractor's name)* hereby appoint *(construction manager's name)* as the Manager responsible for *(site address)* to carry out the construction work of *(description of construction work and area of responsibility)*.

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all statutory appointments have been completed;
3. That, where required, health and safety committees are established and that meetings are accordingly held;
4. That all persons are aware and understand the hazards attached to the work being carried out;
5. That the required risk assessments are carried out;
6. That precautionary measures are identified and implemented;
7. That discipline is enforced at the construction site at all times;
8. That all identified statutory requirements are met; and
9. That any other interests in terms of health and safety with respect to the responsible area is met.
10. You will in writing delegate your duties to the Assistant Construction Supervisor while absent from site.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 47 of 71

You are required to report any deviations of the above-mentioned instructions to **(contractor's name)**. This appointment is valid from **(date)** to the completion of the stipulated construction work. You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

Contractor's Representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(construction manager)** understand the implications of the appointment as detailed above and confirm my acceptance.

Construction Manager's full name Signature Date

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 48 of 71

Attention: *(Excavation Work Supervisor's Name)*

APPOINTMENT OF THE EXCAVATION WORK SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 13 (1)(a)

I, *(contractor's name)* hereby appoint *(excavation work supervisor's name)* as the excavation work supervisor responsible for *(site address)* to supervise and carry out all the necessary inspections in terms of all excavation work as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to excavation work that that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met.

This appointment is valid from *(date)* to the completion of the stipulated construction work.

Contractor's representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, *(excavation work supervisor's full name)* understand the implications of the appointment as detailed above and confirm my acceptance.

Excavation Work Supervisor full name Signature Date

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 49 of 71

Attention: *(Ladder Inspector's Name)*

APPOINTMENT OF THE LADDER INSPECTOR IN TERMS OF THE GENERAL SAFETY REGULATION 13(A)

I, *(contractor's name)* hereby appoint *(ladder inspector's name)* as the ladder inspector responsible for *(site address)* to manage ladders on site. You should inspect the ladders as per the checklist at least once a week.

You shall ensure that when becoming aware of any health and safety hazards in respect to ladders that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2003 are at all times met.

This appointment is valid from *(date)* to the completion of the stipulated construction work.

Contractor's representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, *(ladder inspector's full name)* understand the implications of the appointment as detailed above and confirm my acceptance.

Ladder inspector's full name Signature Date

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 50 of 71

Attention: *(Risk Assessor's Name)*

APPOINTMENT OF THE CONSTRUCTION SITE RISK ASSESSOR IN TERMS OF CONSTRUCTION REGULATION 9(1)

I, *(contractor's name)* hereby appoint *(risk assessor's name)* as the construction site risk assessor responsible for *(site address)* to carry out risk assessments prior to the commencement of construction work and any other risk assessment that may be required for the duration of the construction work.

You shall ensure that all risks are identified and analyzed and that safe working procedures are drafted and implemented to reduce, mitigate or controls the hazards that were identified.

You will at least use the risk evaluation program with the provided checklists.

This appointment is valid from *(date)* to the completion of the stipulated construction work.

Contractor's representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, *(construction site risk assessor's name)* understand the implications of the appointment as detailed above and confirm my acceptance.

Construction site Risk Assessor's Signature Date
full name

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 51 of 71

Attention: *(Stacking and Storage Supervisor's Name)*

APPOINTMENT OF THE STACKING AND STORAGE SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 28 (a)

I, *(contractor's name)* hereby appoint *(stacking and storage supervisor's name)* as the stacking and storage supervisor responsible for *(site address)* to manage all stacking and storage on site.

You shall inspect all new stacking and thereafter as often as needed according to the checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to stacking and storage that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met. On identifying any shortfalls or hazards convey such information in writing to the construction supervisor.

This appointment is valid from *(date)* to the completion of the stipulated construction work.

Contractor's Representative full name Supervisor Date

Kindly confirm your acceptance of this appointment by completing the following:

I, *(stacking and storage supervisor's full name)* understand the implications of the appointment as detailed above and confirm my acceptance.

Stacking and Storage Supervisor's Signature Date

Attention: First Aider

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 52 of 71

OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993), GENERAL SAFETY REGULATIONS 3(4) – FIRST AIDER

I, _____, having been appointed as contemplated in Section 16(2) of the Occupational Health and Safety Act (85 of 1993), hereby appoint you, _____, as First Aider for the _____.

RESPONSIBILITIES

1. Ensure you inspect the contents of the first aid box at least once per month.
2. Ensure all dressing undertaken is recorded on the treatment register.
3. Ensure deviations noted are reported to your supervisor.
4. Ensure the necessary signage is placed to define first aid box placement and responsible first aider's name.

Kindly confirm your acceptance of this appointment and understanding of the duties involved by signing this legal appointment.

Yours faithfully

SECTION 16 (2) APPOINTEE

I accept the appointment as set out above and confirm my understanding of the duties involved.

Signed: _____

Date: _____

Attention: Safety Representative

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 53 of 71

OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993)

SECTION 17 – HEALTH AND SAFETY REPRESENTATIVE

I, _____, having been appointed as contemplated in Section 16(2) of the Occupational Health and Safety Act (85 of 1993), hereby appoint you, _____, as Health and Safety Representative, as contemplated in Section 17 of the Occupational Health and Safety Act (85 of 1993).

You are hereby appointed from _____ until _____ as a Health and Safety Representative for the following project:
_____.

RESPONSIBILITIES

1. Review the effectiveness of the Health and Safety measures within your area of responsibility;
2. Assess the potential hazards to the Health and Safety of the employees at the workplace;
3. Investigate the causes of incidents and all complaints from the employees relating to their Health and Safety;
4. Inspect the workplace and report on such inspection, and the aspects mentioned in (1), (2) and (3) above, to the employer;
5. Participate in the investigations into incidents, in your designated area as contemplated in Section 18 of the Occupational Health and Safety Act (85 of 1993).

Kindly confirm your acceptance of this appointment and understanding of the duties involved by signing this legal appointment.

Yours faithfully

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 54 of 71

SECTION 16 (2) APPOINTEE

I accept the appointment as set out above and confirm my understanding of the duties involved.

Signed: _____

Date: _____

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 55 of 71

ANNEXURE 2

Identified Hazards

In terms of Regulation 9 (1) (a) of the Construction Regulations 2003 the following hazards anticipated with the scope of work have been identified.

NOTE: The list of potential hazards is by no means intended to be all inclusive and is not limited to this list, and it remains the responsibility of the Contractor to identify all possible hazards with regards to his scope of work and to put measures in place to mitigate, reduce or control these hazards.

- Deep excavation
- Dust
- Incorrect use of hand tools.
- Broken hand tools
- Working at elevated points, using cherry picker and ladders.
- Working on the shoulder of the road and pedestrians.
- Failure to comply with traffic accommodation plan.
- Potential live circuits.
- Substandard lifting operation – Danger to employees and equipment.
- Swinging loads



OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
PROJECT LOCATION	
PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
PAGES	Page 56 of 71

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 57 of 71

BASELINE RISK ASSESMENT AND SAFETY SPECIFICATION.

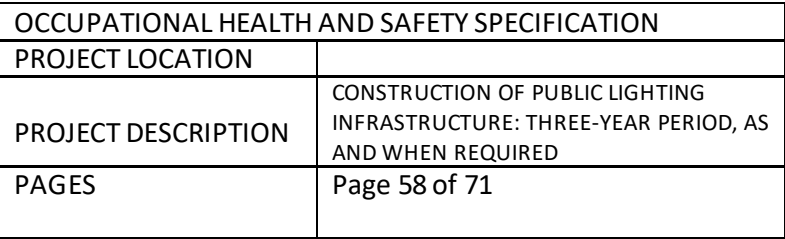
	City of Tshwane: Energy and Electricity Division	
	Baseline Risk Assessment	

PROJECT INFORMATION:

LOCATION:	SCOPE OF WORK:
Throughout City of Tshwane Electricity Network	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED

RISK RATING AND ABBREVIATIONS:

Risk Rating	Abbreviations
15-25 EXTREME	S = SAFETY
8 - 14 HIGH	H = HEALTH
4 - 7 MEDIUM	E = ENVIRONMENT
1 - 3 LOW	Q = QUALITY



RISKS		CONSEQUENCES	PROBABILITY				
			Almost Certain	Likely	Possible	Unlikely	Almost Impossible
			5	4	3	2	1
S H E Q	Multiple fatalities, or significant irreversible effects to >50 persons	5	25	20	15	10	5
	Serious, long term environmental impairment of ecosystem function						
	Very serious impact on quality of product/service. Definite loss of customer or discontinuation of contract with service provider						
S H E Q	Single fatality and/or severe irreversible disability to one or more persons	4	20	16	12	8	4
	Serious medium term environmental effects						
	Serious impact on quality of product / Probable loss of customer or discontinuation of contract with service provider						



OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

PROJECT LOCATION

PROJECT DESCRIPTION

CONSTRUCTION OF PUBLIC LIGHTING
INFRASTRUCTURE: THREE-YEAR PERIOD, AS
AND WHEN REQUIRED

PAGES

Page 59 of 71

S	Moderate irreversible disability or impairment (<30%) to one or more persons.						
H							
E	Moderate, short-term effects but not affecting ecosystem function	3	15	12	9	6	3
Q	Moderate impact on quality of product / Possible loss of customer or discontinuation of contract with service provider						
SH	Objective but reversible disability requiring hospitalization						
E	Minor effects on biological or physical environment	2	10	8	6	4	2
Q	Minor impact on quality of product / Minor impact on relationship with customer or service provider						
SH	No medical treatment required.						
E	Limited damage to minimal area of low significance	1	5	4	3	2	1
Q	Limited impact on quality of product / Minimal impact on relationship with customer or service provider						

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 60 of 71

PROJECT BASELINE RISK ASSESSMENT:

N o:	Task	Activities	Hazards in Carrying out this Activities:	Risk (Harm):	Risk Analyses:				Risk Reducing Control Measures:
					SHEQ:	Consequence:	Probability	Risk Rating:	



OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
PROJECT LOCATION	
PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
PAGES	Page 61 of 71

1	GENERAL	EXCAVATIONS AND BACKFILLING.	Incompetent operator. Defective mobile plant. Oil / fuel leaks. No spotter to guide Operating for long hour. Underground service (electrical cables). Dust. Noise. Unmanned open trenches. Exposure to strike from working with local labourers. Working on the shoulder of the road and pedestrians Working with hand tools(shovel, pickle)	Damage of company property. Serious injuries may lead to fatal. Fatigue Electrocutions. Explosions. Inhalation of dust NIHR (Noise induce hearing loss). Falling into trenches can cause serious injuries. Injuries from attacks by local labourers Accidents Injuries from incorrectly used of hand tools.	S H E	4	4	1 6	Conduct HIRA Training of workers and local labourers Conduct safety talks Tool box talks / awareness training Pre use inspections of TLB for leaks, defects and report immediate to your supervisor When operating machine ensure that there are a spotter always, to assist operator and secure no unauthorized entry in area. Monitoring operators hours and stop operations to rest if necessary Operator must take frequent breaks and adequate rest after hours. Obtain excavation permit from client Client to point out all underground cables, waterlines, Areas must be marked and excavation must be done by hand. (don't make use of picks, forks or jack hammers) Noise levels to be monitored and dealt with accordingly. Issue hearing protection and enforce the use there of in noisy zones. Dust to be controlled by wetting access roads by means of water bowser. Wear proper PPE (Safety gloves, safety goggles, hard hat, safety boots, earplugs, dust masks, long sleeve overall, reflector vest. Adequate supervision at all times. Enforce good housekeeping. All open excavations to be clearly demarcated for employees and public not to fall into trenches. Comply with traffic accommodation plan always.
---	---------	------------------------------	--	---	-------------	---	---	--------	--



OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
PROJECT LOCATION	
PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
PAGES	Page 62 of 71

2	CABLES and SWITCHING BOXES	INSTALLATION, TERMINATION AND JOINTING OF CABLES	Deep excavation	Injuries from collapsing excavation and falling into excavation.	S H E	4	4	16	Appoint competent excavation supervisor. Do soil survey, excavation must use shored and barricade. Dust mask must be used. All hand tools must be listed on the prescribed checklist and checked for integrity at prescribed intervals
		INSTALLATION AND REPAIR OF DEFECTS.	Dust	Lung and Eye irritation due inhalation from exposure to dust.					
			-Incorrect use of hand tools.	Hand Injuries from incorrect use of hand tools.					
			Broken hand tools						

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 63 of 71

3	OVERHEADS	INSTALLATION AND REPAIR OF DEFECTS	Working at elevated points, using cherry picker and ladders. Working on the shoulder of the road and pedestrians. Failure to comply with traffic accommodation plan. Potential live circuits. Substandard lifting operation – Danger to employees and equipment. Swinging loads	Injuries/fatalities from falling. Injuries/fatalities from bee stings. Injuries/fatalities from electrocutions. Injuries/fatalities from falling objects.	S H E	4	4	16	Conduct HIRA Fall protection in place and employees trained in plan If you come across a bees' nest, do not confront them but move away. Inform the client on whose premises you work and arrange for the bees to be removed by a competent person or contractor. If the bees should attack, attempt to lock yourself in side your vehicle if you are out doors or in a room if you are close to a building. If you have been stung, arrange for medical attention a.s.a.p. Comply with traffic accommodation plan always. Always test the circuit to check whether it is live or dead. Make use of guide rope to prevent loads from swinging Safe work procedures
---	-----------	------------------------------------	--	--	-------------	---	---	----	--



OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
PROJECT LOCATION	
PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
PAGES	Page 64 of 71

 CITY OF TSHWANE IGNITING EXCELLENCE	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 65 of 71

ANNEXURE 3 **MANDATORY** **AGREEMENT(SECTION37.2)**

ARTICLE OF AGREEMENT IN TERMS OF SECTION 37(2) OF THE

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 66 of 71

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 BETWEEN
THE CITY OF TSHWANE METROPOLITAN MUNICIPALITY
(Hereinafter referred to as the “CLIENT ”)
AND

.....

Herein represented by in
his/her capacity as duly
authorised by virtue of a resolution dated
Attached hereto as Annexure A of the said
(hereinafter referred to as the “CONTRACTOR”).

WHEREAS the CONTRACTOR is the mandatory of the CLIENT as contemplated in an agreement in respect of

.....

Contract number

.....

AND WHEREAS section 37 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993, hereinafter referred to as the “ACT”), imposes certain powers and duties upon the CLIENT.

AND WHEREAS the parties have agreed to enter into an agreement in terms of section 37(2) of the ACT.

NOW THEREFORE the parties agree as follows:

1. The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
2. The CONTRACTOR undertakes that all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations will be fully complied with: Provided that should the CLIENT prescribe certain arrangements and procedures, that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 67 of 71

3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations and the CONTRACTOR expressly absolves the CLIENT from itself being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures as the case may be.

4. The CONTRACTOR agrees that any duly authorised officials of the CLIENT shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with this undertaking as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

5. The CONTRACTOR shall be obliged to report forthwith to the CLIENT any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge as the case may be.

Thus signed at PRETORIA for and on behalf of the CLIENT on this the.....day of..... 20
.....

AS WITNESSES:

1.

2.

.....
SIGNATURE

.....
NAME AND SURNAME

.....
CAPACITY

Thus signed at PRETORIA for and on behalf of the CONTRACTOR on this the

..... day of 20

AS WITNESSES:

1.

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 68 of 71

2.

.....

SIGNATURE

.....

NAME AND SURNAME

.....

CAPACITY

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 69 of 71

ANNEXURE 4

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 70 of 71

ACKNOWLEDGEMENT OF RECEIPT OHS SPECIFICATION

Acknowledgement of receipt of OHS Specification:

Name of Designer/Contractor

I, the undersigned, hereby acknowledge that I have obtained copies of OHS Specification and confirm full compliance to the conclusion of project or construction work.

Signed aton this Day of.....20.....

Signature of Designer /Contractor Manager

Date

Signature of Contractor Supervisor

Date

	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION	
	PROJECT LOCATION	
	PROJECT DESCRIPTION	CONSTRUCTION OF PUBLIC LIGHTING INFRASTRUCTURE: THREE-YEAR PERIOD, AS AND WHEN REQUIRED
	PAGES	Page 71 of 71

Witness 1 Witness 2