भारत सरकार/Government of India पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202 फोन सं./Phone No. : 0832-2953115 ई-मेल /E-mail: dte-goa@gov.in वेबसाइट /Website: www.dgll.gov.in



# निविदा दस्तावेज़/BID DOCUMENT

Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

## भारत सरकार/Government of India

पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

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#### भारत सरकार/Government of India पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

#### खण्ड/SECTION-1

## ई-निविदा आमंत्रण सूचना/NOTICE INVITING e- TENDER

सं / No. EM-Goa-01001(13)/1/2022-Electrical Maintenance दिनाँक/Dated: 05/09/2022

For & on behalf of President of India, the Director, Directorate of Lighthouses & Lightships, Goa, invites on-line Bids, under two cover system (Technical bid, Commercial bid) from the Original Equipment Manufacturers (OEMs) or their authorized agents or appropriate class contractors registered with CPWD, State PWD, Railways, MES, BSNL etc., or with any other State/Central Government/Public Sector undertaking/Autonomous bodies having experience in the following work:

#### Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

1.	अनुमानित लागत Estimated Cost of the work	₹ 20,61,811/- (Including all taxes)
2.	बयाना राशि Earnest Monet Deposit	₹ 41,236/- in the form of Demand draft/Fixed Deposit receipt (FDR) of any Nationalized Bank in favour of "The Director of Lighthouses and Lightships, Goa" payable at Goa.
3.	निविदा राशि / Tender Fee ( non-refundable)	₹ 500/-in the form of Demand draft of any Nationalized Bank in favour of "The Director of Lighthouses and Lightships, Goa" payable at Goa.
4.	निविदा कागज़ात डाउनलोड करने की अवधि / Download period of bid- document	06/09/2022(1600Hrs) to 21/09/2022(1600Hrs)
5.	निविदा पूर्व बैठक Pre-bid meeting	13/09/2022(1500Hrs)
6.	निविदा प्रस्तुत करने की अवधि Bid submission period	06/09/2022(1600Hrs) to 21/09/2022(1600Hrs)
7.	तकनीकी निविदा खोलने की तिथि Date of opening of Technical Bids	22/09/2022(1600Hrs)
8.	बयाना राशि जमा और निविदा मूल्य Submission of EMD & Tender Fee	06/09/2022(1600Hrs) to 21/09/2022(1600Hrs)
9.	कार्य पूर्ण करने का समय Period of completion of work	90 days from the date of award of contract

नोट/Note :

- 2. Tender Fee in the form of Demand Draft drawn in favour of The Director of Lighthouses and Lightships, Goa" payable at Goa.
- Earnest Money Deposit shall be furnished in the form of Demand Draft or FDR from any Nationalized Bank, in favour of "The Director of Lighthouses and Lightships, Goa" payable at Goa on or before 21/09/2022, 1600hrs. EMD in any other form shall not be accepted. Validity of the EMD shall be 90 days from the date of publishing of tender.
- 4. The details of work are available in the tender document which can be downloaded from Central Public Procurement (CPP) Portal https://eprocure.gov.in/eprocure/app.
- 5. The bid is to be submitted on https://eprocure.gov.in/eprocure/app up to last date and time of submission of tender in on-line only.
- 6. Sale of physical tender document is not applicable.

देशक/Director

भारत के राष्ट्रपति के लिए और उनकी ओर से For and on behalf of the President of India

# भारत सरकार/Government of India पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

#### खण्ड/SECTION -2

## विस्तृत बोली सूचना और बोलीदाताओं के लिए निर्देश DETAILED BID NOTICE AND INSTRUCTIONS TO BIDDERS

2.1 For and on behalf of the President of India, the Director, Directorate of Lighthouses & Lightships (DLL) invite on – line bids, from the reputed and experienced contractors/ parties & Govt. under taking, for ": Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.". Tender form can be downloaded from the web site <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.

#### नोट/Note:

This section of the bidding documents provides the information necessary for bidders to prepare online responsive bids, in accordance with the requirements of the DLL. It also provides information regarding on - line bid submission, opening, evaluation and award of the contract. It is necessary for the bidders to go through the instructions contained in this section before submission of bid.

# 2.2 ऑनलाइन बोली हेतु निर्देश/Instructions for on-line Bid Submission

The bidders are required to submit soft copies of their bids electronically on the Central Public Procurement (CPP) Portal, using valid Digital Signature Certificates. The instructions given below are meant to help the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

#### 2.2.1 पंजीकरण/Registration

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal by using the "Online bidder enrolment" option available on the home page. Enrolment on the CPP Portal is free of charge.
- (ii) During enrolment / registration, the bidders should provide the correct/true information including valid email-ID & mobile no. All the correspondence shall be made directly with the contractors/bidders through email-ID provided.
- (iii) As part of the enrolment process, the bidders shall be required to choose a unique user name and assign a password for their accounts.
- (iv) For e-tendering, possession of valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) is mandatory which can be obtained from SIFY/TCS/n-Code/e-Mudra or any Certifying Authority recognized by CCA India on e-Token/ Smartcard.
- (v) Upon enrolment on CPP Portal for e-tendering, the bidders shall register their valid Digital Signature Certificate with their profile.

- (vi) Only one valid DSC shall be registered by a bidder. Bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse and should ensure safety of the same.
- (vii) Bidders can then log onto the site through the secured login by entering their user ID / password and the password of the DSC / e-Token.

#### 2.2.2 बोली की तैयारी/Preparation of Bids

- (i) For preparation of bid, Bidders shall search the tender from published tender list available on DGLL"s website or CPP portal, download the complete tender document, take into account corrigendum, if any published, before submitting their bids. After selecting the tender document same shall be moved to the 'My favorite' folder of bidders account from where bidder can view all the details of the tender document.
- (ii) Bidder shall go through the tender document carefully to understand the documents required to be submitted as part of the bid. Bidder shall note the number of covers in which the bid documents have to be submitted, the number of documents - including the name and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- (iii) Any clarifications, if required, may be obtained on-line through the tender site, or through the contact details given in the tender document.
- (iv) Bidder shall get ready in advance with the bid document to be submitted as indicated in the tender document/schedule in PDF/xls/rar/zip/dwf/jpg formats. If there is more than one document, they can be clubbed together using zip format.
- (v) Bidder can update well in advance, the documents such as experience certificates, annual report, PAN, TIN, EPF registration, service tax registration and other details etc., under "My Space" option, which can be submitted as per tender requirements. This will facilitate the bid submission process faster by reducing upload time of bids.

#### 2.2.3 बोली प्रस्तुतीकरण/ Submission of Bids

- (i) Bidder shall log into the site well in advance for bid submission so that he/ she upload the bid in time i.e. on or before the bid submission time.
- (ii) Bidder shall prepare the Tender Fee and EMD as per the instructions specified in the NIT/ tender document. The originals of Tender Fee and EMD shall be submitted to the DLL, on or before the last date & time of bid submission. Bidder shall send the EMD & Tender fee through India post/Courier Service/in person. DLL shall not be responsible for any delay or loss, due to postal/Courier Services. The details of the Demand Draft/FDR, sent physically, shall tally with the details available in the scanned copy and the data entered during bid submission time, otherwise the uploaded bid is liable to be rejected.
- (iii) While submitting the bids on-line, the bidder shall read the terms & conditions (of CPP portal) and accept the same in order to proceed further to submit his bid.

- (iv) Bidder shall select the payment option as off-line to pay the Tender Fee/ EMD and enter details of the Demand Draft/FDR.
- (v) Bidder shall digitally sign and upload the required bid document step by step as indicated in the tender document.
- (vi) Bidder shall note that the very act of using DSC (Digital Signature Certificate) for downloading the tender document and uploading their offer is deemed to be a confirmation that they have read all sections and pages of the tender document without any exception and have understood the complete tender document and are clear about the requirements of the tender document.
- (vii) Bidder shall note that each document to be uploaded for the tender should be less than 2MB. If any document is more than 2MB, it can be reduced through zip/rar and the same can be uploaded. For the file size of less than 1MB, the transaction uploading time will be very fast.
- (viii) Utmost care shall be taken for uploading Schedule of rates and any change/ modification of the price schedule shall render it unfit for bidding. Bidders shall download the Schedule of Rates i.e. Section-8, in XLS format and save it without changing the name of the file. Bidder shall quote his rates in figures in white background cells, thereafter save and upload the file in financial bid (Price bid) only. If the Schedule of Rate file is found to be modified by the bidder, the bid will be rejected.
- (ix) Bidder shall submit his bid through on-line e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids on-line by the bidders at the eleventh hour.
- (x) After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the bidder shall take print out of system generated acknowledgement number, and keep it as a record of evidence for on-line submission of bid, which will also act as an entry pass to participate in the bid opening.
- (xi) Bidder shall follow the server time being displayed on bidder's dashboard at the top of the tender site, which shall be considered valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system.
- (xii) All the documents being submitted by the bidder would be encrypted using PKI (Public Key Infrastructure) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- (xiii) The bidder shall ensure that the bid document submitted shall be free from virus and if the documents could not be opened due to virus during tender opening, the bid is liable to be rejected.

- (xiv) Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- (x) The bidder shall logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
- (xi) Any query relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender.
- (xii) Any query relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. **The contact number for the helpdesk is 1800 3070 2232.**

#### 2.3 प्रस्ताव जमा करना/Submission of Offer

The tender shall be submitted online in two cover system duly scanned and digitally signed by the authorized representative of the bidder as follows:

#### A) तकनीकी बोली/Technical Bid

On-line bids shall be submitted containing copies of the following for documentary proof, fulfilling qualifying criteria failing which the offer shall be summarily rejected.

- Scanned Copy of Earnest Money Deposit (in the form of Demand Draft/FDR) from any Nationalized Bank/RBI approved Bank.
- Scanned Copy of Tender fee (Non-refundable) in the form of Demand Draft drawn in favour of The Director, Directorate of Lighthouses and Lightships, Goa", Payable at Goa.
- (iii) Scanned copies of proof for eligibility as section 3
- (iv) Scanned copy of duly filled and signed forms 9.3 to 9.7.

If technical bid, does not contain any of the above mentioned documents or contains incomplete or unsuitable technical details, then the offer shall be deemed liable to rejection/ disqualification. The respective i.e. Price Bid, of the technically disqualified offers shall not be opened. The bidders are cautioned that divulging of any price information in Technical Bid will result in rejection of their tender.

#### B) बोली मूल्य/Price Bid

The price bid shall be uploaded in the excel format as per the Section-8.

- i) It may be noted that this part shall not contain any terms & conditions. Any condition given in the price bid will be a sufficient cause for rejection of bid.
- ii) The quoted rates shall be written in figures in the enclosed Proforma (BOQ / Schedule

of Rates) which shall be duly digitally signed by the bidders or his authorized person.

#### 2.4 बोली प्रस्तुतीकरण और खोला जाना/Submission and Opening of Bid

- 2.4.1 The bid shall be submitted on-line at website http://eprocure.gov.in/eprocure/app only, on or before the due date. The Server Date & Time as appearing on the website http://eprocure.gov.in/eprocure/app shall only be considered for the cut- off date and time for submission of bids. Offers sent through post, telegram, fax, telex, e-mail, courier or by any other mode will not be considered. In case of date of opening is declared, as Central Government closed holiday, tender will be opened on next working day at the same time.
- 2.4.2 Only those bidders shall be considered qualified by the DLL, who submit requisite Tender fee, EMD and necessary documents, accept all the terms & conditions of the Tender document unconditionally and meet the qualifying requirement stipulated in the Tender document. The decision of the DLL shall be final and binding in this regard.
- 2.4.3 The bidder shall bear all cost associated with the preparation and submission of its bid. The DLL will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the tendering process.

For and on behalf of the President of India

भारत सरकार/Government of India पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

#### खण्ड/SECTION –3

#### बोली पात्रता मापदंड/ELIGIBILITY CRITERIA FOR BIDDING

#### 3.1 पात्रता मापदंड/Eligibility Criteria

- 3.1.1 It is an essential requirement that the bidder has taken up, executed and satisfactorily completed at least one similar work amounting to not less than ₹ 16,49,449/- or two similar works each amounting to not less than ₹ 10,30,906/- or three similar works each amounting to not less than ₹ 8,24,724/- during last seven years ending last day of previous month in any Central Government / State Government / Public sector Undertaking Organization / Private firm. Similar work means Electrification works, ESE lightning arrester, Electrical UG Cable works.
- 3.1.2 The bidder should have experience in providing services in similar work for a minimum of 3 years.
- 3.1.3 The bidder is required to furnish detailed information with regard to their financial capacity, technical capability and experience. Following details with supporting documents shall be furnished along with the Technical Bid-
  - (a) Self-attested copy Copy of Tender Fee and EMD.
  - (b) Self-attested Copy of PAN and GST.
  - (c) Self-attested Copies of original documents defining the legal status, place of registration, principal place of business, written power of attorney of the signatory of the bidder to commit the bid,
  - (d) Self-attested copy of valid Electrical Contractor License for undertaking all Electrical Works
  - (e) Proof of execution and satisfactory completion of similar works along with copies of work order(s) and work completion certificate(s) during last seven years.
  - (e) Report on the financial standing of the Bidder i.e. annual turn-over of the Company, profit and loss statement and auditor's report for the past three years ending last day of previous month.
  - (f) Information regarding projects in hand and their progress.
  - (g) Information regarding any litigation, current or during last 3 years, orders regarding exclusion, expulsion or black-listing if any, in which bidder is involved, the parties concerned and disputed amount,
  - (h) List of Technical & Administrative staff, along with their personal details like EPF no. etc, and proposed to be engaged for site management; technical personnel for execution and supervision of the project with their qualification and experience.
  - (i) Self-attested Copies of Income Tax Returns for the last three Assessment years 19-20, 2020-21, 2021-22.
  - (j) Bank solvency certificate issued by a Schedule Bank only.
  - (k) List of similar class of works completed during the last seven years.
  - (I) List of works in Hand/ under Execution at present.
  - (m) List of make and model of proposed products which will to be used such as: LED Light and street Light fittings, Cables , Switches & Sockets, MCBs/RCCBs, Fan etc.
  - (n) Duly filled and signed tender acceptance letter (form 9.4), pro forma for undertaking (form 9.5), pro forma for non blacklist affidavit (form 9.6) and bid security declaration (form 9.7), technical bid checkup list (form 9.8).

Note : A check- up list of above documents for technical bid is attached in excel file which must be filled with due care, documents details mentioned in this technical bid checkup list (form 9.8) only be considered for technical evaluation hence only relevant documents to be uploaded.

The bid shall be rejected if the documents are found false or fake. If at a later stage, the documents submitted are found false or fake, the Contract shall be terminated and performance bank guarantee forfeited. Also, the Contractor shall be fined as deemed appropriate by the employer for breach of trust.

3.1.4 It will be an essential requirement that the prospective bidder shall be fully equipped & capable to carry out the maintenance, repair & stocking of spare parts required for maintenance support.

#### 3.2 बोली मूल्य/Cost of Bidding

The bidder shall bear all costs associated with the preparation and delivery of the bid. The employer shall in no case be responsible or liable for these costs.

#### 3.3 आश्वासन/Assurance

The bidder shall be required to give satisfactory assurance of his ability and intention to deliver the goods and services, pursuant to the Contract, within the time set forth therein.

#### **3.4** बोली दस्तावेज़/Bid Document

- 3.4.1 The bid document contains the following -
  - Section 1 Short Bid Notice Inviting e-tender.
  - Section 2 Detailed Bid Notice and Instructions to Bidders
  - Section 3 Eligibility Criteria for Bidders
  - Section 4 General Conditions of Contract
  - Section 5 Special Conditions of Contract
  - Section 6 Scope of work and System Specifications
  - Section 7 Evaluation criteria for the Technical Bid
  - Section 8 Bill of quantity
  - Section 9 Miscellaneous Pro forma
- 3.4.2 The bidders are expected to examine the bid document including all instructions, forms, terms & conditions and specifications. Failure to furnish any information required in bid document or submission of bid not substantially responsive to the bid document in every respect shall result in rejection of the Bid.

#### 3.5 बोली दस्तावेज़ स्पष्टीकरण/Clarification on bid document

- 3.5.1 The prospective bidder requires any clarification about tender document may obtain the same on-line/ off-line from Tender Inviting Authority i.e. The Director, Directorate of Lighthouses & Lightships, Deep Bhavan, Goa, in person or otherwise in writing so as to reach the said office on or before **1200hrs on 13.09.2022**
- 3.5.2 The pre-bid meeting schedule on 13/09/2022 at 1500hrs, hosted by Directorate of Lighthouses & Lightships, Deep Bhavan, , Near GMC Stadium, Bambolim, Goa 403202 to clarify the issues & to answer questions on any matter that may be received at that stage as stated in clause 3.5.1 above. Bidders are advised to attend

the pre-bid meeting; however, non-attendance of the pre-bid meeting shall not be a cause for disqualification of the Bidder. Any substantive clarification or modification arising out of the pre-bid meeting would be finalized only by addendum to bid document. The outcome of the meeting including the text of questions received (without identifying the source of inquiry) and the responses given shall be uploaded on CPP portal. No further queries shall be entertained after settling clarifications/issues received during the above pre- bid meeting.

#### **3.6** बोली दस्तावेज़ संशोधन/Amendment of bid document

- 3.6.1 At any time prior to the deadline for submission of Bids, the Employer may for any reason, at his own initiative, modify the bid documents by amendment and same shall be uploaded on CPP portal.
- 3.6.2 The amendment shall be part of the bid document.

#### 3.7 बोली की भाषा/Language of the bid

All documents related to bid shall preferably be in English language. The language for communications shall be English. Any printed literature furnished by the bidder may be written in another language provided that this literature is accompanied by an English Translation. In such case, for purpose of interpretation of the Bid, the English translation shall prevail.

#### 3.8 बोली की तैयारी/Preparation of Bid

3.8.1 The bid prepared by the bidder shall be having two Parts viz. Technical bid and price bid.

3.8.2 The technical bid shall comprise all the documents mentioned in para 3.1 with technical bid check up list.

#### 3.9 बोली मूल्य/Bid Price

- 3.9.1 The bidder shall upload the appropriate price for schedule of works as in BOQ.
- 3.9.2 Price quoted by the bidder shall remain firm and valid until completion of Contract.

#### 3.10 बोली मुद्रा/Bid Currencies

The Contract provides for payment of the Contract Price in Indian Rupee only.

# 3.11 Documents establishing conformity of the Bidder's proposal to the bid document.

- 3.11.1 The documentary evidence of conformity of the goods and services to the bid document may be in the form of literature, drawings, data and shall include detailed description on the proposal's essential technical and performance characteristics. Apart from above it shall also include the following
  - (i) How the offered solutions shall satisfy functional requirements stated IEC or CPRI Test standards.
  - (ii) Documents such as user/operation manual, technical manuals.
  - (iii) Any additional features and functions.
- 3.11.2 A detailed schedule of execution of the work under the Contract (Work Schedule), outlining key activities and critical item on the schedule which could influence the

Contract completion date. A time schedule in man-days for the execution of works from the commencement of works to the handing over of the system shall be incorporated.

3.11.3 A detailed schedule of works on power supply, environmental controls needed, or any other resources/service/activities if that are to be provided by the Employer indicating clearly their time schedule and criticality must be spelt out.

#### 3.12 बोली का भरा जाना/Filling up of Bid

- 3.12.1 All the rates and amount shall be quoted in whole denomination of the Indian Rupee.
- 3.12.2 The rate of each item shall be quoted in figures. The amount in figures shall be written in such a way that interpolation is not possible.
- 3.12.3 No amount shall be paid to the Contractor for the item for which no rate or amount is quoted by the Bidder, but the contractor shall be bound to do that job/work free of cost (on zero amount). Moreover, for comparison purpose, highest rate quoted by other bidders shall be loaded for the subject component/item.
- 3.12.4 The bidder shall be deemed to have satisfied himself before Bidding as to the correctness and sufficiency of his bid for the works and of the rates & amount quoted in the schedules of works, which rates & amounts, shall, except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion of the work as aforesaid in accordance with good practices and recognized principles.
- 3.12.5 In case of any bid where unit rate of any item appears unrealistic, such bid shall be considered unbalanced and non-responsive. The employer may ask for providing satisfactory explanation for such unrealistic quoted rate. If bidder is unable to provide satisfactory reply with supporting analysis of rates, the bid shall be rejected.
- 3.12.6 Each bidder shall submit only one bid for this work. A bidder who submits more than one bid for this work will attract disqualification and rejection of all of his bids and EMD shall be forfeited.
- 3.12.7 The bidder shall not be under a declaration of ineligibility for corrupt & fraudulent practices in any Govt. Department or organization in India or abroad.

#### 3.13 बोली स्पष्टीकरण/Clarification on Bids

To assist in the examination and evaluation of bids, DLL may, at his discretion, ask the bidder for any clarification on his bid. All responses to such requests for clarification shall be in writing. No change in the prices or substance of the bid shall be sought, offered or permitted.

#### 3.14 प्रारंभिक परीक्षा/Preliminary Examination

The employer will examine the bids to determine whether they are complete, any computational errors have been made, required details have been furnished, the documents have been properly signed or the Bids are generally in order.

# 3.15 कार्य सौंपा जाना और अनुबंध पर हस्ताक्षर/Award of work and signing the agreement

- 3.15.1 The employer shall award the Contract to the bidder whose bid has been determined to be responsive to the bid document and who has offered the lowest bid price, provided that such bidder has been determined to be
  - (a) Eligible in accordance with the provisions of Clause 3.1.1, 3.1.2., 3.1.3 & 3.1.4
- 3.15.2 The bidder whose bid has been accepted shall be notified by LOI for the award by the DLL prior to expiry of the bid validity period by registered letter or by e-mail Letter of Intent. The letter of Intent will state the sum that the Employer shall pay the Contractor in consideration of the execution, completion, commissioning and handing over of the works by the Contractor as prescribed in the Contract.
- 3.15.3 Within 15 days of receipt of Letter of Intent, the successful bidder will furnish the Letter of Acceptance, contract performance guarantees in the form of Bank Guarantee/FDR and sign the Agreement with the employer. The Agreement will incorporate all correspondences between the employer and the successful bidder.
- 3.15.4 The earnest money deposit of the successful Bidder shall be refunded without any interest within 30 days of award of the contract. The earnest money deposit of the unsuccessful bidders shall also be refunded within 30 days, without any interest, after award of the contract.
- 3.15.5 The tendered rate should be valid for a period of 90 days from the date of opening of technical bids.

#### **3.16** बोली मूल्यांकन/Evaluation of Bids

- 3.16.1 The DLL will determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the tender document. For the purposes of determination, a substantially responsive bid is one that conforms to all the terms, conditions & specifications of the tender document without any deviations, objections, conditionality or reservation.
- 3.16.2 If a bid is not substantially responsive, it will be rejected by the DLL and may not subsequently be made responsive by the bidder by correction of the non-conformity.
- 3.16.3 The bid that does not meet minimum acceptable standards of completeness, consistency and details will be rejected for non-responsiveness.
- 3.16.4 If the present performance of the bidder in a current contract for any major work is unsatisfactory as certified by the any authority of the relevant work, the offer of the bidder will be summarily rejected without assigning any reasons thereof.
- 3.16.5 The bidders shall quote the rates only for the items mentioned in the schedule of Rates in excel format provided along with this tender. The rates quoted for the item other than the items mentioned above shall not be considered for evaluation.
- 3.16.6 The rates shall be quoted in Indian Currency only and if quoted in other currency, the offer will be rejected.
- 3.16.7 The units of the items shall be same as per the Schedule of Rates and any other unit mentioned in the offer will be liable to be rejected.

- 3.16.8 Conditional offers are liable for rejection.
- 3.16.9 The Price bid of the prospective bidders, who fulfills the techno-commercial requirement of the bid(s), shall be evaluated further.
- 3.16.10 Any effort by a bidder to influence the DLL in the process of examination, clarification, evaluation, and in decisions concerning award of contract, may result in rejection of the bidder's tender.

#### 3.17 कार्य सौंपने की अधिसूचना/Notification of Award

- 3.17.1 The bidder whose bid has been accepted shall be notified for the award by the DLL prior to expiry of the bid validity period through the Letter of Intent.
- 3.17.2 The Bidder shall promptly check their e-mail box registered with CPP Portal for receipt of any information / clarification / correspondence in respect of their bid. The DLL shall not be responsible for non-receipt/failure of e-mail to the bidders.
- 3.17.3 If any of the information furnished by the bidder is found to be incorrect, the bid/ contract is liable to be rejected/terminated and the EMD/ Performance Security will be forfeited.
- 3.17.4 DLL reserves the right to cancel the tender without assigning any reason thereof.
- 3.17.5 Tenders from those tenderers who have not submitted their offer as per NIT will not be considered.

निदेशक/Director

#### भारत सरकार/Government of India

पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

# खण्ड/SECTION-4 संविदा की सामान्य शर्तें/GENERAL CONDITIONS OF CONTRACT

#### 4.1. सामान्य/General

- (i) DLL shall mean the Director, Directorate of Lighthouses and Lightships, Goa having its office at **DEEP BHAVAN**, **NEAR GMC STADIUM**, **BAMBOLIM**, **GOA** 403202 and shall include his legal representatives and successors and permitted assigns.
- (ii) Accepting authority shall be DLL or his authorized representative.
- (iii) The contract shall mean the notice inviting bid, the bid and acceptance thereof and the formal agreement if any, executed between the DLL and the contractor together with the documents referred to therein including these conditions with appendices and any special conditions, the specifications, designs, drawings, schedule of quantities / items with rates and amounts and schedule of rates. All these documents taken together shall be deemed to form contract and shall be complementary to one another.
- (iv) The contractor shall mean the individual or firm or company whether incorporated or not, undertaking the works / jobs and shall include legal representatives of such individual or persons composing such firm.
- (v) The contract sum shall mean the sum for which the bid is accepted.

#### The site shall mean the premises of the following Lighthouse premises and its Staff Quarter Compound premises.

Bhatkal Lighthouse, Bandar Road, Post Mavinkurve, Via Bhatkal, Bhatkal Taluka, Uttar Kannada District, City Bhatkal-Karnataka-581320.

- i) The works / jobs shall mean the works / jobs to be executed in accordance with the contract and shall include all extra or altered or substituted works or temporary and urgent works as required for performance of the contract.
- ii) The contractor shall satisfy himself with regard to the nature of work to be done, its scope, the conditions of contract, specifications, etc. included in the bid document.
- iii) The contractor shall abide by prevalent rules & regulations for security and safety. Any material brought inside the premises of the office which is required to be taken out from the premises shall have necessary prior written permission from the DLL, or his authorized representative.
- x) The contractor, being the Principal Employer for the workmen engaged by him shall take maximum care against any accident and shall ensure proper safety

measures. For any accident, mishappening due to lack of safety measures, the contractor shall be responsible. The contractor in his own interest shall insure the workman so deployed. DLL will not be responsible for any such claims whatsoever.

- xi) The rates shall remain valid for a period of 90days in all the respect from the date of opening the bid.
- xii) It will be absolutely necessary on the part of the bidder to sign the tender documents for all its parts. The successful bidder at the time of award of the work shall enter into an agreement with the Director, Directorate of Lighthouses & Lightships as per the conditions stipulated in this tender.
- xiii) No interest shall be payable to the contractor against the earnest money /security deposit/performance bank guarantee or any money recovered from the contractor.
- xiv) Within 15 days of the issue of the Letter of Intent by the employer, the contractor shall furnish a contract performance guarantee in the form of Bank guarantee/FDR. Failure of the contractor to furnish the required performance guarantee by due date shall constitute sufficient ground for the annulment of the award and forfeiture of the EMD or action as per bid security declaration.
- xv) Performance guarantee shall be in the name of Director of Lighthouses and Lightships, Goa. It will be equivalent to 3% of the contract value and shall remain valid 3 months after expiry of 2 Year warranty/guarantee period. The Performance guarantee shall be in the form of Bank guarantee/FDR.
- xvi) To be eligible for the award of the contract, the bidder shall provide evidence, satisfactory to the DLL of their eligibility, their capacity and adequacy of resources to carry out the subject contract effectively. It is an essential requirement that the tenderer have prior experience in executing similar works. The bidder shall enclose sufficient proof of experience for similar works in other organization.
- xvii) All the future correspondences in this connection shall be addressed to:

The Director, Directorate of Lighthouses and Lightships, Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403 202 Phone No. : 0832-2953115 E-mail: dte-goa@gov.in

- xviii) During the course of the bid the DLL may modify certain aspects of the bid, by amendment. The modification may be based on DLL's own initiative or on clarifications issued. Such amendments shall be uploaded in the CPP portal. Additional time required if any due to the amendments shall also be uploaded in the CPP portal. The DLL at his discretion may extend the last date for submission of bids in order to give reasonable time to tenderers to take the amendments into account.
- xix) The DLL may terminate the contract at any time for unsatisfactory response by the contractor and only proportionate amount shall be paid.
- xx) Income tax shall be deducted as per the provision of income tax act.

#### 4.2. Material and workmanship:

Material and workmanship required for the execution of the contract is required to be of first quality and to the satisfaction of the DLL or his representative who shall have full powers to reject any items of the stores or all the materials and/or workmanship which may appear to him to fall short of the requirements.

In the event of any doubt occurring in the execution of the work either in respect of maintenance of systems or in respect of any other item of the work for any reason whatsoever, the contractor shall refer the matter to the DLL whose decision shall be final and binding.

#### 4.3. Guaranty/Warranty:

Warranty conditions like replacement against manufacturing defects and repairs/ replacement against deterioration in performance in pro rata basis to be clearly mentioned.

#### 4.4.संविदा निरस्त किया जाना/Rescindment of contract

If at any stage during the work, the Contractor(s) ceases work or refuses to fulfill his part of the contract, the DLL shall have power to rescind the contract, of which rescission notice in writing to Contractor(s) under the hand of the DLL shall be conclusive evidence of Contractor(s) default and the whole of the Performance Bank Guarantee paid by Contractor(s) shall stand forfeited and be absolutely at the disposal of the Government. The DLL, shall moreover, have the power to adopt any measure for completion of the work in any manner he may choose. In the event of such a course being adopted any expenses which may be incurred in excess of the sum which would have been paid to the Contractor(s), if the whole work had been executed by Contractor(s) (for the amount in such cases, the certificate in writing of the DLL shall be final and conclusive) shall be realized from the Contractor(s) from any money which may be due to him under this or any other contract or otherwise. In the case when the contract has been rescinded under the aforesaid provision, the Contractor(s) shall have no claim for compensation for any loss sustained by him for reasons of having purchased any material or having entered into any engagement or made any advance on account of the execution of the work. But on the other hand, the DLL shall be entitled to take possession of any or part of any material which has been brought by the Contractor(s) to the site of work and in which event the Contractor(s) shall be entitled to such payment therefore as may be considered reasonable by the DLL.

#### 4.5. उप-किराएदारी/Subletting

The contract shall not be assigned or sublet without the written approval of the Director.

#### 4.6. दिवालियापन और संविदा-भंग/Insolvency and breach of contract

The Director may at any time by notice in writing summarily determine the contract without compensation to Contractor(s) in any of the following events-

If Contractor(s) being an individual or if a firm any partner in Contractor(s) shall at any time be adjudged insolvent or shall have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or for Composition under any Insolvency Act for the same being in force or make any conveyance or assignment of his effects or enter into any arrangement with this creditors or suspend payment or if the firm be dissolved under the Partnership Act; or

If the Contractor(s) being a company shall pass a resolution or the court shall

make an order for the liquidation of its affairs or a Receiver or Manager on behalf of the debenture holders shall be appointed or circumstances shall have arisen which entitled the court or debenture-holders to appoint a Receiver or Manager; or If the Contractor(s) commits any breach of this Contract not being specifically herein provided for; provided always that such determination shall not prejudice any right of action or remedy which shall have accrued or shall accrue thereafter to the President of India and provided also that Contractor(s) shall be liable to pay the President of India for any extra expenditure they are hereby put up.

#### 4.7. विसंगति और त्रुटि का समायोजन/Discrepancies and adjustment of errors

If there are varying or conflicting provision made in any one documents forming part of the contract, the accepting authority shall be the deciding authority with regard to the intention of documents.

#### 4.8. भुगतान प्राधिकारी/ Paying Authority

Name of the Consignee & Paying Authority	Address	Contact phone
The Director	Directorate of Lighthouses and Lightships, Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403 202	PH: 0832-2953115 E-mail: dte-goa@gov.in

#### 4.9. अप्रत्याशित घटना खण्ड/Force Majeure Clause

- (i) In the event of either party being rendered unable by force majeure to perform any obligation required to be performed by it under this Agreement, the relative obligation of the party affected by such force majeure shall after notice under this clause be suspended for the period during which such cause lasts.
- (ii) The term force majeure as used herein shall mean acts of God, War (declared or undeclared) Riots or Civil commotion, Fires, Floods and acts of Regulations of the Government of India or any of its authorized agencies.
- (iii) Upon the occurrence of any force majeure cause and upon its termination, the party alleging that it has been rendered unable as aforesaid shall notify the other party in writing, within seventy-two (72) hours of the alleged beginning and ending thereof giving full particulars and satisfactory explanation in support of its claim.
- (iv) Time for performance of the relative obligation suspended by the "Force Majeure" shall then stand extended by the period for which such causes lasts.

#### 4.10. समाप्ति/Termination

i) In the event of the Contractor going into liquidation or winding up his business or making arrangement with his creditors, this agreement shall stand ipso fact terminated from the date of occurrence of such event. This termination shall be without prejudice to any other rights to remedies, available to the DLL under this agreement. ii) In the event of any breach of terms and conditions of this Agreement or unsatisfactory performance of the contractor, the DLL shall have the right to terminate the Agreement forthwith by giving 30 days' notice. The decision of the DLL under this clause shall be final.

#### 4.11. ठेकेदार के कारण पैसे पर ब्याज/Interest on money due to the contractor

The contractor shall not be entitled to interest damages for loss of interest upon any amounts lodged as deposits with DLL or upon payments in arrears or upon any balance, which may, on the final settlement on his accounts, be due to him.

#### 4.12. जुर्माना खण्ड/Penalty Clause

- (i) Throughout the stipulated period of contract, the work shall be proceeded with all due diligence. The contractor shall pay a sum equal to 0.1% of the cost of the work for each day the work remains incomplete beyond the stated period, provided that the entire amount of compensation to be paid under the provision of this clause shall not exceed 05% of the cost of the work as indicated in the contract.
- (ii) All the case of delay shall be decided by the Director of Lighthouses & Lightships, Goa or his authorized representative.

# 4.13. अनुमति/सांविधिक अनुज्ञप्ति/मंज़ूरी/अनुमोदन/Permit/statuary licenses / clearances / approval

The responsibility of obtaining necessary Permit/ statuary licenses / clearances /approval from designated authority (State Government/ its agencies) will be of the contractor. However necessary administrative assistance will be provided by the DLL Goa.

निदेशक/Director

#### भारत सरकार/Government of India पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

#### <u>खण्ड/SECTION –5</u>

# संविदा की विशेष शर्तें/SPECIAL CONDITIONS OF CONTRACT

#### 5.1 सामान्य/General

The Employer shall test and examine any material to be used and/or workmanship employed in connection with the work. Employer shall also have full powers to delegate his authorities as stipulated in the conditions of contract, to his representative.

#### 5.2 निरीक्षण/Inspection

#### 5.2.1 सामग्री/कार्य की गुणवत्ता/Quality of material/work

- 5.2.1.1 The materials used for the work must be of best quality and fulfilling the specification said in the Contract.
- 5.2.1.2 The Employer or his representative's decision to the quality of such material and work will be final and binding on the Contractor. The Contractor shall remove rejected materials from the site of work at his own cost within the time specified by the Employer failing which the Employer or his representative will remove such material from the site of work and shall deduct the cost incurred for such removal from any money due to the Contractor.

## 5.2.2 निरीक्षण पंजी/Inspection Register

The Contractor shall maintain at the site of work an inspection Register, which must be produced by the Contractor or his agent whenever called upon to do so by the Employer or his representative during their inspection of the work. If the rectifications ordered to be done are not carried out within the time specified by the Employer, the Employer shall have the right to get such work done by any other agency and to recover the cost thereof from the Contractor. This inspection register shall be the duplicate copying type so that one copy of the entries get recorded in the Employer's office. The Contractor shall not make entry of any kind in this register.

#### 5.3 अभिलेख और सामग्री उपयोग/Records and usage of Materials

The Contractor shall maintain a detailed record of all materials received at site or in his store or storage and working area in the vicinity of the site and shall make such records available to the Employer or his representative on demand.

#### 5.4 पूर्ण होने का समय/Time of Completion

The entire scheme shall be executed, tested, commissioned, completed and handed over within a period of **90 days** from date of signing of the agreement.

#### 5.5 कार्य अनुसूची/Work Schedule

5.5.1 The Contractor shall submit a time program to the Employer within 10 days from the signing of the agreement. The Contractor shall also submit a revised program whenever the previous program is inconsistent with actual progress or with the

Contractor's obligations. Unless otherwise stated in the Contract, each program shall include-

- (i) The order in which the Contractor intends to carry out the Works, including the anticipated timing of each major stage of the Works,
- (ii) The periods for reviews under "Contractor's Documents",
- (iii) The sequence and timing of inspections and tests specified in the Contract, and
- (iv) A supporting report which includes
  - a) A general description of the methods which the Contractor intends to adopt for execution of each major stage of the Works, and
  - b) The approximate number of each class of Contractor's Personnel and of each type of Contractor's Equipment for each major stage.
- 5.5.2 Unless the Employer, within 7 days after receiving a program, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the program, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the program when planning their activities.
- 5.5.3 Contractor shall promptly give notice to the Employer of specific probable future events or circumstances that may adversely affect or delay the execution of the Works. In this event, or if the Employer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Employer in accordance with this sub-clause.

#### **5.6** तंत्र स्वीकार्यता/System Acceptance

During the Integrated System Acceptance Test the complete functionalities of the system shall be evaluated.

#### 5.6.1 गारंटी/वारंटी/Guaranty/warranty:

The bidder shall provide warranty of 2 years from the date of completion of Work/acceptance. During warranty period, the bidder shall attend all technical problem arising in the works done through this tender.

#### 5.7 अनुरक्षण दर्शन/Maintenance Philosophy

5.7.1 अनुरक्षण और मरम्मत/Maintenance and Repair - Maintenance support for all hardware products shall be required for warranty/guarantee period.

#### 5.7.2 अनुरक्षण/Maintainability:

The bidder shall provide warranty of 2 years from the date of completion of Work/acceptance. During warranty period, the bidder shall attend all technical problem arising in the works done through this tender.

5.7.3 Supplier shall stock necessary spares for the system and associated equipment during the period of warranty. The maintenance shall cover the repair of the system supplied by the vendor. Maintenance shall include rectification of faults, routine periodic maintenance and any overhaul that may be required from time to time. Repair shall be in the form of in -situ repairs, emergency repairs, routine repairs and routine regular visits of engineers to sites. The maintenance shall cover all repairable and expendable items. The maintenance during the warranty shall be comprehensive. Supplier shall supply all essential parts supplied and installed by supplier, free of cost during the warranty period.

#### 5.8 संविदा तैयार करना/Framing of Contract

This contract shall be framed and operated as an Indian Contract in all the respects and in conformity with Indian laws. Law suits and others proceedings arising out of or in connection with the contract works shall be instituted in Courts of Law of Goa, India.

#### 5.9 कार्य भुगतान/Payment for Works

5.9.1 The Contract provides for payment of the Contract Price in Indian Rupees only as per schedule. GST as applicable, shall be paid extra as per actual on submission of proof of payment as mentioned in Clause 5.9.4 below. The bidders are required to explicitly quote for these components in their bid failing which their bid shall be liable to be rejected.

# 5.9.2 It shall be noted that the price comparison of the bidders shall be made on the basic price only.

- 5.9.3 Payment to the Contractor shall be made by **The Director** of Lighthouses & Lightships, Goa, as per details given below
  - a. The Contractor may submit a running account bill as per CPWD RA bill format through site-in -charge, for the work actually executed. He shall be paid the Running account bill as per actual measurement and BOQ, the final bill for the entire constructed work in all respect shall be paid after one month of successful operation and Functioning. The Agency is required to submit proof of GST paid to Govt.
  - b. Any request for Advance Payment shall not be entertained.
  - c. Deductions towards TDS Income tax and GST shall be made at source under the laws in force.
- 5.9.4 The payment by the Employer towards GST wherever applicable shall be made extra as per actual. The contractor shall submit proof of payment of taxes. The amount for which the Bid is approved shall be inclusive of all expenses for the proper completion of the work and shall be inclusive of municipal taxes, local taxes, OCTROI, all royalties, patent rights, other incidental charges etc. The amount offered shall be final and no claim whatsoever on any account shall be entertained.

# The Directorate is exempted from OCTROI. Necessary certificate wherever required shall be issued on request by Director of Lighthouses & Lightships, Goa.

- 5.9.5 The prices quoted by the Bidder and accepted by the Employer shall hold good till completion of the works and no additional claims will be admissible on account of any price variation or fluctuation in the market rates.
- 5.9.6 Any notified change in the GST (both increase and decrease) from the base date shall be to the Employer's account. For such claims of variations, the Bidder shall produce the Government notification as documentary evidence. Price variation due to any other cause shall be on Bidder's account.

- 5.9.7 Whenever an adjustment is agreed, approved or determined as per Contract, the Employer shall specify the amount payable. For this purpose, reference shall be made to the actual cost of the varied work.
- 5.9.8 It will be the responsibility of the Successful Bidder to obtain import license / custom clearance at his cost, wherever required, on behalf of the Employer. The Employer shall only provide assistance and undertaking wherever required as per the law of the land.
- 5.9.9 The contractor shall pay Income Tax on all payments made to him under the contract. The Income Tax and Surcharge shall be recovered from the contractor from his bills at the appropriate rate as per the relevant provision of prevalent Income Tax Act.
- 5.9.10 The Employer shall not make any direct payment to sub-contractors or to any other contractor's agent.
- 5.9.11 It shall be accepted as a condition of the contract that the payment of the final bill to the contractor less the withheld amount and his acceptance thereof shall constitute a full and absolute release of the Employer from all further claims by the contractor under the contract.
- 5.9.12 Authorized variations shall not vitiate the contract but additions and omissions shall be measured up and dealt with in accordance with the Contract agreement.
- 5.9.13 Rates for extra or reduced items shall be worked out as per relevant conditions of the contract.
- 5.9.14 Time is the essence of the contract and it shall be clearly understood that the contractor is bound to complete the work in all the respect within the time specified in the Bid Document.

#### 5.10 भराई और ढुलाई आवश्यकता/Packing and Transportation Requirements

- 5.10.1 The responsibility shall lie with the Contractor to ensure that equipment/spare parts/components/materials brought to sites are strictly in conformity to specifications. There shall not be any shortage or excess in items supplied with reference to Bill of Quantities (B.O.Q.) of agreement.
- 5.10.2 The Contractor shall include and provide for securely protecting and packing the equipment and machinery so as to avoid damage or deterioration under rough handling and exposure to extreme temperatures, salt, water, precipitation during transit or storage.
- 5.10.3 The contractor shall take entire responsibility for the packing to ensure that equipment and machinery are brought and installed at site free from any damage.

#### 5.11 सुरक्षा आवश्यकता/Security Arrangements

The security for storage of materials under controlled condition shall be contractor's responsibility and the Employer shall not be responsible for any loss of the material.

#### 5.12 दुर्घटना/Accidents

The contractor shall within twenty four (24) hours of the occurrence of any accident involving serious injury or death of his employee at or about the site or in connection with the execution of the work, report such accidents to the Employer or his

representative. The contractor shall also report such accidents to the concerned notified authorities.

# 5.13 विदेशियों को रोज़गार/Employment of Foreigners

- 5.13.1 If any foreigner is employed by the contractor to work on the sites under this contract, the contractor shall ensure that such a foreigner possesses the necessary special permission issued by the Civil Authorities in writing and also comply with the instructions issued therefore, from time to time. In the event of any lapse in this regard on the part of such foreigner, the Contractor shall be solely held responsible for the lapse and the Employer shall not be liable in any event.
- 5.13.2 For the purpose of necessary clearance for foreign personnel brought in by the contractor, in connection with this contract, he shall furnish the following specific information and also comply with instructions issued from time to time.
  - (i) The number of foreign personnel required.
  - (ii) The period for which each such personnel is required
  - (iii) The nature of work that would be required to be done by them, and
  - (iv) The qualifications and experience of the personnel proposed to be engaged. If there is any lapse in this regard, the Contractor shall be personally responsible for

# the lapse and the Employer shall not be held accountable.

## 5.14 उचित मज़दूरी/Fair Wages

- 5.14.1 The contractor shall pay the labourers engaged by him on the work, not less than fair wages, which expression shall mean whether for time, or place of work, the respective rates of wages as fixed by the Central Government/State Govt. /Local bodies as fair wages for concerned areas payable to the different categories of labourers as set out in the schedule.
- 5.14.2 The Contractor shall, notwithstanding the provisions of any contract to the contrary, ensure that fair wages are paid to labourers directly engaged on the works, including any labour engaged by the Sub-contractors in connection with the said work, as if the labourers had been immediately employed by him.
- 5.14.3 The contractor shall comply fully with the provisions of the payment of **THE CODE ON WAGES, 2019** as amended. However, all the consequential payment shall be made by the contractor.

## 5.15 पुर्जे और उन्नयन/Spares and Upgradation

5.15.1 The contractor shall guarantee the availability of all necessary spares for a minimum period of 2 years from the date of acceptance of the system at site. This shall include spares, from third party hardware also.

#### 5.16 परिवर्तन/Variations

The contractor is not to vary or deviate from the drawings, specifications, schedule of works, general and special conditions of contract or instructions to execute any work of any kind whatsoever unless so authorized by the Employer in writing. If compliance with the Employer's aforesaid order involves extra work, then unless the same were issued in consequence of some breach of this contract on the part of the contractor(s), the later shall be entitled to be paid the price of the said work (to be valued as per clause 4.4). In case such instructions involve reduction in the scope of work and/or any saving in cost, the price adjustment shall be made as per the Contract Agreement.

#### 5.17 नियोक्ता का अधिकार/Right of the Employer

- 5.17.1 The Bid documents issued to the intending Bidders, Bid terms arrived at during process of clarifications together with the letter of acceptance thereof, shall constitute a binding contract between the successful Bidder and the Employer, and shall form the foundation of the rights and obligation on both the parties. If there are varying or conflicting provisions made in any document forming part of the contract, the Employer shall be the deciding authority with regard to the intention/interpretation of the document and his decision shall be binding without any reservations. The right to carry out the work either in conformity with or in a manner entirely different from the terms of this Bid document that may be most suitable before or subsequent to the receipt of Bids due to exigencies of work, is reserved with the Employer.
- 5.17.2 Any error in description, quantity or rate in schedule of works, or any omissions there from shall not vitiate the contract or release the contractors from the execution of the whole or any part of the work comprised therein according to drawings and specifications or from any of his obligations under the contract.
- 5.17.3 The Employer shall not be precluded or stopped from taking any measurements, and framing of estimates or detaining any certificates made either before or after the completion and acceptance of the work and payment, from showing the true amount and character of the works performed and materials furnished by the contractor and from showing that any such measurements, estimates or certificates untrue or incorrectly made and that Employer shall not be precluded or stopped from recovering from the contractor such damages as it may be sustained by reasons of his failure to comply with the terms and conditions of the contract.
- 5.17.4 Neither the acceptance by the Employer nor any payment for acceptance of the whole or any part of the work nor any extension of time nor any possession taken by the Employer shall operate as a waiver of any portion of the contract or any power herein reserved or of any risk of damage. A waiver of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.

#### 5.18 विनिर्देश/Specifications

The detailed description of work and materials given in Section-6 of Bid documents are not necessarily repeated in the bill of quantities/schedule of work. The Contractor shall adhere to detailed descriptions of work and material given in Section-6 of bid document.

#### 5.19 ठेकेदार का कर्तव्य/Contractor's Obligation

The execution of any item of work where any incidental work is actually required but not specifically stated in the Bid, it is to be understood that the amount quoted by the Contractor shall cover such charges also and nothing extra on account of such incidental charges, if any, shall be paid.

#### 5.20 देश के कानून का ज्ञान/Knowledge of the Laws of the Land

The Contractor shall keep himself fully informed of all acts and laws of the Union of India State of Tamil Nadu, all local bye laws, ordinances, rules, regulations and all orders and decree of bodies or, tribunals having any jurisdiction or authority which in any way affect the conduct of the works. Contractor shall at all times, observe and comply with all such laws, ordinances, rules, regulations, orders and decrees, and shall give all notices and pay out of his own money any fees or charges to which he may be liable. He shall protect and indemnify the Employer against any claim or liability arising out of violations of any such law, ordinances, legislations, order or decree.



#### भारत सरकार/Government of India

पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

#### खण्ड/SECTION-6

काम का दायरा और तकनीकी विनिर्देश/SCOPE OF WORK & TECHNICAL SPECIFICATIONS

Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

#### 6.1.1 Brief Technical Specifications for wiring and earthing

6.1

- a) All the Electrical Materials for the works mentioned below have to be supplied; should be as per the specifications, make and model as mentioned in the Annexure of Section – 8, unless inspected and finalized by the DLL or his representative otherwise.
- b) All the wiring works are to be carried out using concealed wiring except Lighthouse tower inclusive of plastering and painting.
- c) All the electrical points are to be earthed using 3plate ceiling rose except the angle batten holder.
- d) The Switch Boards, DBs and Mains are to be properly earthed. The neutral and earthing should be Tree connection from Mains to DB then to Switchboards and from Switch Boards to Points.
- e) All electrical Light fittings should be Philips/Luker/Havells/Crompton make, Cables should be in Polycab/Havells/Finolex make and Switches should be in Legrand Mylinc/Havells Fabio/GM Four Five Smart Switches/Anchor Roma make.
- f) The requirements for Wires, UG Cables and Earth Wires shown in the BoQ are indicative only. The measurement of the same shall be taken as per actual at the site.
- g) UG Cable has to be laid in underground Trench. The normal size of the trench shall be 30-45cm width and 0.5m depth for LT Cable. After leveling and dressing of the trench, the UG Cables shall be laid in the trench and bricks/terracota tiles placed as protective covering on the UG cables with sand cushioning of the trench, backfilling of the trench to be carried out.
- h) The Earthing should be adequate with required number of Solid Pipe for watering and pure copper plate Earthing filled with charcoal, salt or earthing compound in adequate quantity and with 1½" dia "C" class GI pipe up to bottom of the earth pit of adequate depth and provision for pouring water in the earth pit and provision of Inspection chamber with Cast Iron Chequered plate/FRP as Lid or readymade FRP Chamber as accepted by department representative (as per Drawing 9.1.3)

6.1.2 All wiring works must be carried out as per Local State Electricity Distribution Company specifications and standards. Wherever the specifications are not available, the

works must be carried out as per CPWD GENERAL SPECIFICATIONS FOR ELECTRICAL WORKS 2013 PART-I INTERNAL & PART VII (DG SETS).

6.1.3 All Electrical works shall be carried out in accordance with the provisions of Indian Electricity Act, 2003 and Indian Electricity Rules, 1956 amended up to date.

6.1.4 All Electrical works shall be carried out in consultation with the DLL or his representative. Any modifications/clarifications in the work shall be obtained from DLL representative before execution of the works.

6.1.5 All MESCOM (Mangalore Electricity Supply Company Limited) Energy Meters are to be placed in appropriate Meter Boxes on the location as specified by the MESCOM regulations. The Service connections to the Meters have to be ensured by the Contractor after the completion of works.

6.1.6 Necessary documents for reconnection must be prepared by contractor and submitted to Local State Electricity Distribution Company. The contractor should ensure the Mains Supply is available before occupation by the residents.

6.1.7 Any payments made to Local State Electricity Distribution Company in connection with the temporary connection, shifting of meters, reconnection, Security Deposit, etc., if not included in the BoQ (Section - 8), can be claimed separately by the contractor after the submission of the appropriate receipts to this office.

6.1.8 All wires/conductors shall be of copper only and fire resistant wherever applicable. The items shall conform to relevant BIS/ISI/IEC standards wherever applicable.

6.1.9 Technical Specifications/make/model of the items to be used in the above works should be implemented only after the approval from the Director or his representatives.

6.1.10 The work must be guaranteed for a period of **2 years** for its satisfactory performance from the date of completion and all defects cropping up within this period must be rectified at contractor's cost immediately.

6.1.11 All materials which shall be used in the work shall be as per specification and must be from the list of approved materials as mentioned in the specification. Samples of the materials proposed to be used shall be submitted for approval and nothing shall be used which are not approved.

6.1.12 contractor should note that all wiring, DB starter etc. below false ceiling in system room should be concealed unless otherwise specified.

6.1.13 It is obligatory under Indian Electricity Rules that electrical installation work shall be executed under qualified Electrical Supervisor holding a valid Electrical Supervisor's Certificate of competency guarantee by the State License Board.

6.1.14 Evidence vouchers from manufacturer/authorized agent showing use of proper materials should be furnished as and when required.

6.1.15 Quantity are approximate and the work will be paid on the measurement basis as per ISI code of measurement.

6.1.16 All Electrical works shall be carried out in consultation with the DLL or his representative. Any modifications/clarification in the work shall be obtained from DLL representative before execution of the works.

6.1.17 all the fitting and accessories that might not have been mentioned specified in the specifications.

# Note: The electrical work of staff quarters to be carried out with coordination of civil works.

#### 6.2: Early Streamer Emission Air Terminal: - Drawing No: 9.1.12

- (a) The lightning protection system should be confirming to international standard NF C 17 102 (Protection of structures & open area against lightning using Early Streamer Emission Air Terminal.) and installation shall follow: BS 6651:1999 (against lightning code of practice).
- (b) The air terminal should be of early streamer emission type and is sealed in a 304 grade stainless steel shell in order to guarantee resistance to impact, corrosion and chemical agent. It should be suitable for high humidity climate and in exposed industrial sites having ambient temperature of 50°C and relative humidity of 95%.
- (c) The air terminal must be having an embedded system to recognize the chance of lightning before the strike and the system should be sensitive to approaching lightning (both +ve and -ve) and send an appropriate upward streamer to neutralize the lightning strike through down conductor & earth terminal.
- (d) The Air Terminal should be with capturing rod diameter of: 20 to 25mm and Triggering distance should be: 50 to 60m at level 3 standard protection.
- (e) The minimum level of protection offered should be: 80m radial distance in generation Level-III (Lightning intensity: 16kA and above) with tip height of 2m above the Lantern house.
- (f) The Air Terminal should have undergone tests at CPRI for impulse current test 8/20microseconds at 40kA and approved by competent authority of State/Central govt. for use in lightning arrestor applications.
- (g) The Air Terminal should be suitable for effective & satisfactory long term performance. Being coastal areas, all fitting should be mechanically sound to withstand the atmospheric pressure during wind storm and heavy rain.
- (h) The weight of Air Terminal should be 4 to 6 Kg.
- (i) The test & certification must be by: CPRI/CERDA/NABL or other govt. approved institutes.
- (j) Guarantee /warranty should be minimum of 02 Years from the acceptance of system.

#### 6.2.1 : Extension Mast and Stay Wires

(a) The mast should have single length of 6m of heavy duty elevation pole with mounting kit (Lightning arrester mast) made of GI "C" Class minimum 60mm dia. Or above. The extension mast should be suitable for fixing / holding the above ESE Air Terminal. (The Air terminal of the mast shall be placed approximately 1m above the top of the lantern house.

- (b) Necessary provisions shall be provided for stay wire termination, fixing of insulated copper flat laying from the top (ESE unit) of the mast to bottom of the mast. The bottom of the mast shall be welded with 300 x 300 x 10mm GI plate and supported gazette plate with 4 nos. of 22mm hole suitable for making foundation bolt for fixing the mast.
- (c) The stay wires shall be made of 6mm SS in the grade of 304 with suitable SS wire rope clamp which withstand the pressure & velocity of the wind pressure during lightning, storm and rains.
- (d) Foundation of Cement Concrete in the ratio 1:1.5:3 M20 concrete ratios shall be used for making foundation of Lightning arrester mast.

#### 6.2.3: Triangle support

Additional triangle support to the mast shall be provided with handrails of the lighthouse tower using 40mm GI 'C' class pipe. So as to avoid the shaking of mast during heavy wind.

#### 3.2.4: Down Conductor

- (a) The down conductor required shall be 99.9% electrolytic grade copper of size 25mm x3mm, free from manufacturing defects and flaws.
- (b) The copper conductor shall be in single maximum length to reduce the number of joints during installation at site. It shall be continuous for entire length and shall not have any cut-outs or switches or links.
- (c) The down conductor (25mm x3mm) shall be insulated by using heat shrink and laid from tower top to bottom (up to test point)by using insulators (drawing enclosed) at the distance of 2 feet each. (The down conductor should be electrically insulated PVC sheathed protected covering over the down conductor)
- (d) Down conductors shall be as short and straight as practicable and shall follow a direct path to earth. Down conductor shall not be connected to other earthing conductors above the earth level. The down conductor shall be effectively connected with two earth pits.
- (e) Clamping the down conductor shall be fixed with insulators at the distance of 2 feet each.

40m (17m tower + 8m mast & bend + 15m earth run & earth pit)]

#### 6.2.5: Lightning flash Counter:-

- (a) It should have IP67, six digit display analog Lightning Counter. The average battery life should be minimum 03 years.
- (b) It should count lightning stroke.
- (c) It should start detection from range 3kA to 100kA.
- (d) It should be installed on the down conductor at the bottom of Lighthouse tower just 2 meters above the ground level & nearer to the earth terminal.

#### 6.2.6 Test Point Box:-

- (a) It should be PVC / GI weatherproof enclosure with isolating/disconnecting copper connects arrangements on down conductor between the Air terminal and Earth Pit Terminal for testing of the Earth Resistance.
- (b) It should be provided at bottom of Lighthouse tower and just below the Flash Counter & the place should be convenient for periodic Testing of the earth pits.

#### 6.3. Earthing System (Copper Plate earth)(Drawing No: 9.1.4)

The Earthing System should be consisting of followings accessories & should give the effective Earth Resistance of below 01 Ohm as per the Code of practice for the protection of building and allied structures against lightning.

- (a) 2 Nos. of plate Earthing works is to be done using 600 x 600x 3mm size of copper plate and 25mm x 3mm strip.(As per the ISI standards, the copper strip should be bolted & brazed with the plate, kept at 10 feet depth of ground with 60mm dia " C" class GI pipe with wire mesh funnel for watering) The Earth shall be as per IS 3043 1966: Code of practice of earthing IS 2309 1969.
- (b) Two earth pits shall be provided at the distance of minimum 10 feet or as per the direction of department representative.
- (c) Two earth pits shall be connected parallel and terminated with test points.
- (d) The earthing-pit shall be made as per IS 3043 (Construction of Inspection chamber of size 450 x 450 x 450 mm with 100 mm thick brick walls over a P.C.C. layer. Keep 100 mm of the chamber above the ground level. Cover the top with a cast iron (CI) cover. FRP readymade earth chamber is also acceptable after acceptance of departmental representative.

#### 6.4 SCOPE OF WORK ALSO INCLUDES

- (a) Drawings & documents.
- (b) The equipment supply will be complete in all respect and any material, component or accessory not specifically stated in this specification but necessary for trouble free operation shall be deemed to be included.
- (c) Loading, unloading and storage of material at site.
- (d) Scaffolding (if necessary) or ropes, supporting structure etc. required for the installation work at site.
- (e) Warranty of the system 24 months from the date of performance & acceptance at site.

#### 6.5 INSPECTION

The manufacturer shall carry out a comprehensive inspection and testing program during manufacture for all bought out items and also workmanship during this stage. The manufacturer shall submit the inspection program at least four weeks prior to the purchaser. The manufacturer shall carry out all standard routine tests in accordance with relevant IS. The manufacturer shall also carry out type tests in accordance with relevant IS on one piece of one rating. While the routine tests shall be carried out at manufacturer's works under prior information to purchaser, the type test certificates from reputed test houses shall be submitted for purchaser's approval giving details of each test and evaluation of test data. Tests which are common to both type and routine tests may be covered under routine test in the presence of purchaser's representative, if required.

#### 6.6 TEST CERTIFICATE

The equipment covered under these specifications shall be Type tested in accordance with relevant codes. The bidder shall supply at the time of execution the routine test certificates from the manufacturer indicating the type of tests conducted and the test results in accordance with relevant codes.

#### **6.7 STAGE INSPECTION**

Purchaser reserves the right to carry out inspection at any stages of the process of manufacture and assembly for which all facilities will be provided by the Supplier. Before carrying out such inspection, necessary information will be given to the manufacturer by the purchaser.

#### 6.8 TESTING:

The system after installation at site will checked and tested by the department representative. The system will be checked for the workmanship, alignments and material. The resistance measurement of the system will be carried out with micro-ohm meter. Other tests will be carried out as prescribed in the applicable standards.

#### 6.9 Delivery & Completion:

The lightning protection system shall be completed to the said Lighthouses within 60 days from the date of commencement of work. This period shall be effective as per the work order and shall be independent of any other factors.

- (a) The contractor must satisfy themselves that the stores are in accordance with the terms of the supply and fully conform to the required technical specifications.
- (b) All material, fitting etc. used for the protection system should be of IS specified make and standards.
- (c) Interconnection of earth and down conductor should be made in such a way that reliable and good electrical contact is established.
- (d) Anti-corrosive measures: Copper strip should be protected against mechanical damages and corrosion. Fittings should be resistant to the corrosive agencies or be otherwise suitably protected. Joints and bonds may be protected with bitumen or embedded in plastic compound according to the local conditions.
- (e) Contractor shall carry out the work, which is required for completion of work and not mentioned in the specification such brazing, chipping and breaking of masonry work etc.

(f) Warrantee/Guarantee: The lightning protection system shall be guaranteed in all respects for satisfactory performance for two years from the date of taking it into service. This should be confirmed.

#### 6.10 GENERAL TERMS & CONDITIONS OF WORK

- (a) The work is to be planned and executed so as to cause least disturbance to the functioning of other activities. Materials shall be stacked only at specified locations as directed by departmental representative to cause lest obstruction to the movement of personnel in and around Lighthouse premises.
- (b) The bidders are advised in their own interest to visit all the proposed site of work to get acquaint themselves with the site and the working conditions as also the nature and minimum standard of work expected of them.

**Bhatkal Lighthouse** - Bhatkal Lighthouse is inside the fort about 3 km west of Bhatkal town on the National Highway-17. The nearest Railway Station is Bhatkal .

- (c) The bidders shall carefully go through the clauses in the specifications, General terms and conditions including safety code, etc., and shall include in their rates any sum they may consider necessary to cover the fulfillment of the various clauses contained therein.
- (d) The items of work and unit rates quoted shall be inclusive of everything necessary to complete the said items of work, within the contemplation (BOQ) of the contract. Beyond the unit rates, no extra payment will be allowed for incidental or contingent work, labour, materials and plant.
- (e) The rates quoted by the bidder shall also include for Supplying, transporting to site, unloading, protecting and installation of materials in accordance with the specifications.
- (f) Bidders shall go through the technical specifications and provide in the offer point by point compliance. The technical deviations, (if any) shall be indicated clearly in pre bid meeting will be held at this office on the specified date and time. Kindly note that no further communication will be made to get the technical clarifications. The offers without this information will be rejected without any consideration.
- (g) The contractor shall bring his own tools, tackles, ladders, ropes, safety belt, drilling machine, cutting plier, screw driver, portable Generator etc. required at site for installation work. Department will not provide any tool/tackles at site. All materials and tools for installation shall be arranged by the Contractor at his own cost.
- (h) The workers required to carry out the works shall be skilled and have requisite experience qualification / certificates. The copies of documents are to be provided

to department representative, before commencement of work at site. Unqualified/unskilled workers will not be allowed to work at site.

- (i) The work has to be carried out in accordance with the departmental specifications and as per the directions of the department representative camping at the Lighthouse station.
- (j) The work shall be carried out to the entire satisfaction of the undersigned or department representative.
- (k) 25mm x 3mm (sleeved) copper conductor insulated Lightning arrester tape should not touch with wall.
- (I) SS screws of size 10 x 40mm of 304 grade and Suitable high quality fisher (PVC grip) shall be used.
- (m) Please note that the wind is very high at site, so the contractor shall take necessary precautions for safety of workers during work on tall structure.
- (n) The safety of the workmen engaged by the contractor for the works is the sole responsibility of the contractor. Any loss / damage to the workmen during the course of the execution of the work should be made good by the contractor on his own expenses.
- (o) The department is not responsible for any loss or damage occurred due to any accident of the labourers engaged by the contractor during the execution of the work and the contractor will be solely responsible for the same. The contractor must ensure that no damage is done to the existing civil installations during the course of work and any such damage / loss should be made good by the contractor on his own expenses.
- (p) The payment will be made after execution of work satisfactorily.
- (q) If at any stage it is found that the progress is slow and not up to the satisfaction, the undersigned reserves the right of the resentment of the contract and any claim of any loss suffered by the contractor due to the same will not be entertained and decision of the undersigned will be final and binding on the contractor.
- (r) The undersigned reserves the right to reject the work contract at any time without assigning any reason there off.
- (s) All the safety precautions as per applicable code and practices shall be followed at site. The safety instructions issued by department representative shall be followed in all respect. The contractor will be responsible for any injury/accident occurring at site, due to any reason, department will not pay or be liable for any compensation.

#### भारत सरकार/Government of India

पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

#### खण्ड/SECTION -7

# तकनीकी बोली का मूल्यांकन मापदंड/EVALUATION CRITERIA OF TECHNICAL BID

#### 7.1 सामान्य/General

- 7.1.1 The Technical Bids shall be evaluated by a Committee. It is mandatory on the part of the bidder to score a minimum of 70% to qualify for the opening of commercial bid.
- 7.1.2 The commercial bids of only those bidders shall be opened whose bid is technically qualified. Once technically qualified, the bidders will be informed about opening of the commercial bids.
- 7.1.3 The technically qualified bidder who has quoted the lowest rates shall be declared successful bidder.

#### 7.2 तकनीकीमूल्यांकन/Technical Evaluation

The Technical Evaluation shall be carried out based on following attributes to ascertain the quality of bid-

Sr No	Attributes and Evaluation criteria	Max Marks
A	Statutory Requirements	25
i)	Self-attested copy of PAN	2
ii)	Self-attested copy of GST Registration	2
iii)	Company Registration certificate	3
iv)	Self-attested copy of valid Electrical Contractor License for undertaking all Electrical Works	13
v)	Tender Fee	2
vi)	Earnest Money Deposit/Bid Securing Declaration (form 9.7)	3
B	Financial Standing of the Firm	
i)	Annual Income Tax return filed with I.T. Department	
	A.Y. 2019-20	1
	A.Y. 2020-21	1
	A.Y. 2021-22	1
ii)	Financial turnover duly certified by Chartered Accountant.	
	A.Y. 2019-20	2
	A.Y. 2020-21	2
	A.Y. 2021-22	2
iii)	Profit/Loss in Lakhs	
	A.Y. 2019-20	1
	A.Y. 2020-21	1
	A.Y. 2021-22	1
iv)	Bank solvency certificate issued by a Schedule Bank only.	3
С	Experience in similar class of work	40

	Bidder to score a minimum of 70% to qualify for the opening of commercial bid.	Total	100
v)	Fan		1
iv)	MCBs/RCCBs		1
iii)	Switches & Sockets		1
ii)	Cables		1
i)	LED Light and street Light fittings		1
E	List of make and model of proposed products which will to be used such as:		5
v)	Pro Forma For Non Blacklist Affidavit (Form 9.6)		3
iv)	Pro Forma For Undertaking (form 9.5)		3
iii)	Tender Acceptance Letter (form 9.4)		3
ii)	List of Technical & Administrative staff		3
i)	List of works in Hand/ under Execution		3
D	Undertaking and Declarations		15
ii)	Performances of works : i) Very Good : 20 ii) Good : 15 iii) Fair/Satisfactory : 10 iv) Poor : 0		20
i)	List of completion certificates for similar works ca one similar work not < ₹ 6,81,968/- or two similar works each not < ₹ ₹ 4,26,230/- or three similar works each not < ₹ 3,40,984/- duri seven years ending last day of previous month. i) 60% marks for minimum eligibility criteria ii) 100% marks for twice the minimum eligibility iii) In between (i) & (ii) on pro-rata basis	ng last	20

निदेशक/Director

भारत सरकार/Government of India पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

## <u>खण्ड/Section –8</u>

## मात्राबिल/BILL OF QUANTITY

Tender Inviting Authority: Director, Directorate of Lighthouses and Lightships, Goa

Name of Work: Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

File No.: EM-Goa-01001(13)/1/2022-Electrical Maintenance

Bidder Name :

## PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )

SI. No.	Item Description	Quantit Y	Units	BASIC RATE In Figures To be entered by the Bidder in ₹ for Each Item	GST and other taxes/duti es as applicable in % for Each Item	TOTAL AMOUN T Withou t Taxes	TOTAL AMOUN T Includi ng Taxes	TOTAL AMOUNT including Taxes in Words
1	2	3	4	5	6	7	8	9
1.00	"Re-wiring of Lighthouse Tower at Bhatkal Lighthous	se - ANNE	XURE – 1	ĺ				
1.001	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.			Rat		uld on Q in x		quoted m
1.011	3 x 1.5 sq. Mm (for fan and light points in service room	20	meter					

	and tower bottom)			
1.012	3 x 2.5 sq. mm(From DB to Switch Board)	35	meter	
1.013	$4 \times 1.5$ sq. mm(for staricase wiring From LH tower bottom to service room)	25	meter	
1.020	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.			Rates should only be quoted
1.021	5/6 A switch	18	Each	in BoQ in xIs form
1.022	2 way 5/6 A switch	2	Each	
1.023	15/16 A switch	2	Each	
1.024	3 pin 5/6 A socket outlet	8	Each	
1.025	6 pin 15/16 A socket outlet	2	Each	
1.030	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.			
1.031	1 or 2 Module (75mmX75mm) (PVC) (for Wall mounted fan)	2	Each	Rates should only be quoted
1.032	3 Module (100mm * 75mm) (PVC)	2	Each	in BoQ in xis form
1.033	12 Module (200mm * 150mm) (PVC)	3	Each	
1.034	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	8	Each	

1.035	Installation, testing and commissioning of ceiling fan/wall mounting fan including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	2	Each	
1.036	Supplying and fixing PVC batten / angle holder including connections etc. as required. (1 for lantern room)	3	Each	
1.040	Switch Gear and DB			
1.041	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.			
1.042	Single pole 6A(4 Nos for service room)(2 Nos for LH bottom)	6	Each	
1.043	Single pole 16A (LH bottom)	2	Each	
1.044	Double pole (6A)(LH Service room)	4	Each	
1.045	Supplying and fixing following rating, double pole, 240 V, isolator in the commissioning etc. as required. existing MCB DB complete with connections, testing and and commissioning etc. as required. (at service room and LH bottom)			Rates should only be quoted in BoQ in xis form
1.046	40 A (1 No for Service room, 1 No for LH bottom stair case)	2	Each	
1.047	Supplying and fixing following rating, double pole, (single phase and neutral), 240V, residual current circuit breaker			

	(RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. (at service room and LH bottom)			
1.048	40 A (1 No for Service room, 1 No for LH bottom stair case)	2	Each	Rates should only be quoted in BoQ in xis form
1.049	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required.			
1.050	8 way, Double door (2 Nos LH tower Service room)(1 No for LH bottom)	3	Each	
1.051	Earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	1	Each	Rates should only be quoted in BoQ in xis form
1.052	Supply of Indoor Industrial Tube Light Battens, with LED Tube (inclusive), LED Batten with Essential 4' 22W LED tube. (refer SI No. 1.035 for installation)	2	Each	
1.053	Supply of 10W LED Bulk Head Luminaries IP65/66/67 LED Light source (inclusive) with integrated LED source.	5	Each	
1.054	Supply of LED LAMP 12W(Base B22 12-Watt LED Bulb)dimmable Master LED Glass Bulb (refer SI No.1.035 for installation)	3	Each	
1.055	Supply of Wall Mounting Fan, 400 millimeter Bracket	2	Each	

	mounted fan for Wall mounting (Mist Air Duos) Hi-Speed,						
1.056	Supply of Cable ducting (base+cover) Transcab - 60 X 80 mm - PVC cable management duct for laying cable from tower bottom to Top. ( Each duct 2 mtre length.)	20	Nos.				
1.057	Supply of 1 inch (25X16mm) U-PVC mini trucking system each 2 mtr length (for stiar case light wiring)	15	Each				
1.058	Supply and laying of 3core X 2.5 Sqmm Copper armoured PVC insulated/PVC sheathed XLPE power cable as required.(from Power house to Lighthouse service room top 80 meter to main light )+(55 for stair case Light from PH to LH Bottom )+ (55 for NAIS from PH to LH bottom)	190	meter				
1.059	Supply of Bare Copper wire, 8 SWG earth wire	4	Kg		-		
1.060	Laying of 8 SWG copper wire in cable duct from earth pit to serivce room DB & LH tower bottom DB.	30	meter	should In Boq		-	oted
1.061	Laying & fixing of cable duct (for vertical run) and re- routing of Old NAIS, other cables and New cable in cable duct from Tower bottom to lighthouse tower top (service room) (20 meter height tower)	1	LS				
1.062	Making earth pit charges(additional) of SI No.1.051 for Lighthouse located at hill & rocky area diffcult to digging earth pit(heavy duty machinary and labour charges)	1	LS				
1.063	Miscellaneous items for the purchase of S.S screws and washer(for fixing cable duct), drill bits, fishers(heavy wall plugs) 250mm cable ties, SS 'U' Clamps, flexible pipes,	1	LS				

	Re-wiring of Power House, Staff Quarters and				
2.00	Inspection Quarter at Bhatkal Lighthouse - ANNEXURE – II				
2.01	MODULAR SWITCH BOXES, SWITCHES AND SOCKETS			Rates should only be quote in BoQ in xis form	d
2.011	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
2.012	1 or 2 Module (75mm * 75mm)	7	Each		
2.013	3 Module (100mm * 75mm)	27	Each		
2.014	6 Module (125mm * 125mm)	12	Each		
2.015	8 Module (125mm * 125mm)	6	Each		
2.016	12 Module (200mmX150mm)	18	Each		
2.02	Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.			Rates should only be quot	ed
2.021	5/6 A switch	192	Each	in BoQ in xis form	
2.022	15/16 A switch	23	Each		
2.023	3 pin 5/6 A socket outlet	63	Each		
2.024	6 pin 15/16 A socket outlet	23	Each		
2.03	Bell push	6	Each		

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2.031	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	6	Each	
2.032	Supplying and fixing PVC batten/ angle holder including connections etc. as required. (fancy type)	32	Each	
2.033	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	93	Each	
2.034	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	18	Each	
2.035	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	18	Each	
2.036	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	104	Each	
3.01	CONDUIT AND CABLE			
3.011	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. conduit as required.			Rates should only be quoted in BoQ in xis form

3.012	25 mm	808	meters	
3.013	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.			
3.014	2 x 1.5 sq. mm(for Lamp Holder)	350	meter	
3.015	3 x 1.5 sq. mm	916.5	meter	
3.016	3 x 2.5 sq. mm	798	meter	Rates should only be quoted
3.017	3 x 4 sq. mm	212	meter	in BoQ in xis form
4.01	SWITCH GEAR			
4.011	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted\ including earthing etc. as required. (But without MCB/RCCB/Isolator)			
4.012	6 way, Double door	3	Each	
4.013	12 way, Double door	5	Each	
4.014	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.			
4.015	Single pole 10A	21	Each	

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4.016	Single pole 16A	29	Each	
4.017	Supplying and fixing following rating, double pole, 240 V, isolator in the commissioning etc. as required. existing MCB DB complete with connections, testing and Commissioning etc. as required.			
4.018	40 A	8	Each	
4.019	Supplying and fixing following rating, double pole, (single phase and neutral), 240V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.			Rates should only be quoted in BoQ in xis form
4.02	40 A	4	Each	
4.021	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A, "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	6	Each	
4.022	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal / coke and salt as required.(for power house) (1 No for Genset Body &Neutral Earthing)	2	Each	Rates should only be quoted in BoQ in xis form
4.023	Providing and fixing 25 mm X 3 mm copper strip on surface or in recess for connections etc. as required. (For	30	Each	

	Genset body & Neutral Earthing)			
4.024	Earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.(NA-1 qtrs - 1 No, NA-2 Qtrs - 1 No, IQ-1 No, LHA qtrs - 2 No, Office - 1 No)(1 No for powerhouse Earthing)	7	Each	
4.03	Supply of Indoor Industrial Tube Light Battens, with LED Tube (inclusive), LED Batten with Essential 4' 22W LED tube. (refer SI No. 2.036 for installation)	37	Each	
4.031	Supply of Bulk Head Luminaries IP65/66/67 IK09/10 LED Light source (inclusive) with integrated LED source. (refer SI No. 2.036 for installation)	13	Each	Rates should only be quoted in BoQ in xis form
4.032	Supply of LED LAMP 12W(Base B22 12-Watt LED Bulb)dimmable Master LED Glass Bulb (refer SI No.2.036 for installation)	32	Each	
4.033	Supply of Wall Mounting Luminaries, 7W Full Glass LED lamp B22/E27 (Non Dimmable) (refer SI No.2.036 for installation)	12	Each	
4.034	Supply of Ceiling Fan, Electro-phoretic lacquered/ Electroplated surface for anti-rusting, <b>High speed</b> fan with wider tip blade for effective air circulation with Sweep 1200mm and Hight performance even at low voltage. (refer SI No.2.035 for installation)	18	Each	
4.035	Supply of Outdoor 25Watt LED COB street light fitting (Die cast powder coated enclosure with structured LED arrays and IP65/66 protectionand) (refer SI No.2.036 for	3	Each	

	installation)			
4.036	Providing and fixing of street light bend pipe 1"(inch) GI class "C" pipe including clamp/SS screws etc.,	3	Each	
4.037	Supply of 250mm Exhuast fan PVC (fixed in window)	5	Each	
4.038	Supply of Bare Copper wire, 8 SWG earth wire (for all quarters)	15	Kg	
4.039	Labour charge for laying 8 SWG wire from ground level to Distribution box through pvc pipe with clamp.	90	Mtr	
4.04	Supply and laying of 3core X 4 sqmm Copper armoured PVC insulated/PVC sheathed XLPE power cable as required. Ph to office - 90 mtrs, PH to Auxilary lgiht room - 175 mtrs)	265	Mtr	Rates should only be quoted in BoQ in xis form
4.041	Supply and laying of 3core X 6 sqmm Copper armoured PVC insulated/PVC sheathed XLPE power cable as required. (Power house to IQ, Power house to NA 1 qtrs - 110 mtrs, PH to NA-2 qtrs - 95 mtrs, PH to LHA twin qtrs - 190	470	Mtr	
4.042	Supply and laying of 4 core X 16 sqmm Copper armoured PVC insulated/PVC sheathed XLPE power cable as required. (Electric Pole to Power house) 1 length 45 meter for LH and 1 length 45 meter for Staff quarters)	90	Mtr	
4.043	Supply and laying of 2 core X 16 sqmm Copper armoured PVC insulated/PVC sheathed XLPE power cable as required. (Genset room o/p to Power house)	80	Mtr	
4.044	Providing and fixing 40 mm, 6 meter height GI pipe Class	1	Each	

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	C ("bend Pipe) in Electric pole for laying of 16sqmm copper armoured cable from pole to power house (including all accessories like, GI nipple, GI bend, copper clamp, ss bolt and but, etc.,)							
4.045	Making cable trench for laying cable direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. (Rocky area)(street light cable, staff quarters cable)	250	Mtr					
4.046	Applying wall white putty and painting in wherever plastering work done in all quarters.	1	LS					
4.047	Labour charge for Dismantling of old wiring, cables, fans, switch board and electrical fittings etc., at NA-1 Qtrs 1 No, NA - 2 Qtrs 1 No, LHA qtrs 2 Nos, IQ and power house and dismantling of Old panel Board etc., handed over to Station incharge.	1	LS	Rates : ir	should 1 BoQ	-	-	loted
4.048	Miscellaneous items for the purchase of screws, Bolts, Nuts & Washers, drill bits, cable ties, 25mm PVC insulation, 25mm PVC bends, tees, 1,2,3,4 way junction boxes,Cutting plates, 12 mm Fan hooks, Fan rod for extension, wire strippers, steel spring, pvc junctions boxes etc., Wall white putty and paints.	6	LS					
4.049	Making earth pit charges(additional) of SI No. 4.023 for Lighthouse located at hill & rocky area diffcult to digging earth pit(heavy duty machinary and labour charges) (plate earthing)	2	LS					
4.05	Making earth pit charges(additional) of SI No.4.024 for Lighthouse located at hill & rocky area diffcult to digging	7	LS					

	earth pit(heavy duty machinary and labour charges)			
4.051	Black stone cutting charges for concealed wiring and making hole 600 mm wall for cable entry As buildings are constructed by black stone.	713	Mtr	
4.056	Supply, Installation and testing of LT Distribution panel, Fabriated out of 16SWG CRCA Sheet not less than 2mm thick, powder coated, dust/vermin proof, compartmentalized with hinged doors, with one incomer and 8 outgoing with following single front, fixed type indoor installation type, Power Control Cubical Panel-with double bus bar system and Epoxy based powder coating of Colour Siemens Gray. E.B INCOMER: Consisting of the following 100A, 4Pole, MCCB - 1 No R,Y,B Phase Indication Lamps (LED Type) OUT-GOING FEEDERS: Consisting of the following 1) Single Phase Metering Feeders: 4 Nos. 32A,Kit-Kat Fuse Re-wirable type - 4 Nos 16A, Neutral link - 4 no. 2) 32A,2Pole,10kA, MCB - 4 Nos	1	LS	Rates should only be quoted in BoQ in xis form
4.057	Supply, Installation and testing of LT Distribution panel, Fabriated out of 16SWG CRCA Sheet not less than 2mm thick, powder coated, dust/vermin proof, compartmentalized with hinged doors, with one incomer and 3 outgoing with following single front, fixed type indoor installation type, Power Control Cubical Panel-with double bus bar system and Epoxy based powder coating of Colour Siemens Gray.(Wall Mounted) <b>100A,Kit-Kat Fuse Re-wirable type - 3 nos.</b>	1	LS	

	200A, Neutral Link - 1 no. 100A, 4Pole, MCCB - 1 no. Digital VAF(Multifuction) Meter along with necessary CT & PT R,Y,B Phase Indication Lamps (LED Type) 63A 2 Pole 2 Way Change over Switch 63A 1 Pole 3 Way Selector Switch 25kA, 4Pole,320V AC SPD Surge Protector - 1 no. OUT-GOING FEEDERS: Single Pole 10A MCB - 4 Nos, 16A MCB - 4 Nos 20A MCB - 4 nos.							
5.01	Supply of 16 Sqmm, 4 core Pvc Ins Copper Flexible Cable (for internal loop wiring in power house)	20	Meter	Rates	should	l only	be qu	oted
5.011	Supply and Installation of Street light poles with LED fitting at Bhatkal Lighthouse- ANNEXURE-III			51	n Boq	in XIS	form	
5.012	Electrical Fittings /Cables/							
5.013	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.							
5.014	Double pole (6A)	12	Nos					
5.015	Providing, laying and fixing 80mm dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep)and re-filling etc as required (for RCC road crossing)	20	meter					

5.016	Supply of Outdoor 25Watt LED COB(chip on board) street light fitting (Die cast powder coated enclosure with structured LED arrays and IP65/66 protectionand)	10	Each	
5.017	Supply of Outdoor IP65 Wall Mounting Gate Light Luminaries, 20W LED with Big doom	4	Each	
5.018	Supply and laying of 3core X 2.5sqmm Copper armoured PVC insulated/PVC sheathed XLPE power cable as required.	200	Each	
5.019	Supply of 2.5 Sqmm Cable gland	24	Each	
5.02	Supply and Installation 3" Dia Class "C" GI pipe 4 meter Length (as per drawing) alongwith applying 1 coat primer and 2 coat aluminium paint.	10	Each	
5.021	Supply and Installation of 1" threaded 45 degree bend pipe 1 meter length alongwith applying 1 coat primer and 2 coat aluminium paint.	10	Each	Rates should only be quoted in BoQ in xis form
5.022	Supply and Installation of 3" to 1" GI reducer alongwith applying 1 coat primer and 2 coat aluminium paint.	10	Each	
5.023	Supply and fixing of SMC Pole mounted Junction Box (200X140X95mm)with side hinged door, IP55 with necessary clamps/ Strip, SS screws/Nut and blot, etc.,	12	Each	
5.024	Supplying and laying of 3 Core 1.5 Sqmm PVC Copper cable (from street light fitting to jn box)	45	Mtr	
5.025	Supply and fixing 1 <sup>1/2"</sup> PVC HDPE flexible(Hard) pipe Thickness aprox 3mm hard pipe (To fixing foundation for laying cable from under ground to junction box)	30	Meter	

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5.026	Supply of 1 Phase street light timer 16 Amp	1	Nos	
5.027	Supply of PVC enclosure for fixing street light timer	1	Nos	
5.028	Electrician (Labour) Charges for wiring of streelights, and fitting luminaries, timer, etc.,	1	LS	
5.03	Foundation and base work for Streetlights			
5.031	Base of Streetlights: Earthwork Excavation(0.6 x 0.6 x 0.5m) for the foundation of steeetlight, 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) Concrete Work (0.6 x 0.6 x 0.5m) for the foundation with Post pipe placed in concrete inclusive of materials, Brick Work (0.45 x 0.45 x 0.45m) for post base and placing of pipes for cable entry, Plastering Work (4 x 0.45 x 0.45) +(0.45 x 0.45) for post base and Painting Work applying 1 coat White primer Paint and 2 coat Synthtic enamel Red Paint.(4 x 0.45 x 0.45)+(0.45x 0.45)	10	Each	
5.032	Labour charge for dismentaling of old street lights	6	Each	Rates should only be quoted
5.033	Pumphouse Accessoires			in BoQ in xis form
5.034	Supply of Submersible Pump Set Single Phase with motor rating of 1.5 kiloWatt 30 stage with Control Panel with starter, ISI marked MCB /main switch,ammeter,voltmeter.	1	Each	
5.035	Supply and laying of 3core X 2.5sqmm Copper Submersible Flat Cables for Submersible Pumps	250	Meter	
5.036	Supply and fixing 50mm GI class C pipe 6 meter length in ground (including Earthwork Excavationand and	6	Nos	

	foundation with Congrate) for supporting of subersible flat cable on over head from power house to Submersible pump			
5.037	Supply and fixing 50mm GI dummy	6	Nos	
5.038	Labour charge for installation of 2 phase motor and starter	1	Each	
5.039	Miscellaneous items for the purchase of GI elbow, Nipple, Joint, water proof Joint tape, teflon tape , etc.,	1	LS	
6.01	Supply and Installation of ESE Lightning arrester at Bhatkal Lighthouse- ANNEXURE_IV			
6.011	Lightning arrester			
6.012	Providing and fixing 25 mm X 3 mm copper strip on surface or in recess for connections etc. as required. (For Lightning arrester)	40	meter	
6.013	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal / coke and salt as required.(For Lightning arrester) IS 2309 1969: Code of practice for the protection of building and allied structures against lightning.(Two earthing)	2	Each	Rates should only be quoted in BoQ in xis form
6.014	Supply of Early Streamer Emission (ESE) lightning conductor. Equipped with Stainless central pick up rod. Full electrical continuity between the tip and the earth point. Fully autonomous (no battery, no external power supply required) Collect energy through streamer emission controlled with detects the lightning and trigger a	1	Each	

2)

	streamer (3,5KV and 20A). The ESE shall cover the area of 60 mtrs. Radius. Manufactured as per CPRI Requirements & as per Indian standard.			
6.015	Supply of 6 mtr. single length elevation pole (Lightning arrester mast) made of GI "C" Class 40mm dia. with a M20 thread at the top to fix the ESE unit. Necessary provisions shall be provided for stay wire termination, fixing of insulated copper flat laying from the top (ESE unit) of the mast to bottom of the mast. The bottom of the mast shall be welded with 300 x 300 x 10mm GI plate and supported gazette plate with 4 nos. of 22mm hole suitable for making foundation bolt for fixing the mast. The stay wires shall be made of 6mm SS in the grade of 304 with suitable SS wire rope clamp which withstand salty atmosphere and wind speed of 150km/hr.	1	Each	Rates should only be quoted in BoQ in xis form
6.016	Providing and fixing of additional 6 feet Triangle GI support to the mast pipe with hand rail using 40mm GI 'C' class pipe by using copper clamp with SS bolt and nut.	1	Each	
6.017	Supply of Lighning flash counter	1	Each	
6.018	Supply of 40mm insulator pipe for fixing ESE lightning arrester pipe with basement of mast pipe.	2	feet	
6.019	Supply of Test link box(GI)(Test link point should be copper strip with brase bolt and nut)	1	Each	
6.02	Installation of ESE Lightning arrester, insulator pipe, lightning mast Pipe, flash counter, Test link, etc.,	1	Each	
6.021	Making earth pit charges(additional) refer SI No.6.013 (for earthing) Lighthouse located at hill & rocky area diffcult to	2	Nos.	

Quoted R	ate in Words							
Fotal in F	igures							
6.023	Miscellaneous items for the purchase of S.S screws, SS washer, bolt&nut, Ceramic Strip Insulator- 80 Nos, insulation tape, Insulation sleeve, Fisheres(wall plug) etc.,	1	LS					
6.022	(refer SI No 6.012) (Additional + risk charge) Laying of 25X3mm copper strip (For vertical run) at the out side of LH tower on surface of wall from Lighthouse tower top (lightning arrester) to LH bottom earth pit by clamping the tape at the distance of 2 feet using insulator, fisheres(wall plug), ss screws tools.(including all accessories like, Nylon rope, safety belt etc.,)	1	LS	Rate	s should In BoQ	-	-	ted
	digging earth pit(heavy duty machinary and labour charges) (for plate earthing)					N.		

The bidder should quote for all the above Items

निदेशक/Director

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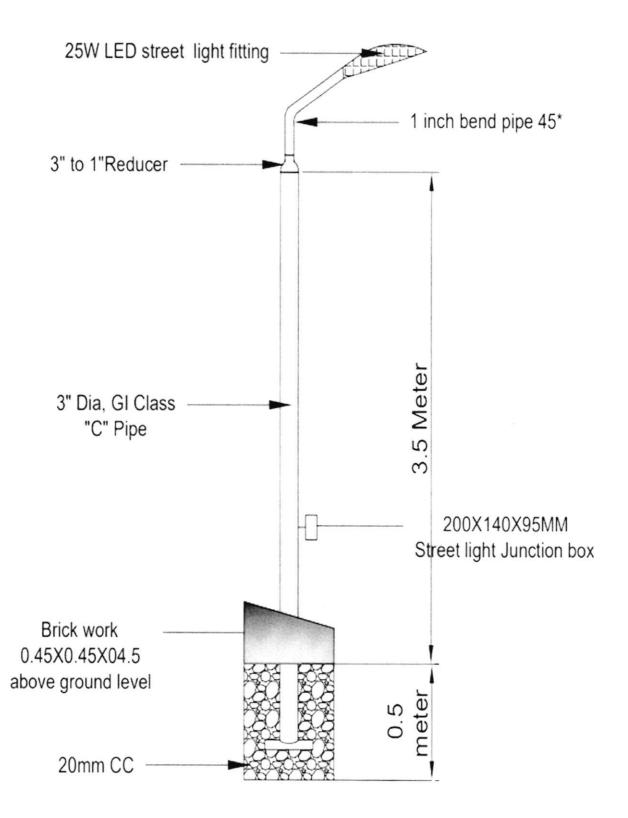
भारत सरकार/Government of India पत्तन, पोत परिवहन और जलमार्ग मंत्रालय /Ministry of Ports, Shipping and Waterways दीपस्तंभ और दीपपोत निदेशालय/Directorate of Lighthouses and Lightships दीप भवन, जी एम सी स्टेडियम के पास, बम्बोलिम, गोवा - 403202 Deep Bhavan, Near GMC Stadium, Bambolim, Goa – 403202

## खण्ड/Section – 9

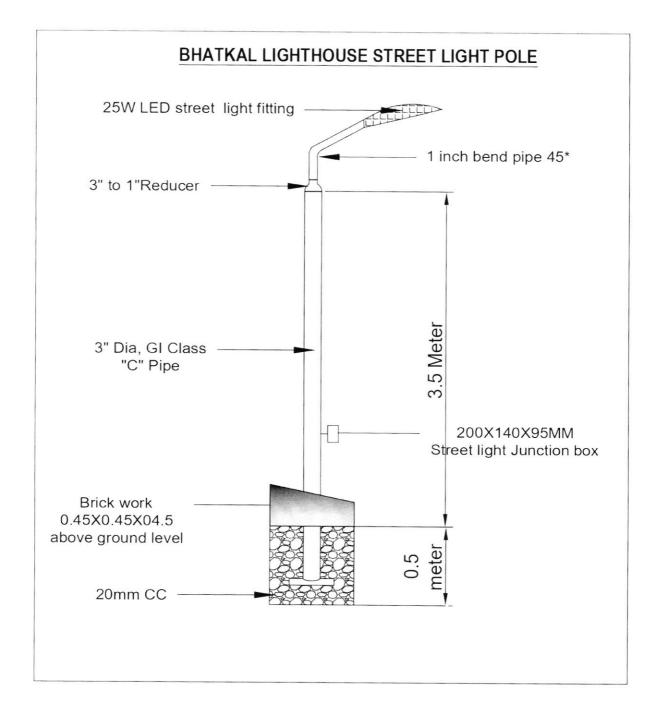
## मिस्केलनोस एनेक्सीक्स/MISCELANEOUS ANNEXURES

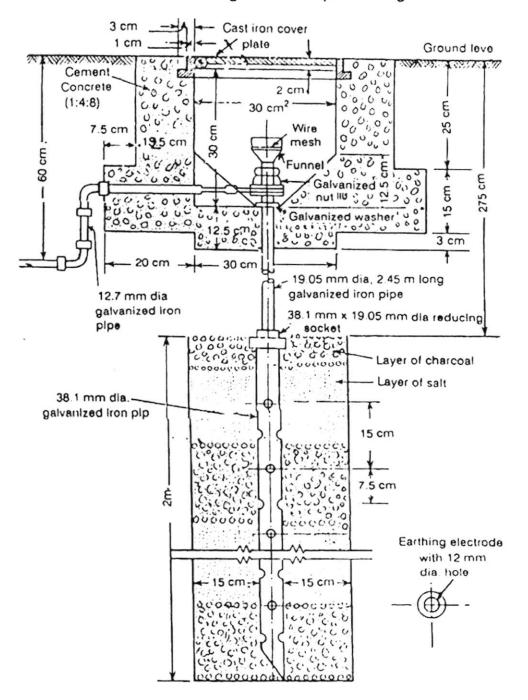
- Drawings 9.1.1 to 9.1.9
- Form 9.2 Pro forma of Bank Guarantee for Contract Performance
- Form 9.3 Pro forma for Submission of EMD
- Form 9.4 Pro forma for Tender Acceptance Letter
- Form 9.5 Pro forma for Undertaking
- Form 9.6 Pro forma for Non Blacklist Affidavit
- Form 9.7 Pro forma for Bid Security Declaration
- Form 9.8 Technical bid checkup list.

निदेशक/Director



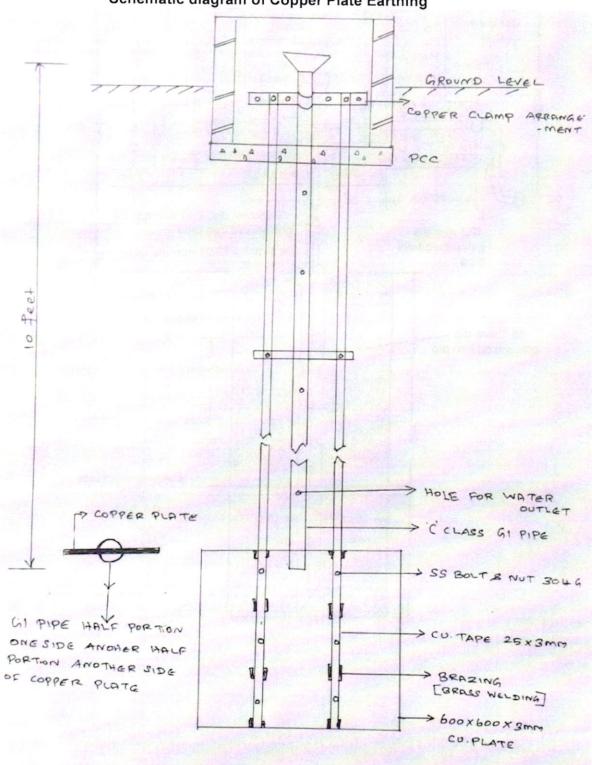
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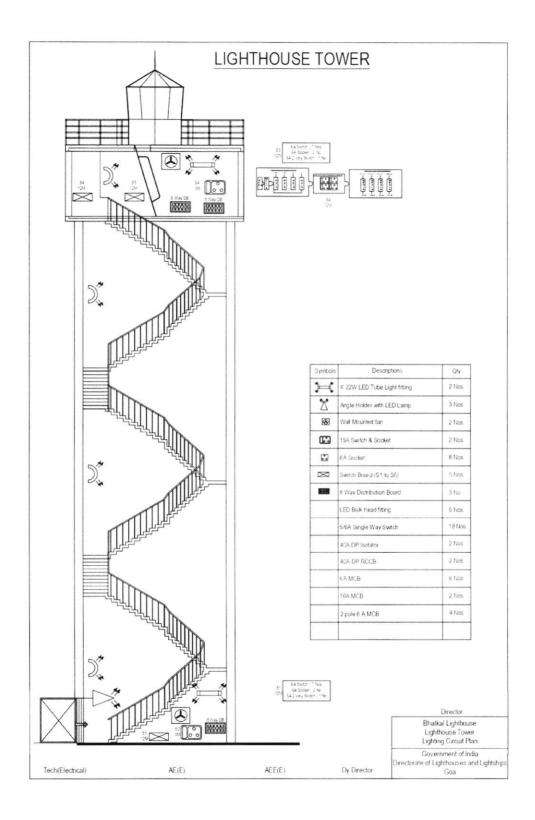


## Schematic diagram of GI Pipe Earthing

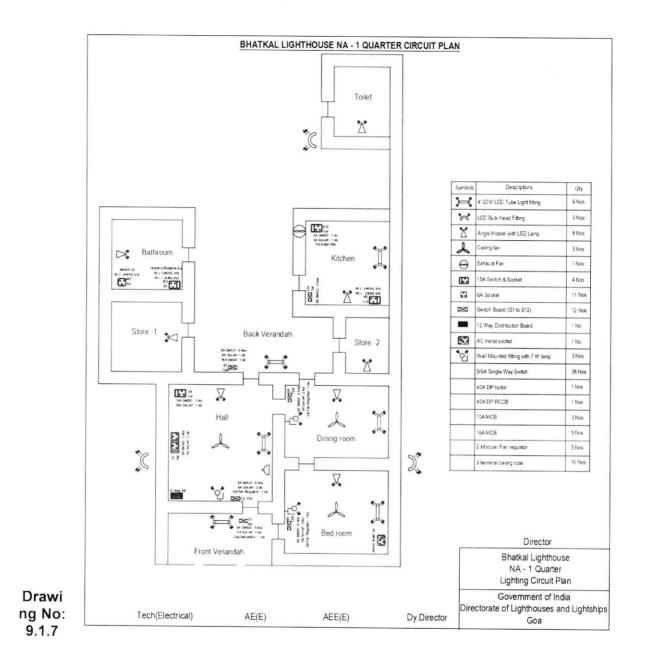
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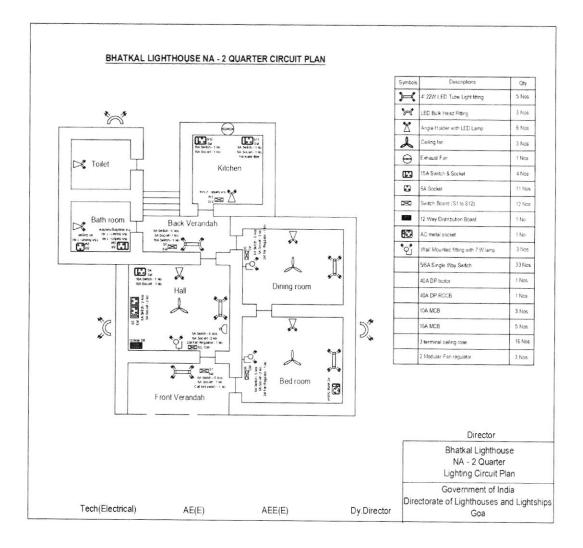


Schematic diagram of Copper Plate Earthing

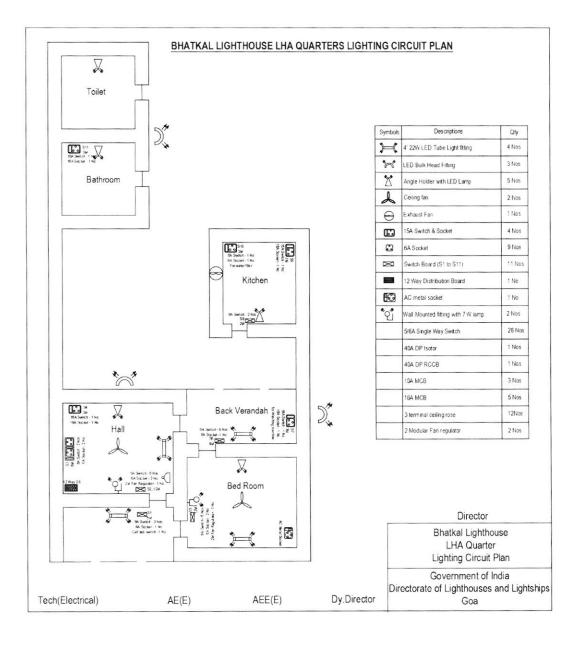


Drawing No: 9.1.6

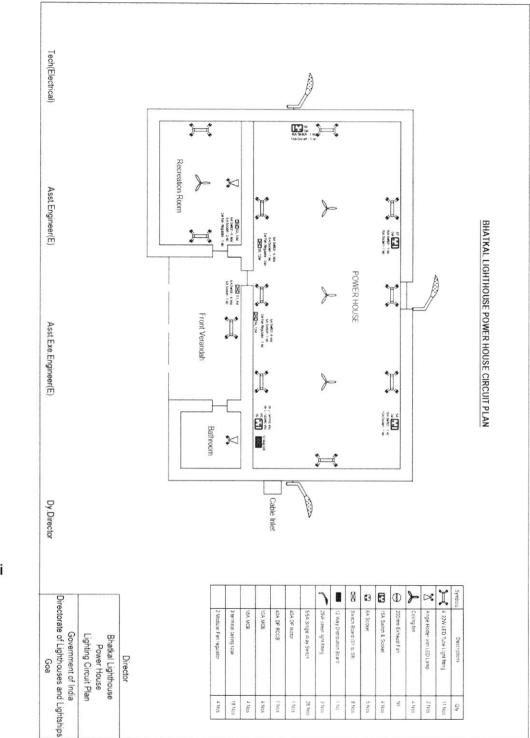


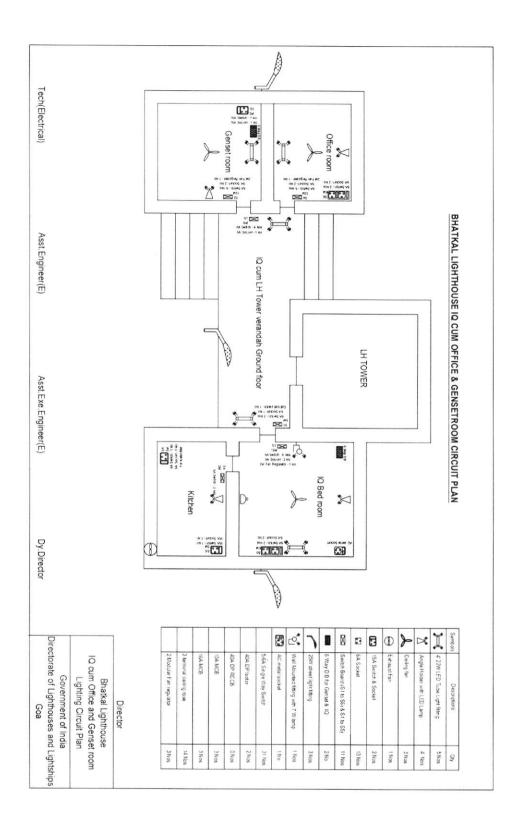


Drawing No: 9.1.8

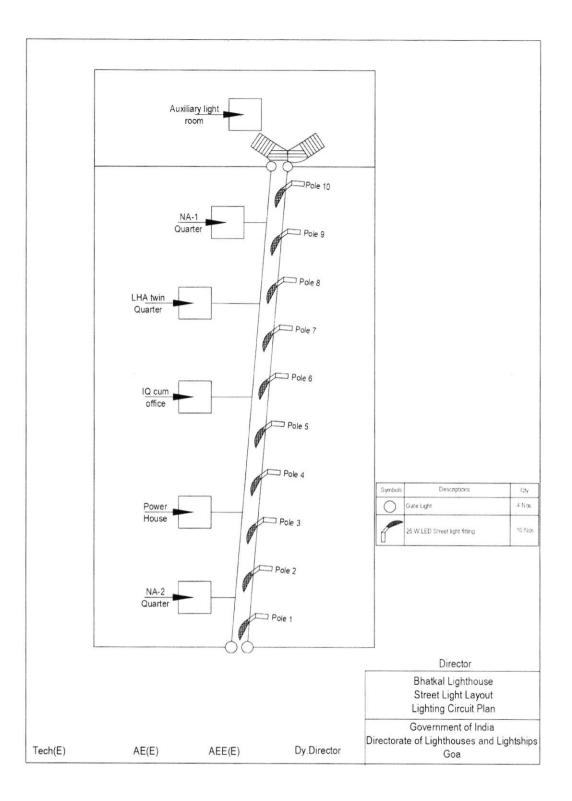


Drawing No: 9.1.9

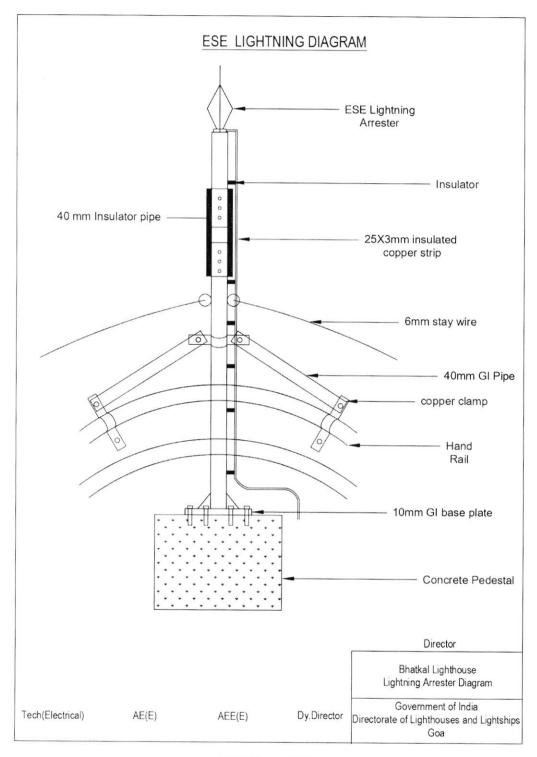




Drawing No: 9.1.11



Drawing No: 9.1.12



ম্বদর/Form 9.2 PRO FORMA OF BANK GUARANTEE FOR CONTRACT PERFORMANCE (On a non-judicial stamp paper of ₹ 200/-)

Bank Guarantee No ...... Ref.....

Date.....

To The President of India Acting through the Director, Directorate of Lighthouses & Lightships, Deep Bhavan, Near GMC Stadium, Bambolim, Goa 403 202.

#### Dear Sirs,

We \_\_\_\_\_\_\_\_\_\_ (Name & Address of the bank) having its Head office at\_\_\_\_\_\_\_\_\_\_ (hereinafter referred to as the "Bank" which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assignees) do hereby guarantee and undertake to pay the DLL, on mere demand any and all moneys payable by the Contractor to the extent of ₹ \_\_\_\_\_\_\_\* as aforesaid at any time up to \_\_\_\_\_\_\_\_ (day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the DLL on the Bank shall be conclusive and binding notwithstanding any difference between the DLL and the Contactor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the DLL and further agrees that the guarantee herein contained shall continue to be enforceable till the DLL discharges this guarantee.

The DLL shall have the fullest liberty without affecting in any way the liability of the bank under this guarantee, from time to time to extend the time for performance of the contract by the Contractor. The DLL shall have the fullest liberty, without affecting the 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 Contractors, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied in the Contract between the DLL and the Contractor or any other course or remedy or security available to the DLL. The bank shall not be released of its obligations under these presents by any exercise by the DLL of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the DLL or any other indulgence shown by the DLL 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 DLL 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 notwithstanding any security or other guarantee that the DLL may have in relation to the Contractor's liabilities. We undertake to pay to the Government any amount so demanded by the Government, notwithstanding any dispute or difference between the Government or the Contractor or any other person or between the Contractor or any person or any suit or proceeding pending before any court or tribunal or arbitration relating thereto; or the invalidity, irregularity or unenforceability of the contractor in any other circumstances which might otherwise constitute discharge of this Guarantee, including any act of omission or

commission on the part of the Government to enforce the obligations by the Contractors or any other person for any reason whatsoever.

We\_\_\_\_\_(indicate the name of the bank) further agree that the guarantee herein contained shall be continued on and remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the DLL, certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

We\_\_\_\_\_\_(indicate the name of the bank) hereby agree and undertake that any claim which the Bank may have against the Contractor shall be subject and subordinate to the prior payment and performance in full of all the obligations of the Bank hereunder and the Bank will not without prior written consent of the Government exercise any legal rights or remedies of any kind in respect of any such payment or performance so long as the obligations of the bank hereunder remain owing and outstanding, regardless of the insolvency, liquidation or bankruptcy of the Contractor or otherwise howsoever. We will not counter claim or set off against its liabilities to the Government hereunder any sum outstanding to the credit of the Government with it.

Notwithstanding anything contained herein above our liability under this Bank Guarantee is limited to total amount of ₹\_\_\_\_\_\_\* and it shall remain in force up to and including \_\_\_\_\_\_\*\* and shall be extended from time to time for such further period as desired by M/s\_\_\_\_\_\_ on whose behalf this guarantee has been given.

Dated this WITNESS	day of	2021 at
		(signature)
Name		(Bank's rubber stamp)
(Official address)		Name
		Designation with Bank stamp
		Attorney as per power of Attorney

#### NOTE:

1. Strike out whichever is not applicable:

\*This sum shall be three percent (03%) of the contract Price.

\*\*The date will be Ninety (90) days after the end of the guarantee/warranty period as specified in the Contract.

2. The stamp papers of appropriate value shall be purchased in the name of Guarantee issuing Bank.

प्रपत्र/Form 9.3

Date.....

#### **PRO FORMA FOR SUBMISSION OF EMD**

(To be given on Company Letter Head)

Ref.....

From:-

To, The President of India, Through the Director, Directorate of Lighthouses and Lightships, Deep Bhavan, Near GMC Stadium, Bambolim, Goa 403 202.

Sub:- :Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

Sir,

I/We do hereby offer to carry out and complete the subject work as per schedule of works, general conditions of contract stipulated by you and such other details as may be supplied from time to time during the execution of the subject work by the Director, Directorate of Lighthouses & Lightships, Goa or his representative at the rates quoted by me/us for the above work.

2. I/We further undertake to complete the work within \_\_\_\_\_\_from the date of written order to commence the work.

4. Should I/We fail to execute the work as specified and in accordance with the terms of contract the full value of the E.M.D. shall stands forfeited to you without prejudice to any other rights and redressals.

Yours faithfully

Bidder

प्रपत्र/Form 9.4

# निविदास्वीकृतिपत्र/TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:

To,

The Director, Directorate of Lighthouses & Lightships, Deep Bhavan, Near GMC Stadium, Bambolim, Goa 403 202

## Sub: Acceptance of Terms & Conditions of Tender

Tender Reference No:

Name of Tender / Work: Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

Dear Sir,

I. We have downloaded / obtained the tender document(s) for the above mentioned "Tender/work" From the web site(s) namely:

as per your advertisement, given in the above mentioned website(s).

- 2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. 1 to 79 (including all documents like annexure(s), schedule(s), etc.), which shall form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
- The corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.
- 4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document/ corrigendum(s) in its totality / entirety.
- 5. I / We hereby undertake that, the prize bid will not contain any conditon.
- 6. In case any provisions of this tender are found violated, then your department/ organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full earnest money deposit absolutely.

Yours faithfully,

(Signature of the Bidder, with Official Seal)

## **PRO FORMA FOR UNDERTAKING**

(To be given on Company Letter Head)

I						son of	Shr	ri./Smt.	authorised
signatory	to	sign	the	bid	on	behalf	of	M/s.	
								do har	aby aive an undertaking that

do hereby give an undertaking that,

(i) The price bid does not contain any condition.

(ii) We have not made payment or illegal gratification to any person /authority connected with the bid process, so as to influence the bid process and have not committed any offence under PC Act in connection with the bid.

(iii) The design, the Contractor's Documents, the execution of works will be in accordance with the laws of the land.

(Seal of the Company)

Date..... bidder....

Place ..... bidder..... Signature of the

or his Authorised signatory Name of the

or his Authorised signatory

## प्रपत्र/Form 9.6

## PRO FORMA FOR NON BLACKLIST AFFIDAVIT

(Affidavit on a Non Judicial Stamp Paper of ₹ 100/- Duly Notarized or on company letter head)

That ours is partnership firm having partners as under :-

Full Name of partners.

(a)

(b)

(C)

(d)

Or

That ours is a private limited/public limited company incorporated in terms of the provisions of the Companies Act, 1956/Companies Act, 2013. (Delete which is not applicable while typing affidavit)

If proprietorship a registration certificate for the same/if partnership Firm, partnership deed is to be enclosed, if private limited/public limited company, Certificate of incorporation and Memorandum & Articles of association to be submitted. All the partners/ directors should sign the affidavit or the person authorized by all the partners or one of the Directors duly authorized by Board Resolution in case of Company can sign with authority letter from all the partners/or Board Resolution in case of Company is to be enclosed.

2. That I hereby confirm and declare that my/our firm/company M/s..... is not blacklisted/ delisted or debarred or on Holiday list with any company of Private/Public Ltd. or Government Company/ Govt. dept. from participating in the tender as on date.

3. That I hereby confirm and declare that my/our firm/company M/s..... is /are not involved in any illegal activity and/or not charge sheeted for any criminal act of theft and/or diverting of any other essential commodity during last five years.

4. That I further undertake that in case any of the facts sworn in as mentioned above and any particulars mentioned in our application is found other-wise or incorrect or false at any stage, my/our firm/ company shall stand debarred from the present and future tenders of the Directorate General of Lighthouses and Lightships (DGLL). Besides, DGLL shall be entitled to take all such actions as may be deemed fit including termination of contract, if awarded, without any claim for any compensation whatsoever on account of such premature closure of the contract.

5. I know that to swear a false affidavit is a crime under the law and with such knowledge only I have swear this Affidavit.

(Signature of the Proprietor/ Managing Partner/Director with Seal) DEPONENT

> (Signature of the Proprietor/ Managing Partner/ Director with Seal) DEPONENT

(Signature & Seal of Notary)

प्रपत्र/Form 9.7

### BID SECURITY DECLARATION

The Director, Directorate of Lighthouses and Lightships, Near GMC Stadium, Bambolim, North Goa-403202.

Sir,

To,

Sub.: Submission of EMD/Bid Security Declaration - Reg.

Ref.: No.:

, dated

# Name of work: : Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

I/We declare that:

- I/We understand that according to the tender document, bids must be accompanied by EMD or a Bid Security Declaration. Accordingly, I/We have opted for submitting this Bid Security Declaration.
- I/We declare that I/We not withdraw our bid during the Bid validity period or make any modifications to my/our bid.
- I/We understand that if I/We withdraw my/our bid or modify the bid, I/We be automatically suspended from being eligible for bidding and also will be debarred from competing for bids in your esteem institute for a period of two year from date of occurring of such breach.
- 4. I/We understand that if I/We fail to furnish the Performance Guarantee before the deadline specified in the LOA/LOI, my /our bid will be automatically cancelled and I/We will also be debarred from competing for bids in your esteemed institute for a period of two year from the date of occurring of such breach.
- 5. I/We further understand that if I/We fail to sign the contract in case the work is awarded to me /us or fail to furnish the Performance Guarantee, my/our bid will be automatically cancelled and I/We will also be debarred from competing for bids in your esteemed institute for a period of two year from the date of occurring of such breach.
- 6. I/We understand that this Bid Security Declaration will automatically expire if we are not the successful bidder/ upon the expire of bid validity period.

7. I/We declare that I am/ we are authorized to sign this declaration.

Duly signed this declaration on this day......2022 in the presence of following witness.

In the presence of:

In the presence of:

Name of witness : Signature : Postal Address :

Name of witness : Signature : Postal Address :

Signature of the Bidder

## TECHNICAL BID CHECK UP LIST (to be filled and uploaded on cpp portal by bidder in excel format attached with tender document)

SUB : Re-wiring of Lighthouse tower, Power house, Staff Quarters, Inspection Quarter, Supply and installation of Street lights poles and ESE Lightning Arrester at Bhatkal Lighthouse under Goa Directorate.

NIT No: EM-Goa-01001(13)/1/2022-Electrical Maintenance dated 05/09/2022

Sr	Name of the Contractor			
No	Description		Documents Attached/Not Attached (select from drop down list))	Details (Description)
1	Address		······	
2	Contact person			
3	Telephone no.	Mr. XXX Mob. 99999999999		
4	Fax no.			
5	E mail Id			
6	PAN	PAN No.		
7	GSTIN	GSTN.		
8	Company Registration certificate	Cert. No. date.		
9	Self-attested copy of valid relevant License for undertaking all Electrical Works	Cert. No. date.		
10	Tender Fee	Rs DD No Bank_		
11	Earnest Money Deposit	Rs FDR No Bank_		
12	Annual Income Tax return filed with I.T. Department			
13	A.Y. 2019-20	Rs.		
14	A.Y. 2020-21	Rs.		
15	A.Y. 2021-22	Rs.		
16	Financial turnover duly certified by Chartered Accountant. in Lakhs in Lakhs			
	A.Y. 2019-20	Rs.		
	A.Y. 2020-21	Rs.		
	A.Y. 2021-22	Rs.		
	Average last 3 consecutive years (not < 50% of tender estimated amount)	Rs.		
17	Profit/Loss in Lakhs			

	A.Y. 2019-20	Rs.	
	A.Y. 2020-21	Rs.	
	A.Y. 2021-22	Rs.	
18	Bank solvency certificate issued by a Nationalised Schedule Bank only.	Rs.	
19	List of completion certificates for similar works carried out as per para 3.1.1 of tender document.		
		M/s. Company Name work completion certificate No. & date. WO No. dated : Work Subject: work Amount Rs. (Location of site) Performance:	
		M/s. Company Name work completion certificate No. & date. WO No. dated : Work Subject: work Amount Rs. (Location of site) Performance:	
		M/s. Company Name work completion certificate No. & date. WO No. dated : Work Subject: work Amount Rs. (Location of site) Performance:	
20	List of similar class of works completed during the last seven years.		
21	List of works in Hand/ under Execution .		
22	List of Technical & Administrative staff		
23	TENDER ACCEPTANCE LETTER (form 9.4)		
24	PRO FORMA FOR UNDERTAKING (form 9.5)		
25	PRO FORMA FOR NON BLACKLIST AFFIDAVIT (Form 9.6)		

26	BID SECURITY DECLARATION (form 9.7)		
27	List of make and model of proposed products which will be used such as:	LED Light and street Light fittings	
		Cables	
		Switches & Sockets	
		MCBs/RCCBs	
		Fan	

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