



Morbi Municipal Corporation

Tender Documents

for

Selection of Bidder(s) for Supply, Installation, Testing and Commissioning of Development of Heritage Pathway with Decorative pole system with related comprehensive Civil, Electrical, Mechanical Work including all necessary equipment's at near Khakrechi Darvaza with 3 (Three) years of Comprehensive maintenance, Morbi, Gujarat.

TENDER NO: MMC/ _____/2025-26

VOL-I: - TECHNICAL BID (TOTAL PAGE: XX)

1	Tender documents available	On web site http://www.tender.nprocure.com
3	Last Date & Time of submitting the tender (ONLINE)	Online till 02/07/2026, up to 18.00 Hrs.
4	Last Date, Time & Place of submitting the Volume-I (Technical Bid only) of Tender in HARD COPY	Up To 09/07/2026, 18:00 Hrs. only at Morbi Municipal Corporation, Dr. Ambedkar Bhavan, Gandhi Chowk, Morbi – 363641. GUJARAT.
5	Date, Time & Place of OPENING of the Volume-I (TECHNICAL BID ONLY) of Tender	10/07/2026 at 12:00 Hrs. Online Opening in the Office of: Morbi Municipal Corporation, Dr. Ambedkar Bhavan, Gandhi Chowk, Morbi – 363641. GUJARAT. Place for HARD COPY Opening of Tender: Morbi Municipal Corporation, Dr. Ambedkar Bhavan, Gandhi Chowk, Morbi – 363641. GUJARAT.

Municipal Commissioner
Morbi Municipal Corporation
Dr. Ambedkar Bhavan, Morbi - 363641.
Gujarat, India
2025-26



MORBI MUNICIPAL CORPORATION

TENDER NOTICE

Selection of Bidder(s) for Supply, Installation, Testing and Commissioning of Development of Heritage Pathway with Decorative pole system with related comprehensive Civil, Electrical, Mechanical Work including all necessary equipment's at near Khakrechi Darvaza with 3 (Three) years of Comprehensive maintenance, Morbi, Gujarat.

Last date of tender submission (Online)	Date: 02/07/2026 up to 18:00 Hrs.
Last date of tender submission (Hard Copy)	Date: 09/07/2026 up to 18:00 Hrs.
Details and Tenders available on	On web site http://www.tender.nprocure.com

Part - I
General Specifications

NOTICE INVITING TENDER

Name of Work: Selection of Bidder(s) for Supply, Installation, Testing and Commissioning of Development of Heritage Pathway with Decorative pole system with related comprehensive Civil, Electrical, Mechanical Work including all necessary equipment's at near Khakrechi Darvaza with 3 (Three) years of Comprehensive maintenance, Morbi, Gujarat.

Tender Cost:- Rs. 71,81,625.00 Lakh.

Dear Sir,

- 1.1 **Municipal Commissioner, on behalf of Morbi Municipal Corporation, Morbi (MMC) invites sealed tenders on two Bid system (Bid- I : Technical Bid & Bid – II : Financial Bid) from the prosperous, experienced bidders and who qualify the eligibility criteria, as mentioned in Section – I of technical specifications for the Selection of Bidders for Supply, Installation, Testing and Commissioning, of Development of Heritage Pathway with Decorative pole system with related comprehensive Civil, Electrical, Mechanical Work including all necessary equipment's at near Khakrechi Darvaza with 3 (Three) years of Comprehensive maintenance, Morbi, Gujarat.**

Volume – I : Technical Bid

Part – I : Notice Inviting Tender

Section-I :- Instruction to Tenderer

Section-II :- General Condition of Contract

Section-III :- Special Condition of Contract

Part – II : Annexure 1 to 11 & Annexure B

Part – III : Section-IV :- Technical Specification for Decorative Heritage Pathway with Lighting System

Part – IV : Section – V :- Drawings

Volume – II : Financial Bid

(To be filled ONLINE only)

- 1.2 Tender along with conditions of contract will be available from the website
- 1.3 <http://www.tender.nprocure.com>. Tenderer shall have to submit D.D. in favour of Municipal Commissioner payable at Morbi of **Rs.3000/-** as tender fee along with the tender submission.
- 1.4 The tenderer is required to check the website for Addendum if any before 48 hours of tender submission date and time. The tenderer who quotes the tender without attaching the addendum will be rejected.

- 1.5 Tenderer shall have to submit Earnest Money Deposit of **Rs. 71,816.25 /- (Rs. Seventy-One Thousand Eight Hundred Sixteen only)**, in the form of Demand Draft / Bank Guarantee, in favour of Municipal Commissioner, Morbi, Payable at Morbi. Tenderer who wishes to submit a Bank Guarantee, must submit it in the prescribed format as given in the tender, and this bank guarantee should have validity of minimum of Six Months from the date of opening of Tender and it must be issued from any Nationalised Bank / Scheduled bank **as per the Annexure-B of List of Banks attached herewith.**
Note : In case of EMD/SD submitted in form of BG, tenderer has to follow guide line as per Annexure-B.
- 1.6 The Earnest Money Deposit of the bidders who does not receive the Work Order shall be returned within 60 days, after the Award of the Work Order.
- 1.7 The successful tenderers shall have to execute Contract Agreement with MMC and shall have to pay Security deposit worth 5 % of the given order value within 15 days from the date of receipt of work order in the form of Demand Draft / Bank Guarantee, in favour of Municipal Commissioner, Morbi, payable at Morbi and this bank guarantee must have validity of minimum of One year after the date of completion of Entire work order. If the Contract price offered by the selected bidders is lower than 10% but up to 20 % of the Estimate project cost than the additional performance security shall be calculated @ 20% of the difference in the Estimated project cost minus 10% of the estimated project cost and contract price offered by the selected bidder. If the contract price offered by the selected bidder is lower than 20 % of the Estimated project cost than the additional performance security shall be calculated @ 30% of the difference in the Estimated project cost minus 10% of the Estimated project cost and contract price offered by the selected bidder. If the successful tenderer wish to submit a Bank Guarantee, must submit it in the prescribed format as given in the tender, and this bank guarantee must have validity of minimum of One years from the date of completion of Entire work order and it must be issued from any Nationalised Bank of List of Banks attached herewith of Morbi Branch ONLY.
- 1.8 If the tenderer fails to execute the contract within 15 calendar days after receiving work order of the award of contract and fails to submit security deposit, the earnest money may be forfeited, and the tenderer may be disqualified from tender.
- 1.9 After the awarding of contract has been finalized, the Earnest Money will be returned to the respective tenderer, except the successful tenderers.
- 1.10 The successful tenderer's earnest money can be retained as part of the security deposit after signing the contract and for making of the contract deposit, and rest amount of the security deposit can be submitted in the same form which the tenderer has submitted the EMD, which will be released after satisfactory completion of the entire project.
I.e., Security deposit will be released after completion of defect liability period of one year from the date of work completion. Prior to release of this SD, contractor shall have to submit a new SD worth 5% of the value of total LED fixtures i.e., 25% of the ordered value for the period of remaining Two years.
- 1.11 No interest will be paid on any tender deposit.
- 1.12 The tender shall be accompanied with the **Income tax return copy of the last three financial years.**
- 1.13 **Two sets (One Original + One Xerox copy)** of tender documents (Volume I: Part-I,

II, III,IV) including addendum if any, duly completed in all respects shall be submitted as described further, so as to reach at the following address on or before the date and time mentioned in tender notice.

**Morbi Municipal Corporation,
Dr. Ambedkar Bhavan, Gandhi Chowk,
Morbi – 363641, Gujarat.**

- 1.14 Tender Fee and Earnest Money Deposit should be sealed in separate envelope and the same should be enclosed along with Volume – I & drawings in **Envelop – ‘A’ only (Technical Bid) (One original + One Xerox copy).**
- 1.15 All tender documents as per requirement of tender notice & document should be scanned & uploaded.
- 1.16 The following documents should also be scanned form original & uploaded in Technical Bid without which financial bid will not be opened.
- I. The Similar type of work as mentioned in Pre-qualification criteria.
 - II. A copy of valid Income Tax Return submitted for current Assessment year.
 - III. Scanned from original list of works completed and in hand works tendered along with supporting certificates.
 - IV. Affidavit of Rs. 300/- Stamp Paper as per (Annexure- 12) with Notarized.
 - V. A copy of certificate of registration / NOC with the E.P.F. Organization India.
 - VI. Scanned Original Copy of Self-Declaration submitted by the contractor regarding Completeness, Correctness and truthfulness of document as per Performa given in Annexure-1 on Tenderer's Letter Head.
 - VII. Scanned from original copy of Professional Tax Registration /Professional Tax Enrolment Certificate.
 - VIII. Scanned from original Copy of PAN allotted by Income Tax Department.
 - IX. Scanned from original Copy of GST.
 - X. Solvency certificate as per Mention in Tender.
- 1.17 Financial Bids must be filled **ONLINE** Only. Hard Copy (Physical) submission of Financial Bids (Vol-2) should not be done in any case.
- 1.18 **On all these envelopes, the name of tenderer, name of work as well as date of opening of the bid shall be written invariably.**
- 1.19 Vol-I containing technical bids from the bidders received in physical form and online, will be opened in the presence of the bidder's representatives; who choose to attend at the place, time and date mentioned by MMC and the technical bids will be scrutinized.
- 1.20 After this, the financial bid – Volume – II of only technically qualified tenderers will be

opened **ONLINE ONLY**. The actual date of opening of financial bids will be communicated to technically responsive tenderers at a later date.

- 1.21 Tenders received **without Earnest Money Deposit / Tender fee (OR both)** will be considered as **non-Responsive** and **will be rejected outright**.
- 1.22 The conditional tender **will not be accepted and will be rejected outright**, unless, the nature of condition(s) put up by the bidder is acceptable to MMC. **Any suggestions / alterations from the tender, if suggested in specifications, must be mentioned in the main forwarding letter.**
- 1.23 The tender shall be **Percentage Rate Tender**. Tenderer shall have to offer the rates for the total tender value in **Above OR Below** percentage **in figures and words in Volume-II** of the tender document (**Financial Bid**). **Quantity mentioned in BOQ are indicative. It may vary as per the requirement of MMC. GST will be paid extra as actual.**
- 1.24 Acceptance of the tenders will rest with the Municipal Commissioner, who does not bind himself, to accept the lowest tender OR to accept the tender partly and reserves the right to reject any or all tenders without assigning any reason thereof.
- 1.25 The tender for the work shall remain open for a period of **120 days** from the date of Opening of the Financial Bids of the tender and the tenderer shall not be allowed to withdraw or modify the offer on his own during this period any modifications or additions in terms and conditions of his tender not acceptable to the City Engineer, Morbi Municipal Corporation shall without prejudice to any right or remedy, be at liberty to forfeit in full they said earnest money absolutely.
- 1.26 Tenderer shall, in no case have the right to withdraw the tender after opening of the Financial Bids. If any of the tenderer does so, then in such case the EMD of tenderer, shall be forfeited and in future, tenderer may be barred from quoting the tender in MMC.
- 1.27 **Incomplete tender which does not fulfil any of the above conditions will be liable for rejection. Tender will also be liable to be rejected if –**
- i) The tenderer proposes any alteration in the work specified or in the time allowed in carrying out the works or make corrections in Schedule of Quantities.
 - ii) Any of the page or pages in the tender is / are removed or replaced.
 - iii) The rate is not entered in **ink**, in **figures** in Financial Bid. Also, the rate is not written in word and figure and signed.
 - iv) All corrections, additions or pasted slips are not initialled by the tenderer.
 - v) Any erasure is made in the tender.
 - vi) The tenderer or in the case of a firm, each partner or the person holding the power of attorney thereof does not sign or the signature(s) is (are) not attested by the witness, wherever it is required.
 - vii) Earnest money for required amount is not paid with the tender.
 - viii) The tenderer returns the tender document without signing relevant pages of the bid and amendments in duplicate copy, if any.
 - ix) Data sheet by the bidder in Part – II must be furnished.

- 1.28 In the event of a discrepancy between description in words and figures in total offered amount by the tenderer, **the description in words shall prevail.**
- 1.29 In the event of any calculation error found in the bid of submission, the rate will be considered as final and accordingly the amount will be corrected.
- 1.30 The MMC reserves the right to reject all the tenders of the lowest or any other tender which is the judgment of the MMC and also does not appear to be in its best interest and the tenderers shall have no cause of action or claim against the MMC of its officers, employees, successors for assignees for rejection of its tender.
- 1.31 It must be clearly and distinctly understood that the conditions of contract and specifications shall be rigidly enforced and no relaxation on the grounds of customs prevailing shall be allowed.
- 1.32 The quoted rates in the Financial Bid (Volume-II) shall be inclusive of transportation, Inspection(Including travelling, lodging and boarding expenses of MMC Engineer) & Testing Charges, TPI Charges, etc.
- 1.33 It is considered that the tenderer has fully acquainted himself with the local situations regarding materials, labour and other factors pertaining to work and studied the drawings and estimates before submitting the tender.
- 1.34 Tenderer shall have to sign on stamp of the company on each and every page of the Vol-1.
- 1.35 The tenderer shall carefully read the eligibility criteria, given in Clause No : 15 "INSTRUCTIONS TO TENDERERS ", furnish the details and satisfy the same; otherwise the tender will be rejected without assigning any reason.
- 1.36 This notice will form part of the Contract.

Last date of **ONLINE** submission will be 02/07/2026 up to 18.00 Hrs. and **HARD COPY OF TENDER (Only Technical Bid) Submission** can be done till 09/07/2026 up to 18.00 hours. Tenders will be opened online on date 10/07/2026 at 12.00 Hrs. in Office of Additional City Engineer (Morbi Municipal Corporation).

Then after Hard Copies of Tender (Only Technical Bid), along with Tender fee and EMD Covers will be opened on same date: 09/07/2026 after 16:05 Hrs. In the office of Morbi Municipal Corporation, Dr. Ambedkar Bhavan, Gandhi Chowk, Morbi – 363641. Gujarat, India.

- 1.37 Municipal Commissioner reserves the right to terminate the contract at any time during the contract period if the work is not found satisfactory.
- 1.38 The Municipal Commissioner is in no way bound to accept the lowest or any tender and reserve to right divide or cancel without giving reasons thereof. Any Court case is not

allowed for the above tender & final authority for the above tender is Municipal Commissioner.

- 1.39 In case of any delay/deviation of our standard term of payment no interest or extra charges will be paid to tenderer by MMC.
- 1.40 On the occurrence of any accident on site while working, which results in death of workman, employed by the contractor or any disability likely to be occurred, in respect of which compensation may become payable under workmen's compensation Act has to be borne by the contractor.
- 1.41 Not more than one tender shall be submitted by Contractor or by a firm of Contractors. No two or more concerns in which an individual is interested as a proprietor and / or a partner and / or director shall submit tender for the execution of the same work / tender. If they do so, all such tenders shall be liable to be rejected.
- 1.42 In Case Of late Submission and/or Extension of Bank Guarantee, the period lapsed shall be charged as per MMC norms. Presently the same is charged 4% per annum for the delay period.
- 1.43 Municipal Commissioner reserves the right (I) To change, Alter or to waive any technical or commercial terms, conditions and qualification, (II) to reject all the tenders or the lowest or any other tender in part or full without assigning any reason whatever (III) For making changes/relaxation in eligibility criteria at any time (IV) to split the tender and award to more than one tenderer in the interest of public. The tenderer shall have no cause of action or claim Against the corporation or its officers, Employees, successors or assignee for rejection of his tender.
- 1.44 Tenderer Has been Disqualified if Even though the Applicants meet the required criteria, they are subjects to be disqualified if Applicant or any of its constituent partner/s, director/s, have:-Made misleading or False representation in the forms, statements and attachments submitted: or – Been debarred or terminated or blacklisted by Central Govt. Organization/ State Government Organization /MMC/Any Municipal Corporation /ULBs etc.
If, any of the directors, partners or the proprietor has a criminal history or has been convicted by any court of law for any of the offenses under any Indian laws.
If, any criminal proceeding is pending in any court of law in India against any of the directors, partners or a proprietor and if any such proceeding culminates into conviction.

1.45 **Enhancement Factors**

Following enhancement factors will be applied to annual turnover and completion cost of works to bring them to the base year. The current financial year in which bid is invited shall be considered as the base year.

Year	Financial year	Enhancement factor
Base (Year of inviting tender)	2025-2026	1.00
2	-1(2024-2025)	1.10
3	-2 (2023-2024)	1.21
4	-3 (2022-2023)	1.33
5	-4(2021-2022)	1.46
6	-5(2020-2021)	1.61

In case the financial figures and value of completed works are in foreign currency, current market exchange rate will be applied for the purpose of conversion foreign currency into Indian Rupees.

Applicant will indicate actual figures of costs and amounts in the schedule without accounting for the above mentioned factors.

Signature of Tenderer	:	City Engineer (MMC)
Name	:	Morbi Municipal Corporation
Company's seal	:	
Date	:	

SECTION – I
INSTRUCTIONS TO TENDERERS

1.0 Note

- 1.1 These instructions are provided to assist tenderers while preparing their tenders.

2.0 Invitation to Tender

- 2.1 The City Engineer, MMC for and on behalf of the Morbi Municipal Corporation, Morbi, hereinafter referred to as the MMC, will receive tenders for the Selection of Bidder(s) for Supply, Installation, Testing and Commissioning of Development of Heritage Pathway with Decorative pole system with related comprehensive Civil, Electrical, Mechanical Work including all necessary equipment's at near Khakrechi Darvaza with 3 (Three) years of Comprehensive maintenance, Morbi, Gujarat.
- 2.2 Tenders will not be accepted after the mentioned date and time fixed for receiving of tenders. Telegraphic tenders will not be accepted under any circumstance. Tenders received after the hour and date so fixed will not be considered. Tenders (only technical bid- Volume - I) will be received by RPAD / Speed Post / Hand delivery on or **before due date and time as mentioned in tender notice**. Tenderer's authorized representatives may attend the tender opening. The tenders shall be **opened at the date and time as mentioned in tender notice**.
- 2.3 The MMC does not bind himself to accept the lowest or any tender. If the tenderer wishes to offer discount in the event of the entire work he shall state so in the tender.
- 2.4 Tender documents are not **transferable**.

3.0 Tender Validity Period

- 3.1 The tender shall be kept valid for acceptance for a period of One hundred Twenty (120) calendar days **from the date of opening of the Financial Bids**.

4.0 Language of Tender

- 4.1 Tenders shall be submitted in English, and all information in the tender shall be in **English**. Information in any other language shall be accompanied by its translation in English. Failure to comply with this may disqualify a tender. Only English text shall be governing.

5.0 Content of Tender Documents

- 5.1 The goods required, tendering procedures and contract terms are prescribed in the Tender Document. In addition to the Invitation for Tenders, the Tender Document includes:
- 5.2
- (a) Instructions to Tenderer
 - (b) General Conditions of Contract
 - (c) Special Conditions of Contract
 - (d) Scope of Works

- (e) Technical Specifications
- (f) Price Schedules
- (g) Tender Form
- (h) Tender Security Form
- (i) Contract Form; and
- (j) Performance Security Form

The Tenderer is expected to examine all instructions, forms, terms and specifications in the tender document. Failure to furnish all information required by the Tender Document or submission of a Tender not substantially responsive to the Tender Document in every respect will be at the Tenderer's risk and may result in the rejection of their Tender.

6.0 Deleted

7.0 Deleted

8.0 Submission of Tenders

- 8.1 Tenderer should take utmost care in submitting the tender. All required documents (except Financial Bid) as asked in the tender shall have to be scanned and submitted ONLINE as well as in HARD COPY. Financial Bid is to be submitted separately ONLINE ONLY.
- 8.2 In the event of a contract, the tender and the documents attached thereto shall be considered as forming part of the Contract Documents. After Final Submission / Opening of the tenders, no request shall be accepted to submit any document. Hence Tenderer should ensure proper submission.
- 8.3 Two sets (One Original + One Xerox copy) of tender documents (only technical bid - Volume-I) duly completed in all respects shall be submitted as described in notice inviting tender in a sealed envelope so as to reach by at the following address on or before the date and time as mentioned in tender notice.

**The Morbi Municipal Corporation,
Dr. Ambedkar Bhavan, Gandhi Chowk,
Morbi – 363641, Gujarat, India.**

- 8.3 The sealed envelopes tender document shall show on the outside, the name of the tenderer and his address.
- 8.4 The tender shall be considered non-responsive if technical specifications (Part-III) are not complete in all respect. Tenderers are requested to present the tenders well in time before stipulated date and time of receipt; so as to avoid rush at the closing hours.
- 8.5 The tender document shall be accompanied by the following documents:
 - (a) DD for tender fee

- (b) The tender in duplicate copy with duly signed.
- (c) A chart showing the estimated monthly labour force proposed for the execution of this contract.
- (d) The work done and work completed by tenderer during last 7 years, he should submit satisfactory completion certificate (3A form) from the owner.
- (e) A covering letter (in duplicate) stating any other matter in relation to this tender which the tenderer considers should be drawn to the particular notice of the MMC or Consulting Engineers if any.

In addition, the original tender shall be accompanied by:

- (f) EMD, in any of the form as described in the tender
- (g) A certificate of registration minimum “B or above” class as approved Contractor should be attached with the tender.

8.6 Erasures and other changes shall be noted over by the initials of the person signing the tender.

9.0 General Performance Data

9.1 Tenderer shall present the following information along with their tenders in duplicate:

- (a) Evidence of financial capacity to execute a contract of this magnitude in terms of solvency certificate, annual turnover and price of same magnitude jobs carried out.
- (b) The bidders are requested to furnish requisite information to enable the competent authority to decide the technical and financial capability of the bidder, based on which, the bidder shall be evaluated.

Experience of similar works & equal or required magnitude as asked in the tender, The tenderer should have received the work order and completed the works in their firm / agency name only, either in Any Municipal Corporation / ANY ULB/ Any State / Central Government/ GWSSB(Gujarat)/ GWRTC(Gujarat) / Irrigation / Railways. A copy of the work order received and work completed satisfactorily during last seven years, in any of the above organization must be attached with this tender. The MMC reserves the right to waive minor deviations, if they do not materially affect the capability of a bidder to perform the contract. **Tenderer having Experience of Subcontract shall not be considered and such tenders will be rejected.**

- (c) Magnitude with names of authorities for which the works were executed along with completion / performance certificate from the owner/Issuing Authorities/Head of Department with specific mention that work is completed in time and it is completed satisfactorily. Also in the completion form 3A / performance certificate issued by other above mention organisation (section 9.1 (c)) except Morbi Municipal Corporation it should clearly mention the number of erected streetlight poles with fixtures, streetlight section pillar(feeder panel) with the expense done for the same details. In case of composite streetlight work , it should clearly mentioned the Capex and Opex amount separately from the end user. For technical evaluation of only Capex amount will be considered.

- (d) List of current jobs of comparable nature along with starting date and likely completion dates with their contract values.
 - (e) The extent of responsibilities carried by Contractors associated with the tenderer.
 - (f) General detail of tenderers' organization, management, staff and personnel, Facilities for design and execution.
- 9.2 Tenders will not be considered if the above information is not provided or is considered to be unsatisfactory.

10.0 Signing of Tender Document

- 10.1 Tenderers are requested to quote the total offered value of the tender in percentage above/below in the Financial Bid (ONLINE ONLY).
- 10.2 If the tender is made by an individual, it shall be signed with his full name above his current address.
- 10.3 If the tender is submitted by a proprietary firm, it shall be signed by the proprietor above his name and the name of his firm with its current address.
- 10.4 If the tender is made by a limited company or a limited corporation, it shall be signed by a duly authorized person holding the power of attorney for signing the tender, in which case, a certified copy of the power of attorney shall accompany the tender. Such limited Company or Corporation may be required to furnish satisfactory evidence of its existence before the contract is awarded.
- 10.5 Deleted.
- 10.6 The tender submitted by Joint Venture is not acceptable.
- 10.7 All signatures in the tender documents shall be dated.

11.0 Interpretation of Documents

- 11.1 Tenderer shall carefully examine the Tender Documents and fully inform themselves as to all the conditions and matters which may in any way affect the work or the cost thereof. Should a tenderer find discrepancies in or omission from the specification or other documents, or should be in doubt as to their meaning, he should at once address a query to the Additional Chief Engineer (Streetlight/Tr.Signal), MMC. Any resulting interpretation of the Tender Documents will be issued to all tenderer as an Addendum. Verbal clarification and/or information given by the City Engineer (MMC), shall not be binding to the MMC.

12.0 Errors and Discrepancies in Tenders

- 12.1 Should the Financial Bid and Rates submitted with the tender be found to contain errors, or discrepancies, the owner/engineer will not permit any bidder to change the Substance or price of his bid after the bid opening. In case of discrepancy in the quoted rate and the corresponding amount the rate quoted in words in all cases shall govern. Also the bidder will not be permitted to correct or withdraw material deviations or reservations once bids have been opened.

13.0 Clarification of Tender Documents

- 13.1 A prospective tenderer requiring any clarification of the Tender Document may notify the Purchaser in writing or by telex or fax at the Purchaser's mailing address as indicated. The Purchaser will respond in writing to any request for clarification of the Tender Document which it receives no later than 30 days prior to the deadline for the submission of Tenders prescribed by the Purchaser. Written copies of the Purchaser's response will be sent to all prospective Tenders who have purchased the Tender Document.

14.0 Amendment of Tender Documents

- 14.1 Modifications of specifications and extension of the closing date of the tender, if required, will be made by an Addendum which will be put up on website before 48 hours of tender submission date and time. **These shall be signed and returned by the tenderer and shall form a part of the tender document.**
- 14.2 The tenderer shall not add to or amend the text of any of the documents except in so far as may be necessary to comply with the Addendum.

15.0 Eligible Tenderer

This invitation for Tenders is open to all contractors who have the following qualification:

15.1 Tender Eligibility Criteria

15.1.1 Eligibility Criteria :-

- 1.1 The contractor must possess the valid electrical contractor license duly renewed for the current year from Any state / Central government.
- 1.2 The Tenderer should have Government approved at least "B or above" Class contractor registration. The current year copy of the same should be attached with the Tender.
- 1.3 Tenderer must have experiences of the SITC Work of Heritage Pathway, Decorative Heritage pole Projects, Street light poles of G.I./ FRP/ GRP/ M.S. / SITC of High mast system done within the time limit of the Work order given and work completed during the last seven years ending last day of the month previous to the one in which tenders are invited should be either of following.
- One Similar work order completed having costing not less than the amount equal to Rs. 57,45,300.00 Lakh. (i.e., 80% of tender value)
 - OR**
 - Two Similar work orders completed having costing not less than thof tenderqual to Rs. 35,90,812.5 Lakh. (i.e., 50% of tender value)
 - OR**
 - Three Similar work orders completed having costing not less than the amount equal to Rs. 28,72,650.00 Lakh. (i.e., 40% of tender value)

Contractor should have received the work order and completed the works during last seven years. Work order & Form 3(A) / work completion certificate / work performance certificate is to be submitted mandatorily and the same issued from Competent authority of End User. Also in the

3(A) form/ work completion certificate / work performance certificate of the End User except Morbi Municipal Corporation it should mention the quantity of Streetlight poles erected with fixtures, cables, streetlight section/ feeder pillar with the details of the expense done for the same. In case of composite streetlight work, it should clearly mention the Capex and Opex amount separately from the end user. For technical evaluation only Capex amount will be considered.

- **Definition of Similar Works:- Similar Works means SITC of Decorative Heritage Pathway, Street Lighting Poles (G.I./ FRP/ GRP/ M.S.) / SITC of High mast System with its related Civil, Electrical and Mechanical Works.**

- 1.4 Tenderer should have sound financial capacity and having average annual turnover of at least Rs. 21,54,487.5 Lakh during the last three years, ending 31st March of the previous financial year. (i.e. 30 % of tender amount).
- a. Qualified Staff: The Contractor shall have qualified staff with him. Details shall be submitted with the tender.

15.1.2 Qualification will be based on meeting all the following minimum pass / fail criteria regarding the bidder's general and particular experience, personnel and equipment capabilities and financial position. Experience of similar works & equal or required magnitude as asked in the tender. During last seven years the tenderer should have received the work order and completed the works in their firm / agency name only, either in Any Municipal Corporation / Any ULB/ any State / Central Government/ GWSSB(Gujarat)/ GWRTC(Gujarat) / Irrigation / Railways. Contractor must have to submit the copy of the work order received and works completed during last seven years. **Tenderer having Subcontract Experience shall not be considered and such tenders will be rejected.**

The bids received under this procedure shall be assessed and evaluated based on the Qualification Criteria and Evaluation Procedure prescribed hereunder.

15.1.3 Assessment of Bids:

Bid applications will normally be assessed using following process. The contract will only be awarded to responsible, financially sound and well experienced contractors on the following basis:

- (A) Experience
- (B) Financial Capacity
- (C) Qualified staff

(A) Experience:

The bidder shall be electrical license holder of any state Government or such license is notified by the any state Government. The license shall be valid during the Tenancy of the contract. Registration should be at least in "B or above" class.

The tenderer should have received the work order and completed the works in their firm / agency name only, either in Any Municipal Corporation / any ULB/ any State / Central Government/ GWSSB(Gujarat)/ GWRTC(Gujarat) / Irrigation / Railways. A copy of the work order received and work completed satisfactorily during last seven years, in any of the above organization must be attached with this tender. The MMC reserves the right to waive minor deviations, if they do not materially affect the capability of a bidder to perform the

contract. **Tenderer having Experience of Subcontract shall not be considered and such tenders will be rejected.**

(B) Financial Capacity:

The Tenderer shall have to submit audited annual reports / financial reports of last three financial years. Annual reports shall include the auditor's certification, wherever necessary, the Employer can make enquiries with the bidder's bankers.

• **The Bid capacity will be evaluated as:**

$$\text{Bid capacity} = 2AN - B$$

Where, A = Maximum turnover annually during last 3 years

N = Completion period (in month) / 12 = 12/12 = 1
(12 Months Consider Only for Tender bid Calculation)

B = Value of work of the existing commitments and on-going works to be completed during the next one year

(C) Qualified Staff: The Contractor shall have qualified staff with him. Details shall be submitted with the tender.

15.1.4 Litigation History :

The bidder should provide accurate information on any litigation history or arbitration resulting from contracts completed or under execution by him over the last ten years. This should also include such cases, which are in process/progress. A consistent history of awards against the bidder or any partner of a joint venture may result in failure of the bid. In case the bidder has not provided such information and has come to the notice of the Authority the tender will be rejected at whatsoever stage and in such case all the losses that will arise out of this issue will be recovered from the tenderer / contractor and he will not have any defence for the same.

Disqualification: -

Even though the applicants meet the required Criteria, they are subject to be disqualified if the applicant or any of its constituent partner/s, director/s, have:- Made misleading or false representation in the forms, statements, and attachments submitted; or – been debarred or terminated or blacklisted by Central Govt. organisation / Any State Govt organisation / MMC / Any Municipal Corporation / ULBs etc.

- If any of the directors, partners or proprietors has a Criminal history or has been convicted by any court of law for any of the offenses under any Indian laws.
- If, any criminal proceeding is pending in any court of law in India against any of the directors, partners, or a proprietor and if any such proceeding culminates into conviction.

15.1.5 Solvency Certificate:-

The Tenderer should submit a Solvency Certificate from a Nationalized / Scheduled Bank of an amount of Rs. 14,36,325.00 lakh. (i.e., 20% of Estimated cost of tender). Bank Solvency should not be Older than One year period from the date of opening of tender. Tenders received without Bank Solvency shall be rejected.

16.0 Evaluation of Tenders

16.1 For evaluation and comparison of bids, the following factors shall be considered.

- i) Qualification criteria for contractor as mentioned in the above clause no: 15 - Eligible Tenderers.
- ii) The costs of procurement of principal element of the work of similar magnitude executed earlier.
- iii) The time of completion of this work, is essence contract. The work is to be completed within the time schedule given from the date of the work order given during the last seven years ending last day of the month previous to the one in which applications are invited.
- iv) The reliability of the proposed execution of electrical work.
- v) Deviations, if any.
- vi) Technical competence.
- vii) Relative quality of previous jobs.
- viii) Organization set up.
- ix) Financial Capability.
- x) Financial capacity of the contractor.

17.0 Policy for tenders under consideration

17.1 Tenders shall be deemed to be under consideration from the opening of tenders, until such time as an official announcement of award is made.

17.2 While tenders are under consideration, tenderer and their representatives, or other interested parties, are advised to refrain from contacting by any means any MMC personnel or representatives on matters relative to the tenders under study. The Engineer's Representative, if necessary, will obtain clarification of tenders by requesting such information from any or all the tenderer either in writing or through personal contact, as may be necessary. The tenderer will not be permitted to change the substance of his tender after tenders have been opened. This includes any post tender price revision or major modification as defined in Clause No. 13. Non-compliance with this provision is a cause for disqualification.

18.0 Cost of Tendering

18.1 The Tenderer shall bear all costs associated with the preparation and submission of its Tender and Morbi Municipal Corporation (MMC), hereinafter referred to as "the Purchaser", will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.

19.0 Award of Contract

19.1 Notification of award will be made in writing to the successful tenderer.

19.2 The contract will be awarded to the technically and financially qualified and responsive tenderer offering the lowest overall evaluated tender or tenders in conformance with

specifications. Evaluation of tenders and policy for tenders under considerations, mentioned earlier.

- 19.3 A responsive tender is one which accepts all the terms and conditions of the Tender Documents without any major modifications. A major modification is one which affects in any way the price, quality, quantity or completion of works or which limits in any way, any responsibilities or liabilities of the tenderer or any rights of the MMC, as specified in the Tender Documents. The MMC may waive any minor informality in a tender which does not constitute a major modification. However, the failure of successful bidder to pay 'Security Deposit' and signing the contract shall constitute sufficient grounds for annulment of the award of contract and forfeiture of the earnest money deposit, in which case the Owner/Engineer may award the contract to the next lowest evaluated responsive bidder. In the event of not finding any such bidders, the employer is empowered to call for new bids.
- 19.4 In case, the tender is found technically responsive, tenderer will be intimated accordingly.
- 19.5 All the tenderers who participate in the tender, should raise all their queries and objections (if any), after the opening of technical bids, and before opening of financial bids.
- 19.6 However, any of the tenderer whosoever will raise the queries or objections after the opening of financial bids, then in such case, it will be considered as a corrupt intentional practise for affecting the tender procedure and pressurise the competent Authority. In such case, such agency will be debarred from the tender procedure for Three years and EMD will be forfeited.
- 19.7 If the queries or objections are raised by person/s, or agency other than the participant agencies, then such queries or objections will not be taken into consideration (at any stage of the tender) and such queries or objections shall be rejected straightway.
- 19.8 **If the tenderer fills the tender price more than 20 % less of the tender value than he has to give all the justification about the quoted price with all supporting documents for the work to execute. Also, he has to give in written on Rs. 300 stamp papers that he will do the work as per tender terms and conditions, maintain quality of work and complete the work in the time limit.**

20.0 Signing of Contract

- 20.1 The successful tenderer shall be required to execute the Contract with MMC as described in clause 1.7.
- 20.2 The person to sign the contract documents shall be the persons as detailed in tender document i.e., signing of tender documents.

21.0 Stamp Duty and Legal Charges

- 21.1 It shall be incumbent on the successful tenderer to pay stamp duty on the contract and legal charges for preparation of the contract agreement.

22.0 Tender Security

- 22.1 Tenderer shall furnish, as part of its Tender, Tender security for the amount as indicated in the form and it shall be submitted in cover with tender.
- 22.2 The Tender security is required to protect the Purchaser against the risk of Tenderer's conduct which would warrant the security's forfeiture
- 22.3 The Tender security shall be denominated in the currency of the Tender. A bank guarantee issued by a bank acceptable to the Purchaser, in the form provided in the Tender Document.
- 22.4 Any Tender not secured in accordance with above clause no: 22.1 to 22.3 will be rejected by the Purchaser as non responsive, pursuant to Clause 22.
- 22.5 Unsuccessful Tenderer's Tender security will be discharged / returned as promptly as possible but not later than 30 days after the expiration of the period of Tender prescribed by the Purchaser
- 22.6 The successful Tenderer's Tender security will be discharged upon the Tenderer executing the Contract & furnishing the performance security.
- 22.7 **The Tender security / performance guarantee may be forfeited:**
- a) If a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Tender Form' or
 - b) in the case of successful Tenderer, if the Tenderer fails:
 - c) to sign the Contract in accordance with Clause 24; or
 - d) to furnish performance security in accordance with Clause 24
 - e) Security deposit shall be converted into performance guarantee and based on penalty clause for non-performing said work, MMC will deduct the amount from performance guarantee.
- 22.8 No interest will be paid on Tender security.

23.0 Period of Validity of Tenders

- 23.1 Tenders shall remain valid for **120 days** after the date of Opening of the Financial Bids. A Tender valid for a shorter period i.e., less than 120 days from Financial Bid Opening date may be rejected by the Purchaser as non-responsive.
- 23.2 In exceptional circumstances, the Purchaser may solicit the Tenderer's consent to an extension of the period of made in writing. The Tender security provided under Clause 22 shall also be suitably extended. A Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting the request will not be required nor permitted to modify its Tender.

24.0 Security Deposit

- 24.1 Within 15 days after the Tenderer's receipt of notification of award of the Contract, the Tenderer shall furnish security deposit to the Purchaser in the amount specified in the Special Conditions of Contract.

- 24.2 The proceeds of the security deposit shall be payable to the Purchaser as compensation for any loss resulting from the Tenderer's failure to complete its obligations under the Contract.
- 24.3 The security deposit shall be denominated in Indian Rupees and shall be in the following forms:
- 24.4 A bank guarantee issued by a bank acceptable to the Purchaser, in the form provided in the Tender Documents or another form acceptable to the Purchaser.
- 24.5 The security deposit will be discharged by the Purchaser and returned to the Tenderer after completion of warranty/guarantee period of LED fixtures. Tenderer's performance obligations, including any warranty obligations, under the Contract.
I.e. Security deposit will released after completion of defect liability period of one year from the date of work completion. Prior to the release of this SD, the contractor shall have to submit a new SD worth 5% of the value of total LED fixtures i.e., 25% of the ordered value for the period of remaining Two years.
- 24.6 Security deposit shall be converted into performance guarantee and based on penalty clause for non performing said work , MMC will deduct the amount from performance guarantee.
- 25.0** Minimum Bid capacity (2AN-B) , Where A=30% of final estimated amount) , N =
Completion period (in month) / 12 = 12/12 = 1 (12 Months Consider Only for Tender bid Calculation), B = 0.

Signature of Tenderer	:	City Engineer (MMC)
Name	:	Morbi Municipal Corporation.
Company's seal	:	Date

SECTION – II

GENERAL CONDITIONS OF CONTRACT

1.0 DEFINITIONS

1.1 In this Contract, the following terms shall be interpreted as indicated:

- (a) “The Contract” means the agreement entered into between the Purchaser and the Tenderer, as recorded in the Contract Form signed by the parties. Including all attachments & appendices thereto and all documents incorporated by reference therein;
- (b) “The Contract Price” means the price payable to the Tenderer under the Contract for the full and proper performance of its contractual obligations;
- (c) “The Goods” means all of the equipment, machinery, and / or other materials which the supplier is required to supply and install to the Purchaser under the Contract;
- (d) “Services” means services ancillary to the supply and install of the Goods, such as transportation & insurance, and any commissioning, provision of technical assistance, training and other such obligations of the Tenderer covered under the Contract;
- (e) “The Purchaser” means the Organization purchasing the Goods; and
- (f) “The Tenderer” means the individual or firm supplying and installing the Goods under this Contract.
- (g) The Tenderer shall have to Order and offer the inspection call of Minimum 20 % of tender quantity of all materials within 45 days as per instruction of engineer – in-charge.
- (h) Time Limit for the material procurement shall have to be followed strictly by each Tenderer as per quantity instructed by the Purchaser at regular interval.
- (i) The Tenderer shall have to execute the work in the Chronological order of Suborders given. No Suborder should be left out unexecuted. However, In case of any Emergency / High Priority work, every Tenderer shall have to execute minimum 5 suborders of their total Suborders, as per instruction of the City Engineer (MMC).

2.0 APPLICATION

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3.0 STANDARDS

3.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Good’s country of origin and such standards shall be the latest issued by the concerned institution.

4.0 USE OF CONTRACT DOCUMENTS AND INFORMATION

- 4.1 The Tenderer shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Tenderer in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 4.2 The Tenderer shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in Para 4.1 except for purposes of performing the Contract.
- 4.3 Any document, other than the Contract itself, enumerated in Para 4.1 shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Tenderer's performance under the Contract, if so required by the Purchaser.

5.0 PATENT RIGHTS

- 5.1 The Tenderer shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6.0 DELETED

7.0 INSPECTIONS AND TESTS

- 7.1 The Purchaser or its representative shall have the right to inspect and / or to test the Goods to confirm their conformity to the Contract at manufacturer's works. The special conditions of contract and/or the Technical Specification shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Tenderer in writing of the identity of any representatives retained for these purposes.
- 7.2 The inspections and tests shall be conducted in the premises of the Original Equipment Manufacturer's Works. Manufacturer shall have all required Testing Facilities in his premises as per I.S. All tests shall have to be carried out in the presence of TPI Personal & MMC representatives. Contractor shall have to arrange TPI from any one of the TPI Firms viz. CEIL/RITES/SGS India/TUV-SUD South Asia Pvt. Ltd./ EQDC Gandhinagar or any recommended by the MMC and inform the name of TPI & its representative in the Inspection Call letter. All expenses towards factory/manufacturer works testing & Inspection of materials shall be borne by the contractor, which also include travelling, lodging & Boarding expenses of the TPI Person, & MMC representative.
- After receiving inspected lot(s) of LED Fittings at any of the site of MMC/MMC store, randomly one sample of each wattage capacity from any Lot will be selected and sent to NABL accredited lab ERDA for testing, once in entire contract period. And If, its result(s) aren't found as per requirements, entire that particular lot will be rejected. Charges for such ERDA testing shall be borne by MMC. In case of any

lot is rejected then ERDA testing charges for subsequent such lot would be recovered from the contractor's bill.

In case of rejection of tested sample by ERDA, contractor/ manufacturer can appeal/ request for re-testing and Dy.Municipal Commissioner(MMC) will take decision for re-testing for sample accordingly.

TESTING PARAMETERS AT ERDA.

- (1) VISUAL
- (2) DIMENSIONS
- (3) FITMENT AND ASSEMBLY
- (4) MEASUREMENT OF IR VALUE
- (5) HV TEST (1.5 KV FOR 1 MINUTE)
- (6) ELECTRICAL/FUNCTIONAL
- (7) POWER FACTOR
- (8) REVERSE POLARITY
- (9) VOLTAGE OPERATION TEST 140-270 VOLT
- (10) INGRESS PROTECTION IP 66
- (11) HUMIDITY TEST
- (12) THERMAL TEST
- (13) PHOTOMETRY TEST (LPW, CCT & CRI)
- (14) IMPACT RESISTANCE TEST

Note: MMC shall be free to conduct any of the above mentioned tests at ERDA.

- 7.3 All the expenses related to inspection at manufacturer's works & at site viz. including lodging, unloading and carting of material and Third Party Inspection (TPI) fees and other related commercial expanses as and where required shall be borne by the contractor. Mode of transportation is by Air lines only and for stay minimum 3 star hotel. If Air lines facility not nearby city then through 1st class Air conditioning train /Air Conditioning comfortable SUV car.
- 7.4 For demonstration and testing of LED fittings on site by ERDA, all contractors will have to arrange for lux level measurement on-site for each capacity(wattage) LED once at any one common suitable site, in presence of MMC engineer. And report of the same has to be submitted to Streetlight Department. And If, it's result(s) aren't found as per requirements, entire that particular lot will be rejected. All charges for such on-site testing shall have to be borne by the contractor.
- 7.5 Should any inspected or tested Goods fail to confirm the Specifications, the Purchaser may reject them and the contractor shall either replace the rejected Goods or make all alterations necessary to meet specification requirements free of cost to the Purchaser.
- 7.6 If the Good is purchase from outside of India by contractor, then it is the Purchaser's right to inspect, test and, where necessary, reject the Goods after the

Good's arrival in India shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the goods' shipment from the country of origin.

- 7.7 Nothing in above clause shall in any way release the contractor from any warranty or other obligations under this Contract.

8.0 PACKING

- 8.1 The Tenderer shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Good's final destination and the absence of heavy handling facilities at all points in transit.

- 8.2 The packing, marking and documentation within and outside the package shall comply strictly with such special requirements as shall be expressly provided for in the Contract and, subject to Clause 16, in any subsequent instructions ordered by the Purchaser.

9.0 DELIVERY AND DOCUMENTS

- 9.1 Delivery of the Goods shall be made by the Tenderer in accordance with the terms specified by the Purchaser in its Scope of Work and the Special Conditions of Contract.

10.0 Deleted

11.0 TRANSPORTATION

- 11.1 Where the Tenderer is required under the Contract to deliver the Goods, FOB, transport of the Goods, up to and including the point of putting the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged and paid for by the Tenderer, and the cost thereof shall be included in the Contract Price.
- 11.2 Where the Tenderer is required to effect delivery under any other terms, for example, by post or to another address in the source country, the Tenderer shall be required to meet all transport and storage expenses until delivery.

12.0 WARRANTY

- 12.1 The Tenderer warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models & incorporate all recent improvements in design & materials unless provided otherwise in the Contract. The Tenderer further warrants that the Goods supplied under this Contract shall have no defect arising from

design, materials or workmanship (except insofar as the design or material is required by the Purchaser's Specifications) or from any act or omission of the Tenderer, that may develop under normal use of the supplied Goods in the conditions obtaining in India.

12.2 Deleted.

12.3 The Purchaser shall promptly notify the Tenderer in writing of any claims arising under this warranty.

12.4 Upon receipt of such notice, the Tenderer shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without additional costs to the Purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from the port of entry to the final destination.

12.5 If the Tenderer, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Tenderer's risk and expense and without prejudice to any other rights which the Purchaser may have against the Tenderer under the Contract.

13.0 PAYMENT

13.1 The method and conditions of payment to be made to the Tenderer under the Contractor shall be specified in the Special Conditions of Contract.

13.2 The Tenderer's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by shipping documents submitted and upon fulfilment of other obligations stipulated in the contract.

13.3 The currency in which payment is made to the Tenderer under this Contract shall be Indian Rupees.

14.0 DEVIATION IN PAYMENT SCHEDULE

14.1 Tenderer must adhere to payment schedule of MMC outlined in the Special Condition of Contract. Tenders will be evaluated on the basis of this base price.

15.0 Deleted

16.0 CHANGE ORDERS

16.1 The Purchaser may at any time, by a written order given to the Tenderer pursuant to Clause 29, make changes within the general scope of the Contract in any one or more of the following:

- (a) Drawings, designs or specifications, where Goods to be furnished under the contract are to be specifically manufactured for the Purchaser;
- (b) The method of shipment or packing;

- (c) The place of delivery and
- (d) The Services to be provided by the Tenderer.

16.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Tenderer's performance of any part of the work under the Contract, adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Tenderer for adjustment under this clause must be asserted within thirty (30) days from the date of the Tenderer's receipt of the Purchaser's change order.

17.0 CONTRACT AMENDMENTS

17.1 Subject to Clause 16, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

18.0 ASSIGNMENT

18.1 The Tenderer shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

19.0 DELETED

20.0 DELAYS IN THE TENDERER'S PERFORMANCE

20.1 Delivery of the Goods and performance of Services shall be made by the Tenderer in accordance with the time schedule specified by the Purchaser.

20.2 An unexcused delay by the Tenderer in the performance of its delivery obligations shall render the Tenderer liable to any or all of the following sanctions: forfeiture of its performance security, imposition of liquidated damages, and / or termination of the Contract for default.

20.3 If at any time during performance of the Contract, the Tenderer should encounter conditions impeding timely delivery of the Goods and performance of Services, the Tenderer shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Tenderer's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Tenderer's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

21.0 TERMINATION FOR DEFAULT

21.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Tenderer, terminate the Contract in whole or in part:

- (a) **If the Tenderer fails to execute the work as per schedule given herewith from the date of work order as specified in the Contract, the penalty will be charged**

2% per week to maximum limit to 10% of the total work order of the particular work. Maximum time to complete any sub order will not more than 75 days.

- (b) Municipal Commissioner reserves the rights to terminate the contract during contract period without assigning any reason, if the work is not satisfactory & not as per the tender terms & Conditions.**

22.0 FORCE MAJEURE

- 22.1 Notwithstanding the provision of Clauses 20 & 22 the Tenderer shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 22.2 For purposes of this clause, “Force Majeure” means an event beyond the control of the Tenderer not involving the Tenderer’s fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 22.3 If a Force Majeure situation arises, the Tenderer shall and promptly notify the Purchaser in writing of such condition and the cause thereof, unless otherwise directed by the its obligations under the Contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

23.0 TERMINATION FOR INSOLVENCY

- 23.1 Every contractor shall, unless exempted in writing by the Concerned Engineer, produce along with his tender a solvency certificate of his financial ability from the collector of the district within which he resides or a Banker’s certificate. If he fails to produce such a certificate his tender will not be considered.
- 23.2 The Purchaser may at any time terminate the Contract by giving written notice to the Tenderer, without compensation to the Tenderer, if the Tenderer becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

24.0 TERMINATION FOR CONVENIENCE

- 24.1 The Purchaser, may by written notice sent to the Tenderer, terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser’s convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

24.2 The Goods that are complete and ready for shipment within 30 days after the Tenderer's receipt notice of termination shall be purchased by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect :

- (a) To have any portion completed and delivered at the Contract terms and prices; and / or
- (b) To cancel the remainder and pay to the Tenderer an agreed amount for partially completed Goods and for materials & parts previously procured by the Tenderer.

25.0 RESOLUTION OF DISPUTES

25.1 The Purchaser and the Tenderer shall make every effort to resolve amicably by direct informal negotiation and disagreement or dispute arising between them under or in connection with the Contract.

26.0 If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Tenderer have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the Special Conditions of Contract.

26.1 GOVERNING LANGUAGE

26.2 The Contract shall be written in the language of the bid, as specified by the Purchaser in the Instruction to Tenders. Subject to Clause 28, that language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in that same language.

27.0 APPLICABLE LAW

27.1 The Contract shall be interpreted in accordance with the Indian laws.

28.0 NOTICES

28.1 Any notice given by one party to the other pursuant to the Contract shall be sent in writing (or by telegram / telex / fax and confirmed in writing) to the address specified for that purpose in the Special Conditions of Contract.

28.2 Any notice shall be effective when delivered or on the notice's effective date, whichever is later.

29.0 TAXES AND DUTIES

29.1 GST will be paid extra as actual.

30.0 CHILD LABOUR ACT:

30.1 No Contractor shall employ any child heaving age 5 years to 14 years, as it is prohibited by the Child Labour Prohibition and Regulation Act, 1986. The Hon.

Supreme Court has given certain guidelines and as per the guidelines, if employment of child labour is detected on the site work, the employer i.e., the Contractor shall have to deposit Rs. 20,000/- (Rupees Twenty Thousand only) in the Child Labour welfare Fund. If the employer refuses to deposit, then action will be taken for contempt of Court of the Supreme Court Judgment and also will be prosecuted by the concerned authority.

- 30.2 Because of the breach of any provision of the Child Labour Prohibition and Regulation Act, 1986, by the Contractor and for that Municipal Corporation has to pay any amount, then the Municipal Corporation shall recover the said amount from the Contractor.

31.0 Deleted

32.0 BRAND NAMES

- 32.1 The make of equipments shall be as per attached list. If make of a particular item is not given in the tender, then prior approval of MMC for that make must be required.

33.0 EQUIPMENT FOR EXECUTION

- 33.1 To expedite the execution work, the contractor has to submit a complete list of equipment he proposes to deploy on this work along with the tender. Tenderer not complying with this requirement may be considered non-responsive and his tender is liable to be rejected.

34.0 Warranty

- 34.1 This warranty shall remain valid for 12 months after the Goods, or any portion thereof as the case may be, have been delivered, erected and commissioned to the final destination indicated in the Contract, unless specified otherwise in the Special Conditions of Contractor.

35.0 EXTRA ITEM OF WORK

- 35.1 The extra work beyond tender item, if required to be executed during course of execution of regular work, that shall have to be carried out by the contractor as per the instructions and satisfaction of the Engineer-in-charge. This will be paid separately as per detail rate analysis made by the department based on market rate or prevalent SOR whichever is less.
- 35.2 If in the interest of the MMC it is necessary to change either any site or the design of the proposed work the Contractor shall carry out the same at his quoted rates without charging any extra and he will be paid at the rates quoted by him and no claim for extra amount for subsequent changes made will be entertained.

36.0 MEASUREMENT OF WORK

- 36.1 The measurements of work will be taken according to the usual method in use in the

Morbi Municipal Corporation and no proposals to adopt alternative methods will be accepted. The Concerned Additional Chief Engineer (Streetlight)'s decision as to what is 'the usual method in use in the Morbi Municipal Corporation' will be final.

- 36.2 The Contractor shall submit all the bills on the printed forms to be had on application at the office of the Engineer-in-Charge. The charges to be made in the bills shall always be entered at the rates specified in the agreement or at the part/reduced rates subject to the approval by the Engineer-in-Charge in the case of items not completed/executed as per agreements or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the tender, at the rate hereinafter provided for such work.

37.0 NO CLAIM TO ANY PAYMENT OR FOR RESTRICTION OF WORK: .

- 37.1 In the case of such delay in the supply of materials, Morbi Municipal Corporation shall grant such extension of time for the completion of the works as shall appear to the Engineer-in-Charge to be reasonable to accordance with the circumstances of the case. The decision of the Engineer-in-Charge as the extension of time shall be accepted as final by the Contractors.

- 37.2 Action and compensation in case of bad work :** If, at any time before the expiry of defects Liability, period, it shall appear to the Engineer-in-charge or his sub-ordinate in charge of the work, that any work has been executed with unsound, imperfect or unskilled workmanship or with materials or inferior quality or that any materials or articles provided by him for the execution of the work are unsound, or of a quality inferior to that contracted for or are otherwise not in accordance with the contract, it shall be lawful for the Engineer-in-Charge to intimate this fact in writing to the Contractor and then notwithstanding the fact that the work, materials or articles complained of, may have been passed, certified and paid for, the Contractor shall be bound forthwith to rectify, or remove and reconstruct the work so specified in whole or in part as the case may require, or if so required shall remove the materials or articles so specified in whole or in part and provide other proper and suitable materials or articles at his own charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in the written intimation aforesaid, the Contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate of the rectification for every day not exceeding ten days during which the failure so continues, and in the event of any such failure as aforesaid continuing beyond ten days, the Engineer-in-charge may rectify or remove, and re-execute the work or remove and replace the materials complained of, as the case may be at the risk and expense in all respects of the Contractor should the Engineer-in-charge consider that any such inferior work of materials as described above may be accepted or made use of, it shall be within his discretion to accept the same at such reduced rates as he may fix therefore, However, the contractor shall be responsible for normal maintenance of the work till the final bill for the work is prepared by the corporation officer.

37.3 Recovery: In case of any half-done work or work not as per specification because of site condition or any other reason beyond control and agreed by the corporation engineer, the proportional rate will be paid to the contractor based on the rate analysis made by the corporation. The percentage recovery in rates shall be calculated based on latest SOR rates / Market Rates.

38.0 Defect Liability Period :

The Contractor shall be responsible to make good and remedy at his own expense any defect which may develop or may be noticed before the period mentioned hereunder from the certified date of completion. The Engineer-in-charge shall give the Contractor a notice in writing about the defects and the Contractor shall make good the same within 05 days of receipt of the notice. In the case of failure on the part of the Contractor, the Engineer-in-charge may rectify or remove or re-execute the work at the risk & cost of the Contractor. The Engineer-in-charge shall be entitled to appropriate the whole or any part of the amount of the security deposit towards the expenses, if any, incurred by him in rectification, removal or re-execution. The Defects Liability period shall be as under:

- (a) The period shall be 12 months from certified date of completion, either in part of full except LED. LED light fixture defect liability for 3 years. It may be possible that the defect liability period will be different for deferent sites as per the handing over the work to MMC. This clause will be executed in the case of several site work execution and completed at different time spans.

39.0 SETTING OUT THE WORKS

39.1 The Contractor shall be responsible for the true and proper setting out of the works in relation to original points, lines and levels of reference given by the Engineer in charge and for correctness, subject as above mentioned in the position, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliances and labour in connection therewith.

40.0 AMENITIES TO BE PRESERVED

40.1 The Contractor shall cause the least possible interference with the existing amenities, whether natural or man made. No tree shall be felled without permission of the Engineer's Representative and clearance of the site shall generally be kept to the minimum necessary for the works and temporary works. Temporary works shall be sited so as minimize the number of trees to be felled.

40.2 All necessary actions for any diversion of traffic shall be arranged by the contractor with all indicating signboards and fluorescent lighting system during night period.

41.0 SAFETY MEASURES AND SERVICES

- 41.1 The Contractor shall be entirely responsible for the safety of all his Technicians, labourers, workmen involved in SITC WORK . Contractor must ensure that the site of work is fully secured prior to the commencement of Work, which shall include required permissions and clearance of all the authorities like department of Roads, traffic, Water Supply and Drainage; Electricity Board, Telephone Company, etc. Wherever necessary and observe the regulations regarding the execution of work in congested areas, heavy traffic areas, etc.
- 41.2 Contractor must inform well in advance to Engineer Incharge of the site prior to commencement of Work of every Suborder. After coordinating with Engineer In charge & on getting permission to work with all necessary safety and security measures, the Contractor shall have to commence the work on each site of each suborder.
- 41.3 Contractor must also ensure utmost security of the citizens near site of work. Reference in these respects shall also be made to the Conditions of Contract and safety provisions but in particular, such measures shall include the following:
- (a) Provision of proper safety and emergency regulations' fire, gas and electric shock precautions, stretchers, first-aid box and fire extinguisher together with rescue facilities generally for each place of working;
 - (b) Provision of efficient safety helmets for all personnel including the Engineer's Representative and each of his staff and any authorized visitors to site;
 - (c) Safe control of water including provision of ample standby generating and pumping plant;
 - (d) Provision and maintenance of suitable lighting to provide adequate illumination of works with appropriate spares and standby equipment;
 - (e) Provision and maintenance of safe, sound mechanical equipment, each item of plant having an up-to-date testing certificate;
 - (f) Provision and maintenance of safe, sound, ropes, slings, pulleys and other lifting tackle, each appliance having an up-to-date testing certificate where appropriate;
 - (g) Provision of notices 1.25 m x 1.5 m size written in bold letters in English, Gujarati and Hindi to be erected on existing footpaths and at points of access likely to be used by the public, which shall warn the public of the Works. These notices shall be in addition to any statutory requirements demanded of the Contractor.
- 41.4 Contractor shall provide and maintain at his own expenses all lights, guards, fencing and necessary watchmen when and where necessary or required by Owner/ Engineer for the protection of the works or for the safety and convenience of those employed on the works and the public. Contractor shall also provide at his cost traffic barricades, men for diverting and controlling traffic, necessary sign boards for diversion of traffic. In the event of failure on the part of Contractor, Owner man with or without notice to Contractor put up a fence or improve a fence already put up or provide and/or improve the lighting or adopt such other measures as he may deem necessary, and all the cost of such work and procedures as may be adopted by

Owner/ Engineer shall be borne by Contractor. Maintenance of adequate warning and general lighting at nights at place of work is essential.

41.5 Contractor shall provide all safety equipment like Helmets, shock proof Shoes, Gloves, safety jackets, Fire extinguishers and all necessary equipments to all the personals involved in the SITC Work.

41.6 Liaison Work :

The Contractor shall be totally responsible for obtaining statutory approval from the electrical inspector or any other statutory authority for the entire installation carried out by him unless otherwise specified and agreed. Necessary test reports, drawings & documents shall be submitted by him to electrical inspector. This will be an integral part of the contract and shall not be paid for separately. The contractor shall liaison with local electric supply company for getting power supply and only necessary fees, if any, payable to supply company shall be borne by the Owner.

42.0 LIABILITY OF ACCIDENTS TO PERSONS:

Responsibilities and liabilities of the contractor under Workmen's Compensation Act.

- (a) During the execution / Incomplete Work, if any accident occurs which may result in injury or Death of any person (Contractor's staff or any Citizen) on site, then the contractor must take all immediate necessary measures to minimise the issue.
- (b) At the same time Contractor must inform immediately to the MMC Authorities regarding the incidence.
- (c) Contractor shall be responsible for any Fatal / Non-Fatal incidence which may occur during execution of Work. In case of any death of any person/s, Contractor shall have to deal with all necessary legal proceedings, which may include Police Case, Court Case, Proceedings with Electricity Regulatory Authorities, Compensation as per the govt / Labour Laws / Workmen's Compensation Act. to the families of the persons affected, etc which are necessary to subside the matter. MMC shall not be responsible for any such accidents / incidences.
- (d) On Completion of Work on every site and prior to leaving the Site, the Contractor has to ensure that the site is completely safe and secured, and see that no wires or cables are left open which might endanger the lives of people. Proper reinstatement Work should be done before completion of Work.
- (e) Contractor must be familiar & equipped with all Labour and other necessary Licenses which are mandatory for the Electrical Works, as fixed by Electrical

Regulatory Authorities, and work accordingly in order to ensure the safety of people.

43.0 CLEARING SITE ON COMPLETION

- 43.1 On completion of the Works, the Contractor shall clear away and remove from the site all Constructional Plant, surplus materials, rubbish, Temporary Works of every kind and leave the whole of the site and the works clean and in a workmanlike condition to the satisfaction of the Engineer, failing which he will be penalized as per rules and regulations of the corporation.

44.0 Deleted.

Signature of Tenderer:

Name :

Company's seal :

Date :

City Engineer (MMC)

Morbi Municipal Corporation

Date :

SECTION – III

SPECIAL CONDITIONS OF CONTRACT

1.0 GENERAL :

- 1.1 The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions of Contract is indicated in bracket.
- 1.2 The contractor shall have to reinstall / shift any of the poles if any objection / disputes arise on site at the time of execution of SITC of street lighting work at no extra cost.
- 1.3 The contractor shall have to submit all replaced materials to A.M.C after completion of each job of improvement work. In all improvement work, contractor shall have to repaint the entire pole with brackets with two coat of silver paint as per standards, replace pole wire from each fitting to box (Three Core copper flexible FRLS Cable) and also do renumbering as per the instruction by engineer in charge.
- 1.4 Deleted
- 1.5 During the SITC work OR after completion of SITC work, if it is required to replace / shifting of the poles / fittings / cable etc. due to unforeseen circumstances like accident, natural calamities, riots, monkey jumping or during demolition of encroachment/road widening work of MMC, the material will be provided by MMC after producing sufficient and satisfactory evidence and crediting of such materials by contractor and the contractor shall carry out the installation work an an extra cost.

2.0 DEFINITIONS:

- 2.1 The Purchaser or Client is Morbi Municipal Corporation (MMC)
- 2.2 Morbi Municipal Corporation (MMC) shall mean the Purchaser.
- 2.3 ‘Contractor / Supplier’ shall mean individual or firm or company undertaking the work and shall include their legal representative.
- 2.4 ‘Engineer’ shall mean the officer or representative of the Morbi Municipal Corporation (MMC) who may be authorized by Morbi Municipal Corporation (MMC) to carry out the work.
- 2.5 ‘The Engineer’s Representative’ shall mean any Engineer, Consulting Engineer, or Assistant to the Engineer appointed from time to time by the Engineer to perform the duties delegated.

3.0 Deleted

4.0 DELIVERY AND DOCUMENTS:

- 4.1 The Supplier shall mail the following documents to the Purchaser on or before

claiming the Payment:

- (a) Copies of the Supplier invoice showing Goods description, quantity, unit price, total amount.
- (b) Delivery note / railway receipt / truck receipt;
- (c) Manufacturer's / Supplier's guarantee certificate;
- (d) Inspection Certificate issued by the nominated inspection agency and the Supplier's factory inspection report; and
- (e) Certificate of origin.

5.0 PAYMENT:

5.1 Payment for Goods and Services shall be made in Indian Rupees as follows:

5.1.1 For SITC :

- (a) **On Delivery:** 60% of the contract price shall be paid on receipt of satisfactory Goods and upon submission of the certificates and documents as described in Part III, Section IV Technical Specification.
- (b) **On Installation:** 30% of the contract price shall be paid on installation of the goods; and upon submission of the certificates and documents as described in Part III, Section IV Technical Specification.
- (c) **On Final Acceptance:** The remaining 10% of the contract price shall be paid to the Contractor after testing & commissioning and handing over the work and within thirty (30) days from the date of the Acceptance Certificate for the completion of job order given.
- (d) The time of completion of this work is an essence of contract. Work is to be completed as per the schedule given herewith.

SCHEDULE OF SUB ORDER WORK INITIATION FOR TIME LIMIT				
	Time for Site marking and material mobilization From Sub Order Date	Work completion	Penalty for each day after stipulated time	Remarks
All drawings and single line diagrams (SLDs) shall be submitted for approval within 10 days from the date of commencement of work, and the approval process shall be completed within the first month.	10 Days	10 Days	If the tenderer fails to execute the work as per schedule given herewith from the date of work order as specified in the Contract, The penalty will be charged 2% per week to maximum limit to 10% of the total work order of the particular work..	If there is any objection during execution of Heritage Pathway. Agency has to submit a letter about objection or site clearance. In such cases time limit for penalty will be considered from sub order initiation schedule only after getting site clearance.
Procurement of all required fixtures shall be completed within 20 Days following the approval of all drawings, counted from the date of commencement of work.	20 Days	20 Days		
Supply, Installation, Testing, and Commissioning (SITC) of all fixtures, along with the trial run, shall be carried out and completed during the 30 Days from the date of commencement of work	30 Days	30 Days		

NOTE : ERDA TESTING TIME DURATION WILL NOT BE CONSIDERED IN ABOVE TIME LIMIT.

5.2 Penalty :-

- (a) Penalty will be charged for not supplying non performing LED fitting after getting first intimation. Within 30 days no penalty will be charged, after 30 days, for each week Rs. 3000/- per week will be penalised upto 8 weeks. After that MMC will procure LED fixture and cost of that fixture and penalty charge will be deducted from the tenderer's security deposit.
- (b) If the Tenderer fails to execute the work as per schedule given herewith from the date of work order as specified in the Contract, The penalty will be charged 2% per week to maximum limit to 10% of the total work order of the particular work. Maximum time to complete any sub order will not more than 75 days.
- (c) Also following penalties is to be levied as per the work not carried out as per tender :-

Sr. No.	Description	Penalty
1	If Cable laying below 600 mm depth from ground level penalty will be deducted per Cable span between two poles	200 per /span
2	If Cable laying above 600 mm depth from ground level penalty will be deducted per Cable span between two poles	300 per /span
3	If pole muffing Not done as per drawing then penalty will be deducted from bill	500 per/ muffing
4	If Earthing not done in proper depth then penalty will be deducted from bill	600 per/ earthing

Signature of Tenderer:

Name :

Company's seal :

Date :

City Engineer (MMC)

Morbi Municipal Corporation

Date :

Part - II
Annexure - 1
TENDER FORM

Date :
Contract No. :

To,
Engineer
Morbi Municipal Corporation
Morbi

Gentlemen,

Having examined the Tender Documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply, deliver, Erect & commissioning of Heritage Pathway in conformity with the said Tender Documents for the sum of (_____) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this tender.

We undertake, if our tender is accepted, to commence delivery within _____ days and to complete delivery of all the items specified in the Contract within / /.

If our tender is accepted we will obtain the guarantee of a bank in a sum not exceeding _____ % of the contractor price for the due performance of the Contract.

We agree to abide by this tender for a period for _____ days from the date fixed for tender opening as per the instructions to Tenderers and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this tender, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 20 _____

Signature

(In the Capacity of)
Duly authorized to sign tender for and on behalf of
(Name of Tenderer)

Annexure -2

TENDER SECURITY FORM

Whereas _____
(hereinafter called “the Tenderer”) has submitted its tender dated _____ for the supply of _____
(hereinafter called “the Tender”) _____
_____ know all _____ of _____
_____ having our registered office at _____
_____ (hereinafter called “the Bank”) are bound up to _____
_____ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ .

The Conditions of this obligation are :

- 1. If the Tenderer withdraws its Tender during the period of tender validity specified by the Tenderer on the Tender Form; or**
- 2. If the Tenderer having been notified of the acceptance of its tender by the Purchaser, during the period of tender validity :**
 - (a) fails or refuses to execute the Contract Form, if required, or**
 - (b) fails or refuses to furnish the Performance Security, in accordance with the instructions to Tenderer;**

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and demand in respect thereof should reach the Bank not later than the above date.

(Signature of the Bank)

Annexure - 3

CONTRACT FORM

This Agreement made the _____ day of _____, 20____ between (Name of Purchaser) of (Country of Purchaser) (hereinafter “the Purchaser”) of the one part and (Name of Supplier) of (City and Country of Supplier) hereinafter the “the Supplier” of the other part.

Whereas the Purchaser is desirous that certain Goods and ancillary Services should be provided by the Supplier, viz. (Brief Description of Goods and Services and has accepted a tender by the Supplier for the supply of those Goods and Services in the sum of (Contract Price in Words and Figures) hereinafter “the Contractor Price”).

NOW THIS AGREEMENT WITNESSED AS FOLLOWS :

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract.
2. The following documents shall be deemed to form and be read and constructed as part of this Agreement viz.:
 - (a) The Tender form and the Price Schedule submitted by the Tenderer;
 - (b) The Schedule of Requirements ;
 - (c) The Technical Specifications ;
 - (d) The General Conditions of Contract;
 - (e) The Special Conditions of Contract ; and
 - (f) The Purchaser’s Notification of Award.
3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby will pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed
in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the

said _____ (For the Purchaser)

in the presence of _____

Signed, Sealed and Delivered by the

said _____ (For the Supplier)

in the presence of _____

Annexure - 4

BANK GUARANTEE Of SECURITY DEPOSIT/ PERFORMANCE BANK GUARANTEE

In consideration of the Municipal Corporation of the city of Morbi (hereinafter to as the corporation) having agreed to exempt _____ (hereinafter referred to as “ the said Contract”) from the demand of earnest money in cash for the due fulfillment of the terms and conditions of the agreement made between the for _____ (hereinafter referred to us “ the said agreement”) on production of Bank Guarantee for Rs.

_____ Rupees _____ only. We _____ Bank (hereinafter referred to as “Bank”) do hereby undertake to pay to the corporation as a amount not exceeding Rs. _____ Rupees _____ only on the demand from Corporation.

Any such demand on the bank shall be conclusive as regards as amount due and payable by the bank under this guarantee. However, liability of the bank under this agreement shall restricted to as amount not exceeding Rs. _____ Rupees _____ only.

We the bank further agree that the guarantee herein contain shall remain in full force and effect during the period that would be taken for the validity of the said bid and that it shall continue to e enforceable till all the dues of the Corporation under or virtue of the said agreement have been received by the bank from the Corporation. However unless the demand of claim under the guarantee is made to the bank in writing on or before the _____

(specify the dame) the bank shall be discharged from all liabilities under this guarantee.

With the bank further with Corporation shall have fullest liberty, without the concert of the bank without effecting in any manner it obligations herein under to vary and of the terms and conditions of the said agreement or extend time for validity by the said bid from time to time or to postpone for any time for any time or from time to time any of the powers exercisable by the Corporation against the side Contractor and to forebear to enforced any of the terms and conditions relating to the said agreement and the bank shall not be relieved from liability by reason of ny such variation, or extension granted to the contractor for any forbearance, at Contractor or by any such matter or thing whatsoever which the law relating to sureties would, but this provision, have the effect of so relieving the Bank.

We _____ the must undertake not to revoke the Guarantee during currency except with the previous concert of the Corporation in writing.

Dated the _____ day of _____ of 20 _____.

For _____ Bank.

Principal (Contractor)

Surety (Bank)

Contract No.

And date of Contract

Annexure - 5

STRUCTURE AND ORGANISATION OF FIRM

1. Name of Applicant
2. Nationality of Applicant
3. Office Address
Telegraphic Address
Telephone No.
Telex No.
Fax No.
E-mail Address
4. Year and location of establishment
5. The Applicant is
 - a) An individual
 - b) A proprietary firm
 - c) A firm in partnership
 - d) A limited company or Corp.
(if a firm in partnership)
6. **Attach the organization chart showing the structure of the organization including the names of the Directors and position of officers.**
7. Number of years of experience
8. For how many years has your organization / firm been in business of similar work under its present name? What were your fields when your organization was established?
9. **Were you ever disqualified / considered ineligible for similar works?**
10. Whether any new fields were added to your organization? If, so, give details.
11. Were you ever required to suspend execution for period of more than six months continuously after you started? If so, give the name of project and reasons thereof.

12. Whether you ever left the work awarded to you incomplete?
(if so, give name of project and reasons for not completing work?)
13. In how many of your projects penalties were imposed for delays?
(Please give details)
14. In which field of electrical / mechanical engineering do you claim specialization and interest?
15. Give details of equipments, if any.

Signature of Tenderer:

Additional Chief Engineer (Streetlight/Tr.Signal)

Name :

Morbi Municipal Corporation

Company's seal :

Date :

Date :

Annexure - 6
FORM 'A'
INCOME-TAX CLEARANCE CERTIFICATE

- 1. Names and style (of the Company, Firm, HUF or Individual) in which the applicant is assessed or assessable to Income-Tax and the addresses for the purpose of assessment:**
2. Names and addresses of all Companies, Firms or Associations or persons in which the applicant is substantially interested in his individual or fiduciary capacity.
3. The Income-Tax Circle/ Ward/ District in which the applicant is assessed to Income-Tax.
4. The following particulars are to be furnished concerning the Income-Tax Assessments for the preceding four years:
 - (a) The total contract amount received during the preceding four accounting years (give date of the closing day of the year being previous year).
 - (b) Year Total Income-Tax demanded, Tax paid, Balance due Tax assessed Note:
 - (i) Tax in Columns 3 and 4 should include all items viz. Income-Tax, Sales Tax, Surcharges, Excess Profit Tax and Port Tax, etc.
 - (ii) If any tax remains unpaid, the reasons should be explained in an attached statement.
 - (c) In case there has been no Income-Tax assessment in any year, whether returns have been submitted under section 22 (1) or 22 (2) or Tax has been paid in advance under Sections 18(A) (3) of the Act and if so, the amount of income returned for each year and tax for each of the four years mentioned above and the name of Income-tax Circle/Ward/District concerned where such returns have been paid. Give reasons why the income-tax is not assessed.
 - (d) Whether any attachment or certificate proceedings pending in respect of the arrears.
 - (e) The name and address of Branch(es), if any.

I declare that the above information is correct and complete to the best of my information and belief.

Signature of the Contractor

Registered

No. Address:

Date:

In my opinion, the assessee mentioned above has been doing everything possible to pay the tax demanded promptly and regularly and to facilitate the completion of the pending proceedings.

This will remain valid for one year from the date of issue.

Signature of the Income-Tax officer. / Circle / Ward

Annexure - 7

**DETAILS OF THE WORKS OF SIMILAR TYPE AND MAGNITUDE CARRIED OUT BY THE TENDERER DURING LAST 7 YEARS
PERIOD**

Sr. No.	Name of Work	Place and Country	Tendered Cost	Date of start	Date of Completion		Principal Features
					Prescribed date of completion	Actual date of completion	

Note : Certificate of satisfactory completion of the work from the owner shall be given for each work.

Signature of the Tenderer with stamp

Name :

Company's seal :

Date :

Annexure - 8

DETAILS OF THE WORKS IN HAND AND WORKS TENDERED FOR AS ON THE DATE OF SUBMISSION OF THE TENDER.

Sr. No	Name of Work	Place and Country	WORKS IN HAND			WORKS TENDERED FOR			Main features of the work
			Tendered Cost	Cost of work remaining to be executed as on date	Anticipated Date of Completion	Tender Cost	Date when decision is expected	stipulated date period Completion & of	

Signature of the Tenderer with stamp

Name :

Company's seal :

Date :

Annexure - 9

DETAILS OF TECHNICAL PERSONNEL WITH TENDERER WHO ARE PROPOSED FOR THIS CONTRACT.

Sr. No.	Description of Category	Name	Qualification	Professional experience and details of works carried out	Since how long in service with tenderer	Remark

Note : The complete bio-data of each personnel with qualification and experience shall be furnished separately alongwith this schedule.

Signature of the Tenderer with stamp

Name :

Company's seal :

Date :

Annexure - 10

**INFORMATION REGARDING FINANCIAL CAPACITY
OF THE TENDERER.**

Sr. No.	Details	Amount	Remarks
1	Solvency		The Tenderer should submit a Solvency Certificate from a Nationalised / Scheduled Bank of an amount of at least 20% amount of the Estimated Cost of the Tender, (i.e 20% of 3.0 Cr.). Bank Solvency should not be Older than One year period.
2	Annual turnover for last three years: a) Year 2020-21 b) Year 2021-22 c) Year 2022-23		Details of major contracts executed during these years shall be furnished.
3	Price of the biggest job carried out		Certificate from the owner in support of successful completion of work may be furnished.

Signature of the Tenderer with stamp

Name :

Company's seal :

Date :

Annexure - 11

**DETAILS OF THE EQUIPMENT IN POSSESSION OF THE
CONTRACTOR AND THE EQUIPMENT
HE PROPOSES TO BRING TO THE SITE FOR
THIS WORK**

Sr. No.	Type and Description of the Equipment & Capacity	Age and Approximate Value	Numbers the Tenderer has in possession	Numbers he proposes to bring on to site.

Tenderer hereby confirms that quantity and type of tools he will employ for execution

Signature of the Tenderer with stamp

Name :

Company's seal :

Date :

Annexure – 12

Self-Declaration of Not blacklisted

(On company letterhead)

To,
City Engineer
Morbi Municipal Corporation
Dr. Ambedkar Bhavan, Gandhi Chowk,
Morbi - 363641

Respected Sir,

This is to declare that the company _____ is not blacklisted from last 5 years by any central / state government department / public sector undertaking.

Name of Bidder:

Signature of the bidder with seal

Annexure - 13

Record of Arbitration & Litigation

(On Company Letterhead)

The Bidder shall record chronologically any disputes he has had with any of his previous Clients during the last 7 years, indicate whether arbitration or Litigation, the nature, approximate duration and amount of claim involved in respective cases.

S no	Project Identification and Location	Name and Address of Client, tel & Fax	Nature of Dispute					
			Description	Arbitration Litigation	Period From-To	Amount Claimed (lakh Rs).	Result	In favour of Client / Contractor
No Record of Arbitration & Litigation from clients during last 7 years.								

Name:

Date:

Signature:

Designation:

Seal of Company

તો નીચે જણાવેલ બેંકોની શાખાઓની બેંક ગેરંટી સ્વીકારવામાં આવશે. નાણાંખાતા દ્વારા ઉપરોક્ત સંદર્ભમાં જણાવેલ પરિપત્રોની અન્ય તમામ શરતો યથાવત રહેશે.

ANNEXURE – I

A. Guarantees issued by following banks will be accepted as SD/EMD on permanent basis.

❖ **All nationalized Banks**

B. Guarantees issued by following banks will be accepted as SD/EMD for the period up to March- 31, 2025. The validity cut-off date in the GR is with respect to the date of issue of Bank Guarantee irrespective of the date of termination of Bank Guarantee.

1. Commercial Banks :-

1. A U Small Finance Bank
2. Axis Bank
3. Bandhan Bank
4. City Union Bank
5. CSB Bank
6. DBS Bank India Limited
7. DCB Bank
8. Equitas Small Finance Bank
9. Federal Bank
10. HDFC Bank
11. HSBC Bank
12. ICICI Bank
13. IDBI Bank
14. IDFC First Bank
15. IndusInd Bank
16. Jana Small Finance Bank
17. Kamataka Bank
18. Karur Vysya Bank
19. Kotak Mahindra Bank

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20. South Indian Bank
 21. Tamilnadu Mercantile Bank
 22. Utkarsh Small Finance Bank

2. Co-operative and Rural Banks Of Gujarat :-

1. The Ahmedabad Mercantile Co-operative Bank Limited
2. Kalupur Commerical Co-operative Bank Limited
3. Nutan nagrik Sahakari Bank Limited
4. Rajkot Nagarik Sahakari Bank Limited
5. Saraswat Co-operative Bank
6. SVC Co-operative Bank
7. The Cosmos co-opretive Bank
8. Baroda Gujarat Gramin Bank
9. Saurashtra Gramin Bank
10. The Gujarat State Co-Operative Bank
11. The Mehsana Urban Co-operative Bank Limited
12. The Surat District Co-operative Bank
13. The Surat Peoples Co-operative Bank

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PART – III

SECTION - IV

Technical Specifications With Data Sheets

1.0 Materials And Workmanship

1.1 Introduction:

- 1.1.1 This part of the specification Sets Out The General Standards Of Materials To Be Supplied And The Workmanship Required To Be Ensured By The Contractor And Mention Of Any Specific Material Does Not Necessarily Imply That Such Is Included In The Works. All Component Parts Of The Works Shall, Unless Otherwise Specified, Comply With The Provisions Of This Part Or Be Subject To The Approval Of The Engineer.
- 1.1.2 The Names Of The Manufacturers Of Materials And Equipment Proposed For Incorporation In The Works Together With Performance, Capacities, Certified Test Reports And Other Significant Information Shall Be Furnished By The Contractor.

1.2 Compliance With Standards:

- 1.2.1 Where Reference Is Made In The Specification To A Indian Standard Specification (Hereinafter Abbreviated To 'I.S..') Issued By The Indian Standards Institution Of India And Specification (I.S.) Issued By The Bureau Of India Standards, (Earlier Known As Indian Standard Institution), Manak Bhavan, 9 Bhadur Shah Zafar Marg, New Delhi 110 002, Street Light Pole Specification No I.S 2713 –(Part Iii) 1980 For Swaged Poles Or Any Other Equivalent Standards. It Shall Be To The Latest Revision Of That Standard At The Tender Opening Date.
- 1.2.2 The Contractor May Propose At No Extra Cost To The Employer, The Use Of Any Relevant Authoritative Internationally Recognized Reference Standard, Including Indian Standard.
- 1.2.3 All Details, Materials And Equipment Supplied And Workmanship Performed Shall Comply With These Standards. If Contractors Offer Equipment To Other Standards, The Equipment / Material Should Be Equal Or Superior To Those Specified And Full Details Of The Difference Shall Be Supplied.
- 1.2.4 In The Event Of Conflict Between This Specification And The Codes For Equipment, Provisions Of This Specification Shall Govern.

1.3 Materials – General

- 1.3.1 All materials incorporated in the Works shall be the most suitable for the duty concerned and shall be new and of reputed make / approved quality, free from imperfections and selected for long life and minimum maintenance. Non destructive tests, if called for in the specification, shall be carried out.

1.4 WELDING

- 1.4.1 Any welding of the job shall follow the procedure of respective IS specification and it should be shown as and when engineer in charge demanded.
- 1.4.2 Any welding of the job shall be tested as per respective IS specification and the test report should be submitted to the engineer in charge at the time of supply of the material.

2.0 Deleted.

3.0 DECORATIVE LIGHT POLE

3.1 GENERAL:

Tenderer must have to arrange and bear all the cost for inspection & testing of Decorative Pole, fixtures, cables, section pillar etc., by Third party inspecting (TPI) agency. The inspections and tests shall be conducted in the premises of the Original Equipment Manufacturer's Works. Manufacturer shall have all required Testing Facilities in his premises as per I.S. All tests shall have to be carried out in the presence of TPI Personal & MMC representatives. Tenderer shall have to arrange TPI from any one of the **TPI Firms viz. CEIL / RITES / SGS India/TUV-SUD South Asia Pvt. Ltd./EQDC** Gandhinagar or any recommended by the MMC and inform the name of TPI & its representative in the Inspection Call letter. All expenses towards testing & Inspection shall be borne by the tenderer, which may include lodging & Boarding of the TPI Person, & MMC representative.

3.1.1 Deleted

3.1.2 The Decorative heritage lighting installation for the works under M.P / M.L.A /MUNICIPAL COUNCILORS / GENERAL budget shall be carried out by use of outdoor type, weatherproof luminaries, to be mounted on tubular steel pole. as per required numbers.

3.1.3 Electric power supply at 415 volt, three phase, four wire, 50 Hz. to be tapped from the street lighting section pillar. or heritage light pole

3.1.4 The electric power shall be distributed to the street lighting poles through electric cables and shall be distributed equally on three phase of the electric power supply system.

3.1.5 Individual fixture control Kit Kat fuse (16 A , 415 V) with junction box shall be provided on each poles. (The junction box shall be weather proof, having gasket door cover from left to right with necessary accessories etc.)

3.1.6 Deleted.

- 3.1.7 Electric cable required for the street lighting installation shall be 1100 volt grade, XLPE insulated and sheathed, armoured cable having Aluminium conductor of stipulated rating.

3.1.8 SITC OF HERITAGE LIGHT POLES:-

SITC of heritage Lighting poles of sizes are to be carried out with pole to pole average spacing as per design (OR as per actual site condition) and as per the applicable BOQ which also includes the following works:-

3.2 DESIGN OF POLES:

- 3.2.1 SITC of 3.5M height Pole Made of mild steel pipe sections 89mm dia. & Top decorative bracket made of steel pipe sections 60mm dia.(vertical) & gradually bent 33mm dia. steel pipe sections. Decorative flower & curved designs are made of steel. Arch. Base design with overall dimension of 260mm dia. & 200mm height made of cast iron with weight around 10kgs. Ring- 1(89mm/60mm, weight- 2.5kgs.) made of cast iron. Entire pole & Bracket including all the cast iron elements shall be made to provide pleasing aesthetics as approved by Concerned Engineer in-charge. The pole should be provided with an inbuilt junction box to fix 1no. of 32A connectors and 1no. of 6A MCB, at the bottom - the inbuilt box should have a flush door of suitable size. The decorative pedestal to be provided with a suitable size base plate. This base plate along with foundation bolts of suitable size to be used for ensuring firm grouting into the specially designed RCC foundation. wind pressure calculation as per IS 875(part-3) & structural calculation report as per EN40 should be submitted to verify the pole design. Pole & Cast iron parts are painted in 3 layer coating(coating thickness-100 microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint - customised colour Metallic NERI Grey. Decorative Light Fixture, Light 851, Wattage 25-35W Power Module LED, 3000k, Suspended
Light 851: it's upper square frame in single piece made of die cast aluminum using pressure die-casting process,with a decorative element with threaded tube male G 3/4" which is also made of die cast aluminum using pressure die-casting process, fixed on the top. Auxiliary and optical compartment can be accessed by tilting the top frame. Lower frame with hinge arrangement & four armed bracket made of die cast aluminium in single piece using pressure die casting process. a small decorative element made of cast aluminium is provided at the bottom. Frosted Basket Screen made of acrylic (PMMA) injection molded in single piece. Pure polyester powder coating in Customized Metallic Grey Colour. Silicone gasket between the upper and lower frames ensures IP Rating - IP 66.
Height – 650mm, Length - 325mm,Width-325mm,Weight - 4.5Kg.
LED source of high efficacy should be used . Colour Rendering Index: Ra > 70. Electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection. LED Lifetime >50,000hours. LM80 report from LED Manufacturer should be submitted. Sample should be submitted for approval from concerned engineer-in charge.

- 3.2.2 The Heritage light pole shall be fabricated as per the details and dimensions shown in the drawing.

3.2.3 The street light poles shall have base plate, having 300 mm×300 mm×6 mm M.S. Plate shall be properly welded.

3.2.4 The access shall provide easy access to a Kit-kat fuse (16 A, 415 V) to be mounted inside the Junction box. The access shall be specially fabricated with adequate reinforcement and weather protection gasket to prevent ingress of moisture and weather proof.

3.2.5 **The poles fabricated shall confirm to the drawings.**

3.2.6 Deleted

3.2.8 Deleted

3.2.9 **DELETED**

3.2.10 Deleted

3.2.11 **INSTALLATION:**

- 1 Heritage lighting installation shall be carried out as per details shown in the drawing.
- 2 The poles shall be erected in perfect plumb with muffing as shown in drawing.
- 3 The luminaries shall also be installed on the pole Decorative bracket and be separately electrically wired to the respective junction box.
- 4 The cable lay out shall follow the route as per the instruction of site Engineer. In case of any constraint on the cable route the same shall be brought to notice of. Engineer-in-charge and carry-out cable laying as per the instruction of Engineer-in-charge.
- 5 The cable lay out shall be carried out in an underground manner and the said installation complete with electric connections. All cable layout in Double Walled Corrugated (DWC) type pipe.
- 6 The depth of cable-laying in normal case shall be 90 cms. from ground level.
- 7 On completion of the installation, the street light poles shall be done numbering as instruction by engineer in charge.
- 8 Deleted
- 9 This includes fixing of Heritage light led fittings complete with accessories at the end of the pole / bracket, connecting it with copper flexible cable, copper FRLS wire, double PVC insulated wire to Junction box. Third core shall be connected with earthing point of light fitting at one end and earthing point of junction box at the other end.

3.3 CABLE LAYING:

- 3.3.1 Electric cable for the Heritage lighting installation shall follow specification under the heading “MEDIUM VOLTAGE ALUMINUM XLPE CABLES”. The cable colour shall be yellow colour for 4 core × 25 sq. mm. & Green colour for 4 core × 6 sq. mm. cable & size and MMC shall be embossed / Printed on outer surface of cable at every mtr. Length.
- 3.3.2 Cable shall be terminated to the attached junction box. Approved make of cable sockets shall be provided.
- 3.3.3 Cable route shall be as per direction of Engineer-in-charge or the contractor shall mark the route and lay the cables only after approved by Engineer-in-charge.
- 3.3.4 Cable laying shall be done with excavation, backfilling of trench with same excavated morum and back filling material without sharp edged stone or bricks shall be used.

3.4 EARTHING:

- 3.4.1 All street light fixtures and poles shall be earthed as specified in the drawing.
- 3.4.2 Earth electrode shall be of 450mm×450mm×10mm thick CI plate OR 40 mm dia 2.5 Mtr. Long B grade G. I. pipe as required and as per guidelines of engineering in charge. Termination of CI plate with G.I. strips of 25 x6 or 30 x 5 mm.
- 3.4.3 E-Jumper: 3 mm dia Flexible G.I. wire with nylon / PVC coating with the suitable crimped socket at both end must be provided on each pole as shown in drawing.

3.5 INSTALLATION:

- 3.5.1 Heritage lighting installation shall be carried out as per details shown in the drawing.
- 3.5.2 The poles shall be erected in perfect plumb with muffing as shown in drawing in proportion of 1:2:4 PCC. The muffing shall withstand against the static load as well as wind velocity and bending moment of the pole.
- 3.5.3 Deleted
- 3.5.4 Deleted
- 3.5.5 The cable lay out shall follow the route as per the instruction of site Engineer. In case of any constraint on the cable route the same shall be brought to notice of. Engineer-in-charge and carry-out cable laying as per the instruction of Engineer-in-charge.
- 3.5.6 The cable lay out shall be carried out in an underground manner and the said installation complete with electric connections.
- 3.5.7 The depth of cable-laying in normal case shall be 90 cm. from ground level. In case of crossing the roads, then cable shall be laid in 50 mm dia. Double Walled Corrugated (DWC) pipe of Poly Ethylene (conforming to IS-14930 II) with necessary connecting accessories of same material.
- 3.5.8 Installation of poles shall be done as per enclosed drawings of street light poles. The depth of pole to be buried in ground shall be $\frac{1}{8}^{\text{th}}$ of the total pole length or as

specified in drawing, whichever is more.(The pole below ground should be 100 % Corrosion proof) Special care shall be taken in erecting poles so that these are not strained or damaged during erection. The pole shall be grouted inside ground pit as shown in respective drawing, with necessary GI pipes (40 mm dia.) shall be placed for facilitating drawing of cables. Separate GI pipe shall be provided for incoming and outgoing cables. The muffing shall be protected from premature drying by curing sufficient water.

- 3.5.9 This includes fixing of Heritage light led fittings complete with accessories at the end of the pole / bracket, connecting it with copper flexible cable, copper FRLS wire, double PVC insulated wire to Junction box. Third core shall be connected with earthing point of light fitting at one end and earthing point of junction box at the other end.

3.6 GENERAL NOTES FOR HERITAGE LIGHTING :

- 3.6.1 For supplying and laying of cables, technical specification (wiring) shall be applicable reference shall be made under heading cable work elsewhere in the tender.
- 3.6.2 For Heritage light poles along roads, nearest finished road level shall be taken as ground level and for poles along compound wall / away from roads, existing ground / finished ground shall be taken as ground level.
- 3.6.3 A loop of 1.5 mtr. of cable shall be provided near each street light pole for all incoming and outgoing cable.
- 3.6.4 Three wire each of Three Core copper flexible FRLS Cable shall be provided for connecting luminaries & earthing of the pole.
- 3.6.5 Three Core copper flexible FRLS Cable shall be provided for connecting luminaries & earthing of the pole.

3.7 METHOD OF MEASUREMENT:

- 3.7.1 Supply, installation, connection, testing and commissioning of one lighting pole including base plate with muffing, one appropriate pole bracket, one junction box with two nos. of GI protection pipe, internal connection from fuse in junction to the LED light fixture with 3C copper flexible FRLS Cable with control gear, pole earthing etc. shall be considered as one unit for measurement and payment.
- 3.7.2 All cabling work shall be measured on the basis of unit length and the cost shall include, cost of cable, excavation, laying, back filling, cable terminations and connection in junction box or pole terminal box etc.
- 3.7.3 All earthing work shall be measured on the basis of each earthing pit as shown in drawing and testing earth resistivity before earthing and electrode resistance after completion of work by the contractor and it should be submitted to the concern engineer in charge.

4.0 SITC OF LIGHT FIXTURES :-

4.1 SCOPE:

The scope of work shall cover the supply, assembling, Installation, testing and Commissioning of various types of light fixtures as per specification and latest standards with SITC of copper flexible cable from LED streetlight fittings/fixtures to Junction Box, Connection of pole wire from Junction Box with Luminaries wire should be with proper jointing System with rubber gum / any equivalent adhesive for longevity.

4.2 STANDARDS:

4.2.1 The following standards and rules shall be applicable :

- (a) IS 1944 - 1970 part 1 & 2 for Code of practice for lighting of public thoroughfares
- (b) IS 1913 - 1969 General and Safety requirements for Electric Lighting fittings.

(c) Indian Electricity Act and Rules issued the under.

4.2.2 All codes and standards mean the latest. Where not specified otherwise the installation shall generally follow the Indian Standard Code of Practice or the relevant British Standard Code of Practice in the absence of Indian Standard.

4.3 GENERAL REQUIREMENTS:

- 4.3.1 All LED fixtures shall be complete with LEDs shouldering on sheet with lens with proper wiring, SPP, electronic driver with necessary accessories and fixings necessary for installation whether so detailed under fixture description or not. All the fixtures shall be inspected by third party agency. Tenderer shall have to arrange TPI from any one of the TPI Firms viz. CEIL / RITES / SGS India/TUV-SUD South Asia Pvt. Ltd./EQDC Gandhinagar or any recommended by the MMC and inform the name of TPI & its representative in the Inspection Call letter. Tenderer shall have to communicate date of inspection & testing well in advance so that we may depute our engineer during third party testing. All expenses towards testing & Inspection shall be borne by the tenderer, which may include lodging & Boarding of the MMC representative.
- 4.3.2 Fixture housing, frame or canopy shall provide a suitable cover for the fixture outlet box or fixture opening. Fixture should be top opening type.
- 4.3.3 Fixture shall be completely wired and constructed to comply with the regulations and standards for LED Lighting Fixtures, unless otherwise specified. Fixtures shall bear manufacturer's name and the factory inspection label unless otherwise approved.

- 4.3.4 Wiring within the fixture and for connection to the branch circuit wiring and shall not be not less than 1.5 sq. mm. copper for 250 Volt application. Wire insulation shall suit the temperature conditions inside the fixture and wires bypassing the choke shall be heat protected with a heat resistant sleeve.
- 4.3.5 Aluminium Die Cast LM6 used in lighting fixtures shall be not less than 2.5 MM or heavier if so required to comply with specifications or standards. Sheet steel reflectors shall have a thickness of not less than 1.2 MM. Non-reflecting surfaces such as fixture frames and trim shall be Aluminium die cast.
- 4.3.6 All the wattages of LED fixtures are as per the IP 66 (both compartment) protection.
- 4.3.7 Lighting fixtures shall be designed for minimum glare and for continuous operation under specified atmospheric condition.
- 4.3.8 All luminaires shall be provided with toughened glass of sufficient strength/UV stabilized polycarbonate material is also acceptable. The luminaire should be provided with individual optical lens/ optical lens plate on the LED chip for achieving desired photometric distribution. The minimum IK protection of optic cover shall be IK 10 & for toughened glass it shall be IK 08. Appropriate test certificate/evidences shall be provided at the time of supply.

4.4 REFLECTOR: (If Applicable)

- 4.4.1 Light reflecting surface shall be mirror finished having the reflection factor of not less than 70% to 80% All parts of reflector shall be completely covered by finish and free from irregularities. It shall be capable of withstanding a 6 mm. radius bend without showing sign of cracking, peeling or loosening from the base metal. Finish shall be capable of withstanding 72 hours exposure to ultra violet sun lamp placed 10 cm. from the surface without discoloration, hardening or warping and retain the same reflection factor after exposure. Test report shall be furnished for each lot of fixtures.

4.5 Deleted

4.6 Deleted

4.7 Deleted.

4.8 Deleted

4.9 Deleted

4.10 TEST:

The following routine tests shall be conducted as per the relevant Indian Standards by the contractor & test report shall be submitted if reburied.

- a) Insulation resistance of each fixture shall be tested at 500 V.D.C. & the insulation resistances so measured shall not be less than 2 mega ohms between all current carrying parts and ground.

- b) Each fixture complete with its proper lamp/lamps shall be shown to operate satisfactorily at its normal voltage and frequency.
- c) Each fixture shall be examined visually to ensure that it is complete in all respects and satisfactorily finished.
- d) Type and routine test certificates shall be submitted for tests conducted as per relevant IS/BS for the fixture and accessories.

4.11 DRAWINGS AND DATA OF LIGHTING FIXTURES:

As per proposal, the bidder shall furnish relevant descriptive and illustrative literature of the lighting fixtures and accessories along with drawings/ data for the respective lighting fixtures: -

- i) Dimensional Drawings.
- ii) Mounting details cable entry facilities and weights.
- iii) Lamp output V/S temp. curves.

5.0 SPECIFICATION FOR L.T. XLPE CABLES

5.1 GENERAL :

The medium voltage cables shall be supplied, laid, connected, tested and commissioned in accordance with the specifications, as per IS : 7098 part I or relevant Indian Standards specifications, manufacturer's instructions. The cables shall be delivered at site in original drums with manufacturer's name, size, and type, clearly written on the drums.

All cables shall be adequately protected against any risk of mechanical damage to which they may be liable in normal conditions of handling during transportation, loading, unloading etc.

The cable shall be supplied in single length i. e. without any intermediate joint or cut unless specifically approved by the client.

The cable ends shall be suitably sealed against entry of moisture, dust, water etc. with cable compound as per standard practice.

5.2 CONDUCTOR:

Uncoated, annealed aluminium, of high conductivity conductors shall be concentrically stranded as per IEC: 228.

5.3 INSULATION:

Cross link polyethylene (XLPE) extruded insulation rated at 70° c

5.4 CORE IDENTIFICATION:

Two core	:	Red and Black
Three core	:	Red, Yellow and Blue
Four core	:	Red, Yellow, Blue and Black
Single core	:	Green for earthing

Black shall always be used for neutral.

5.5 ASSEMBLY:

Two, three or four insulated conductors shall be laid up, filled with non-hygroscopic material and covered with an additional layer of thermoplastic material.

5.6 ARMOUR:

Galvanized steel round / strip wires applied helically in single layers complete with covering the assembly of cores.

For cable size up to 25 Sq. mm.:

5.7 SHEATH:

ST-2 PVC along with polypropylene fillers shall be provided.

Inner sheath shall be extruded type and shall be compatible with the insulation provided for the cables.

Outer sheath shall be of an extruded type layer of suitable PVC material compatible with the specified ambient temp. 50 deg. C and operating temperature of cables. The sheath shall be resistant to water, ultraviolet radiation, fungus, termite and rodent attacks. The colour of outer sheath shall be as specified.

Sequential length marking required at every 1.0 mtr. interval on outer sheath.

5.8 TESTING :

5.8.1 FINISHED CABLE TESTS AT MANUFACTURER'S WORKS :

The finished cables shall be tested at manufacturer's works by third party agency witness by engineer in-charge. The cost of third party inspection shall be borne by the contractor.

Following routine tests for each and every length of cable shall be done and copy of test results shall be furnished for each length of cable along with supply - delivery.

5.8.2 VOLTAGE TEST :

Each core of cable shall be tested at room temperature at 3 KV A.C. R.M.S. for duration of 5 minutes.

5.8.3 CONDUCTOR RESISTANCE TEST :

The D.C. Resistance of each conductor shall be measured at room temperature and the results shall be corrected to 20° c. to check the compliance with the values specified in IS 8130 - 1976.

5.8.4 CABLE TEST BEFORE AND AFTER LAYING OF CABLES AT SITE SHOULD BE DONE BY CONTRACTOR AS FOLLOWS:-

Insulation Resistance test between phases and phase to Neutral and phase to earth.
Continuity test of all the phases, neutral and earth continuity conductor.
Earth resistance test of all the phases and neutral.
Sheathing continuity test

All tests shall be carried out in accordance with relevant Indian Standard Code of practice (IS: 7098 part I) and Indian Electricity Rules. The Vendor shall provide necessary instruments, equipments and labour for conducting the above test and shall bear all expenses in connection with such tests.

5.9 CABLE MARKING:

The outer sheath shall be legibly embossed/ Printed with following legend:

ELECTRIC CABLE: 1100 V, SIZE: $4C \times 25 \text{ mm}^2$ / $4C \times 6 \text{ mm}^2$, "Property of MMC"

Manufacturer's Name & year of manufacturing.

5.10 SEALING, DRUMMING & PACKING:

After tests at the manufacturer's works, both ends of the cable shall be sealed to prevent the ingress of moisture during transportation and storage.

Cable shall be supplied in length of 500 meters or as required in non-returnable drums of sufficiently sturdy construction.

Cables of length more than 250 meters shall also be supplied on non-returnable drums. The spindle hole shall be 110 mm minimum diameter.

Each drum shall bear on the outside flange, legibly and indelibly in the English literature, a distinguishing number, the manufacturer's name and particulars of the cable i.e. voltage grade, length, conductor size, cable type, insulation type and gross weight shall also be clearly visible. The direction for rolling shall be indicated by an arrow. The drum flange shall also be marked with manufacturer's name and year of manufacturing etc.

5.11 The outer layer of cable shall have following colour,

Yellow: $4C \times 25 \text{ mm}^2$. size cable.

Green 4 C X 6 mm² size of cable.

6.0 EARTHING

6.1 GENERAL

All the non-current carrying metal parts of the street lighting installation and mechanical equipments shall be earthed properly. The cables armour and sheath, section pillar of feeder pillar luminaries' pole & pole box of metal shall be bonded together and connected by means of specified earthing system. An earth continuity conductor shall be installed with all the feeders and circuits and shall be connected from the earth bar of the panel boards to the conduit system, earth stud of the, lighting fixture, earth pin of the socket outlets and to any metallic wall plates used.

6.2 SCOPE OF WORK

The scope of work shall cover supply, laying, installation, connecting, testing and commissioning of :

Electrical Work

Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (a) For Electrical Installation up to 440V in normal soil

Length of pipe - 1 Mtr

Back filling compound - 1 Nos Bag of 15 Kg.

In pipe type earthing 40 mm dia 2.5 Mtr. Long B class G. I. Pipe with necessary coupling bush with boring method to be inserted in to the ground at the depth of 3 Mtr. 8 SWG GI wire is to be connected with this pipe and connected to the pole or section pillar. The resistance of earthing should not exceed beyond 2 Ohm in any case.

Earthing G.I strips from earthing station to equipotential bar.

Earthing G.I strips from equipotential bar to power panels, FSP, Section pillar & street light pole etc.

Bonding of Non-current carrying parts, and metallic parts of the electrical installation.

Civil Work

- ✓ The Contractor shall design, supply, construct, and commission the Heritage Pathway including all associated civil, electrical, and landscaping works as per approved drawings and specifications. All works shall comply with applicable Indian Standards (IS Codes), PWD specifications, and local authority regulations.
- ✓ Construction of **Heritage Pathway** of **250 m length × 2.5 m width**, raised 150 mm above finished ground level.
- ✓ Pathway surface to be finished with **interlocking concrete paver blocks, M40 grade, 80 mm thick, UV resistant, as per IS 15658:2006.**
- ✓ **Kerb stones** (600×300×100 mm, vacuum-pressed, grey cement) to be installed on both sides of the pathway, as per **IS 14488.**
- ✓ Pole foundations of size **500 mm × 500 mm × 1000 mm** in RCC M25 grade with anchor bolts, complying with **IS 456:2000.**
- ✓ Excavation, trenching, and backfilling in accordance with **IS 1200 (Part 1 & 23).**
- ✓ Cement concrete (1:3:6) below foundations as per **IS 456:2000.**
- ✓ Alignment, levels, and slopes to be maintained as per drawings.
- ✓ Provision of **drainage slopes** to avoid water stagnation.

6.3 STANDARDS

The following standards and rules shall be applicable:

- a) IS: 3043 - 1966 Code of practice for Earthing.
- b) Indian Electricity Act and Rules

6.4 TYPE OF EARTHING STATION

Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly

conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (a) For Electrical Installation up to 440V in normal soil

Length of pipe - 1 Mtr

Back filling compound - 1 Nos Bag of 15 Kg.

Providing and erecting Pipe type earthing having 150 cms.long and 2.5 cms. dia. galvanised iron pipe with coupling and both buried in specially prepared earth pit complete with necessary 8 SWG earth wire.

The earthing arrangement shall be as shown on the drawing.

The earth resistance shall be maintained with suitable soil treatment as shown in the drawing.

The resistance of each earth station should not exceed 2 ohm.

The earth strip / wire shall be connected to the earth plate through Hot Dip G.I. bolts.

The earthing conductors shall be of copper strip in case of copper earthing and hot dip galvanized iron strip in case of G.I. earthing.

19 mm G.I. pipe of approved quality shall be used for watering the earthing electrodes. The hardware and other consumables for earthing installation be of CI/copper earthing and shall be hot dip galvanized material in case of G.I.Earthing.

6.5 METHOD OF MEASUREMENT :

Provision of earthing station complete with excavation, electrode, watering pipe, soil treatment, earth wires / strips, clamps, labour etc. shall be treated as one unit of measurement.

- a) Main equipment earthing grid and connection to the earthing station.
- b) Connection to the section pillars / feeder pillar, pole & pole box.

6.6 Road & Landscaping:

- ✓ Main road length: **250 m (8 m wide)**; pathway parallel length: **250 m (2.5 m wide)**.
- ✓ Landscaping with **132 palm trees (5–8 ft height)** spaced 2–2.5 m apart, with proper pits, soil preparation, and watering system as per **NBC-2016, Part 10 – Landscaping Standards**.
- ✓ Maintenance of landscaping during **Defect Liability Period (DLP)** and O&M phase.

6.7 Pole Erection & Distance:

- ✓ Total **46 heritage decorative poles** with LED lanterns, placed in zigzag arrangement.
- ✓ Inter-pole distance: **10 meters**, mirrored on both sides of pathway.
- ✓ Pole design and erection shall comply with **IS 875 (Part 3: Wind Loads)** and **IS 800 (General Construction in Steel)**.
- ✓ Electrical cabling and trenching shall follow **IS 732:2019 (Code of Practice for Electrical Wiring Installations)**.

6.8 IS Codes to be Followed:

1. **IS 456:2000** – Plain & Reinforced Concrete Code.
2. **IS 875 (Part 1 to 5)** – Structural Safety (Dead Load, Imposed Load, Wind Load, Special Loads).
3. **IS 800:2007** – General Construction in Steel.
4. **IS 15658:2006** – Precast Concrete Paving Blocks.
5. **IS 1200** – Methods of Measurement of Building & Civil Works.
6. **IS 14488** – Kerb Stone Specifications.
7. **IS 732:2019** – Electrical Wiring Installations.
8. **NBC 2016** – National Building Code for landscaping, safety, fire & site works.
9. **IS 3786** – Safety in Excavation & Construction.

6.9 Safety & Site Instructions

- ✓ Contractor shall ensure compliance with **IS 3696 (Part 1 & 2) – Scaffolding, Ladders & Safety Measures**.
- ✓ **Personal Protective Equipment (PPE)** such as helmets, gloves, safety belts, reflective jackets, and shoes must be provided to all workers.
- ✓ Excavation trenches to be barricaded and provided with caution signage & reflective tape.
- ✓ Electrical safety as per **Indian Electricity Rules, 2005** and **IS 732:2019**.
- ✓ Fire extinguishers and first-aid kits to be available at site.
- ✓ Contractor to follow **Occupational Health & Safety (OHS) practices** and submit a **Safety Management Plan** before commencement.
- ✓ Night works (if any) to include adequate temporary lighting, reflective barriers, and trained supervisors.

6.10 Execution & Quality Control

- ✓ All materials to be tested at NABL-approved labs as per **IS standards** before use.
- ✓ Contractor to prepare **Method Statements** and get approval from Engineer-in-Charge before execution.
- ✓ Work to be carried out under **supervision of qualified civil engineers**.
- ✓ Contractor to provide **as-built drawings** and **maintenance manual** at completion.

7.0 SITC AND O & M WORK:

7.1 SCOPE

The intent of this specification is to define the requirements for the installation, testing and commissioning of the lighting system like Cables, earthing network, lighting, Light fixtures etc. Requirement of this project shall be as specified in bill of quantities / approved drawings / general specifications fixed by the owner / consultant.

Necessary drawing approvals in any & clearances from electrical inspector, local authorities and other statutory bodies shall be in the scope of contractor.

7.2 STANDARDS

7.2.1 The work shall be carried out in the best workman like manner in conformity with this specification, the relevant specification / codes of practice of the Indian Standards Institution, approved drawings & the instructions issued by the authorized representative, from time to time. Some of the relevant Indian Standards are listed elsewhere in this tender document.

7.2.2 In addition to the standards mentioned in 2.1, all works shall also conform to the requirement of the following:

- Indian Electricity Act and Rules framed there under.
- Fire Insurance Regulations.
- Regulations lay down by the Chief Electrical Inspector of the State / State Electricity Board / Union Territory.
- Regulations lay down by the Factory Inspector of the State / Union Territory.
- Any other regulations lay down by the local authorities.
- Installation & operation manuals of original manufacturers of equipment.

7.3 EQUIPMENT AND ACCESSORIES SPECIFICATIONS:

This defines specifications and requirements mainly for the equipment and

accessories, which are generally supplied by the erection agency.

All materials, accessories, consumable to be supplied by the contractor shall be selected from the list of specified makes and shall conform to the specification given here under. The equipment shall be manufactured in accordance with current Indian Standard specifications wherever they exist or with the BS or NEC specifications, if no such IS standards are available. In the absence of any specification, the materials shall be as approved by the owner / consultant or his authorized representative.

All similar materials and removable parts shall be uniform and interchangeable with one another. Makes of bought out items selected by the contractor must be furnished by him as per the Performa given in elsewhere in this tender document.

7.3.1 CABLE CONNECTORS:

Cable connectors, lugs/sockets, shall be of copper/aluminum alloy, suitably tinned, solder less, crimping type. These shall be suitable for the cable being connected and type of function (such as power, control or connection to instruments etc.).

7.3.2 Deleted

7.3.3 D.W.C. PIPE FOR CABLES:

For laying of cables under asphalt road / cross road, 50mm dia./ 63 mm dia. Double Walled Corrugated (DWC) pipe of Polyethylene (conforming to IS-14930 II) shall be used.

7.4. INSTALLATION OF CABLE NETWORK:

Cable network shall include cables which shall be laid in underground trenches and 50mm dia. Double Walled Corrugated (DWC) pipe of Poly Ethylene (conforming to IS-14930 II) wherever required as per the client's instructions.

(a) GENERAL REQUIREMENTS FOR HANDLING CABLES:

Before and after laying cables, this shall be tested for physical damage, continuity, absence of cross phasing, insulation resistance to earth and between conductors. Insulation resistance tests shall be carried out with 500 / 1000 V meggar

The cables shall be supplied at site, wound on wooden drums as far as possible. For smaller length and sizes, cables in properly coiled form can be accepted. The cables shall be laid by mounting the drum of the cable on drum carriage. Where the carriage is not available, the drum shall be mounted on a properly supported axle, and the cable laid out from the top of the drum. In no case the cable will be rolled on as it produces kinks which may damage the conductor.

Sharp bending of cable shall be avoided. The bending radius for PVC insulated and

sheathed, armoured cable shall not be less than 10 D, where “D” is overall diameter of the cable.

While drawing cables through 50mm dia. Double Walled Corrugated (DWC) pipe of Polyethylene (conforming to IS-14930 II) pipes, ensure that size of pipe is such that, after drawing cables, 40% area is free. After drawing cables, the end of pipe shall be sealed with cotton / bituminous compound.

High voltage (11 kV and above), medium voltage (240 V and above) and other control cables shall be separated from each other by adequate spacing or running through independent pipes / trays.

Armored cables shall never be concealed in roads without 50mm dia. Double Walled Corrugated (DWC) pipe of Poly Ethylene (conforming to IS-14930 II).

Joints in the cable throughout its length of laying shall be avoided as far as possible and if unavoidable, prior approval of site engineer shall be taken. If allowed, proper straight through epoxy resin tight joint shall be made, without any additional cost.

A minimum loop of 1.5 mtr. shall be provided on both ends of the cable, and on both ends of straight through cable joint. This additional length shall be used for fresh termination in future. Cable for this loop shall be paid for supply and laying.

All cable routes shall be carefully measured and cable cut to the required lengths and undue wastage of cables to be avoided. While selecting cable routes interference with structures, foundations, pipelines, future expansion of buildings etc. should be avoided.

All temporary ends of cables must be protected against dirt / dust and moisture to prevent damage to the insulation. For this purpose, ends of all PVC insulated cables shall be taped with an approved PVC or rubber insulating tapes. Use of friction type or other fabric type tape is not permitted. Lead sheathed cables shall be plumbed with lead alloy. .

(b) LAYING OF CABLES (UNDERGROUND SYSTEM)

Cables shall be so laid in trench that this will not interfere with other underground structure. All water pipes, sewage lines or other structures which become exposed by excavation shall be properly supported and protected from injury until the filling has been rammed solidly in places under and around them. Any telephone or other cables coming in the way are to be properly shielded / diverted as directed by the owner / consultant.

Cable shall be laid at minimum depth of 90 cm / as per site condition from ground level. Excavation will be generally in ordinary soil. The width of trench shall be sufficient for laying of required no. of cables.

50mm dia. Double Walled Corrugated (DWC) pipe of Polyethylene (conforming to IS-14930 II) for crossing road in cable laying shall be provided by the contractor. 50mm dia. Double Walled Corrugated (DWC) pipe of Polyethylene (conforming to IS-14930 II) at the ends shall be sealed by bituminous compound / cotton after laying and testing of cables by electrical contractor without any extra charge.

(c) TERMINATION AND JOINTING OF CABLES:

i. USE OF LUGS / SOCKETS:

All cable leads shall be terminated at the equipment / fixture terminals, by means of crimped type solder less connectors unless the terminals at the equipment ends are suitable for direct jointing without lugs / sockets.

The following is the recommended procedure for crimped joints and the same shall be followed :

Strip off the insulation of the cable and with every precaution, not in severe or damage any strand. All insulation's to be removed from the stripped portion of the conductor and ends of the insulation should be clean and square.

The cable should be kept clean as far as possible before assembling it with the terminal / socket.

Correct size and type of socket / ferrule / lug should be selected depending on size of conductor, and type of connection to be made.

Make the crimped joint by suitable crimping tool.

If after crimping the conductor in socket / lug, some portion of the conductor remains without insulation the same should be covered sufficiently with PVC tape.

(d) TESTING OF CABLES:

Before energizing, the insulation resistance of every circuit shall be measured from phase to ground. This requires 3 measurements if one side is grounded and 6 measurements for 3 phase circuits.

Where splices or terminations are required in circuits rated above 650 volts, measure insulation resistance of each length of cable before splicing and/or terminating. Repeat measurements after splices and/or terminations are complete. Meggar test shall be made after installation on the following :

All 1100 volts grade cables in which straight through joints have been made. All

cables above 1100 V grade.

The Meggar test shall be performed as detailed below :

Cables shall be installed in final position with all the straight through joints complete.

Terminations shall be kept unfinished.

ii. PROFORMA FOR TESTING CABLES:

DATE OF TEST

Drum No. from which cable taken.

Cable from.....to.....

Length of run of this cable..... meter

Insulation resistance test

between core-1 to earth	mega-ohm
between core-2 to earth	mega-ohm
between core-3 to earth	mega-ohm
between core-4 to earth	mega-ohm
between core-1 to core-2	mega-ohm
between core-2 to core-3	mega-ohm
between core-3 to core-4	mega-ohm
between core-4 to core-1	mega-ohm
between core-1 to core-3	mega-ohm
between core-2 to core-4	mega-ohm

7.5 TESTING OF INSTALLATION:

Before a completed installation is put into service, the following tests shall be complied with:

(a) INSULATION RESISTANCE:

The insulation resistance shall be measured by applying 500 volt megger with all fuses in places, circuit breaker and all switches closed.

The insulation resistance in giga ohms of an installation, measured shall not be less than 50 mega ohms divided by the number of points on the circuit.

The insulation resistance shall be measured between

EARTH TO PHASE

EARTH TO NEUTRAL PHASE TO

NEUTRAL

PHASE TO PHASE

(b) EARTH CONTINUITY PATH:

The earth continuity conductors shall be tested for electrical continuity and the electrical resistance of the same along with the earthing lead but excluding any added resistance or earth leakage circuit-breaker measured from the connection, with the earth electrode to any point in the earth continuity conductor in the completed installation and shall not exceed 2 ohm.

(c) **COMPLETION CERTIFICATES:**

All the above tests shall be carried out in presence of client and the results shall be recorded in prescribed forms. Any default during the testing shall be immediately rectified and that section of the installation shall be re tested. The completed test result from shall be submitted to the client for approval.

On completion of an electric installation a certificate shall be furnished by the contractor, countersigned by the certified supervisor under whose direct supervision the installation was carried out. This certificate shall be in a prescribed form as required by the local electric supply authority.

7.6 Deleted

7.7 Scope of work during the Three years Comprehensive O&M period: -

- On Successful Completion of Supply, Installation, testing & Commissioning work as per the Tender, it will be in the scope and responsibility of the Bidders to get the entire Installation and Commissioning Work verified and Certified by the PMC/ Consultant, and same has to be informed to MMC in Written.
- Comprehensive O&M will start from the date of certification of Completion of SITC Work by Consultant/PMC.
- The Successful Bidders shall be responsible for the procurement of all the necessary original spare parts for the entire Installation done by him during the entire period of O & M of 3 years, from the Original Equipment Manufacturers.
- Bidders shall have to carry out routine preventive maintenance and repairing during the Comprehensive O&M period of 3 years.
- The Bidders shall have to arrange and deploy necessary men power & trained personnel, with required qualification and experience as specified in the tender.
- These personals shall be responsible for Operation of each and every equipment's installed in Heritage Pathway premises. For that, necessary staff shall be made available at least before 15.00 hrs. every day.
- All Installations has to be Operated for Minimum 11-hrs every day, and it may

vary as per the requirement of the Show and MMC.

- In the event of any Breakdown, the Bidders shall have to arrange for more necessary technical experts and other required staff in order to resume the System.
- Any repairs are to be attended on top priority for effective show without any compromise on the performance of the illumination.
- It is mandatory for the Bidders to prepare detailed Electrical Drawings of the Entire Installation indicating Cabling Work of Lighting Luminaires, DMX Controllers, Connectors, Decoders, encoders, Splitters etc.
- Bidders have to arrange minimum 2 people for management during the O&M as per following table at site will be as per approval of Authority. Bidders shall deploy personnel as required by the Project to ensure completion of the work in accordance with the contract. All the manpower proposed for the project shall be supported by relevant CV's approved by MMC/ PMC.

Post & Qualification	Nos.
Project Manager/Supervisor with degree/diploma in Electrical or Electronics Engineering with 3 years of experience in similar works.	1
Degree in Civil Engineering with 5 years' experience in similar works.	1
Technician (electrician/Wireman) with ITI certification in Electrical or Electronics Engineering with 3 years of experience in similar works.	1
Helper with 3 years of experience in similar works	2

- Penalty for O&M, after commissioning and on the commencement of the O&M work, if the decorative lighting remains in non-working condition for more than 24 hrs, then penalty Rs. 5000/- per day to up to maximum ceiling of Rs. 50,000/- per month will be applicable.
- If after 3 years of O&M period completed MMC may be extent minimum 1 year (Only operation) then bidders have to ready to do the work as per the last year O&M payment condition.
- Operation and Maintenance: Before the Works are taken over Bidders shall supply operation and maintenance manuals with drawings of the Works as built. These shall be in such detail will enable the MMC to operate, maintain, adjust and repair all parts of the Works. The manuals and drawings shall be in the ruling language, and in such form and three numbers as stated in the Contract. Unless otherwise agreed, the Works shall not be considered to be completed for the purposes of taking over until such manuals and drawings have been supplied to MMC.

- The manpower specified here with are to be deployed for routine normal days. However, additional manpower required at site shall be provided for any major event/festivals/Gov. function/Carnival etc., as & when required by MMC at no additional cost.
- For breakdown repairing more require persons are to be deployed at site.
- A detailed Maintenance register book shall be maintained for all gates, accurately recording measurements, installation progress, testing results, and any site-specific observations related to the decorative lighting works. This register shall be updated regularly, verified by the site engineer, and submitted to the Morbi Municipal Corporation (MMC) along with comprehensive progress reports and supporting documentation to ensure full transparency, accountability, and quality control throughout the execution of the project.
- **Insurance:**
- "As per government regulations, all insurance policies must be duly completed and compliant with the stipulated guidelines to ensure legal validity and full coverage protection."

7.8 HANDING OVER / TAKING OVER:

After completion of works and tests specified above, the various installations of the project can be taken over by the contractor showing every as workmanship as per tender terms & condition to the employer on the site as and when these are ready in all respects.

(b) PROTECTION CLASS:

All the Outdoor Panels shall have protection class of **IP: 55**

(c) PAINTING:

The painting shall be one coat of primer and two coat of synthetic enamel colour.

(d) ELECTRICAL POWER AND CONTROL WIRING CONNECTION:

Terminal for both incoming and outgoing cable connections shall be suitable for 1100 V grade, aluminium / copper conductor PVC insulated and PVC sheathed, armoured cable and shall be suitable for connections of solderless sockets for the cable size as indicated on the appended drawings / BOQ.

Power connections for incoming feeders of the main Panels shall be suitable for 1100 V grade aluminium conductor (PVC) cables.

Both control and power terminals shall be properly shrouded.

Clip on type terminals shall be provided up to 10 sq. mm conductor and above 10 sq. mm bolt type terminals shall be used.

Particular care shall be taken to ensure that the layout of wiring is neat and orderly. Identification mark shall be fitted to all the wire termination for ease of identification

and to facilitate checking and testing.

Spring type washers shall be used for all copper and aluminium connections.

(e) EARTHING:

GI earth bars of size 25 mm × 6 mm or 30 mm x 5 mm shall be provided in the section pillar for the earthing. The frame work of the section pillar shall be connected to this earth. Provisions shall be made for connection from this earth to the main earthing bar coming from the earth pit on both side of the Section Pillar.

(f) LABELS:

Labels shall be provided on all incoming and outgoing cable. Single line circuit diagram showing the arrangements of circuit inside the section pillars shall be pasted on inside of the panel door and covered with transparent laminated plastic sheet.

(g) NAME PLATE:

A paint bold letters shall be painted on the outside of section pillar.

Inside the feeder compartments, the electrical components, equipments, accessories like switchgear, control gear, lamps, relays etc. shall suitably be identified by providing stickers.

Name plate shall be painted in English language, be acceptable.

(h) DANGER NOTICE PLATES:

The danger notice plate shall be affixed in a permanent manner on operating side of the section pillar.

The danger notice plate shall indicate danger notice in English and with a sign of skull and bones.

The danger notice plate, in general, meet the requirements of local inspecting authorities.

Overall dimensions of the danger notice plate shall be 200 mm. wide x 150 mm. high.

The danger notice plate shall be made from minimum 1.2 mm. thick mild steel sheet and after due pre-treatment to the plate, the same shall be painted white with vitreous enamel paint on both front and rear surface of the plate.

The letters, the figures, the conventional skull and bones etc. shall be positioned on plate as per recommendation of IS : 2551-1982.

The said letters, the figures and the sign of skull and bones shall be painted in signal red colour as per IS.

The danger plate shall have rounded corners. Location of fixing holes for the plate shall be decided to suit design of the Panels.

8.2 FUSE:

Fuses shall be of 415 / 500 V and appropriate size of porcelain material.

8.3 CONTACTORS:

The contactors shall meet with the requirements of IS: 13947.

The contactors shall have minimum making and breaking capacity in accordance with utilization category AC3 duty.

If the contactor forms part of a distribution board, then a separate enclosure is not required, but the installation of the contactor shall be such that it is not possible to make an accidental contact with live parts.

8.4 Digital Astronomical TIMER:

Supplying & erecting approved make Digital Astronomical time switch having lithium cell 5 years operative and 48 hrs operate battery backup 1 channel day clock with 28 memory programmes, suitable to operate on 240V +/- 5%, 16A with, floating contacts Minimum switching setup time 1 minimum & LCD display. Also comprised permanent ON/OFF switching. Programming switches & housed in fire proof thermoplastic enclosure & transparent cover erected as required with necessary connection erected as directed.

8.4.a ELCB:

Supplying & erecting approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 100 mA and Short Circuit withstand capacity of 6 KA and suitable for operation on 3 phase and neutral 415V. Having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed.

8.5 INSPECTION

At all reasonable times during production and prior to transport of the Panels to site, the supplier / contractor shall arrange and provide all the facilities at their plant for inspection.

8.6 TEST CERTIFICATES

Testing of section pillar shall be carried out at factory and at site as specified in Indian standards in the presence of consultant. The test results shall be recorded on a prescribed form. The test certificate for the test carried out at factory and at site shall be submitted in duplicate.

9.0 DELETED

10 (1) LED STREETLIGHT FIXTURES SPECIFICATIONS

The LED streetlight system will have to meet the following specifications:

Maintenance Factor	0.8
CCT	5000 K - 6500 K
Protection level	IP 66
Power factor	> 0.95
Construction	Die cast Aluminium body with finish to be of colour and with the confirming to the safety of IS 10322 (part - 2) -1982
Heat Sink	Integrated with in luminaire & The dimensions of luminaries shall be adequate to permit sufficient heat dissipation through the body itself, so as to prevent abnormal temperature rise inside the lantern & consequential damage to cover & gasket materials, LEDs, lenses & Electronic Driver.
Application	Outdoor Use
System efficacy-Lm/W @25c amb	>=130
Warranty	5 years on the LEDs, Fixture & Driver
Protection	Over Heat, Over Load, Short Circuit, HV Surge up to 10.0 KV
Certification	LM 79, LM80 must be produced at the time of Inspection
Marking	Company LOGO Engraving/Embossing on Body, MMC marking
Electrical connector	Lead wire with minimum 1m long
Usage hours	Dusk to dawn (12 hours)
LED life-time (L70)	> 50000 hrs
Driver Life Rating	> 50000 hrs
Beam angle	≥ 135 deg (± 3 deg.)/ 80 deg. Horizontal spread ≥ 135 degrees (± 3 deg.) & Vertical spread 80 deg.
LED	CREE, Osram, Philips, Nichia, LG
LED junction temp in °C@ Ta=25C	< 75
Lens material	Polycarbonate
Working humidity	10% - 90% RH
Working temp in °C	05 to 50 degrees C
LED driver type	Constant Current, analog 0 to 10 V or PWM Dimmable Driver Note: - 1) Analog 0 to 10 V or PWM Dimmable Driver applicable only for 90W and above Wattage LED Streetlight fittings. 2) For LED fittings below 90W, the driver should be of Constant Current type.
Driver Current	≤ 750 mA
Driver Efficiency	>80%
THD Amp	< 10%
THD Volt	< 5%
Input Voltage range (Vac)	150-270 +/- 5%
Input Voltage frequency (Fac)	50 Hz +/-3%
CRI Colour Rendering Index	> 70
Lumen Maintenance Factor	70% up to 35000 burning hrs
Uniformity ratio	>0.4

Note : (1) For LED fittings having CCT (3000/4000 K \pm 10%) with efficacy \geq 115 lm/w for particular project. In such cases the technical specifications of fixtures other than CCT and Efficacy shall remain unchanged.

(2) All LED luminaires offered must be approved by BIS and obviously LED driver must be approved R-Number (Registration no. provided by BIS). Approved BIS certificate must be operative/ valid at the time of tendering/ during actual supply. Appropriate certificate(s) also needs to be furnished at the time of supply of the offered/ luminaires to be installed.

10.0 A LED Fixtures must meet the following criteria in addition to the mentioned in above table. (For 5000 K to 6500 K CCT)

TABLE- A

Sr. No.	Wattage of Fixture	Lumens
1	\leq 45 watt	\geq 5850
2	\leq 60 watt	\geq 7800
3	\leq 90 watt	\geq 11700
4	\leq 120 watt	\geq 15600
5	\leq 150 watt	\geq 19500
6	\leq 170 watt	\geq 22100

LED Fixtures must meet the following criteria in addition to the mentioned in above table. (For 3000 K / 4000 K \pm 10% CCT)

TABLE- B

Sr. No.	Wattage of Fixture	Lumens
1	\leq 45 watt	\geq 5175
2	\leq 60 watt	\geq 6900
3	\leq 90 watt	\geq 10350
4	\leq 120 watt	\geq 13800
5	\leq 150 watt	\geq 17250
6	\leq 170 watt	\geq 19550

10.0 B

Note : 1. Efficacy of the system should not allow below 130 lm/watt (except fitting having CCT 3000 / 4000 K \pm 10%) and wattage specified indicative maximum for the said lumens output. No negative tolerance allowed and no power loading shall be consider for this tender.

10.1 Particulars and Details :

Tenderer have to note the following points while providing of proposed luminaries.

10.1.1 General description

Tenderer must have to provide luminaries as per tender specifications, terms and conditions.

10.1.2 Electrical specifications

Electrical ratings of the proposed luminaries' product must have to provide as per tender specifications, terms and conditions by the tenderer.

10.1.3 DELETED

10.2 Bidder shall have to offer the following minimum warranty:

- a. Provide a Three-year on-site replacement warranty covering material fixture finish and workmanship, to include transportation, removal and installation of new product.
- b. Provide Three-year replacement warranty for defective or non-starting LED source assemblies and all drivers.
- c. Provide a Three-year warranty for luminaries exhibiting inadequate lumen maintenance at the end of the warranty period in compliance with the following table:

L70 lifetime claim	Min. lumen to be maintained @ 3 years
35,000 hours	92.50%
50,000 hours	85.50%
1,00,000 hours	80.00%

- d. A luminaire dirt depreciation (LDD) factor may be included in the above calculation, such a value be determined by mutual agreement between MMC and the manufacturer, consistent with local ambient environmental conditions and practice.
- e. A luminaire dirt depreciation (LDD) factor may be included in the above calculation, such a value be determined by mutual agreement between MMC and the manufacturer, consistent with local ambient environmental conditions and practice.
- f. A monitoring programme to implement 6.6(c) above will be determined by mutual agreement between MMC and the Bidder. The costs of the monitoring programme over the Three year warranty period will be borne by the Bidder, unless agreed otherwise by MMC and the Bidder.
- g. The warranty shall cover all LED light sources (packages or modules/arrays) including but not limited to the LED die, enclosure, and phosphor. If the expected life of the luminaire system is not maintained net of LDD, then the Bidder shall replace the light source(s) and / or luminaries as needed.

10.3 Photometric information:-

The proponent needs to submit the following photometric

- 1) Photometric modelling results, preferably within a LM80 report from an independent accredited laboratory showing generic candle power traces and is footcandle plots for the proposed luminaire product.
- 2) Photometric information, data and diagrams that model the luminance flux distribution of the proposed luminaire referencing the site characteristics given in Section 6.2 above. The proponent should consider the following during the modelling exercise.
- 3) Such modelling should verify that the proponent's proposed luminaire will meet Indian Roadway Lighting Standard IS 1944, which specifies average luminance (E avg.) and uniformity (E min. / E avg.) for roads at the above sites.
- 4) Use Industry accepted, standardized software like Dialux for above modelling. While modelling, a maintenance factor of 0.8 should be used.

Note: The proponent needs to submit a soft copy of the IES file of the proposed luminaire along with supply of material.

10.4 Lumen maintenance statement :-

- 1) The proponent must submit a lumen maintenance statement that estimates how many operating hours can be expected from the proposed luminaire product until its light output declines to 70% of its initial output (L70), given the specific climatic character, including extremes of temperature and high humidity, associated with the Morbi local condition.
- 2) The lumen maintenance statement should also clearly explain that how or what methods was used to determine the rated lifetime.
- 3) Describe in details the thermal management: how the physical and thermal design of the luminaire will prevent the LED chips from overheating on extremely hot days.
- 4) Other trials or pilot projects: Submit information and contacts for other relevant trials in which the proponent's proposed luminaire product, or similar products sold by the agency, have been tested in the field.
- 5) Such information should include: LM 80 report for the LED chip package employed in the proposed luminaire product illuminance or luminance measurements, if available, taken over a minimum of two years of operation from pilot projects that have tested the proposed luminaire products, or a similar luminaire product, in the field.

10.5 Luminaire specification – others

The proponent shall provide information and certifications

- 1) Luminaire: General Requirements, Tests, and Certification specified in IS 10322
- 2) Electrical safety certification such as ISI and CII
- 3) Ingress Protection Certification on IP 66

10.6 DELETED

11.0 DELETED

12.00 DELETED

14.00 LIST OF APPROVED VENDORS :-

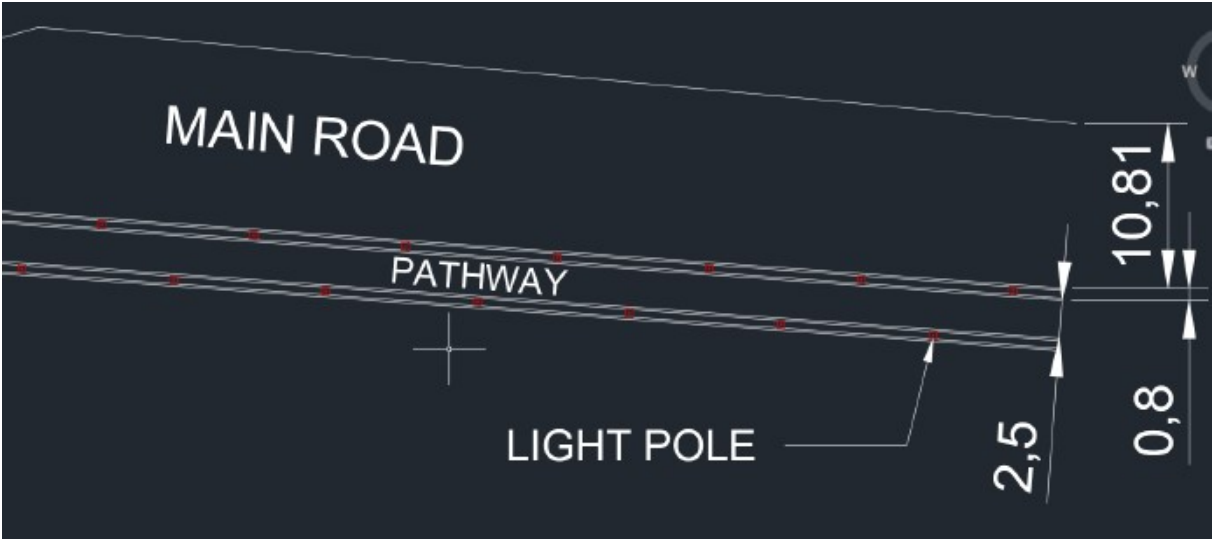
SR.	ITEM	APPROVED MAKE
1	LED FIXTURES / FLOODLIGHT	Bajaj / Crompton / Philips/ HAVELLS/WIPRO/ HELONIX/SURYA/NERI
2	"B" CLASS ERW G.I. PIPES	TATA / SURYA / ZINDAL / ZENITH / ASIAN
3	CABLES	GLOSTER / RR CABLE// KEI WIRE & CABLES/FINOLEX / POLYCAB / HAVELLS
4	FLEXIBLE WIRE/CABLE	GLOSTER / RR CABLE// KEI WIRE & CABLES/FINOLEX / POLYCAB / HAVELLS
5	CABLE SOCKET	HMI (ISI MARKED) / COMMET / DOWELL'S / ALCON
6	SMC JUNCTION BOX Size : (300 X 200 X 100 mm)	CLIPSAL / SINTEX / HANSEL / EPP / EVEREST / PUSHTRON (SUMIP) / GREEN COMPOSITE / SHASHWAT/ ESCO / INDO
7	TIME SWITCH (Astronomical)	L&T / INDO ASIAN / THEBEN / C & S / Asian
8	CONTACTORS	ABB / SIEMENS / CROMPTON / L & T/ C&S / SCHINDER
9	ELCB	ABB / SIEMENS / CROMPTON / L & T/ C&S / SCHINDER
10	SMTPN	SOR (GoG, R&sB Dept) CAT III
11	DWC PIPE	R & B SOR APPROVED
12	SPIKE LIGHT	HAVELLS/WIPRO/JAQUAR

Signature of Tenderer :**Name :****Company's seal :****Date :****City Engineer (MMC)****Morbi Municipal Corporation****Date :**

Drawings:



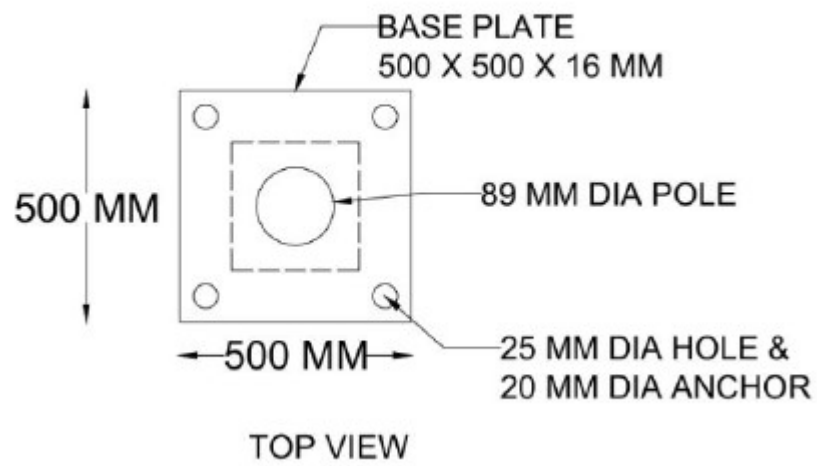
DIMENSIONS OF PATHWAY



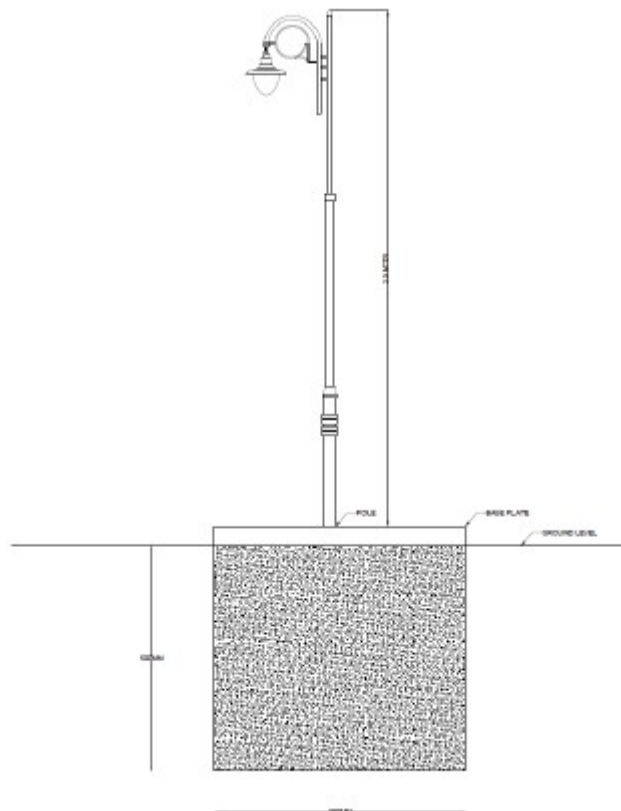
LAYOUT OF LIGHTING POLE PLACEMENT



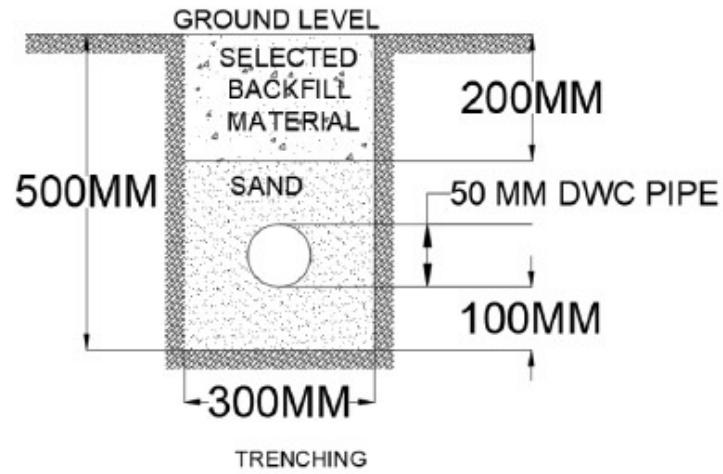
REFERENCE IMAGE OF POLE



LAYOUT OF BASE PLATE & LIGHTING POLE



SECTION VIEW OF BASE PLATE & LIGHTING POLE



LAYOUT OF TRENCHING DETAILS



SIMULATION AT SITE