

West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)

Jaldhaka Hydel Project Office

Village: Paren, P.O. & P.S. – Jaldhaka Hydel Project, Kalimpong -734503 Telephone: 03552-296190, E-Mail: pm.jhp@wbsedcl.in

NOTICE INVITING E-TENDER

NIT No: WBSEDCL/PM/JHP/E&M/2024-25/28 DATE: 30/08/2024

(Tender ID: 2024_WBSED_737851)

The Addl. Chief Engineer & Project Manager, Jaldhaka Hydel Project, WBSEDCL invites e-tender (Submission of Bid through online) on percentage rate basis for the works detailed below from bonafide, resourceful and experienced contractors of State / Central Govt., State / Central Govt. Undertaking, Statutory Bodies constituted under the statute of Central / State Govt. as per following terms & conditions:

- Name of Work: "Supply and delivery of different types of LED luminaries for various locations under Jaldhaka Hydel Project, WBSEDCL, Dist. Kalimpong, PIN - 734503"
- 2. Estimated value: Rs 6, 35,792.36 (Rupees Six Lakh Thirty Five Thousand Seven Hundred Ninety Two and Thirty Six only); exclusive of GST
- 3. Eligibility criteria: The bidder must possess minimum eligibility criteria as mentioned below:

SI. No.	Eligibility criteria	Valid documents	
i.		GST Registration Certificate	
ii.		PAN Card	
iii.		License in respect of prospective bidder such as Proprietorship Firm (Trade License), Partnership Firm (Partnership Deed, Trade License), Ltd. Company (Incorporation Certificate, Trade License), CO-Operative Society (Society Registration copy, Trade License. Successful completion of similar nature of work during the last 7 years from the date of this NIT.	
iv			

- **4. Earnest Money Deposit (EMD):** Rs. 12,716/- (Rupees Twelve Thousand Seven Hundred and Sixteen only)
- 5. Key dates:

SI. No.	Activity	Date and Time	
1.	Date of uploading of N.I.T. & other Documents (online) (Publishing Date)	06.09.2024 at 12:00 hrs.	
2.	Documents download/sell start date (Online)	06.09.2024 at 12:00 hrs.	

CIN: 1140109WR2007SGC113473 Web: www.whsedcl.in

3.	Pre-bid Meeting	11.09.2024 at 12:00 hrs.
4.	Documents download End Date.	20 09.2024 at 17:00 hrs
5.	Bid submission start date (On line)	06.09.2024 at 12:00 hrs.
6.	Bid Submission closing date (On line)	20 09.2024 at 17:00 hrs
7.	Technical Bid opening date (Online)	24.09.2024 at 12:00 hrs.
8.	Date of uploading list of Technically Qualified Bidders	To be intimated later
9.	Financial Bid opening Date (Online)	To be intimated later

OTHER TERMS OF TENDER:

- Intending bidder should download the tender documents from the website http://wbtenders.gov.in directly with the help of Digital Signature Certificate. All documents are to be submitted concurrently duly digitally signed by the Bidder through the website https://wbtenders.gov.in.
- 2. The financial offer of the prospective bidder will be considered only if the TECHNICAL BID of the Bidder is found qualified by the WBSEDCL. The decision of the WBSEDCL will be final and absolute in this respect. The list of Qualified Bidders of Technical Bid will be displayed in the website.
- 3. Bid shall remain valid for a period not less than 180 (one hundred eighty) days from the date of technical bid opening. If the bidder modifies/withdraws the bid during the validity period of bid, the bid will be cancelled with forfeiture of earnest money deposit (EMD). However, WBSEDCL may, on the merit of case, request for extension of validity of the offer for a further suitable period without any change in terms & conditions of the offer.
- 4. All statutory laws have to be complied as per Govt. norms.
- 5. No mobilization advance or secured advance will be allowed.
- 6. A prospective Bidder shall be allowed to participate in the tender either in the capacity of individual or as a partner of firm. If found to have applied severally in a single job, all his offers will be rejected for that job.
- 7. The instant e-NIT will be processed in line with prevailing Revised Purchase Policy of WBSEDCL as available in http://www.wbsedcl.in website.
- 8. The Bidder at the Bidder's own responsibility and risk is encouraged to visit and examine the site of works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the work as mentioned in the Notice Inviting Tender. The cost of visiting the site shall be at the Bidder's own expense.
- 9. The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids, no cost of Bidding shall be reimbursable by the WBSEDCL. The WBSEDCL reserves the right to accept or reject any offer without assigning any reason whatsoever and is not liable for any cost that might have been incurred by any Bidder at any stage of Bidding.
- 10. Prospective applicants are advised to note carefully the minimum qualification criteria before tendering the bids.
- 11. Exemption from deposition of Earnest Money (EMD) shall not be allowed under any circumstances.

- 12. Conditional / Incomplete tender will not be accepted under any circumstances.
- 13. The intending Bidders are required to quote the rate online at wbtenders.gov.in.
- 14. During scrutiny, if it comes to the notice of the tender inviting authority that the credential or any other paper found incorrect / manufactured / fabricated, that bidder would not be allowed to participate in the tender and that application will be rejected without any prejudice and legal action will be taken against him.
- 15. Canvassing in connection with the tender is strictly prohibited in the Tender submitted by the Contractor.
- 16. The WBSEDCL does not bind itself to accept the lowest bidder and reserves the right to reject any or all tender(s) without assigning any reason whatsoever.
- 17. Revised Purchase Policy will be followed wherever applicable in respect of the contract work. Revised Purchase Policy is available on company's website.
- 18. The WBSEDCL reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

(Rajeev)

Additional C.E. & Project Manager, Jaldhaka Hydel Project

INSTRUCTION TO BIDDERS (ITB)

- **1. Availability of Tender Documents**: Intending bidder should download the tender documents from the website http://wbtenders.gov.in directly with the help of Digital Signature Certificate.
- 2. Eligibility criteria: As per eNIT.
- **3.** General guidance for e-Tendering: Instructions/Guidelines for electronic submission of the tenders have been mentioned below for assisting the bidders to participate in e-Tendering.
 - i. Registration/Enrolment of bidder on e-tendering portal of NIC: In order to submit the bid, the bidders have to get themselves registered online on the e-tendering portal of NIC with valid Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India and which can be traced up to the chain of trust to the Root Certificate of CCA. The online registration of the bidder shall be one time activity only. The registration should be in the name of bidder, whereas DSC holder may be either bidder himself or his duly authorized person.
 - ii. The bidder shall have to accept unconditionally the online user portal agreement which contains the acceptance of all the terms and conditions of NIT including general and special terms and conditions and other conditions, indignity Pact etc. if any, along-with online undertaking in support of the authenticity of the declarations regarding the facts, figures, information and documents furnished by the bidder online in order to become an eligible bidder. No conditional bid shall be allowed/accepted. This user portal agreement will be part of NIT/Contract document.
 - iii. Digital Signature Certificate (DSC): Each bidder is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders.
 - iv. The bidder can search and download NIT & Tender Documents electronically from the website mentioned in Clause 1 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

4. Submission of Tenders:

- i. General process of submission Tenders are to be submitted online through the website http://wbtenders.gov.in. All the documents uploaded by the Tender Inviting Authority form an integral part of the contract. Bidders are required to upload all the tender documents along with the other documents, as asked for, in the tender, through the above website within the stipulated date and time as given in the Tender. Tenders are to be submitted in two folders one is Technical Proposal and the other is Financial Proposal. The bidder shall carefully go through the documents and prepare the required documents and upload the scanned documents in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid.
- ii. The bidder needs to download the Forms / Annexure, fill up the particulars in the designated cell and upload the same in the designated location of Technical Bid. He needs to download the BOQ, fill up the rates of items in the BOQ in the designated Cell and upload the same in the designated location of Financial Bid.
- iii. The documents uploaded shall be virus scanned and digitally signed using the Digital Signature Certificate (DSC). Bidders should take note of all the addendum/corrigendum related to the tender and upload the latest documents as part of the tender.

- iv. **Technical proposal:** Technical proposal should contain scanned copies of the following in two covers (folders) i.e. Statutory cover and non-statutory cover
 - a) **Statutory Cover** Containing three covers (folders) (i) NIT (ii) EMD & (iii) Annexures / Forms.
 - NIT folder containing Downloaded and uploaded copies (Digitally Signed) of the following: -
 - eNIT.
 - Additional terms and conditions, special conditions of contract if any.
 - ii. **EMD folder: -** containing proof of online submission of Earnest money Deposit (EMD).
 - iii. Annexure/Forms Folder containing
 - •Undertaking by the bidder (Annexure-I).
 - •Letter of Bid for the work (Annexure-II).
 - Declaration by the tenderer (Annexure-III).
 - Declaration of De-barring/ Black Listing / Holiday Listing (Annexure-IV).
 - b) Non statutory cover containing
 - i. Valid GST Registration Certificate.
 - ii. Valid PAN Card
 - iii. License in respect of prospective bidder such as Proprietorship Firm (Trade License), Partnership Firm (Partnership Deed, Trade License), Ltd. Company (Incorporation Certificate, Trade License), CO-Operative Society (Society Registration copy, Trade License.
 - iv. Completion certificate / payment certificate to establish Successful completion of similar nature of work during the last 7 years from the date of this NIT in any State / Central Govt., State / Central Govt. Undertaking, Statutory Bodies constituted under the statute of Central / State Govt.
 - c) **Financial Proposal:** It contains Bill of Quantities (BOQ). The rate is to be quoted in the BOQ on "percentage basis" in the space (blue coloured) marked for quoting rate (either excess, less or at par i.e., 0.00%). Quoted rate will be encrypted in the B.O.Q. under Financial Bid.
 - d) **Note: -** Failure of submission of any of the above-mentioned documents as stated in a) and b) will render the tender liable to summarily rejected for both statutory & non statutory cover.

5. Earnest Money Deposit (EMD):

- **a.** A bidder desirous of taking part in a tender shall login to the e-procurement portal of Government of West Bengal http://wbtenders.gov.in using his login Id and password.
- **b**. The bidder shall select the tender to bid and initiate payment of EMD. Following payment options are available for paying EMD through online mode.
 - i. Net banking through Payment Gateway.
 - ii. **RTGS/NEFT Payment**: On selection of RTGS/ NEFT as the payment mode, the e-Procurement portal will show a pre-filled challan having the details to process RTGS / NEFT transaction. The bidder will print the challan and use the pre-filled

information to make RTGS/NEFT payment using his bank account. Once the payment is made, the bidder will come back to the e-procurement portal to continue the bidding process after expiry of a reasonable time to enable the RTGS/NEFT process to be completed.

c. General Instructions for Online Payment:

- The bidder will have to mandatorily pay through Net-banking facility once Net banking mode is opted for payment.
- Status of NEFT / RTGS payment through Challan for a bid may take time for bank settlement which is updated in 24 Hrs. (approx.). As such bidders opting to pay through NEFT/RTGS mode shall make payment well before 24 Hrs. to avoid any complicacy.
- In case actual EMD amount as per NIT is more than the one shown in E-tender Portal, bidders will have to opt for NEFT/RTGS mode (challan mode). In that case the total actual EMD amount is to be paid only through NEFT/RTGS mode (challan mode).
- The bank account used for payment of EMD by the bidders shall be maintained operative until the completion of tendering process. All refunds will be made mandatorily to the Bank A/C from which the payment of EMD has been initiated.
- For any queries related to payments and refunds, bidders will have to communicate with ICICI Customer Support, Contact: 033-40267512/13 since payment gateway facility used by E-tender portal is maintained by ICICI Bank.
- Successful bidder shall have to mandatorily create vendor id through WBSEDCL Web Portal Vendor Corner, if not created earlier.

d. Refund of EMD Amount:

- i. For unsuccessful bidders, EMD amount submitted against the tender shall be refunded automatically, through an automated process, by NIC portal on receipt of updated status of any bid.
- **ii.** For successful bid(s), EMD will be kept as part of Security Deposit and will be refunded after successful completion of Defect Liability Period and certified as such by the controlling officer to the work upon written request by the contractor.

e. Forfeiture of Earnest Money deposit :

- i. If the successful bidders fail to accept Purchase Order / LOI issued within their offered validity period.
- ii. For failure to submit specified security deposit within time limit indicated in the Purchase Order / LOI.
- iii.If the bidder modifies/withdraws the bid during the validity period of bid,
- iv. If any cartel is formed by the bidder in their quotation.

7. Opening and evaluation of tender:

- a) Opening of Technical Proposal.
 - i. Technical proposals will be opened by the Tender Inviting Authority or his authorized representative electronically from the website stated above, using their Digital Signature Certificate.
 - **ii.** Intending bidders may remain present if they so desire.

- **iii.** Cover (Folder) for Statutory Documents will be opened first and if found in order, Cover (Folder) for Non-statutory Documents will be Opened. If there is any deficiency in the Statutory Documents, the tender will summarily be rejected.
- **iv.** Decrypted (transformed into readable formats) documents of the Statutory and Non-statutory Covers will be downloaded for the purpose of evaluation.

b) Techno-commercial Evaluation of Tender;

- i. While evaluation, the Tender Inviting Authority or his authorized representative may summon the bidders and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these cannot be produced within the stipulated timeframe, their proposals will be liable for rejection.
- **ii.** The summary list of bidders, whose bids will be found technically responsive, will be uploaded in the web portals. Date of opening of financial bid will be intimated to the techno-commercially qualified bidders.

c) Opening and evaluation of Financial Proposal

- i. Financial proposals of the bidders declared techno-commercially eligible, will be opened electronically by the Tender Inviting Authority from the web portal stated above on the prescribed date.
- **ii.** The encrypted copies will be decrypted and the rates will be read out to the bidders remain present at that time.
- **iii.** After opening of the financial proposal, the preliminary summary result containing inter- alia, name of bidders and the rates quoted by them will be uploaded.
- **iv.** The Tender Accepting Authority may ask any of the bidders to submit analysis to justify the rate quoted by that bidder.
- **v.** Revision/withdrawal of Financial Proposal by the bidder after opening of Technical Proposal of the tender will not be allowed if it is not sought by the Tender Inviting Authority
- vi. Acceptance of Tender: Lowest valid rate should normally be accepted. Evaluation of bid will include and will take into account Cost of total Scope of Work excluding Taxes. However, the Tender Accepting Authority does not bind himself to do so and reserves the right to reject any or all the tenders, for valid reasons.
- **8. Concession:** No price preference will be allowed to any bidder based on the size of the industry or its geographic location. Co-operative Society will not be considered with separate status.
- **9. Holiday Listing and Vendor Rating:** Holiday Listing & Vendor Rating will be applicable according to the "Holiday Listing & Vendor Rating" policies of the Revised Purchase Policy, which is posted in website of WBSEDCL (www.wbsedcl.in). Performance of the bidders, who supplied materials/equipment to WBSEDCL previously, will be evaluated for their Vendor Rating according to the said Vendor Rating policy and their Vender Rating will be taken into consideration at the time of evaluation of Technical and Financial Proposals of the tender.

10. Responsibility of Bidder:

- i. WBSEDCL will not assume any responsibility regarding information gathered, interpretations or conclusions made by the bidder or regarding information, interruption or deductions the bidder may derive from the data furnished by the WBSEDCL. Verbal agreement or conversation with any officer, employee of WBSEDCL either before or after the execution of the contracts, shall not affect or modify any of the terms or obligations contained in the contract.
- **ii.** It shall be the responsibility of the bidders to determine and to satisfy themselves by such means as they consider necessary or desirable as to all matters pertaining to this contract including in particular all factors that may affect the cost, duration and execution of the works. It must be understood and agreed that such factors have properly been investigated and considered while submitting the bid.
- **iii.** Claim, whatsoever, including those for financial adjustment to the contract awarded under these specifications and documents will not be entertained by the purchaser. Neither any change in time schedule of contract nor any financial adjustments arising thereof shall be permitted by the purchaser, which are based on the back of such clear information of its effect on the cost of the contract to the bidder.
- **iv.** The bidder is expected to examine carefully all instructions, conditions, forms, schedules terms, annexure, specification in the bidding document.
- **v.** Failure to comply with the requirements of bid submission will be at the bidder's own risk. Bids, which are determined to be not substantially responsive to the requirement of the bidding document, will be rejected.
- **vi.** Cost of Bidding: The bidder shall bear all cost associated with the preparation and submission of their bid and WBSEDCL in no case shall be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.
- vii. Clarification of Bidding document: Should there be any discrepancy or obscurity in the meaning of any clauses of the bid document or if there be any query of the intending bidder, the bidder shall set forth in writing such discrepancies, doubt, obscurity or queries and submit the same to WBSEDCL, marked to the Project Manager, JHP, WBSEDCL, Dist: Kalimpong before two days from the deadline of prebid meeting. The clarification given shall be final and binding on the part of bidder.

11. Bid Prices:

- **i.** The bidder shall quote their price in the prescribed format.
- **ii.** The quoted price should be firm. There will be no price variation during the pendency of the contract period or thereafter. Bidders are in no way allowed to get any escalation of price against this contract.
- **iii.** Prices indicated in the schedule of prices deemed to include all the levies/ duties/ taxes/ess & all other incidentals payable as per statute. GST shall be paid extra as per statute.
- iv. All corrections in the tender should be initialed by the tenderer before submission of the tender. All pages of the tender document must be signed with company's seal by the tenderer. Prior to the detailed evaluation of bids, WBSEDCL will determine whether the bid is substantially responsive to the requirement of the bidding document. For the purpose of this clause a substantially responsive bid is one which

conforms to all the terms, conditions and specification of the bidding document, without material deviation, or reservations. The purchaser's determination of bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence. If a bid is not substantially responsive to the requirements of the bidding document, it may be rejected by WBSEDCL and the same cannot subsequently be made responsive by the bidder by correction.

12. Process to be confidential.

- i. After the opening of bids, information relating to the examination, clarification, evaluation and comparison of bids, and recommendations concerning the award of contract shall not be disclosed to bidders or other persons not officially concerned with such process.
- ii. Any effort by a bidder to influence WBSEDCL or other connected in the process of examination, clarification, evaluation and comparison of bids, and in decisions concerning the award of contract, may result in the rejection of his/their bid.

13. Evaluation and comparison of Bids:

- On examination of documents submitted under different covers WBSEDCL will evaluate and compare the bids, determined to be substantially responsive at each step.
- ii. The owner shall evaluate and compare only the bids determined to be substantially responsive evaluated bid and as a result of this comparison, the lowest bid will be selected for award of contract.
- iii. Conditional rebate, if any, offered by any bidder shall not be considered in Bid evaluation.
- **14.** Laws governing contract: The contract shall be construed according to acts/laws in force in the country and shall be under the jurisdiction of Calcutta High Court.
- **15. Language and measures:** All documents pertain to the contract including specifications, schedule, notice, correspondences, operating and maintenance instructions, drawings or any other writings be written in English language. The metric system of measurement shall be used exclusively in this contract.
- **16. Corrupt or fraudulent practice:** WBSEDCL expects that bidders/contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the owner defines for the purpose of this provision, the terms set forth below as follows:
 - i. "Corrupt practice" means the offering giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
 - ii. "Fraudulent Practice" means misrepresentation of facts in order to influence a procurement process of the execution of a contract to the detriment of the owner, and includes collusive practice among bidders (Prior to or after bid submission) designed to establish bid prices at artificial no-competitive levels and to deprive the owner of the benefits of free and open competition.

- iii. Will reject a proposal for award if the owner determines that the bidder recommended for award has engaged in corrupt or fraudulent practice in competing for the contract in question.
- iv. Will declare a Firm ineligible either indefinitely or for a stated period of time if owner any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.
- **17. Insurance:** The successful bidder on awarding of contract shall arrange, secure and maintain all insurance as may be pertinent to the work and obligatory in terms of law to protect the interests of WBSEDCL against all perils. The form & the limit of such insurance together with underwriting in each case shall be acceptable to WBSEDCL. However, irrespective of such acceptance the responsibility to maintain adequate insurance coverage at all times during the period of contract shall be bidder's alone.
- **18. Penalty for suppression / distortion of facts.** If any Bidder fails to produce the original hard copies of the documents (especially Completion Certificates and audited balance sheets), or any other documents on demand of the Tender Committee within a specified time frame or if any deviation is detected in the hard copies from the submitted copies or if there is any suppression, the tender committee will take action as deem fit against such defaulting Bidder.

19. Award of contract:

- i. The Bidder whose Bid would be accepted will be notified by the authorized official through acceptance letter/Letter of award/ Purchase order.
- ii. The notification of award will constitute the formation of the Contract.
- iii. The Agreement as prescribed format will incorporate all agreements between the Tender Accepting Authority and the successful bidder. All the tender documents including N.I.T., B.O.Q., S.O.W will be the part of the contract documents.
- **20. Right to reject bids**: WBSEDCL reserve the right to accept or reject any bid to and the bidding process and reject all the bids at any time prior to award of contract without **thereby** incurring any liability to affected bidder or bidders or any obligation to inform the affected bidder or bidders the reason for WBSEDCL's action.

21. Taxes, duties and other levies:

- i. The contractor shall be solely responsible for the taxes that may be levied on the contractor's persons or on earnings of any office employee and shall hold the purchaser indemnified and harmless against any claims that may be made against the purchaser. The WBSEDCL does not take any responsibility what-so-ever regarding taxes under Indian Income Tax Act for the contractor or his personnel. If it is obligatory under the provisions of Indian Income Tax Act, deduction of Income Tax at source shall be made by WBSEDCL.
- ii. All other taxes/duties/levies/cess payable by the bidder except GST shall be included in the bid price and no claim on this behalf will be entertained by WBSEDCL. GST will be paid extra as per prevailing rules.
- **22. Additional Performance Security:** If the lowest bidder's bid is found to be within the range of -20% to -80% of the estimated value, the bidder shall have to furnish an

Additional Performance Security amounting to 10% of the tendered amount. The Additional Performance Security shall be submitted in the form of Bank Guarantee from any scheduled bank before issuance of Work Order. The Additional Performance Security shall have validity for entire defect liability period and with a claim period of another 3(three)

months. Tenderer shall not claim any interest on Additional Performance Security. Additional Performance Security may be extended or revised as per the request of purchaser.

GENERAL CONDITION OF CONTRACT

- 1. **Definition of Terms:** In writing these General conditions of Contract one specification and Bill of quantity/bidding schedule (schedule of work) the following words shall have normally the meanings here-in-after indicated unless there is something in the subject matter of content inconsistent with such construction.
 - a) **The Board/purchaser/Owner/Department** shall mean the WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD, having its Office at Vidyut Bhavan, Block-DJ, Sector-II, Kolkata 700091.
 - b) **The Engineer-in-Charge/Controlling Officer** shall mean the Engineer designated by the Company for the purpose of this contract.
 - c) **Company's representative** shall mean any person or persons of consulting firm appointed and remunerated by the Company to supervise, inspect, test and examine workmanship and materials of the work under this scope.
 - d) **The Contractor** shall mean the Bidder who will be awarded with the contract by the WBSEDCL and shall include the contractor's executor's administrators, successors and permitted assignees.
 - e) **The 'Sub-Contractor'** shall mean the person named in the Contract for any part of the works or any person to whom any part of the contract has been sublet by the contractor with the consent in writing of the Engineer and will include the legal representatives, successors and permitted assigns of such persons.
 - f) Equipment/materials shall mean and include all type of construction equipment & materials etc. required for true and satisfactory completion of the work under this contract.
 - g) **Workmanship** shall mean the method/manner in which the jobs of the different items, whether included in the schedule or not but are required for true & satisfactory completion of the work under this contract, are executed.
 - h) **General conditions** shall mean all the clauses of General conditions of the proposed contract stated hereinafter. The specification shall mean the specification annexed to or issued with the General Conditions and shall include the schedule and drawings attached thereto.
 - i) The terms **Services** shall mean all works to be undertaken by the contractor as laid down under the head "scope of contract" or elsewhere in the specification enclosed. When the words "approved", "subject to Approval". "As directed", "Accepted", "Permitted" etc. are used, the approval, judgment, direction etc. are understood to be a function of Company.
 - j) Month shall mean calendar month.
 - k) "Writing" shall include any manuscript, type written, printed or other statement reproduced in any visible form.
 - I) The work 'Site' shall mean the site of proposed work as detailed in the specification or any other place where the work is to be executed under the contract.
 - m) 'Date of Contract' shall mean the date on which notification of award of contract/ letter of award/telex award has been issued
 - n) **'Zero Date'** will be started from the date of issuance of order/date of handing over of site.
- 2. Scope of SUPPLY: As per enclosed Annexure-A
- 3. General and statutory obligations:

a. **Acceptance of order:** The successful bidder has to submit acceptance of the order within 10 days from the date of issue of the order.

b. Contract Agreement:

- The successful bidder shall be required to execute an Agreement on a non-judicial stamp paper of Rs. 100/- with the WBSEDCL with all related documents for satisfactory execution of the work.
- Contract agreement shall be signed on a date and time to be mutually agreed upon in the office of the Controlling Officer of the work and the same has to be signed by both the parties within 30 days from the date of acceptance of the order. Power of attorney of the authorized representative of the contractor who will sign the contract on behalf of the contractor is to be submitted before signing of the agreement.
- The agreement shall be signed in original and six photo copies in book form. The
 original agreement shall be retained by the WBSEDCL and a copy will be handed
 over to the Contractor.
- Any other work not mentioned in the Scope of work but is important for the job needs to be done as per the instruction of the Controlling Officer/Supervising Officer shall be paid extra as per mutually agreed rate.
- **Insurance:** The successful bidder on awarding of contract shall arrange, secure and maintain all insurance as may be pertinent to the work and obligatory in terms of law to protect the interests of WBSEDCL against all perils. The form & the limit of such insurance together with underwriting in each case shall be acceptable to WBSEDCL. However, irrespective of such acceptance the responsibility to maintain adequate insurance coverage at all times during the period of contract shall be bidders alone.

4. Completion of work:

- i. **Completion of work:** Within 60 days from the date of acceptance of Order.
- **ii. Delivery:** The material shall be delivered within the scheduled completion period to the address given as under Jhalong Store, Jaldhaka Hydel Project, WBSEDCL, P.O.: Jaldhaka Hydel Project, Dist. Kalimpong, PIN 734503 (WB)

5. Inspection & Testing:

- i. WBSEDCL may depute engineer at his own cost to inspect the materials before dispatch.
- **ii.** The contractor shall arrange and provide all necessary facilities along with necessary manpower for inspection, testing at his own cost. The testing equipment must have valid calibration certificate and the same will be produced on demand.
- **iii.** The contractor shall inform in 7 days advance regarding readiness of materials for inspection.
- **iv.** The rejected materials shall have to be replaced by the contractor and subject to reinspection.
- **v.** The contractor shall pay full cost of re-inspection.
- vi. WBSEDCL shall issue dispatch clearance after inspection and testing of materials.
- **6. Payment:** 100 % of the ordered value along with full taxes and duties subject to realization of **security deposit** shall be paid after successful completion of the work and

submission of Tax Invoice (triplicate) and challan to the controlling officer for processing of payment.

7. Security Deposit.

- **a.** As a contract security the contractor shall have to submit security deposit equivalent to 10% of contract value.
- b. The EMD submitted by agency with NIT will be converted to initial security deposit and the agency will deposit balance amount to constitute security deposit @ 3 % of security deposit.
- **c.** Security deposit will guarantee for successful and satisfactory performance of the materials/works supplied under the contract till the expiry of the **defect liability period**.
- d. Refund of Security Deposit: Refund of Security deposit shall be subject to WBSEDCL's right to deduct/appropriate its dues against the contractor or under this contract or any other contract. The performance Bond/Security deposit for all type of bids shall be released only after satisfactory expiry of the defect liability period and certified as such by the Controlling Officer of the work upon written request by the contractor.

8. Defect Liability Period:

- a. The term 'defect liability period' shall mean the period of 12 (Twelve) months from the Date of supply / delivery at site.
- b. If any defect is found within the defect liability period the contractor shall be liable to rectify/replace the materials at their own cost and responsibility within specified date or as deemed justified by the Controlling Officer.
- c. The defect liability period of rectified/replaced materials shall be automatically extended as per clause (a.)

9. Liquidated Damage:

- a. If the contractor fail to complete the work within the time specified in the Contract or any extension thereof, WBSEDCL shall recover from the contractor as liquidated damages a sum of half percent (0.5%) of the contract value of works for each calendar week of delay or part thereof of delay subjected to the **Force Majeure**.
- b. The total recovery against liquidated damage shall not exceed ten percent (10%) of the contract value of the work.
- c. An extension of time without imposition of liquidated damage may be granted for delay in execution of work provided there is no fault whatsoever on the part of the Contractor. Such extension may only be granted on the basis of application to be submitted by the contractor who has to establish that the extension of time required by him was not due to his fault.

10. Force Majeure:

a. The Contractor shall not be liable to pay any liquidated damage for delay/failure to perform the contract for reasons of force majeure such as acts of God, acts of the public enemy, acts of Governments, fire, flood, epidemics, quarantine restriction, strikes, freight embargos and provided that the contractor shall within 10 (ten) days from the beginning of such delay notify the WBSEDCL in

- writing of the cause of delay. The WBSEDCL shall verify the fact and grant such extension as found to be justified without imposing liquidated damage.
- **b.** The WBSEDCL shall not be responsible or liable to pay any compensation for any interruption in your work at the site due to strike, lockout, riot, earthquake, flood, cyclone or civil commotion or any other force of accident due to any reason beyond control. The Department shall not be held responsible to or liable to pay for any interruption in your work at the site arising out of resistance from the local public due to any resistance towards work.

11. WBSEDCL's Right to Terminate the Contract:

- a. If the contractor neglects or fails to proceed with the work proportionate to the schedule time of completion of the work or fails to complete the work within schedule time for completion or within the extended time approved by the WBSEDCL then WBSEDCL shall have right to terminate the order/ letter of intent after giving notice in writing to the contractor. If the contractor fails after 14 (fourteen) days' of such notice, to proceed with the work in the manner notified the WBSEDCL shall terminate the contract and call the contractor to take joint measurement along with the Engineer for the finished portion of work. If the contractor does not appear for a joint measurement, ex party measurement by the WBSEDCL will be taken as final.
- b. In that case the WBSEDCL shall take possession of the work site and may engage other agency to complete the work. Extra cost, if incurred to get the unfinished work done through other agency, will be realized from him, from his pending bills and security money. If the contract is terminated as above, the contractor shall have no claim for compensation against the WBSEDCL for any loss or deterioration of any materials that he may have collected or engaged or entered into on account of the work.
- 12. Controlling Officer-The Superintending Engineer (E), JHP, WBSEDCL
- **13. Supervising officer**: The Divisional Engineer (E) OPH, JHP or authorized representative of controlling officer.
- **14. Paying Officer-** The Manager (F&A), JHP, WBSEDCL.
- 15. Consignee: The Divisional Engineer (E) & IC, JHP Store, WBSEDCL.

PROFORMA OF DECLARATION BY THE BIDDERS

PROFORMA FOR UNDERTAKING TO BE SUBMITTED BY THE BIDDER

(For genuineness of the information furnished on-line and authenticity of the documents produced before Tender Committee for verification in support of his eligibility)

I,	, Partner/Legal
	ney/ Accredited representative of M/S
solem	nly declare that:
1.	We are submitting Tender for the Work
2.	None of the Partners of our firm is relative of employee of
3.	All information furnished by us in respect of fulfilment of eligibility criteria and qualification information of this Tender is complete, correct and true.
4.	All documents/credentials submitted along with this Tender are genuine, authentic, true and valid.
5.	If any information and document submitted is found to be false/incorrect at any time, department may cancel my Tender and action as deemed fit may be taken against us, including termination of the contract, forfeiture of all dues including Earnest Money and banning/delisting of our firm and all partners of the firm etc.
	Dated: Signature of the

Tenderer

FORMAT FOR LETTER OF BID

LETTER HEAD OF BIDDER (AS ENROLLED ONLINE ON e-tendering PORTAL OF NIC)

To
The Tender Committee
Sub: Letter of Bid for the work:
Ref: 1. NIT No:
dated:
2. Tender Id No:
Dear Sir,
We offer to execute the work as per our offered bill of quantity in accordance with the conditions of the NIT document as available in the website. The details of the EMD being submitted by us has been furnished on-line.
This Bid and your subsequent Letter of Acceptance/Work Order shall constitute a
binding contract between us.
We hereby confirm our acceptance of all the terms and conditions of the NIT
document unconditionally.
Dated: Signature of

the Tenderer

ANNEXURE-III

DECLARATION BY THE TENDERER

I / We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. I / We have carefully gone through the Notice Inviting e-Tender and other tender documents mentioned therein. I / We have also carefully gone through the 'Bill of Quantities'.

My/Our tender is offered taking due consideration of all factors regarding the local site conditions stated in this Detailed Notice Inviting Tender to complete the proposed construction in all respects.

I/We promise to abide by all the stipulations of the contract documents and carry out and complete the work to the satisfaction of the department.

I/We also agree to procure tools and plants, at my / our cost required for the work.

Signature of Tenderer

Postal address of the Tenderer

PROFORMA OF DECLARARTION OF BLACK LISTING / HOLIDAY LISTING

In the case of a Proprietary Concern:
I hereby declare that neither I in my personal name or in the name of my Proprietary
concern
M/s
which is submitting the bid nor any other concern in which I am proprietor nor any partnership firm in which I am involved as a managing partner have been placed on black list or holiday list declared by WBSEEDCL or any Central / State power utility services, except as indicated below:
• () (Here give particulars of blacklisting or holiday listing, and in absence thereof state "NIL")
In the case of a partnership firm:
We hereby declare that neither we, M/s
Who is Submitting the bid nor any partner involved in the management of the said firm either in his individual capacity or as proprietor or managing partner of any firm or concern have or has been placed on black list or holiday list declared by WBSEDCL or any Central / State power utility services, except as indicated below:
• () (Here give particulars of blacklisting or holiday listing, and in absence thereof state " NIL ")
In the case of a company:
We hereby declare that we,
Have not been placed on any holiday list or black list declared by WBSEDCL or any Central / State power utility services, except as indicated below:
• () (Here give particulars of blacklisting or holiday listing, and in absence thereof state "NIL") It is understood that if this declaration is found to be false in any particulars, WBSEDCL shall have the right to reject my/our bid and if the bid has resulted in
a contract, the contract is liable to be terminated.
Signature with date & seal of the bidder

INDEMNITY BOND

(To be executed on Non-Judicial Stamp Paper of Rs. 100/-)

BY THE PRESENT INDEMINITY BOND EXECUTED by me / us on thisDay
of(hereinafter called "OBLIGOR/OBLIGORS" which expression shall mean and includes my/our
Successors legal representatives, assigns) do hereby binds myself / ourselves and also our Company/ firm
Indian Company's act having registered office at Bidyut Bhavan, Block-DJ ,Sector-II, Salt Lake City, Kolkata-700091 (hereinafter called as OBLIGEE, which expression shall mean and include it's legal representative, administrators assigns.
WHEREAS OBLIGOR/OBLIGORS has /have been awarded to execute the job/works under letter noDatedissued by the OBLIGEE after having observing necessary formalities the details of which is described in the schedule given hereunder as per letter mentioned herein-above and whereas the said job/works will be/likely to be done in places covered under
Employees State Insurance Act (ESI) and /or the Workmen Compensation Act (W.C. Act) and

AND WHEREAS according to the condition of the contract the OBLIGOR/OBLIGORS is under obligation to execute this Indemnity Bond before the commencement of actual execution and OBLIGOR/OBLIGORS is/are aware that unless this Indemnity Bond is executed in accordance with the condition of contract before the actual execution in accordance with law the OBLIGEE shall have the power to deem that actual work has been started within the meaning of the

contract before the execution of this Indemnity Bond.

/or other laws relating to the Labour Management and Welfare.

$\underline{\sf NOW\ THIS\ INDENTURE\ WITNESS\ THAT\ I\ /\ We\ the\ OBLIGOR/OBLIGORS\ do\ hereby\ undertake.}$

- 1. THAT the OBLIGEE shall not be held responsible for any type of accident which may take place during the course of work undertaken by the OBLIGOR/OBLIGORS.
- 2. THAT the OBLIGOR/OBLIGORS will take adopt all safety norms in respect of each and every workmen labour personnel according to the rules or to the satisfaction of the OBLIGEE in all cases.
- 3. THAT the OBLIGOR/OBLIGORS undertakes to engage only those labour worker or any

other personnel whether skilled or unskilled or any other person whether in technical management or non-managerial or any other capacity in the area covered under Employees State

Insurance Act, 1948 who has/have insurance coverage within the meaning of Employees State Insurance Act and further undertakes NOT to engage any person in the area covered under the Employees State Insurance Act, who does / do not has/have insurance coverage within the meaning of Employees State Insurance Act.

4. THAT the OBLIGOR/OBLIGORS further undertakes to engage only those labour worker, or any other personnel, whether skilled or unskilled, whether in technical, managerial or non-managerial or any other capacity in the area NOT covered under Employees" State Insurance

Act who has life insurance for the sum assured equivalent to the amount of Compensation under the Employees" Compensation Act in case of accidental death or inquiry and such insurance has been effected by the OBLIGOR/OBLIGORS.

- 5. THAT the OBLIGOR/OBLIGORS undertakes / undertake to indemnify and keep harmless the OBLIGEE from all claims action proceedings and of risk damage danger to any person whether belonging to/or not belonging to OBLIGOR/OBLIGORS.
- 6. THAT the OBLIGOR/OBLIGORS shall keep harmless the OBLIGEE from all claims compensation damages any proceedings in respect of any of its employee/workmen under the Workmen Compensation Act. Act or any other laws for the time being in force.
- 7. THAT if during the course of execution of work as stated in the letter mentioned hereinabove issued by the OBLIGEE, it is found that the OBLIGOR/OBLIGORS has/have not complied with guidelines/formalities within the meaning of Employees" State Insurance Act or Workmen Compensation Act or any other laws relating to the Labour Welfare for the time being in force, and also has not observed the safety norms in accordance with the law to the satisfaction of the OBLIGEE, the OBLIGEE shall have the right to stop the execution of work/job and the period of such stoppage shall continue till adequate safety and other compliance mentioned hereinabove under the labour welfare legislation have been observed and such period of stoppage shall not be taken into account for the

Calculation of the total period of completion of work for which the OBLIGOR/OBLIGORS is responsible to complete the work/job and it will be deemed that discontinuance was due to default of OBLIGOR/OBLIGATOR.

8. THAT , if at any time due to exigency, the OBLIGEE i.e. the West Bengal State Electricity Distribution Company Limited as the Principal Employer, becomes liable to pay any such compensation mentioned hereinabove, whether on failure of the OBLIGOR/OBLIGORS or for any other reason , the OBLIGEE shall have the right to recover the said amount from any amount receivable by OBLIGOR/OBLIGORS or any bank guarantee deposited or anything payable whether in connection with this contract or other contract by the OBLIGEE to the OBLIGOR/OBLIGORS.

9. THAT the OBLIGOR/OBLIGORS is/are aware and accept that for the persistent or repeated violation of any condition mentioned in this Indemnity Bond, the OBLIGEE shall have right to terminate the contract of work issued by the OBLIGEE to OBLIGOR/OBLIGORS.

SIGN	NED AND DELIVERED	
BY THE OBLIGOR/OBLIGORS		
	Signature	
<u>WITNESS</u>		
1	Name, Designation	
	Signature	
2.	Name, Designation	
	Signature	

Contract Agreement

(To be executed on Non-Judicial Stamp Paper of Rs. 100/-)

Articles of agreement made on this
AND
hereinafter referred to as the 'CONTRACTOR' (Which expression shall unless excluded by or repugnant to the context be deemed to include his heirs, executors, administrators, representatives and assigns) of the OTHER PART.
WHEREAS the Company invited tenders vide Tender Notice No
(annexed hereto) for "
AND WHEREAS in pursuance of such invitation for tenders, the contractor submitted a tender vide no dated , technical bid of which was
Opened on
AND WHEREAS AFTER consideration of the tender submitted by the contractor with clarification(s), the Company accepted the said tender submitted by the contractor and placed Letter of Award no
NOW, THEREFORE, the Company and the contractor agree as follows:
1. The Contractor agrees to undertake the work of –"

" as per Letter of Award no	dt
referred to above.	dt.
2. The Company agrees to pay the Contractor as per l	
 Both the Contractor and the Company agree that court in regard to any dispute arising out of this deemed to have been executed within the jurisdic Court, Kolkata. 	agreement, this agreement shall be
IN WITNESS WHEREOF the parties have hereunder affixed month and year written as above. SIGNED, SEALED AND DELIVERED	d their signature on the day, the
Contractor	Company
1)	1)
Witness	Witness
2)	2)
Witness	Witness

PROFORMA OF BANK GUARANTEE FOR CONTRACT PERFORMANCE (To be stamped in accordance with Stamp Act)

Ref	Bank Guarantee No
	Date
То	
The Project Manager,	
JHP:WBSEDCL	
Dear Sirs, In consideration of West Bengal State Electric	ity Distribution Company Ltd. (herein after
referred to as the "Owner" which expression meaning thereof include its successors, admi M/swith registered/Head of	nistrators and assigns) having awarded to
"Contractor" which expression shall unless repinclude its successors, administrators, executors	ougnant to the context or meaning thereof s and assigns), a Contract issued by Owner's
Letter of Award Nodated	· · · · · · · · · · · · · · · · · · ·
Nodated Contractor having a	
Guarantee for the faithful performance of the en	-
(10%) (Ten percent) of the said value of the Cor	stract to the Owner.
We	
(Name & Address) having its Head Office at "Bank", which expression shall, unless repugnar	
its successors, administrators, executors and as	
pay the Owner, on demand any or all monies	
Rsas aforesaid at any time up	• •
demur, reservation, contest, recourse or pro	test and/or without any reference to this
Contractor.	
Any such demand made by the Owner on	-
notwithstanding any difference between the	·
pending before any Court, Tribunal, Arbitrator o	
not to revoke this guarantee during its currency	•
further agrees that the guarantee herein contains owner discharges this guarantee.	med Shair continue to be emorceable till the
owner discharges this guarantee.	

The Owner shall have the fullest liberty without affecting in any way the liability of the Bank under the guarantee from time to time to extend the time for performance or the Contract by the Contractor. The Owner shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner and either to enforce or to for bear to enforce any covenants, contained or implied in the Contract between the Owner and the Contractor or any other course or remedy or security available to the Owner. The Bank shall not be relieved of its obligations under these presents by any exercise by the Owner of its liberty with reference to the matters aforesaid or any of them or by reason of any other act of omission or commission on the part of the Owner or

any other indulgences shown by the Owner or by any other matter or thing whatsoever which under law would, but for this provision have the effect of relieving the Bank. The bank also agrees that the Owner at its option shall be entitled to enforce this guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and not withstanding any security or other guarantee the Owner may have in relation to the Contractor's liabilities. Notwithstanding anything contained herein above our liability under this guarantee is restricted to Rs.....and it shall remain in force up to and including*(day/month/year) and shall be extended from time to time for such period as may be desired M/s.....on whose behalf this guarantee has been given. Unless a demand or claim is lodged on us within and including**(day/month/year) we shall be discharged from all liabilities thereafter. Dated this......atat......at...... **WITNESS** (Signature) (Signature) (Name) (Name) (Official Address) (Official Address) Attorney as per Power Of Attorney No..... Date..... 12 months ** 15 months. Notes: The stamp paper of appropriate value shall be purchased in the name of issuing 1. bank. 2. The sum shall be 3% (three percent) of the Contract Price. The performance Bank Guarantee/ Security Deposit Bank Guarantee shall be valid initially for 12 months from the date of successful completion of work. A period of 3 (three) months should be added as claimed period from the last date of validity of the Bank Guarantee.

-----END OF NIT------

ANNEXURE - A

	120 W a	tt LED Flood Light (Complete Set)
Sl. No.	Description of specifications	Range/Value
1	Housing	Die Cast Aluminum alloy Housing having high conductivity heat sinks, Powder coating in attractive colour with Toughened front Glass in the front fixed to the die cast Aluminum retaining ring which would be fixed to the housing with Silicon Rubber gasket by means of steel screws to render it dust, water and vermin proof.
2	LED make	Any reputed brand approved by ISI
3	No. of LEDs	32 Nos. of 5 Watt LEDs
4	Lumens Output	156 Lm/Watt at 85°C
5	Life Span	> 60000 Hrs.
6	Luminary Efficacy	> 90 °C
7	Colour Temperature	3000К
8	CRI	70
9	Optics	High Quality optics to enhance the performance of the luminaries and to match the required Photometry
10	Driver	Constant Current type. Designed as per luminary requirement.
11	Voltage variations	110 V - 270 V
12	Power Factor	> 0.95
13	Efficiency of drivers	> 85 %
14	THD	< 10 %
15	Classification	IP66 to IP68
16	Standards	Drivers used with the luminaries are BIS approved. LEDs used are LM80 approved. Luminaries meet the requirements as laid down in the latest IS codes. Photometric data can be provided where required
17	Protection	10KV Surge Protection, Short circuit, over current, over voltage, over temperature

	75 Watt to 80 Watt LED Street Light (Complete Set)				
SI. No.	Description of specifications	Range/Value			
1	Housing	Single piece Die Cast Aluminum alloy Housing having high conductivity heat sinks, Powder coating in attractive colour with Toughened front Glass in the front fixed to the die cast Aluminum frame which would be fixed to the housing with Neoprene Rubber gasket by means of steel screws to render it dust, water and vermin proof.			
2	LED make	Any reputed brand approved by ISI			
3	No. of LEDs	32 Nos. of 5 Watt LEDs			
4	Lumens Output	156 Lm/Watt at 85°C			
5	Life Span	> 60000 Hrs.			
6	Luminary Efficacy	> 90 °C			
7	Colour Temperature	5700 K			
8	CRI	70			
9	Optics	High Quality optics to enhance the performance of the luminaries and to match the required Photometry			
10	Driver	Constant Current type. Designed as per luminary requirement.			
11	Voltage variations	110 V - 270 V			
12	Power Factor	> 0.95			
13	Efficiency of drivers	> 85 %			
14	THD	< 10 %			
15	Classification	IP66 to IP68			
16	Standards	The Luminaires should meet the latest IS Codes. Photometric data should be provided where required.			

	120 Watt LED Highbay Light (Complete Set)				
Sl. No.	Description of specifications	Range/Value			
1	Housing	Die Cast Aluminum alloy Housing having high conductivity heat sinks, Powder coating in attractive colour with Toughened front Glass in the front fixed to the die cast Aluminum retaining ring which would be fixed to the housing with Silicon Rubber gasket by means of steel screws to render it dust, water and vermin proof.			
2	LED make	Any reputed brand approved by ISI			
3	No. of LEDs	16-24 Nos. of 10 Watt LEDs			
4	Lumens Output	160 Lm/Watt at 85°C			
5	Life Span	> 60000 Hrs.			
6	Luminary Efficacy	> 90 °C			
7	Colour Temperature	3000К			
8	CRI	70			
9	Optics	High Quality optics to enhance the performance of the luminaries and to match the required Photometry			
10	Driver	Constant Current type. Designed as per luminary requirement.			
11	Voltage variations	110 V - 270 V			
12	Power Factor	> 0.95			
13	Efficiency of drivers	> 85 %			
14	THD	< 10 %			
15	Classification	IP66 to IP68			
16	Standards	Drivers used with the luminaries are BIS approved. LEDs used are LM80 approved. Luminaries meet the requirements as laid down in the latest IS codes. Photometric data can be provided where required			
17	Protection	10KV Surge Protection, Short circuit, over current, over voltage, over temperature			

120 Watt LED Flood Light (Complete Set)				
SI. No.	Description of specifications	Range/Value		
1	Housing	Die Cast Aluminum alloy Housing having high conductivity heat sinks, Powder coating in attractive colour with Toughened front Glass in the front fixed to the die cast Aluminum retaining ring which would be fixed to the housing with Silicon Rubber gasket by means of steel screws to render it dust, water and vermin proof.		
2	LED make	Any reputed brand approved by ISI		
3	No. of LEDs	96 Nos. of 5 Watt LEDs		
4	Lumens Output	156 Lm/Watt at 85°C		
5	Life Span	> 60000 Hrs.		
6	Luminary Efficacy	> 90 °C		
7	Colour Temperature	3000К		
8	CRI	70		
9	Optics	High Quality optics to enhance the performance of the luminaries and to match the required Photometry		
10	Driver	Constant Current type. Designed as per luminary requirement.		
11	Voltage variations	110 V - 270 V		
12	Power Factor	> 0.95		
13	Efficiency of drivers	> 85 %		
14	THD	< 10 %		
15	Classification	IP66 to IP68		
16	Standards	Drivers used with the luminaries are BIS approved. LEDs used are LM80 approved. Luminaries meet the requirements as laid down in the latest IS codes. Photometric data can be provided where required		
17	Protection	10KV Surge Protection, Short circuit, over current, over voltage, over temperature		