

**City Municipal Council,
Harihar**

Tender Document

for

**Supplying, Designing, Installation, Erecting,
Testing and Maintaining of
Energy Management System for
Street Lights, with Auto Programmable Units
on Total Turnkey Basis**

Tender Booklet No: CMC/HRH/TND

-: Issued To :-

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Disclaimer

The information contained in this tender document provided to the Tenderer(s), by or on behalf of CMC, Harihar, (hereinafter referred to as "ULB") or any of their employees or advisors, is provided to the Tenderer(s) on the terms and conditions set out in this tender document and all other terms and conditions subject to which such information is provided.

The purpose of this tender document is to provide the Tenderer(s) with information to assist the formulation of their Tenders. This tender document does not purport to contain all the information each Tenderer may require. This tender document may not be appropriate for all persons, and it is not possible for ULB, their employees or advisors to consider the business/investment objectives, financial situation and particular needs of each Tenderer who reads or uses this tender document. Each Tenderer should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this tender document and where necessary obtain independent advice from appropriate sources. ULB, their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the tender document.

ULB may, in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this tender document.

TENDER DOCUMENT

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PART - I

About Tender Document

1) SCHEDULE OF TENDER PROCESS:

ULB would endeavour to adhere to the following schedule from the date of issue of notification during the tendering Process:

Sl. No.	Event Description	Date
1	Last Day of Receiving Requisition	04-06-2007 With in IST 1600 Hrs
2	Period of Issue of Tender Documents	18-06-2007 With in IST 1600 Hrs
3	Tender Due date	25-06-2007 With in IST 1600 Hrs
4	Opening of Technical bid	25-06-2007 With in IST 1700 Hrs
5	Responses of ULB regarding Technical Bid Evaluation	28-06-2007 With in IST 1600 Hrs
6	Opening of Financial bid	02-07-2007
7	Evaluation & approval for successful Tenderer	Soon after opening of price bid

2) TENDER NOTICE:

CITY MUNICIPAL COUNCIL, HARIHAR

☎ 08192-244266 *Office of:* *Municipal Commissioner*
📧 *City Municipal Council,*
🌐 www.hariharcity.gov.in *P.B.ROAD HARIHAR – 577601*

No.: CMC/HRH/ /ELE/TND /2006-07 Dated:

Notice Inviting Tenders

City Municipal Council, Harihar, invites interested bidders, manufactures and authorized dealers for undergoing the following works in CMC, Harihar limits under the Energy Conservation Project, under 12th Finance Grant from Government of Karnataka, Bangalore, sanctioned from Directorate of Municipal Administration, Bangalore, vide order No.: ಪೌ.ನಿ/ಅಂತ್ರಿಕ/ಇಂಧನಉಳಿತಾಯ/ಟಿ.ಎಫ್.ಸಿ./179/05-06 **11-10-2006**. Interested Parties may obtain the tender Document for the Project from the office of the undersigned.

<i>Sl. No</i>	<i>Name of the Work</i>	<i>Quantity</i>	<i>Amount Put to Tender in Rs.</i>	<i>EMD Amount in Rs.</i>	<i>Cost of Tender Document in Rs.</i>
I	Providing Energy Management System to street Lights with Auto Programmable Unit (without remote controlling facility)	84.2 KVA	8,42,000	16840	500.00 + 12.5% VAT
II	Providing Sensors to Water Supply Installations	7 Nos.	28,000	700.00	100.00

Terms and Conditions:

1. For work No. I 'TWO' Cover detailed tenders are invited and 'the Tenders' received would be evaluated and the Successful Tenderer would be selected on the basis of the criteria specified in the tender document.
2. For work No. II Quotations are invited as per the Performa given in the website: www.hariharcity.gov.in. and 'the Quotations' received only as per the Performa shall only be evaluated and the Successful Bidder would be selected as per the basis of the criteria specified in the Performa.
3. Tender Documents are available On Undersigned office during the working day office hours on 18-06-2007 up to 1600 hours.
4. The EMD shall be in the form of a crossed demand draft / banker's cheque drawn in favor of "Municipal Commissioner, CMC, Harihar" from any

- Nationalized Bank, payable at '**Harihar**'. Tenders or Quotations without EMD shall not be accepted and hence rejected.
5. Sealed & filled Tender Documents and the Sealed Quotation are received in this office till 25-06-2007 up to 1600 hours. No Tenders will be received after this time limit.
 6. The received Technical Bids of the Tender Document and Quotations will be opened on 28-06-2007 at 1700 hours. The Technical Bids and the Quotation thus opened shall be evaluated and then intimated to the bidders on or before 02-07-2007. Further the Financial Bids of the technically competitive Bidders shall be opened, after further intimation to these Bidders.
 7. For all further information and details, please contact this office during the office hours or are available in the official website: www.hariharcity.gov.in.

Sd/-

M.B.Dyaberi I.A.S
President CMC Harihar
& Deputy Commissioner
Davangere dist

Sd/-

N.Renuka (K.M.A.S)
Municipal Commissioner
City Municipal Council, Harihar.

About Tender Document

1.	Name of the Work	Tender Notice for Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lights, with Auto Programmable Units on Total Turnkey Basis
2.	Amount put to Tender (Tender Amount in Rs.)	Rs. 8,42,000/- (Rupees eight lak forty two thousand only)
3.	EMD Amount	Rs. 16,840/- (Rupees sixteen thousand eight hundred forty only)
3.	Completion Period	Within 45 DAYS from date of Work Order

**Municipal Commissioner
CMC. Harihar.**

(For office use only)

On opening of the Tender Document

1.	Details of the Contractor	Name : Address : License No. :Date..... Validity :
2.	Proof of Purchase of Tender Document	Cost of Document Rs..... DD / Cheque No..... Name of the Bank.....
3.	Proof of EMD Amount	EMD Amount in Rs. /- DD / Cheque No..... Name of the Bank.....
4.	Date of Opening of Technical Bid	Date :..... Time :.....AM/PM No. of Bids Received: out of No. of Correction :.....
5.	Date of Opening of Financial Bid	Date :..... Time :.....AM/PM No. of Bids Received: out of No. of Correction :.....

3) INSTRUCTIONS TO TENDERERS:

1. CMC, Harihar now invites 'Two Part' sealed tenders from eligible Tenderers, Authorised Dealers and Manufactures, Authorised Company/Firms for the Contract for "Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lights, with Auto Programmable Units on Total Turnkey Basis" at the designated locations in CMC, Harihar limits. The detailed scope of work for the project is set out in **Appendix-A** be evaluated on the basis of the criteria set out in this Tender Document.
2. 'Two Part' Tender in which both 'TECHNICAL BID' and 'FINANCIAL BID' should be separately submitted in duplicate in separate sealed covers.
3. Each Tenderer shall submit a maximum of one (1) tender against this enquiry. Any tenderer who submits more than one tender will be liable for disqualification.
4. The tenderer shall be responsible and shall pay for all of the costs associated with the preparation of the tender and participation in the tender process.
5. Tenderer is also advised to examine carefully the instructions, prequalification requirements, forms of tender quality issues and 'approved listed materials' for lamps & accessories for each of the items etc.
6. At any time prior to the last date of submission of tender CMC, Harihar, for any reason, whether at its own initiative or in response to clarifications requested by any tenderer, modify the tender document by the issuance of addenda.
7. The Tender shall remain valid for a period of six calendar months from the last date of submission of the tender. ULB reserves the right to reject any Tender, which does not meet this requirement.
8. The number of lamps and areas indicated in the tender document is based on the present assessment. However, the 'ULB' has liberty to increase or decrease the quantities in various streets/ areas during the period of the contract. The contractor has to carry out the work as per the actual quantities indicated in work order by CMC, Harihar and contract amount for such a revision will be worked out at appropriate basis and as per the guiding principals of this department.
9. The tenderer should use the all the fittings and accessories of brands confirming to IS standards and as per technical specifications in the bid document. The tenderer should submit proof from the manufacturer that this material confirms to IS standards and also the technical specifications as specified in the tender documents, otherwise tender is liable to be rejected.

10. Pre-Qualification Requirements:

The Tenderer who participate in this tender enquiry need to have following pre-qualifying requirements failing which the tender will not be considered. The documents to prove his capability has to be enclosed as formats set in **Appendix - D** of tender documents without further evaluation will not be considered.

10.1 Tenderer or the firm shall have:

- a) A valid license from Electrical inspectorate of Government of Karnataka or any other Indian State.
- b) Shall have satisfactorily carried out similar kind of works with an estimate cost of Rs. TEN Lakhs and above, in any institutions, in past THREE years period.
- c) A minimum of 30% of saving should be obtained in the past works carried out by the Tenderer. Authenticate Documents in this regard as per **Appendix - D** shall be enclosed by the Tenderer.

10.2 Tenderer should engage the work using qualified and competent personnel's for this work and list of the labours who will execute the work shall be enclosed as per the **Appendix - D**

- 10.3 The Tenderer should have an annual turnover of around 100% of the tendered amount during any of the past three years from its own audited financial statements. The tenderer shall enclose copies of the statement of accounts duly certified by a Chartered Accountant, indicating the total turn over for the previous three financial periods. A statement indicating the net worth of the tenderer duly certified by a Chartered Accountant shall also be enclosed with the tender.

The offer of the tenderer, who do not qualify for the above pre qualification norms, will not be considered for further evaluation.

11. Earnest Money Deposit (EMD):

- 11.1 Each Tender shall be accompanied by EMD of Rs.16,840/- (Rupees sixteen thousand eight hundred forty only)11.2 The EMD shall be in the form of a crossed demand draft / banker's cheque drawn in favour of "Municipal Commissioner, City Municipal Council, Harihar", on any Nationalized Bank, payable at Harihar.
- 11.3 The EMD of every unsuccessful Tenderer would be returned within a period of eight weeks from the date of announcement of the Successful tenderer.
- 11.4 The EMD of the successful Tenderer shall be returned after the completion of the work satisfactorily, and the pre-determined savings are obtained.

12. Format and Signing of Tender:

- 12.1 The tenderer would provide all the information as per this tender enquiry. ULB would evaluate only those Tenders that are received in the required format and are complete in all respects. Each Tender shall comprise the following:

i. Qualification Submission

- a Covering letter in the format set out in **Appendix B**
- b. Details of the Tenderer in the format set out in **Appendix C**
- c. Technical bid as per format set out in **Appendix D (Form D1 to D5)**
- d. Proof of Purchase of the tender Document

ii. Financial Offer:

- a. Financial offer in the format set out in **Appendix E**

- 12.2 The Tenderer shall seal the "Technical bid" and the "Financial bid" separately in two envelopes, duly marking the envelopes as "Technical bid" and "Financial bid". These envelopes shall than be sealed in a single outer envelope.
- 12.3 The Tenderer shall prepare (1) one original and (1) one copy of the Tender, clearly marked "ORIGINAL" and "COPY" respectively. In the event of any discrepancy between the original and the copy, the original shall prevail.
- 12.4 The Tender, both the original and the copy, shall be typed or written in indelible ink and an authorised signatory of the tenderer shall initial each page. The person(s) signing the Tender shall also initial all the alterations, omissions, additions, or any other amendments made to the Tender.

13. Sealing and Marking of Tender

- 13.1 The tenderer shall seal the original and copy of the Bid in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY". The envelopes shall then be sealed in a single outer envelope.
- 13.2 Each of the envelopes, both outer and inner, must be superscribed with the following information:
- a. Name and Address of tenderer
 - b. Contact person and phone numbers
 - c. "Tender for the Project No.: CMC/HRH/ELE/TND /2006-07
Dated:
 - d. TO BE OPENED IN THE PRESENCE OF TENDER EVALUATION COMMITTEE OR 'THE AUTHORISED PERSON' ONLY

- 13.3 If the envelope is not sealed and marked as instructed above, ULB assumes no responsibility for the misplacement or premature opening of the contents of the Tender submitted and such Tender, may, at the sole discretion of ULB, be rejected.

14. Tender Due Date:

- 14.1 Tenders should be submitted on or before 1600 hours IST on 25-06-2007, to 'Municipal Commissioner, CMC, Harihar' in the manner and form as detailed in this tender document. Tenders submitted by either facsimile transmission or telex will not be accepted.
- 14.2 ULB may, in exceptional circumstances, and at its sole discretion, extend the above Tender Due Date by issuing an Addendum.

15. Opening of Tenders and Clarifications:

- 15.1 ULB would open the Technical Bids of the Tenders received on 28-06-2007 at IST 1700 hours for the purpose of evaluation.
- 15.2 ULB reserves the right to reject any Tender not submitted on time and which does not contain the information/ documents as set out in this tender document.
- 15.3 To facilitate evaluation of Tenders, ULB may, at its sole discretion, seek clarifications in writing from any tenderer regarding its Tender.

16. Evaluation:

- 16.1 As part of the evaluation, the Tenders shall be checked for eligibility criteria with the requirements of the tender and only those Tenders which are found to be responsive would be further evaluated in accordance with the criteria set out in this tender document
- 16.2 The Tender would be considered to be responsive if it meets the following conditions:
- a. It is received /deemed to be received by the Tender Due Date including any extension thereof.
 - b. It is signed, sealed and marked as stipulated in Clause 12 and Clause 13.
 - c. It contains all the information and documents as requested in the tender.
 - d. it contains information in formats specified in this tender document along with a proof of pre-site visit in written format to acquaint with the area and scope of work etc., and to start up the maintenance work immediately after the award of the contract without any lapse of time,
 - e. It mentions the validity period as set out in Clause 7.
 - f. It provides information in reasonable detail. ("Reasonable Detail" means that, but for minor deviations, the information can be reviewed and evaluated by ULB without communication with the Tenderer). ULB reserves the right to determine whether the information has been provided in reasonable detail.
 - g. There are no inconsistencies between the Tender and the supporting documents.
 - h. Tender that is substantially responsive is one that conforms to the preceding requirements without material deviation or reservation. A material deviation or reservation is one
 - i. which affects in any substantial way, the scope, quality, or performance of the contract, or
 - ii. Which limits in any substantial way, inconsistent with the tender document, ULB's rights or the tenderer's obligations under the Agreement,
 - iii. Which would affect unfairly the competitive position of other Tenderer presenting substantially responsive Tenders.
- 16.3 The responsive tenders shall be evaluated as per the criteria set out in **Appendix D**.

- 16.4 The 'Financial bids' of only the Tenderer who meet the Qualification Criteria would be opened. The format for quoting the 'Financial bid' is set out in **Appendix E**.
- 16.5 The Tenderer making the lowest "Financial bid" would be declared as the "Preferred Tenderer". ULB may either choose to accept the Tender of the "Preferred Tenderer" or invite him for negotiations.
- 16.6 In case there are two or more Tenderers quoting the same lowest Financial Offer. ULB may in such case call all such Tenderers for negotiations and select the 'preferred tenderer' on the outcome of the negotiations. The selection in such cases shall be at the sole discretion of ULB.
- 16.7 ULB reserves the right to reject any Tender, if:
 - a. at any time, a material misrepresentation is made or discovered; or
 - b. the tenderer does not respond promptly and diligently to requests for supplemental information required for the evaluation of the Tender.
 - c. the tenderer does not enclose the proof form from the manufacturer regarding the brand satisfying the technical specifications and as per IS standards and the specifications mentioned in the tender document.
 - d. the tenderer fails to provide any required information as per clause 16.3.
17. In the event of acceptance of the preferred tenderer with or without negotiations, ULB shall declare the 'Preferred Tenderer' as the Successful tenderer. ULB will notify the Successful Tenderer through a Letter of Award (LoA) that its Tender has been accepted.
18. The 'Successful tenderer' shall execute the Agreement within 7 Days of the issue of LoA or within such further time as ULB may agree to in its sole discretion.
19. Failure of the 'Successful tenderer' to comply with the requirements of Clause 18 shall constitute sufficient grounds for the annulment of the LoA, and forfeiture of the EMD. In such an event, ULB reserves the right to either invite the next lowest tenderer for negotiations or take any such measures as may be deemed fit in the sole discretion of ULB, including annulment of the tendering process.
20. Notwithstanding anything contained in this tender document, ULB reserves the right to accept or reject any Tender, or to annul the tender process or reject all Tenders, at any time without any liability or any obligation for such rejection or annulment, without assigning any reasons thereof.
21. **Program of the work:** The Contractor shall execute all the works assigned to him, as per the specification set in *"5.0 Technical Requirements and Specifications of the Systems"* and within the specified time limit as per the conditions set out in the *"4.0 Scope of the Work for the Contract"*
22. **Terms of Payment:** The payment to the contractor shall be made as per the norms set out in *"4.0 Scope of the Work for the Contract"*. No payment shall be made until and unless the contractor completes the whole work at satisfactorily, of the ULB, and predetermined savings are obtained from the first Energy Bill from ESCOM after 30 days of installation of this system.
23. **ULB Decision**
 - 23.1 In respect of all matter, the ULB shall if required to do so by the TENDERER, give in writing a decisions. In all matters of difference of opinion in respect of the contract, the decision of the **"Deputy Commissioner"** of the district shall be final and acceptable to the tenderer.
 - 23.2 **Settlement of dispute:** Arbitration shall not be a means of settlement of any dispute or claim arising out of the contract relating to the work. Any disputes or difference arising between the parties with respect to the performance of any part of this agreement or any thing connected therewith, etc shall as far as possible be mutually settled by the process of dialog and negotiation. The Courts at Harihar alone shall have jurisdiction in respect of settlement of any matter arising out or in connection with the contract.

Municipal Commissioner

CMC, Harihar

4) SCOPE OF WORK FOR THE CONTRACT:

1. Project Information:

1.1 **General:** Given below is the detailed information about the Project. However, the bidder is required to visit the site to get familiarized with the site conditions.

1.2 **Location of site:** The project sites are located at various locations in Harihar CMC limits, of Davangere district and the names of various sites are as under.

- a) Harpanhalli Road
- b) P.B.Road
- c) Shimoga Road
- d) Over Tunga Bhadra Bridge
- e) J.C.Extn first main Road
- f) J.C.Extn second main Road
- g) J.C.Extn third main Road
- h) J.C.Extn forth main Road
- i) Church Road
- j) Vijaya Nagara
- k) Humsagara Compound
- l) Vidaya Nagara A Block

2. Commitment of Contractor:

2.1 **Interpretation of Contract documents:** All the documents forming part of the contract are to be taken as mutually explanatory, supplementary and complementary to each other. If there is any error, omission or discrepancy in any of them, it shall be brought to the notice of the ULB. The decision of the ULB shall be final and binding. The contractor shall execute the work accordingly.

2.2 The contractor shall examine all the contract documents thoroughly including the scope, nature and magnitude of works he has to execute in accordance with the contract documents.

2.3 The contractor shall visit the project site so as to study the site conditions, means of access to the site and other factors governing the works.

2.4 There may be change in layout of site as per technical requirements and the tenderer shall not be entitled for any claim due to such changes.

3. **Work Contract:** The total time for execution of the work shall be **FOURTY FIVE DAYS** from the date of acceptance of notification of award. The Contractor shall take over the site and work shall be commenced within 7 days from the date of acceptance of Letter of Intent / Work Order whichever is earlier.

3.1 The successful tenderer shall submit the time schedule in the form of charts before commencing the work and shall execute the work strictly as per the schedule submitted by him and approved by the ULB.

3.2 **Compensation for delay:** Time is the essence of the contract. If the contractor fails to complete the work and clear the site on or before the dates fixed for completion, he shall without prejudice be liable to pay liquidation damage (LD) i.e. 1% of the contract value for every week. For the purpose of this condition, the contract value shall be total value of quantities of items in the contract at contract rates plus algebraic sum of the subsequent work ordered. **However, the total amount of LD to be paid under this condition shall not exceed 10% of the contract value.**

3.3 **Default of Contractor:** If the contractor fails to maintain progress and quality of work proportionate to time period allotted for the work in spite of notices or complete the work within the stipulated time period or extended time period, then the ULB shall have the right to;

- i) **To terminate the contract:** In this event, the contract shall be terminated by giving written notice to the contractor and the unfinished works shall be got

completed by other agency engaged by the ULB at the risk & cost of the Contractor.

- ii) **Termination of contract for death:** If the contractor is an individual of a proprietary firm and proprietor of the firm dies and if the Contractor is a Attorney of partnership firm and dies, then the ULB has the right to terminate the contract, unless and until the ULB is satisfied that the surviving partners are capable of executing and completing the remaining contract. In case of termination of contract, the legal representatives of the deceased Contractor are not entitled for any compensation or claim. Also, the ULB shall not levy any penalty against the damage caused by incomplete work.
 - iii) **Termination of Contractor in part or in full for Contractors default:** If the Contractor fails to execute the work in the manner described in the contract documents or if he at any time, in the opinion of the ULB:
 - a) fails to carry out the works in accordance with the contract conditions or as per the specifications mentioned in the documents.
 - b) stops the execution of works without giving prior information to the Owner.
 - c) fails to carry out the works to the satisfaction of the ULB both with respect to qualities and time schedule.
 - d) fails to deploy sufficient or suitable construction plants, materials and labourers etc.
 - e) commits breach of any of the provisions of the contract.
 - f) becomes bankrupt during the continuance of the work. Whenever the ULB shall exercise his authority to cancel the contract under the above condition, the ULB shall be at liberty to hold and retain in their hands, materials, Tools & tackles, machinery and stores of all kinds on site as they may think proper and may at any time sell any of the materials, Tools & tackles, machinery and stores and apply the proceeds of sale in or towards the satisfaction of any loss which may arise from the cancellation of contract as aforesaid. The ULB shall also be at liberty to use materials, Tools & tackles, machinery and other stores on the site of contractor as he thinks proper in completing the work.
- 3.4 **Variation in scope of works:**
- i) **Variation in quantity:** The ULB has the right to increase or decrease the quantity of work or delete / add certain items of work. However such changes shall not entitle the contractor for any compensation claim regarding the change in scope of work.
 - ii) **Variation in drawings and specifications:**
 - a) The variation in scope may be by way of changes in drawings regarding dimensions but specification remaining the same. In such a case the contractor shall not be entitled for any claim due to change.
 - b) In case of change of specification it shall be worked out as given in Clause 3.4, i)

- 3.5 **Staff and Workers:** The contractor shall depute qualified engineers for execution of the project. The technical staff employed by the contractor shall be responsible for the quality and workmanship of the work as per the satisfaction of the ULB. The Contractor's supervisory staff should follow the instructions given by the ULB or his authorized representative. If any of the Contractor's staff members is incapable or inexperienced, in the opinion of the ULB, then he should be removed immediately and the contractor should do suitable substitution. Technical staff employed should be degree holder from a government recognized institution or equivalent with at least 3 years practical experience of work in addition to Diploma holder and other experienced supervisory staff.

If the workers of the supervising staff of the contractor are involved in riotous or illegal activities to such an extent that it becomes necessary to hand over the matter to the police then the contractor would be solely responsible for the case and all the expenses incurred in the legal proceedings shall be borne by the contractor.

- 3.6 **Subletting of contract:** No subletting of contract is permitted. Specialized work agency contracts may be permitted with prior written permission from ULB
- 3.7 **Safety of adjoining properties:** The Contractor or his authorized representatives should conduct all the operations necessary for the execution of works in such a manner that no inconvenience / damage is caused to the properties of other persons & ULB
- 3.8 **Escalation and Prices:** The rates quoted by the Contractor in the contract documents shall be final and shall not be subjected to any change due to the increase in labour wages or inflation in the cost of materials or any other price variations due to any reason during the stipulated time period of the contract or during the extended time period of completion. Even if there is any change in government policies on taxation, the supplier cannot claim for any increase in tax or any government levy arising out of this contract. Quote rate only (QRO) is the rates for items which may be required during execution of project and supplier to supply the requisite quantity as and when ordered by the client. No extra claims are admissible for whatsoever reasons. The rates quoted by the contractor are inclusive of all cost. The rate quoted for Energy Management System shall comprise of the charges that is, supply, erection, maintenance, testing and network charges for the period of TWO years.
- 3.9 **Insurance:** The Contractor shall at his own expense carry and maintain insurance with reputed insurance companies to the satisfaction of the Owner as under:
- i) **Insurance of employees:** The Contractor shall accept full and exclusive liability for the compliance of all obligations and responsibilities imposed by the Employees State Insurance Act, 1948 and any liability or penalty which may be imposed by the Central, State or Local Authorities due to the reason of violation by the contractor or sub-contractor of the Employees State Insurance Act, 1948. the Contractor shall agree to fulfil the requirement of the Employees State Insurance Corporation and maintain the declaration forms and all such forms, which may be, required in respect of the contractor's sub-contractor's employees who are employed in the work provided for or those covered by E.S.I.C. from the time to time under the agreements. The ULB shall retain such sum as may be necessary from the total contract value until the contractor shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948 have been paid by him.
 - ii) **Workmen's Compensation:** Insurance shall be affected for all the Contractor's employees engaged for this contract. The Contractor shall also carry and maintain all other insurance, which may be required under any law or regulations from time to time. He should also carry and maintain any other insurance, which may be required by the ULB.
 - iii) **Transit Insurance:** The cost of transit insurance relating to the items to be transported by the contractor to the site of work shall be borne by the contractor and the quoted price shall be inclusive of this cost.

Note: The Contractor's payment shall be clear only after his compliance of all insurance formalities as given above. He shall have to deposit the photocopies of the various policies and payment receipts with the Owner's site engineer for this purpose.

4. Execution of Work:

4.1 **General:** All the works shall be executed in accordance with the detailed drawings, specifications and instructions given by the ULB mentioned in the contract document.

4.2 Inspection of works:

- i) The ULB shall have the full authority to inspect the works at any time, at any stage. The contractor shall provide adequate facilities to carry the inspection work. The Contractor should present himself or his authorized representative during the inspection so that the ULB can convey the instruction regarding the works.

- ii) The Contractor shall give information to the Engineer in charge before covering up the works so that the same can be inspected and measured jointly & correctly to true dimensions.
 - iii) If the contractor fails to get the work inspected before covering it up, then the ULB has full authority to get the work uncovered at the expense of the Contractor and if any fault is found then the same should be rectified by the Contractor without claiming any extra payment.
- 4.3 Inadequate/substandard works and materials:**
- i) If any material brought by the Contractor is found unsuitable or of sub-standard quality after testing, then the Contractor shall remove those faulty materials immediately from the site as per the instructions of the ULB.
 - ii) If any work executed by the Contractor is found to be of bad workmanship or not as per the drawings, then the same is to be dismantled and re-executed by the Contractor without claiming any extra payment or extension in time period.
- 4.4 Default of Contractor in compliance:** If the contractor or his authorized representative fails to follow the instructions given by the ULB regarding any of the works, then the same shall be got executed by other persons employed by the ULB and the expenses incurred shall be borne by the Contractor.
- 4.5 Discrepancies between instructions:** If any discrepancy occurs between the various instructions conveyed to Contractor or his authorized representative or if any misunderstanding arises between the Contractor's staff and ULB's staff, the contractor shall report the matter immediately to the ULB. The decisions of ULB shall be final and binding. Moreover, no claims for losses due to discrepancies between instructions, doubts or misunderstandings shall be admissible.
- 4.6 Change in specifications and valuation of extra items:** If there is any variation in specification for any change in make of item, then it has got to be approved from the ULB prior to installation or execution. The rates of extra items shall be worked out as follows:
- i) In the case of extra items, whether altered, additional or substituted for which similar items exist in the contract, the rates for the extra items shall be delivered from the agreed rates.
 - ii) In case of an extra item whether altered or substituted for which similar items do not exist in the contract, but rates exist in the State PWD schedule of rates, the rates shall be derived on the basis of the State PWD schedule of rates.
 - iii) In case of extra items, whether additional, altered or substituted or which the rates cannot be worked out from similar items in the contract and only partly from the State PWD schedule of rates, the rates of such parts of items not covered in the State PWD schedule of rates shall be determined by the ULB on the basis of market rates.
 - iv) In case of extra items, whether additional, altered or substituted for which rates cannot be derived either from similar items of work in the contract or from State PWD schedule, the Contractor shall submit to ULB the rates which he proposes to claim supported by rate analysis of the item based on the prevailing rates of material and labour. The rates of such items shall be recommended and approved by ULB and shall be binding to the Contractor.
- 4.7 Testing:** The Contractor shall agree for testing works as mentioned in the specifications of various items of works involved in the project.
- i) If the various tests prescribed in the specifications at specified intervals for ascertaining the quality of the work done prove unsatisfactory, the ULB shall have the authority to instruct the Contractor to re-execute the work done or make alterations as per the orders of the ULB
 - ii) The Contractor shall furnish to the ULB, for approval adequate samples of all materials to be used in the works free of cost. Such samples shall be submitted before the work is commenced, giving ample time to permit the tests. All materials furnished in actual works shall be of the same quality of that of approved samples.

- iii) The testing of various materials to be used in works shall be tested in standard laboratories as directed by the ULB and the expenses incurred shall be borne by the Contractor.
 - iv) The Contractor shall obtain the desired saving as per the conditions specified in Tender Document with one month after commencement of the project. All required and necessary Tests shall be executed by the contractor as per the instructions of ULB, after completion of the project.
- 4.8 **Liabilities for defects and rectifications:** If it shall appear to the ULB that any work has been executed with imperfect or unskilled workman or with materials of any inferior description, or of quality inferior to that contracted for, or otherwise not in accordance with the contract, the Contractor shall on demand in writing from the ULB for his representative specifying the work, materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct that work so specified and provide other proper and suitable materials or articles at his own charges and cost, and in the event of failure to do so within a period specified by the ULB, the ULB may on expiry of notice period rectify or remove, re-execute the work at the risk of Contractor and the cost shall be recovered from the Contractor. The decision of the ULB as to any question arising under this clause shall be final and conclusive.
- 4.9 **Defect liability Period: The defect liability period of work shall be TWO Years from the date of completion of the work as certified by the ULB and this date will be indicated in the provisional completion certificate.** The contractor shall bind to the circular of Directorate of Municipal Administration, Bangalore, No. ಪೊನಿ / ಉನಿ / ಕಾಮಗಾರಿ / ಸುತ್ತೋಲೆ / 88 / 2002 - 03 Dated 16-12-2005, and follow the same. If any damage or defect occurs in the work during the period then the contractor shall rectify the damage or defect at his own expense to the satisfaction of the ULB. If the contractor fails to do so, then the ULB shall have the authority to get the work done by other means and the expenditure incurred shall be recovered from the contractor from his Security Deposit Amount.
- 4.10 **Suspension of work:** The Contractor shall suspend the progress of work, on receipt of the written order from the ULB.
- i) The contractor shall during such suspension, properly protect and secure the works and carry out the instructions of the ULB.
 - ii) If the suspension is ordered, Contractor shall be entitled for extension of time equal to the period of every such suspension but no compensation for damages etc, shall be admissible on account of suspension of work.
5. **Terms of Payment:**
- 5.1 **Schedule of Rates:**
- i) The payments to be made to the contractor for various items of works shall be as per the finalized rates in tender document and the rates of extra items finalized from time to time.
 - ii) The rates finalized in the tender document shall remain firm till the completion of the work including extension of time, if any.
- 5.2 **Measurement:** Joint measurements of the various items of the work shall be taken by the Contractor's authorized representative in presence of the ULB's authorized representative from time to time for maintaining the records and preparing the bills. If the contractor fails to send his representative then the measurements taken by the ULB's authorized representative shall be final and no claim shall be entertained in this regard.
- 5.3 **Mobilization Advance:** No mobilization advance shall be paid.
- 5.4 **Lump sums in Tender:** For the items in tender where it includes lumpsum in respect of parts of works, the contractor shall be entitled to payment in respect of the items at the same rates as are payable under this contract for such items. If in the opinion of the ULB, any part of the work is not susceptible to measurement, the ULB shall

recommend and decide lumpsum amount for the work and the decision of the ULB shall be final and binding on the contractor.

5.5 Payment of Contractor's Bills:

- i) The payment due to the contractor shall be made only in Indian Currency by Crossed Account Payee Cheques. In no case, will the ULB be responsible if the cheque is misled or miss-appropriated by the contractor or his representatives.
- ii) The ULB reserves the right to carry out post payment audit and technical examination of the bills and work executed including all supporting vouchers etc. The ULB further reserves the right to enforce recovery of over-payment when detected. Similarly, if any other payment is discovered, the amount shall be paid to the contractor.
- iii) Wherever any claim for the payment against the contractor arises as per the contract, the same may be deducted from the bill of the contractor or from his security deposit.

5.6 Billing and terms of payment:

- i) The contractor shall only submit First and Final bill along with detailed Measurement Book recorded by the Engineer in charge of this work of the ULB, as supporting documents as per the agreed schedules and actual measured quantities after completion of all the work as per the project. No running bills shall be payable to the contractor.
- ii) **Only 80% of the bill amount of the value of work done shall be paid to the Contractor, after the contractor completes the whole work at satisfactorily, of the ULB, and predetermined savings are obtained from the first Energy Bill from ESCOM after 30 days of installation of this system. And the remaining 20% of the value of work done from the bill will be retained as retention amount, out of which 12.5% value of work done from the bill will released after successful operation of the system for the period of ONE Year from the date of completion and the remaining amount shall be released only after the defect liability period of TWO Years. No interest shall be paid on the retention amount.**
- iii) The amount deposited as Security Deposit shall be released only after issuance of provisional completion certificate by the ULB.
- iv) Tax Deduction: All statutory deductions like Income Tax, VAT or any other government imposed liabilities shall be borne by the contractor (as applicable at the time of execution of job) and relevant taxes shall be deducted from bill submitted by the Contractor.

6. Labour Laws and Safety Regulations:

6.1 Labour Laws:

- i) Labour below the age of 18 years shall not be employed on the work.
- ii) The contractor shall not pay less than what is specified by the law to laborers engaged by him on the work.
- iii) The contractor shall, at his own expenses, comply with all labour laws and the Owner shall not be responsible for any recovery/penalty imposed by the respective authorities for violating the labour laws.
- iv) If the contractor is covered under the Contract Labour (Regulation & Abolition) Act, he shall obtain a license from the licensing authority (i.e the Office of Labour Commissioner), by payment of the necessary prescribed fee and deposit, if any, before starting the work.
- v) The contractor shall comply with the provisions of the existing rules and regulations relating to labour laws.
- vi) The Consultant shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act, 1980, have the power to deduct from the amount due to the contractor any sum required or estimated to be required for making good the losses suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the

workers, or if deductions made from his or their wages which are not justified by the terms of contract or non-observance of the said regulations.

6.2 **Minor Accident on Duty:** For cases of minor accident on duty not covered under compensation by insurance, the contractor shall have to compensate the affected person by reimbursing these medical expenses against submission of actual expenditure document. The absence from duty, if takes place, due to such accident shall be considered as special leave and full payment shall have to be made for duration of such absence.

6.3 **Provident Fund:** It shall be solely the Contractor's responsibility to complete all provident fund formalities as per statutory regulations.

7. Safety Code:

7.1 **Safety and Protection:** The contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions. While carrying out the work, the contractor should provide for;

- i) Safety of personnel engaged in the construction.
- ii) Protection and safety of works and materials during their progress.
- iii) Sanitary and hygienic conditions of working and living for his workers, as required by the Consultant/Owner.

7.2 **Use of Safety Gadgets:** The contractor shall have to ensure availability and use of all desired safety gadgets like safety belts, helmets, goggles, hand gloves etc.

7.3 **Unsafe working condition:** If any activity is found to be progressing without proper and complete safety measures (including use of safety gadgets) being implemented, the contractor may be asked to stop the work unless he fulfills the desired safety norms. Such delays shall not be allowed to be considered for extension in duration of the allotted time period.

7.4 **First Aid:** The contractor shall provide first aid facilities for his employees and those of his sub-contractors. The requisite first aid box and medicines should always be available at work site.

7.5 **Contractor's Barricades:** The contractor shall erect and maintain barricades required in connection with his operations to guard or protect:

- i) Excavations
- ii) Hoisting Areas
- iii) Areas adjudged hazardous by the Contractor's or Consultant's representatives.
- iv) Charged electrical panels.
- v) Owner's existing property liable to get damaged by contractor's operation.

7.6 **Preservation of peace:** The contractor shall take precautions to prevent any riotous or unlawful behavior by his workers, for the preservation of peace and protection of inhabitants and the security of property in the neighborhood of the work.

8. Details of Work Execution:

8.1 The work shall be done in such a manner so as to clear work front availability for other agencies working at site.

8.2 In general the complete work is to be done as per Indian Standard and esthetical norms as specified and detailed in Tender.

9. **Site:** The project sites are located at various locations in Harihar CMC limits, of Davangere district and the names of various sites are as under.

9.1

The Contractor shall be responsible for the movement of his all men, material and equipment at no extra cost.

- 10. Electricity and Water:** Electricity and Water required for the execution of work shall be arranged by the contractor at his own cost.
- 11. Recovery from the Contractor:**
- 11.1 If the contractor or his employees damage or destroy the property of the ULB, then the same shall be replaced / refunded by the contractor, otherwise the expenses may be recovered from his bill or security deposit.
- 11.2 All compensation & recoveries to be made as per terms of the contract shall be deducted from the contractor's bill or security deposit.
- 11.3 Forfeiture of Security Deposit: Whenever any claim against the contractor is to be recovered then the same may be made from the security deposit. If the contractor abandons the work or leaves the work incomplete, then he ULB has the right to forfeit the security deposit.
- 12. Special Instructions:**
- 12.1 All materials to be used in execution of project shall be of first class quality; I.S.I. marked and shall be approved by ULB before its application.
- 12.2 The contractor shall be paying all testing charges required for testing of materials and samples as and when taken by ULB. The Contractor shall arrange necessary labour and transportation to facilitate testing of samples/materials. Frequency of testing materials/samples shall be as per related I.S. codes.
- 12.3 The work should be carried out by in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the consultant before completely executing the work.
- 12.4 The ULB should be immediately informed for any discrepancy in drawings, specifications and instructions in the execution of job at site before actual execution of particular item having discrepancy.
- 12.5 Any item found to be having been executed with poor workmanship or materials of inferior quality then the contractor shall have to rectify / reconstruct the work as specified by ULB. No extra charge will be admissible in such case. If Contractors fails to do so, the ULB reserved the right to rectify /reconstruct the work through some other agency at the expenses of contractor.
- 12.6 The schedule of activities as submitted by the contractor shall have to be strictly adhered to. Regular progress reports shall have to be submitted by the contractor giving all details for monitoring of the schedule.
- 12.7 The Contractor shall take charge of site and if site clearance is involved, he shall attend to it. (If such type of unforeseen and unavoidable situation occurs, in that case actual labour employed for such job shall be paid including overheads and profit).
- 12.8 Special care is to be taken for cleanliness of the site. After the end of day's work, the site should be cleaned immediately.
- 12.9 The contractor shall have to co-operate with the agencies executing other works in the same area.
- 12.10 While executing the work, the contractor shall ensure safety and security of the property of the Owner so as to avoid theft etc.

Municipal Commissioner
CMC, Harihar.

5) TECHNICAL REQUIREMENTS AND SPECIFICATIONS OF THE SYSTEMS:

Appendix - A

1. **Scope of work of the contract:** The Technical Requirements of the contract for Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lighting Unit lighting is set out below:

Providing Energy Management System to street Lights with Auto Programmable Unit, for ON, OFF (including TWI light timings) & dimming facility, voltage and power conditioning with protection units, monitoring & Data acquisition. (With out remote controlling facility)

- b) Micro controller based civil light TWI light time switching device.
 - c) Power conditioning with energy saving
 - d) Suitable switchgear to suit lamp load
 - e) Suitability for three phase four wire 400 volts 50Hz unbalanced lamp load operation with 3 outputs, one lamp ON/OFF time, second for lamp dimming (effect of reducing voltage in such that lumen will be reduced to optimum level to have max electrical saving) ON/OFF time and third to provide alternate switching of two lamp circuit.
 - f) By pass switch to manual operation.
 - g) The device should have retentivity to keep on all 3 outputs even in case of one or two phase failure & should have battery backup facility
 - h) Complete protection against overload & short circuit
 - i) Provides constant out put voltage for the lamp load irrespective of the variation in the input voltage.
 - j) Minimum conservation of energy upto 30% in normal system operation condition.
 - k) .
2. **System Specifications:** The Energy Management System shall have the following Specifications.
 - 2.1 **Electrical Specifications:**
 - i) Input Voltage working range shall be ONE phase TWO wire 230 V AC sinusoidal wave 50 Hz supply or THREE phase FOUR wire 400 V AC sinusoidal wave 50 Hz supply
 - ii) Capacity of the unit shall depend upon the actual capacity at various switching points. The capacity shall not be depended on the input voltage to the unit.
 - iii) Power delivery control mechanism: Stepped Voltage control mechanism.
 - iv) The system should not switch off the lamps while in transient phase from one voltage level to another desired level of output voltage.
 - v) The system should not generate any harmonics
 - vi) Safe over load capacity: 10%.(this relates to the tolerance of the unit.)
 - 2.2 **Environment Specifications:**
 - i) Storage ambient temperature range: 0 C. to 65 C.
 - ii) Operating and ambient Temp range: 0 to 55 C.
 - iii) The increase in temperature within the panel should be limited to 15C, above the ambient temperature. The energy saving device offered shall be designed accordingly to take care of the temperature rise.
 - iv) Relative humidity shall be in the rage of 5% to 95%.
 - 2.3 **Mechanical Specifications:**
 - i) The enclosure should be made of 16 SWG, MS Steel Metal, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps and box should be finished with 2 coats of red oxide primer paint and

- finally finished with approved colour enameled metal paint with Epoxy Powder Painting to give long rust free life.
- ii) The size of the unit shall be very compact so as install the unit on the floor or on the pole near the existing control unit at particular height.
 - iii) The panel should be suitable for Outdoor construction
 - iv) The panel shall be provided with forced fan cooling system as a standard for capacities above 30 KVA panels.
 - v) The internal panel layout must be designed considering proper approach to the controller, instrument, relays, contactors, terminals and other accessories for maintenance.
 - vi) Access should be provided in the front, to switch ON-OFF incoming power / output load to the panel
 - vii) All cable entry in to the panel shall be from bottom / side using cable gland of adequate size.
 - viii) The termination provided at the input and output for the cable, should be of sturdy connector with suitable cover to avoid shock hazard.
 - ix) A separate energy meter compartment should be provided to mount Energy meter in the panel. This Energy Meter shall be separate one and in no way relate to the ESCOM provided Energy Meter.
 - x) A Bypass switch should be provided to put lights on for maintenance during daytime. This has access to MUNICIPAL maintenance authority.
 - xi) The indications for Over Load & Working of the panel, working in the emergency mode should be provided using LED Indicator Lamps with particular circuit for the same with a safety Fuse Unit.
 - xii) The Unit shall have a name plate on it clearly indicating the rating and working stages, using small metal plate. This information thus indicated shall only be fixed after getting prior approval from the ULB.

3. Unit Specifications: The Energy Management System shall consist of following units have the following Specifications.

3.1 Energy Conservator / Modulator: The Energy Conservator / Modulator Unit is the central Unit that shall the input supply and then stabilize the voltage and give constant sine wave output as per the modes of operation, with following specification;

- i) Complete Solid State Technology.
- ii) Micro controller based civil light TWI light tome switching device.
- iii) Power conditioning with energy saving.
- iv) The unit shall have modes of operation like; ON, Energy Save Mode, and OFF.
- v) The Unit shall have built in facility to lower to requisite voltage specified by the Lamp manufacturer, irrespective of a deficient/over voltage during every ignition cycle of the lamps.
- vi) The unit's Energy Saving Capability should not be load-dependant and should not deteriorate, if load is reduced from 100% to 25%
- vii) The panel should not consume more energy during any mode of operation
- viii) There should be no sudden voltage shock or surge to the output lamps during working of the panel, or change in the mode of operation.
- ix) There shall be an minimum conservation of energy upto 30% in normal system operation condition.
- x) Shall maintain constant voltage under all modes of operation, irrespective of the input voltage and the connected load.
- xi) The Unit shall improve power factor.
- xii) Suitability for Single phase two wire 230 volts 50 Hz or three phase four wire 400 volts 50Hz unbalanced lamp load operation with 3 outputs, one lamp ON/OFF time, second for lamp dimming (effect of reducing voltage in such that lumen will be reduced to optimum level to have max electrical saving) ON/OFF time and third to provide alternate switching of two lamp circuit.

- 3.2 **Protection and Control Unit:** It is a backed up unit from the Energy Conservator / Modulator Unit, which will act as per the commands and Controls the output to the lamps. It also should protect the load, with following specification;
- i) Complete protection against overload & short circuit
 - ii) Fuse protection should be provided for all contactor coils.
 - iii) All the electrical items used in the panel should be of suitable ratings to operate in the entire operating voltage range of the input voltage.
 - iv) Wherever a fault occurs, the device shall have a controlled changeover / failsafe protection.
 - a. Over Load: - Electrical / Electronic protection should be provided with retry facility, to avoid false tripping.
 - b. Output - Over Voltage Protection: An independent protection to avoid higher voltage feeding to lamps shall be provided.
 - c. Input over Voltage Protection: - An independent Protection is provided to isolate panel & protect panel from input over voltage.
 - d. Short Circuit: - HRC Fuses at the input & MCB for individual phase at the output, of appropriate rating.
 - v) By pass switch to manual operation, in the cases of emergency.
- 3.3 **Data Acquisition Unit:** It is a unit which will provide the data about the mode of operation, feedback to the input and data at the out put end of the unit. Following information should be available on the Unit and shall also be transferred to the Command Centre through the Network Unit.
- i) Real time & month
 - ii) Mode in which the panel is currently operating.
 - iii) Out put current and output voltage of each of the three phases.
 - iv) Energy Consumed at the input in KWHr.
 - v) Fault Indicator.
- 3.4. **Quality issues:**
- 3.5 The 'Contractor' should use guaranteed quality items for better efficacy and performance standards for all the fittings and electrical materials used in this contract.
- 3.6 The fittings/accessories need to be purchased from authorised manufacturers or the Contractor shall be an authorized manufacturer of these items, the brand confirming to IS standards only. A proof of "source" of purchase place along with invoice and sales tax content need to be furnished along with the bill. Without these documents no payment can be processed for payment.
- 3.7 Contractors should use the PVC insulated and sheathed UG Cables or copper and Aluminum wires / single core, Multi core, Multi stand / single stand cables of class 'A' of reputed make like - Finolex, Cobra, Wincap, Cauvery and Havells only of suitable current capacity size as required.
- 3.8 The present scope of work includes replacement of existing kit-kat arrangement (just wire joining arrangement) or fuse units with Energy Management Systems as per the specification provided.
- 3.9 Contractor should undertake regular inspection and testing at least once in three months for the period of TWO years from the date of commission, and should see that all the equipments are in good condition during that period. After this time limit, if the performance of the contractor is found satisfactory, the maintainance of these systems may be handed over to the same Contractor on Annual Contract basis, only at discretionary powers of the ULB, if so ever required.
- 4.0 Contractor is not permitted to display any board advertising his agency/product or any other advertisement boards on the street light poles or on these.
- 4.1 Contractor will be responsible for missing or lost equipments or any other components of this system etc., and will replace such items at no extra cost. If required, contractor can have an insurance policy for such thefts at his cost.
- 4.2 No extra compensation will be allowed and paid, in case of short circuit due to externalities such as 'over voltage' or due to 'Lighting' resulting in failure of this

- equipments and connected accessories. If required, contractor can have an insurance policy for such situations at his cost, if available.
- 4.3 The Contractor shall be held responsible for any damage or loss of the Street Lighting System, connected on Energy Management System, due to externalities such as 'over voltage' or 'short circuit', caused due the failure of Energy Management System during the retention period, the Contractor at his cost will rectify the same within 48 hrs of such incident. If the Contractor fails to do so, the work will be got done by the ULB, and expenditure incurred will be deducted from the Security Amount of the Contractor.
- 4.4 If the Contractor fails to follow and adhere to the Quality issues, given in Clause 4.0 above, the ULB will enforce the Contractor to do so strictly, and in case of failures or unsatisfactory services, any such financial losses incurred to ULB shall be deducted from the Security Amount, and the ULB shall not issue the Completion Certificate, and may also take steps to Black List the Contractor.
- 5. Monitoring and Reporting System:**
- 5.1 The Contactor after complete commissioning of this System shall, provide necessary training and guidelines to the staff of the ULB, regarding the operation and working of this system. The Contractor shall also give the entire document in text, or notes about these matters.
- 5.2 The Contractor shall submit the reports of saving after completion of the work, after which the bills will be paid to the contractor.
- 5.3 The contractor shall also provide the monthly Energy Savings with regards to the Monthly energy bill from ESCOMs, in annexure given in the Tender document. All the required parameters in this annexure shall be provided by the contractor that is through the Energy Management System's Data Acquisition Unit.
- 5.4 If the desired savings are not obtained, the contractor shall rectify the same, and see that the desired savings are obtained, without reduction in illumination of the lighting system. If the Contractor fails to do so, or neglects in this matter, the ULB may take disciplinary steps as per Clause 4.10, above.
- 5.5 For the satisfaction in illumination in the areas of Energy Management Equipments, it is proposed to have a citizen participatory and reporting system in each area and shall be obtained from at least two nominated prominent citizen from the public will be part of the evaluating process, wherein it will be pointer towards satisfactory services provided by the contractor for the area.

Municipal Commissioner
CMC, Harihar

6) TECHNICAL BIDS:

Appendix B

Covering Letter of Contractor
(On the letter Head of the Tenderer)

No.:

To,
The Commissioner
CMC, Harihar.

Sir,

Subject : Submission of Tender Document Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lighting Unit lighting in Harihar CMC limits

Ref. : Your notification no: _____ dated _____

With reference to the above tender notification, I/We herewith submitting my lowest offers for the work of Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lighting Unit lighting in CMC, Harihar. The entire documents below are submitted in duplicates for kind references. Please accept my/our proposal and oblige.

Thanking You

1. Technical & Commercial qualification Proofs(attested Copies)
2. Qualification Submission as follows
 - a Covering letter in the format set out in **Appendix B**
 - b. Details of the tenderer in the format set out in **Appendix C**
 - c. Technical bid as per format set out in **Appendix D (Form D1 to D5)**
 - d. Proof of Purchase of the tender Document
3. Financial Offer in the format set out in **Appendix E**

Yours Faithfully

Signature of Authorised Person

Name of the Authorised Person

Date _____

Note:

On the letterhead of the Tenderer

Details of Tenderer
(On the letter Head of the Tenderer)

1. (a) Name of tenderer
(b) Address of the Office(s)
(c) Date of incorporation and/or commencement of business
2. Brief description of the tenderer's main lines of business
3. Details of individual(s) who will serve as the point of contact/communications for municipality with the tenderer
 - (a) Name
 - (b) Designation
 - (c) Company/Firm
 - (d) Address
 - (e) Telephone Number
 - (f) E-mail address
 - (g) Fax number
 - (h) Mobile number
4. Name, Designation, address and phone numbers of authorised signatory of the Tenderer
 - (a) Name
 - (b) Designation
 - (c) Company/Firm
 - (d) Address
 - (e) Telephone Number
 - (f) E-mail address
 - (g) Fax number
 - (h) Mobile number

Signature of Authorised Person

Name of the Authorised Person

Date _____

Note:

On the letterhead of the Tenderer

Appendix D

**Technical Bid Form D - 1
Work Done Qualifications of the Tenderer**

Sl. No.	Name of the Institution	Particulars of the Work done	Estimate Amount	Period of Contract (Date of Completion)	Success Rate of the Work with the Certificate for Proof.

** Tenderer shall provide all necessary certificates for the above mention work, with the information about the success rate of the work so executed. The saving obtained shall determine the technical competency of the Tenderer.*

*** Tenderer At least ONE year of experience in similar kinds of jobs in any other institutions and carried out similar kind work with an estimate cost of Rs.10,00,000/- and above with valid license from electrical inspectorate of Government of Karnataka or any other Indian State.*

Signature of Authorised Person

Name of the Authorised Person

Date _____

Note:

On the letterhead of the Tenderer

**Technical Bid Form D - 2
Qualifications of the Tenderer and Staff**

1. Name:
2. Profession
3. Present Designation:
4. Years with Firm/Organization:
5. Nationality:
6. Area of Specialization:
7. Proposed Position on Team:
8. Key Qualifications:
(Under this heading, give outline of staff member's experience and training most pertinent to assigned work on proposed team. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use up to half – a – page)
9. Education*:
(Under this heading, summarize college/university and other specialised education of staff member, giving names of schools/colleges etc., dates attended and degrees obtained. Use up to a quarter page)
10. Experience
(Under this heading, list all positions held by staff member since graduation or any other education qualification, names of employing organization, title of positions held and location of assignments. For experience in last two years, also give types of activities performed and client references, where appropriate. Use up to three quarters of a page)
11. Languages:
(Indicate proficiency in speaking, reading and writing of each language by 'excellent', 'good' or 'poor')

Note: Attach sufficient documentary proof against each qualification/experience claimed. Photocopy this sheet and use for more than one employee present.

** The minimum educational qualification for supervisor is diploma in electrical engineering from recognised polytechnic college and for field employees/linemen, the minimum qualification is two years certificate in electrical trade resulting in national apprentice certificate from recognised ITI or its equivalent.*

Signature of Authorised Person

Appendix D

**Technical Bid Form D - 3
Financial Capability**

The Tenderer shall have **Annual Turnover** for the last Three completed financial years

(Rs. Lacs)

Year 1	Year 2	Year 3

The tenderer should provide the figures of Annual Turnover from its own audited financial statements. The guiding factor for Annual Turn over in any one year shall be considered at least 100% of the tendered cost in one year.

Instructions:

- a. The financial year would be the same as the one normally followed by the bidder for its annual report
- b. The Applicant shall provide the audited annual financial statements as required under this tender document. The financial statements shall be duly supported by a certificate from the statutory auditor of the firm/company, which shall clearly indicate the membership number and contact details of the statutory Auditor.

Signature and Name of Authorised Person

Date:

Appendix D

**Technical Bid Form D - 4
Format for Anti-Collusion Certificate
Anti – Collusion Certificate[#]**

I* / We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, I/We will strictly observe the laws against fraud and corruption in force in India namely “Prevention of Corruption Act 1988”.

I/We hereby certify and conform that in the preparation and submission of our proposal, I/ We have not acted in connect or in collusion with any other bidder or other person(s) and also not done any act, deed or thing which is or could be regarded as anti-competitive.

I/We further confirm that we have not offered nor will offer any illegal gratification in cash or kind to any person or agency in connection with the instant Proposal.

Dated this Day of, 2004

.....
(Name of the Bidder)

.....
(Signature of the Bidder^{##} / Authorised Person)

On the letter head, in case the bidder is not an individual

* In case of an individual

In case of an individual

Appendix D

**Technical Bid Form D - 5
Pre-Tender Site Visit**

(On the letterhead of the Tenderer)

Date:

To: The Commissioner, CMC, Harihar

Sub: Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lighting Unit lighting in CMC, Harihar. Operation & Maintenance Contract for Street Lighting System

Ref: : Your notification no: _____ dated _____

Dear Sir

I/We confirm that, the undersigned has visited the area under the proposed contract and verified the details of the street lighting system. We confirm that the street lighting details are matching with the data provided by the ULB.

I/We also hereby agree and undertake as under:

Signature of Authorised Person

Name of the Authorised Person

Date _____

Note:

On the letterhead of the Tenderer

7) FINANCIAL BID:

Appendix E

Financial Offer for the Project
(On the letter head of Tenderer)

Date:

To,
The Commissioner, CMC, Harihar

Dear Sir/Madam

Sub: Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lighting Unit lighting in CMC, Harihar. Operation & Maintenance of Street Lighting System

Ref: Your notification no: _____ dated _____

Having gone through the tender document and having fully understood the scope of work for the project as set out by [insert the name of municipality] and the product specifications as mentioned in **Appendix – A**, I/we are pleased to inform that we would charge as below the execution of the works envisaged under the scope of work indicated in this tender document.

<i>Sl. No</i>	<i>Name of the Work</i>	<i>Quantity</i>	<i>Units</i>	<i>Unit Rates in Rs.</i>	<i>Total Cost in Rs.</i>	<i>Total Amount in Rs.</i>
I	<p>Providing Energy Management System to street Lights with Auto Programmable Unit, for ON, OFF (including TWI light timings) & dimming facility, voltage and power conditioning with protection units, monitoring System with the following specifications, in the places given below; (without remote controlling facility</p> <ul style="list-style-type: none"> a) Micro controller based civil TWI light time switching device b) Power conditioning with energy saving c) Suitable switchgear to suit lamp load d) Suitability for three phase four wire 400 volts 50 Hz unbalanced lamp load operation with 3 out puts, one lamp ON/OFF time , second for lamp dimming efficit of reducing voltage in such that lumen will be reduced to optimum level to have max eletrical saving ON/OFF Time and Third to provide alternate switching of to lamp circuit e) By pass switch to manual operation f) The device should have retentivity to keep on all three out puts even in case of on or two phase failure and should have battery backup facility g) Complete protection against over load and short circuit h) Provides constant out put voltage for the lamp load irrespective of the variation in the out put voltage i) Minimum conservation of energy up to 30% in normal system operation condition 					

<i>Sl. No</i>	<i>Name of the Work</i>	<i>Quantity</i>	<i>Units</i>	<i>Unit Rates in Rs.</i>	<i>Total Cost in Rs.</i>	<i>Total Amount in Rs.</i>
B	Public & Street Light Fittings					
1.	Harpanhalli Road	9.0	KVA			
2.	P.B.Road	10.0	KVA			
3.	Shimoga Road	14.0	KVA			
4.	Over Tunga Bhadra Bridge	7.0	KVA			
5.	J.C.Extn first main Road	7.0	KVA			
6.	J.C.Extn second main Road	5.0	KVA			
7.	J.C.Extn third main Road	5.0	KVA			
8.	J.C.Extn forth main Road	5.0	KVA			
9.	Church Road	4.0	KVA			
10.	Vijaya Nagara	6.0	KVA			
11.	Humsagara Compound	6.0	KVA			
12.	Vidaya Nagara A Block	6.2	KVA			
	Total	84.2	KVA			
	Total					

Note: All the rates quoted shall include the total expenditure inclusive of taxes, if any.

We have reviewed all the terms and conditions of the tender and would undertake to abide by all the terms and conditions contained therein. We hereby declare that there are, and shall be, no deviations from the stated terms and conditions contained therein. We hereby declare that there are, and shall be, no deviations from the stated terms in the tender document.

Yours faithfully,

For and on behalf of *(Name of Tenderer)*

Duly signed by the Authorised Signatory of the Bidder

(Name, Title and Address of the Authorised Signatory)

8) FORMATS AND STATEMENTS:

Schedule-1

Energy Savings Formats –I

Month:

Sl. No.	Place of Works	No. of SV Lamps	No. of tube Lights	Total Connected Load in KWs	Average Burning Hours per day	Saving incurred

Signature of Authorised Person

Name of the Authorised Person

Date _____

Note:

On the letterhead of the Tenderer

Schedule – 3

Energy Savings Formats -III

Name of Site:
Month:

Date	Output Voltage during ON in Volts	Output Current during ON in Amps	Power during ON in Watts	Illumination in LUX during ON	Output Voltage during DIM in Volts	Output Current during DIM in Amps	Power during DIM in Watts	Illumination in LUX during DIM
1								
2								
3								
4								
5								
7								
6								
7								
8								
9								
10								
.....30								

Signature of Authorised Person

Name of the Authorised Person

Date _____

Schedule - 4

Compliance Certificate

For the month of [insert month], 2006

Place	Illumination during Normal Condition	Illumination during DIM Condition	Sign of the first nominated resident of the area	Sign of second nominated resident of the area

Note: Type of the Remarks to given

- 1) Very Good
- 2) Good
- 3) Average
- 4) Poor
- 5) Very Poor

PART - II

Agreement

DRAFT AGREEMENT:

Page No. 1 of 3

.....
.....
.....
NON JUDICIAL STAMP PAPER – Rs.100/-
.....
.....

Name of the Work : Supplying, Designing, Installation, Erecting, Testing and Maintaining of Energy Management System for Street Lighting Unit in Harihar CMC limits, on Total Turnkey Basis

Contract Amount in Rs : Rs:

This **AGREEMENT** entered into on this the [Insert date] day of [Insert Month], Two Thousand and [Insert Year] at [Insert Place];

BETWEEN

[Insert name and address of ULB] acting through [Insert name]¹, (hereinafter referred to as “**ULB**” which expression shall unless excluded by or repugnant to the context, be deemed to include its successors and permitted assigns); OF THE ONE PART

AND

[Insert name and registered office address of the selected bidder], (hereinafter referred to as “**the Contractor**” which expression shall unless excluded by or repugnant to the context, be deemed to include its permitted successors and permitted assigns), OF THE OTHER PART

ON BEHALF OF ULB

CONTRACTOR

Page No. 2 of 3

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The contractor covenant/s agree / s with the ULB that the contractor/ s with in the time schedule of **FOURTY FIVE DAYS** from the date stipulated in the acceptance letter shall execute and fully complete all the works specified described or referred to in and by the said tender or as amended according to the true intent and meaning of the said tender or as amended and as per the Scheduled Bill of quantities, Particular Specifications, ISI Specification, Drawings & Instructions issued from time to time, Special Conditions of the Contract, Scope & Performance Schedule, General Conditions of the Contract.

The Contractor/s covenant/s and agree/s with the ULB to truly observe, perform, fulfill & submit to the said terms obligations and conditions referred above. Incase the contractor fails to execute the work in the manner described in the condition of Contract or stops the execution of work or fails to carry out the works to the satisfaction of the ULB with respect to quantity, quality and time schedule or abandons the work or becomes bankrupt then the ULB will have right to terminate the contract and get the remaining work executed at the risk and cost of the contractor. It is agreed that, time is of the essence of this contract. Incase the work is not completed in the manner mentioned above to the complete satisfaction of the ULB in every respect within the aforesaid time limit of **FOURTY FIVE DAYS** form the date stipulated in the Work Order the Contractor/s agree/s to pay compensation of 1% of the value of the contract sum for each week of delay beyond the date stipulated for completion however subject to a maximum of 10% of the value of the contract sum.

2. In consideration of the satisfactory work executed by the contractor/s with the provisions as stated above the ULB covenant/s with the contractor/s that they will pay to the contractor/s from time to time in accordance with Schedule Bill of quantities and various terms and conditions as contained in General Conditions of the contract and Special Conditions of the contract, provided that whether or not the work is satisfactory, shall be decided by the ULB and its decision in this behalf shall be final and binding.
3. The rates for items whether termed as extra items or deviations or by whatever name it is called and which are not covered in the Bill of Quantities will be worked out in accordance with Clause
4. Sales Tax, VAT, by whatever name it may be called and in whatever from it may be, in all cases shall be the contractor's / Contractors responsibility. Income Tax, Works contract Tax, Service Tax payment shall be the responsibility of the Contractor and Tax amendment and validation ordinances and or the Act thereof and or other amendments as may be made from time to time or taxes as result of subsequent orders/ ordinances/ acts as issued by the State or Central Govt. from time to time shall be borne by the Contractor/s.
5. The contractor shall abide by and shall be responsible for all statutory provisions of the law such as labour laws & safety regulations etc.

6. This agreement further witnesseth that the contractor/s hereby covenant/s with the ULB that in the event of the non fulfillment in any respect by the contractor/s of the said covenant/s terms, agreements, obligations and conditions on the part of the contractor/s, the contractor shall pay on demand to the ULB all losses, damages, costs, charges and expenses as the ULB may be directly or indirectly put to in consequences of such non fulfillment of contract by the contractor/s.
7. In the event of any dispute arising out of or in connection with the arbitration proceedings, or any proceedings being taken subsequent to the arbitration proceedings, it is further agreed that only the courts in Harihar, Karnataka shall have the sole jurisdiction in the matter.
8. The following documents are deemed to form part of the agreement, namely the tender, the priced bill of quantities, the drawings issued for the work, Particular Specifications, Special Conditions of the contract and General Scope performance Schedule Conditions of the contract, all of which for the purpose of identification have been signed on behalf of the ULB and by the contractor/s. The relevant ISI will also form part of this agreement. The letter of Acceptance and their amendment etc. shall also form part of the agreement.
9. The agreement further witnesseth that the contractors is also responsible for any accident or other compensation payable to the workmen employed by and working under the control of contractors. The ULB has no liability in the matter and that if any payment would have to be made by the ULB, the same shall be reimbursed by the contractors on demand and or recovered form the dues of the contractors. In witnesseth whereof the said parties here to have unto set their hands.

IN WITNESS WHEREOF THE, PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED SEALED AND DELIVERED

For and on behalf of THE ULB by

(Signature)

(Name)

(Designation)

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor by:

In the presence of.

1)

2)

