



Supply, Installation, Testing, Commissioning, Operation & Maintenance of Centralized Control & Monitoring System (CCMS) for Street Lighting on National Highways under PIU, Malda on Five (05) Year Contract Basis.

BID DOCUMENT

July-2026

**Regional Office, Kolkata
“Synthesis Business Park, 8th Floor,
Wing-C, CBD/1, JL-23, Action Area-II,
Newtown, Kolkata - 700 161
Tel: 033 2324 8081,
Email - rokolkatta@nhai.org**

National Highways Authority of India
RO-Kolkata

SECTION -I
NOTICE INVITING TENDER (NIT)

NIT No. 07/2026-27/CCMS/PIU-Malda

Dated: 10 July 2026

Name of Work: Supply, Installation, Testing, Commissioning, Operation & Maintenance of Centralized Control & Monitoring System (CCMS) for Street Lighting on National Highways under PIU, Malda on Five (05) Year Contract Basis.

Bids are invited from experienced and reputed Contractors having proven experience (**minimum of three years**) in the supply, installation, testing, commissioning, operation and maintenance of **Centralized Control & Monitoring Systems (CCMS)** for highways, urban roads, municipal corporations, or other government infrastructure projects.

1. The BOQ form and terms & conditions for the above service work may be downloaded from NHA website <http://www.nhai.gov.in> or E-Tender Portal- NIC (<http://etenders.gov.in>) from **10 July 2026 to 10 Aug 2026 upto 12:00 Hrs**. The Contractor who download the NIT documents from the website will be required to pay a non-refundable fee of Rs.25000/- (Rupees Twenty-Five Thousand only) at the time of the submission of the Bid proposal.

2. **Key Dates:**

1. *Last Date of Online Bid Submission (Online): - 10 Aug 2026 upto 11:00 Hrs*
2. *Date and time of Technical Bid opening: - 11 Aug 2026 at 11:00 Hrs*
3. *Date of Financial Bid opening: - To be intimated later*

3. **Cost of Bid Documents (Non-Refundable): Rs. 25,000/-**

The Bidders shall pay online and submit a payment receipt for **Rs. 25000/-** (Rupees Twenty-Five Thousand only) towards cost of Bid Documents (non- refundable). Details of the designated bank account of NHA Regional Office, Kolkata is as under:

S. No.	Particulars	Details
1	Name of Beneficiary	National Highways Authority of India
2	Name of Bank	CANARA Bank
3	Account No.	95911010007131
4	IFSC Code	CNRB0019525

The RFP will be invited through e-tendering portal of NHA only. Refer procedure under e-tendering for submission of RFP through e-tendering.

4. NHA reserves the right to reject and cancel all quotations without assigning any reasons.

5. Address for any type of communication/ clarifications is given below: -

Chief General Manager (T) cum Regional Officer
National Highways Authority of India
Regional Officer-Kolkata, Synthesis Business Park,
Wing-C 8th Floor, CBD/1, JL-23, Action Area-II New Town,
Kolkata-700156 Phone: 033-2324 8081
E-mail:rokolkatta@nhai.org

SECTION -II (INFORMATION TO BIDDERS)

Name of Work: Supply, Installation, Testing, Commissioning, Operation & Maintenance of Centralized Control & Monitoring System (CCMS) for Street Lighting on National Highways under PIU, Malda on Five (05) Year Contract Basis.

1. Introduction: -

Bids are invited from firms having a **minimum of three (03) years' experience** in supply, installation, testing, commissioning, operation and maintenance of Centralized Control & Monitoring Systems (CCMS) for Street Lighting on National Highways.

Experience certificates shall be issued by Central / State Government departments, Public Sector Undertakings (PSUs), or Municipal Corporations

Note:

In case of nominated sub-contractor, a certificate from the Executive Engineer or equivalent of the Prime Employer should be obtained from whom an approval for subcontractor has been obtained.

2. Scope of Work: -

The scope of work shall include:

- a. Supply of **Centralized Control & Monitoring System (CCMS) feeder panels** conforming to the technical specifications provided in **Section-IV (Technical Specifications)**, including hardware, energy meters, communication modules, enclosure, stand, and all associated accessories.
- b. Installation, testing, and commissioning of CCMS feeder panels at designated switching points along National Highways, service roads, and slip roads.
- c. Operation of the CCMS for **automated and remote ON/OFF control** of street lighting based on astronomical (sunrise/sunset) timings and central control commands.
- d. Preventive and breakdown maintenance of CCMS hardware, communication systems, and web-based central monitoring software for the entire contract period.
- e. Supply, replacement, and upkeep of all consumables and accessories including SIM cards/data connectivity, batteries, relays, protection devices, and other replaceable components required for uninterrupted CCMS operation.
- f. Training of operators and NHAI/Authority personnel for operation, monitoring, report generation, and basic troubleshooting of the CCMS.
- g. Continuous monitoring, logging, and reporting of electrical parameters, energy consumption, system performance, faults, and alerts in compliance with applicable energy efficiency and safety standards.
- h. Deployment and integration of the CCMS on **National Highways** including GIS-based mapping and centralized supervision.

3. Information about Bidding: -

3.1	Address of the Authority for correspondence	Chief General Manager (T) cum Regional Officer National Highways Authority of India Regional Officer-Kolkata, Synthesis Business Park, Wing-C 8th Floor, CBD/1, JL-23, Action Area-II New Town, Kolkata-700156 Phone: 033-2324 8081 E-mail:rokolkatta@nhai.org
3.2	Availability of Bid Documents	The bid documents will be available for download from NHAI website http://www.nhai.gov.in or E-Tender Portal-NIC (https://etenders.gov.in)

3.3	Earnest Money Deposit/Bid Security	Bid security amounting to five Lakh in the form of Demand Draft / Bank Guarantee in favour of National Highways Authority of India payable at Kolkata.
3.4	Performance Security	Equivalent to 10 % of Contract Price in the form of Bank Guarantee (on approved format)/Demand Draft, in favour of National Highways Authority of India payable at Kolkata after issuance of Letter of Acceptance (LOA).
3.5	Last Time and date of submission of Bid	10.08.2026 11:00 AM
3.6	Time and date of opening of Technical Bid	11.08.2026 11:00 AM
3.7	Duration of Contract	Supply, installation & testing shall be done within a period of 04 months and maintenance period will be 60 months (05Years), which may be extended/curtailed by the Authority based on performance & mutual consent.
3.8	Cost of Bid	Rs. 25000/- (Twenty-Five Thousand only) online in Authority's designated bank account of NHAI Regional Office, Kolkata.

4. Method of Bidding:-

4.1 The bidder shall upload following documents: -

- The Proof of online payment for Tender Fee.
- Proof of Bid Security.**
- Power of Attorney for signing the bid.
- Joint bidding Agreement for JV, if any.
- Experience certificates must be issued by the **Central / State Government, PSU, or Municipal Corporation.**

4.2 Additional information/ Guideline: -

- Bidders shall upload copies of all documents listed above while submitting the bid online.
- Technical & Financial evaluation of bid and declaration of result shall be done based on the documents received online after confirmation of Tender Cost in NHAI Regional Office, Kolkata's account.
- Bidders shall be asked to submit originals of all documents listed above after declaration of bid evaluation result by Authority.
- All the Bidders (including individual or any of its Joint Venture Members) failing to submit the original documents required as per 4.1 above shall be unconditionally debarred from bidding in NHAI projects for a period of 1 year.

5. In case L-1 Bidder fails to submit the originals as per para 4.1, the bidding process shall be annulled and tenders shall be re-invited.

6. Authorized Signatory holding Power of Attorney or person executing/delegating such Power of Attorney shall only be the Digital Signatory. In other cases, the BID shall be considered **non - responsive**

7. Eligibility Criteria: -

- The Bidder shall be a Contractor** engaged in the supply, installation, commissioning, operation and maintenance of **Centralized Control & Monitoring Systems (CCMS) for Street light work**, and shall have valid ownership/authorization for the proposed CCMS hardware and software.
- The Bidder shall have a minimum experience of three (03) years** in execution, operation and maintenance of CCMS for Street Lighting.
- The Bidder shall have an average annual turnover of not less than ₹2.00 Crores in CCMS works** during the last three (03) financial years i.e. 2023-24, 2024-25, 2025-26.
- Manufacturer Experience Requirement**

The proposed CCMS Manufacturer shall have successfully supplied and commissioned a minimum of Fifteen Thousand (15,000) CCMS Units during the last Ten (10) years in Government Departments, State Government Organizations, Central Government Organizations, Public Sector Undertakings (PSUs), Urban Local Bodies (ULBs), Smart City Projects, National Highway Projects, or other Public Infrastructure Projects.

The bidder shall submit documentary evidence in support of the above requirement, including but not limited to Work Orders, Completion Certificates, Supply Records, Performance Certificates, Purchase Orders, or any other supporting documents acceptable to the Authority. Failure to submit the required documentary evidence shall render the bid liable for rejection and may be treated as non-responsive.

8. Earnest Money Deposit (EMD)/ BID Security: -

The Bidder shall furnish, as part of the bid, an **Earnest Money Deposit (EMD) / Bid Security** of the amount specified in the RFP document. The EMD / Bid Security shall be submitted in the form of a **Demand Draft / Bank Guarantee**, drawn in favour of **National Highways Authority of India**, payable at **Kolkata**, or through any other mode as permitted on the e-tendering portal.

Any bid not accompanied by an acceptable EMD / Bid Security shall be treated as **non-responsive** and shall be rejected by NHAI. The EMD / Bid Security of unsuccessful bidders shall be returned as per applicable rules.

9. Bid Validity: -

The bids shall be valid for 120 days from the date of opening as prescribed in 3.6 above.

10. Bid Submission: -

The bidder shall be submitting Technical & Financial proposal/bid only in the online e-portal (<https://etenders.gov.in>) in accordance to the bidding document.

11. Bid opening

The technical bids will be opened in the presence of bidder or their authorized representative, who wish to be present at the time of opening of bid, on due date. After scrutiny and evaluation of technical bids, NHAI shall inform those who are eligible for opening of financial bid and dates of opening of financial bid shall be intimated later only in e-portal (<https://etenders.gov.in>) to those bidders fulfilling the eligibility criteria and whose bids are considered responsive by the committee.

12. Performance Security: -

The successful bidder will be required to submit the performance security for an amount specified in 3.4 in the form of Bank Guarantee (B.G.)/ Demand Draft in favour of National Highways Authority of India within 7 days of issue of letter of acceptance (**LOA**). The performance security shall be refunded after successful completion of contract.

13. Award and signing of Contract: -

NHAI shall issue Letter of Acceptance to the lowest bidder, whose Technical and Financial bid have been found technically and financially acceptable. The successful bidder shall then submit performance security within 7 days and execute the Agreement with NHAI on non-judicial stamp paper of Rs.100/- (Rs. One Hundred Only).

14. Right to vary quantities: -

NHAI reserves the right, at any time during the contract period, to **increase or decrease the number of CCMS feeder panels / locations / units** to be supplied, installed, operated and maintained, as per the actual requirement of services, **without any change in the agreed rate(s), terms and conditions of the Contract.**

15. Right to reject any or all the quotations: -

NHAI reserves right to reject any or all the bids without assigning any reason and no claim of whatsoever nature will be entertained for such act.

16. Defect Liability Period (DLP) and Warranty Commitment: -

The proposed CCMS Manufacturer shall provide:

a) Minimum One (01) Year Defect Liability Period (DLP)

b) Minimum Five (05) Years Comprehensive Warranty for all offered CCMS Equipment, Controllers, Communication Devices, RTUs, Power Supplies, Protection Devices, Sensors, and Associated Hardware.

The Manufacturer shall submit an undertaking on ₹100/- Non-Judicial Stamp Paper duly signed and stamped by the Authorized Signatory confirming compliance with the above requirement.

The Manufacturer shall remain fully responsible for repair, replacement, technical support, firmware updates, and rectification of manufacturing defects during the warranty period.

Failure to submit the required undertaking shall render the bid liable for rejection and may be treated as non-responsive.

SECTION-III (TERMS & CONDITIONS)

1. The **Bidder/Contractor** shall have valid registration with the **GST Department** on the last date of submission of the Bid.
2. The **Bidder** shall own or have valid authorization/arrangement for the supply, installation, operation and maintenance of **Centralized Control & Monitoring System (CCMS) feeder panels**, including hardware, software, communication modules, and accessories conforming to the technical specifications prescribed in the RFP. Documentary proof of ownership/authorization shall be uploaded with the Bid.
3. **All CCMS feeder panels, controllers, energy meters and associated equipment** proposed under the Bid shall be new, unused, and of latest manufacture, and shall be in sound working condition at the time of installation.
4. In case any CCMS equipment, software platform, or communication service is provided through third-party arrangements, **valid authorization agreements / MOUs / licenses**, duly signed and legally valid, shall be submitted along with the Bid. Systems without valid authorization documents shall not be considered.
5. **All CCMS feeder panels and associated equipment shall be comprehensively insured**, wherever applicable, from a valid Insurance Company. The insurance shall be kept valid by the Contractor at its own cost during the entire contract period.
6. **NHAI shall not be responsible for any damage, theft, accident, cyber incident, data loss, or third-party claims** arising during installation, operation, or maintenance of the CCMS. The entire liability shall rest with the Contractor.
7. The Bidder shall quote rates **inclusive of all costs**, including but not limited to supply, installation, testing, commissioning, operation, monitoring, maintenance, software licenses, server/cloud charges (except charges reimbursable under Annexure III, Sr. no. 3(n), if applicable), SIM cards/data connectivity, batteries, spare parts, consumables, insurance, and all other incidental charges **except GST**. The CCMS shall be operated and maintained on a **24x7 basis throughout the year**, as per NHAI's operational requirements.
8. **The scope/number of CCMS feeder panels/locations may be increased or decreased by NHAI based on actual requirements. The variation shall be payable accordingly as per quoted rate.**
9. The Contractor shall deploy **qualified, trained, and experienced technical personnel** for installation, operation, monitoring, and maintenance of the CCMS. All personnel shall follow prescribed safety norms. Any cost related thereto shall be deemed included in the quoted rates.
10. In case of **failure, malfunction, communication breakdown, or non-availability of any CCMS feeder panel or software service**, the Contractor shall restore the system with maximum period of **48 hours** from the time of reporting/Intimation. Failure to restore services within the stipulated time shall attract penalties of **₹5,000/- (Rupees Five Thousand only)** per instance or as specified in the RFP, recoverable from bills or Performance Security.
11. The CCMS shall be used exclusively for **monitoring, control, and automation of street lighting systems on National Highways / Associated infrastructure** under the jurisdiction of PIU-Malda or as directed by NHAI.
12. Before submission of the quotation, the bidder shall survey the relevant area/stretch and assess the existing site conditions. If the existing panels / Components are found suitable for reuse, the same shall be utilized as per the directions of the Engineer-in-Charge of the concerned authority. The bidder shall quote the price of the new CCMS panel accordingly.
13. The Bidder shall quote rates **clearly in words and figures**. In case of discrepancy, rates quoted in words shall prevail.
14. **Performance shall be measured** based on service levels as prescribed in the RFP. Monthly performance review and reconciliation shall be carried out.
15. The Contractor shall submit **monthly invoices certified by the Engineer-in-Charge** for release of payment.

16. **No escalation or revision** in quoted rates shall be allowed during the entire contract period, except as expressly provided in the RFP.
17. The Contractor shall commence and complete the installation work within **the period specified in the Letter of Acceptance (LOA)**.
18. Evaluation of bids shall be carried out on **L1 basis**, as specified in the RFP.
19. The successful Bidder shall submit all required statutory documents and execute the **Contract Agreement** on non-judicial stamp paper of Rs.100/- at its own cost.
20. The Contract shall initially be valid for **Five (05) Years**, including comprehensive Operation & Maintenance, subject to satisfactory performance.
21. In case of persistent failure to perform, NHAI shall have the right to **suspend or debar** the Contractor from participating in future tenders of MoRTH/NHAI/NHIDCL for a specified period.
22. NHAI reserves the right to **reject any or all bids** without assigning any reason.
23. The Contract may be terminated by either party by giving **one (01) months' notice**, without any compensation, as per termination provisions of the RFP
24. Bids received after the due date and time shall be **summarily rejected**.
25. Corrigendum / amendments, if any, shall be published only on the **NHAI website(<https://www.nhai.gov.in/>)**/ e-Tender portal (<https://etenders.gov.in/>).
26. NHAI reserves the right to **modify, cancel, or annul** the tender process at any stage without assigning any reason.
27. The Contractor shall ensure **uninterrupted availability of all consumables, spares, accessories, software support, communication services (SIM/data connectivity), batteries, and replacement components** required for continuous and reliable operation of the **Centralized Control & Monitoring System (CCMS)** throughout the contract period.
28. The Bidder shall quote rates as specified in the **Financial Bid (BOQ)** – monthly / per-machine basis, as applicable.
29. NHAI shall have **no obligation**:
 - (a) Towards payment of wages, benefits, or statutory dues of Contractor's personnel.
 - (b) For losses due to negligence, accidents, or statutory violations by the Contractor.
 - (c) For theft, fire, or misconduct by Contractor's staff.
 - (d) For disputes between Contractor and its employees.
30. All disputes shall be subject to RO-Kolkata jurisdiction only.
31. For Force Majeure, please refer Annexure- A1
32. For Arbitration - A2
33. For the indemnification clause, please refer Annexure- A3
34. **In-House NABL Accredited Testing Facility**

The proposed CCMS Manufacturer shall possess a valid In-House NABL Accredited Testing Laboratory for testing, validation, calibration, and quality assurance of CCMS equipment and associated hardware.

The manufacturer shall submit a valid NABL Accreditation Certificate along with the bid.

Failure to submit the valid NABL Accreditation Certificate shall render the bid liable for rejection and may be treated as non-responsive
35. **Manufacturer Authorization**

The bidder shall submit a valid Manufacturer Authorization Certificate (MAF) from the proposed CCMS Manufacturer specifically authorizing the bidder for participation in this tender.

The Manufacturer shall provide technical support, spare parts support, warranty support, and software support for the complete contract duration.

Failure to submit the Manufacturer Authorization Certificate shall render the bid liable for rejection and may be treated as non-responsive

36. Product Support and Spare Availability

The proposed CCMS Manufacturer shall furnish an undertaking confirming availability of spare parts, hardware support, firmware support, and technical support for the entire contract period of Five (05) Years

37. Centralized Head Office Server and API Integration

Integration of all CCMS systems with the Centralized Head Office Monitoring Platform through secure API shall be mandatory. The successful bidder shall be responsible for operation and maintenance of the supplied CCMS equipment, RTUs, controllers, communication network, and field devices, and shall ensure secure and uninterrupted transfer of data in the prescribed format.

The centralized platform shall be utilized for centralized monitoring, standardized reporting, dashboard management, data collection, fault and event monitoring, energy analytics, cyber security, database and backup management, mobile application support, public portal operation, and long-term preservation of historical records and logs.

All bidders shall comply with the API, data management, reporting, and cyber security requirements prescribed by the Authority.

38. Data Ownership and Record Preservation

All operational data, fault history, event logs, energy reports, maintenance records, alarms, and analytical reports generated through the CCMS system shall remain the property of NHAI.

The successful bidder shall ensure secure storage, backup, preservation, retrieval, and continuous availability of such data on the centralized platform throughout the contract period

Address:

Chief General Manager (T) cum Regional Officer
National Highways Authority of India
Regional Officer-Kolkata, Synthesis Business Park,
Wing-C 8th Floor, CBD/1, JL-23, Action Area-II New Town,
Kolkata-700156 Phone: 033-2324 8081
E-mail:rokolkatta@nhai.org

Signature of the Applicant/ Authorised representative

Date: Place:

(Seal of Bidder)

Letter Head of Bidder

UNDERTAKING

I/We, M/s _____, having our registered office at _____, hereby submit this Bid for the Supply, Installation, Testing, Commissioning, Operation and Maintenance of Centralized Control & Monitoring System (CCMS) for Street Lighting for use by the National Highways Authority of India (NHAI), PIU-Malda.

I/We hereby undertake to accept, comply with, and abide by all the terms and conditions, technical specifications, eligibility criteria, scope of work, and provisions contained in the Notice Inviting Tender (NIT), Request for Proposal (RFP), and all other tender documents, without any deviation, qualification, or reservation whatsoever.

Signature of the Applicant/ Authorised representative

Date: Place:

(Seal of Bidder)

SECTION -IV (TECHNICAL BID)

The Technical bid shall consider following documents: -

1. Bid documents signed by the bidder on each page.
2. Cost of bid documents Rs. 25000/- to NHAI Regional Office, Kolkata's account).
3. Information of bidder in Annexure-I
4. Eligibility criteria in Annexure-II
5. Details of the proposed Centralized Control & Monitoring System (CCMS) components to be provided, as per Annexure-III.

TECHNICAL BID

ANNEXURE-I

Sr. No.	Particulars	Details
1.	Name of Bidder / Firm / Company	
2.	Detail address with Phone No.	
3.	Year of GST Registration	
4.	Name, Address & Phone No. Of the Authorized Signatory	
5.	Permanent Account Number (PAN) Firm/Company: Authorized Signatory:	
6.	Details of Payment of Cost of Bid:	Proof of payment shall be uploaded.
7.	Details of EMD	Proof of payment shall be uploaded.
8.	Details of Similar Works Executed during the last three (03) years	Name of Client (Central/State Government Department / PSU Municipal Corporation / Urban Local Body / Highway Authority Contract Value, Number and Type of Centralized Control Monitoring System (CCMS) feeder panels installed, operated a maintained, Period of Contract, and Contact Person details (Name, Designation, Phone No. & Email ID).

Signature of the Applicant/ Authorised representative

Name:.....

Designation.....

Seal:.....

Date:

Place:

(Seal of Bidder)

TECHNICAL QUOTATION ANNEXURE-II

Documents satisfying eligibility criteria: -

Original / Certified copies of experience certificates for a minimum period of **three (03) years**, duly issued and signed by the competent authority (not below the rank of **Executive Engineer / Deputy General Manager / equivalent officer**) of **Central / State Government Departments / PSUs / Municipal Corporations** ,for supply, installation, operation and maintenance of **Centralized Control & Monitoring Systems (CCMS)** for **Street lighting work**.

Name, Signature & Seal of Bidder

Date:

Place:

Annexure-III

****Details of Proposed Centralized Control & Monitoring System (CCMS):**

*(To be provided as per Bid Conditions)***

Specifications

S. No.	Features	Description
1	Operational Features	a) The CCMS unit shall be capable of switching ON and OFF the street lights of an individual switching point and/or networked switching points from the Central Control Station in Instant mode, Fixed Mode, Astronomical Mode, Hybrid Mode, Interval Mode, Offset in Sunset and Sunrise Timing for scheduling. b) The CCMS unit shall be a Dual Sim GPRS and/or GSM-based (with unique IMEI number) proven technology remote street lighting monitoring system with in-built protection against short circuit, over-voltage, surge, and anti-theft/tamper alerts. c) The CCMS unit shall be provided with an internal backup arrangement capable of maintaining Real Time Clock (RTC), configuration data, event logs and power failure/restoration records during power interruption. The system shall be capable of recording and communicating power failure and power restoration events, and the RTC shall remain functional for minimum 3 days during power interruption. d) The CCMS shall have optically isolated communication / RS-485 ports for secure data transfer and protection against unauthorized access. e) The rating of the CCMS unit shall be minimum twice the connected lighting load. f) CCMS shall provide remote restoration through motorized switching arrangement or equivalent technology, incorporating safety interlocks and maintenance lockout provisions to prevent unintended energization during fault conditions or maintenance activities. g) The CCMS unit shall have an independent hardware timer to ensure operation of street lights in case of network failure or any technical glitch

2	Energy Measurement & Communication Features	a) Each CCMS feeder panel shall be provided with a 3-Phase, 4-Wire Energy Meter, ISI marked, LT AC, CT operated, static, DLMS compliant (Category C1)/Modbus, with CT ratio 100/5A or 200/5A, having Accuracy Class 1 for both active and reactive energy, with Optical Port and RS-232/RS-485 communication port, along with compatible software, to be installed inside the CCMS panel. b) The CCMS control panel shall include, but not be limited to, MCB, MCCB, contactors, relays, transformer, controller, SPD, CCMS Panel Size 850*750*250 Stand Mounted and associated accessories. c) The CCMS unit shall be capable of recording and providing the following parameters at programmable time intervals, switching-point wise and/or networked switching points: - Phase-wise Voltage - Phase-wise Current - Power Factor - Active Power (kW) - Apparent Power (kVA) - Cumulative Energy (kWh) - Cumulative Energy (kVAh) d) Recording of number of glowing hours of LED luminaires connected with each switch controller. e) Recording of power supply interruption duration. f) Provision of special emergency ON/OFF operation through wireless control. g) Benchmarking and threshold setting capability for generation of SMS alerts for: - Phase-wise over/under current - Phase-wise over/under voltage - MCB trip - Theft / tamper alert - Group failure of lights - No output supply. h) Alert SMS shall be forwarded to minimum five (05) mobile numbers. i) Provision for future integration of smart solutions such as environmental sensors, Wi-Fi hotspots, etc. j) Accuracy Class 1.0 as per IEC 62053-21 (Class 0.5: IEC 62053-22-Optional) energy meter, with type test report from NABL accredited laboratory, shall be provided. The energy meter shall be calibrated annually. k) In case of an inbuilt energy meter, it shall be DLMS compliant, and shall have Class 1.0 as per IEC 62053-21 (Class 0.5: IEC 62053-22-Optional) accuracy for active energy (kWh) measurement. The integrated system shall measure, record and communicate all required electrical parameters including kWh, Voltage, Current, kW, kVA, kVAR, Power Factor and Frequency, and shall meet all data logging, reporting and functional requirements specified in the tender without any relaxation of performance criteria.
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3	Web-Based Central Control & Monitoring System	a) CCMS shall have a web-based central server to receive, store, and process data from all CCMS units with time stamping. b) Software should have undergone a "Vulnerability Assessment and Penetration Testing (VAPT)" as per OWASP, SANS CWE 24 or CERT-In Standard. The certificate of the VAPT test shall be provided. c) Software application should utilize a Low-Code/No-Code platform to simplify development and customization. It must be hardware-agnostic and compatible with other IoT-based smart city applications. d) The system shall allow individual and group-wise control and monitoring of switching points. e) The system shall record glowing and non-glowing hours of LED luminaires for each switching point. f) Display of power failure details feeder-wise and luminaire-wise. g) Registration and display of all fault conditions such as over-voltage, over-current, power failure, contactor failure, door open alarm, etc., with real-time alerts. h) Generation of daily automated reports including energy consumption, energy savings, lamp failure, actual operating hours, and system uptime (%). i) Role-based user access control with capability to handle large-scale deployments. j) GIS / Google Map based visualization of all CCMS switching points. k) Remote configuration of CCMS units including ON/OFF timings, automation response time, system reset, and status monitoring. l) Minimum data update interval of 15 minutes, programmable up to 1 minute. m) GPS-based time synchronization of controllers and central server. n) Secure data storage for minimum 24 months online and archived data for entire contract period. o) Cyber security provisions including jamming/hacking detection, self-healing mechanism, and fail-safe operation ensuring default ON/OFF operation during system failure. p) The CCMS system shall be integrated with the centralized NHAI Head Office server/portal through secure API implementation for monitoring reporting and data management purposes. The bidder shall pay such API integration, ration, portal usage, cloud hosting, data storage and related charges, if any, as may be prescribed by NHAI/authorized agency from time to time. The actual charges paid by the contractor towards such services shall be reimbursable by the Authority on submission of supporting documents and proof of payment
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Declaration

I/We hereby certify that the above-mentioned machines are **owned / validly leased**, are in sound working condition, and fully comply with the technical specifications and eligibility requirements of the RFP.

Signature of the Applicant

(Seal of Bidder)

Date:

Place:

Annexure- C

ON NON-JUDICIAL PAPER of RS.100/-

To,
Chief General Manager (T) cum Regional Officer
National Highways Authority of India
Regional Officer-Kolkata, Synthesis Business Park,
Wing-C 8th Floor, CBD/1, JL-23, Action Area-II New Town,
Kolkata-700156 Phone: 033-2324 8081
E-mail:rokolkatta@nhai.org

Name of Work:

I/We hereby submit a declaration that the bid submitted by the undersigned, on behalf of **[Name of the Bidder]**, shall not be withdrawn or modified during the period of validity of the bid, i.e. not less than **120 (One Hundred Twenty) days** from the bid due date.

I/We, on behalf of **[Name of the Bidder]**, further accept that in case the bid is withdrawn or modified during the period of its validity, or if we fail to sign the Contract Agreement in case the work is awarded to us, or fail to submit the **Performance Security** within the time specified in the RFP, then **[Name of the Bidder]** shall be liable to be **suspended/debarred** from participation in the tendering process for works of **MoRTH / NHAI / NHIDCL and other Centrally Sponsored Schemes**, for a period of **one (01) year** from the bid due date of this work, as per applicable rules.

[Name of the bidder]

(Signature, Name and Designation of the Authorized Signatory)

Name of work: Supply, Installation, Testing, Commissioning, Operation & Maintenance of Centralized Control & Monitoring System (CCMS) for Street Lighting on National Highways under PIU, Malda on Five (05) Year Contract Basis.

Time Period: - Five Year (60 Months)

Bill of Quantities (To be filed separately in Financial Bid only)

Sl. No.	Name of Item	Unit	Quantity	Quoted Rate (₹)
1	Supply, Installation, Testing & Commissioning of Centralized Control & Monitoring System (CCMS) conforming to the Technical Specifications of the RFP under Section-IV (Technical Bid) , including but not limited to: a) CCMS Feeder Panel (3-Phase) with enclosure, pole-mounted or ground/stand-mounted, and accessories etc. b) CCMS Controller/RTU/Gateway with GPRS/GSM communication c) 3-Phase DLMS compliant Energy Meter/IoT controller with inbuilt energy meter d) Protection devices (MCCB/MCB/ELCB/SPD, relays/contactors, etc.) e) Antenna, wiring, earthing, and all hardware accessories f) Web-based Central Control & Monitoring Software	Per CCMS	132	
2	Operation & Maintenance (O&M) of CCMS , including software support, server/cloud hosting, SIM/data connectivity, batteries, consumables, spares, preventive & breakdown maintenance, fault rectification, and reporting, complete in all respects, shall be payable at the rate of 12.5% of the accepted CCMS supply and installation cost per feeder panel per year, applicable after completion of the first year, for the remaining period of the five-year contract.			

Name, Signature & Seal of Bidder

BOQ

Preferable wattage consumption - 10-25 kW for active power, LED light 150 to 250 Watts, 63/25 kVA Transformers as per actual site condition, Ingress Protection- IP65

Sl. No.	Project Name	No. of LED light	Total required CCMS (Tentative)
1	Baharampore - Farakka section of NH 12 (old NH 34)	1142	41
2	New 4-lane bridge over river Ganga	512	2
3	Farakka - Raiganj section of NH 12 (old NH 34)	1680	38
4	Raiganj - Dalkhola section of NH 12 (old NH 34)	1413	47
5	Dalkhola Bypass including ROB on NH-12 (old NH-34)	56	4
Total		4803	132 **
*** No. of CCMS Panels is tentative, which will be executed as per actual site requirement which depends on Power Consumption, No. of Transformer & No. of lights/attached Panel.			

2.7 Force Majeure

2.7.1 Definition

(a) For the purposes of this Contract, “**Force Majeure**” means an event which is beyond the reasonable control of a Party, and which makes a Party’s performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to:

- war
- riots
- civil disorder
- earthquake
- fire
- explosion
- storm
- flood or other adverse weather conditions
- strikes, lockouts or other industrial action (*except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent*)
- confiscation or any other action by government agencies

(b) Force Majeure shall not include:

- (i) any event which is caused by the negligence or intentional action of a Party or such Party’s sub-consultants, agents or employees; nor
- (ii) any event which a diligent Party could reasonably have been expected to:

(A) take into account at the time of the conclusion of this Contract, and

(B) avoid or overcome in the carrying out of its obligations hereunder.

(C) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

2.7.2 No Breach of Contract

The failure of a Party to fulfil any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care, and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

2.7.3 Measures to be Taken

- (a) A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party’s inability to fulfil its obligations hereunder with a minimum of delay.
- (b) A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any event not later than **fourteen (14) days** following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible. The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

2.7.4 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be

extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

2.7.5 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Services after the end of such period.

2.7.6 Consultation

Not later than **thirty (30) days** after the Consultants, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

ARBITRATION

1 Dispute Resolution

1.1 In the event of any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably.

1.2 The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non-privileged records, information and data pertaining to any Dispute.

2 Escalation of Dispute:

In the event of any Dispute(s) between the Parties remains unresolved within 30 (thirty) days of the notice in writing referred to in Clause 25.1.1 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to Arbitration or Conciliation in accordance with the provisions of Clause 25.3

3 Arbitration, Conciliation and Adjudication of Dispute

3.1 Any Dispute between the Parties the sum of which is of value less than Rupees 10 Crores which remains unresolved between the Parties through the mechanisms available/ prescribed in the Agreement, which has not been agreed upon/ reached settlement by the Parties, will be referred either to SAROD, (a Society registered under Society's Act, 1860 vide Registration no. S/RS/SW1049/2013) duly represented by Government/ Authority and National Highways Builders Federation (NHBF) or to India International Arbitration Centre ("IIAC").

3.1.1 The appointment of Tribunal, Code of conduct for Arbitrators and fees and expenses of SAROD/IIAC and the Arbitral Tribunal shall also be governed by the Rules of SAROD as amended from time to time or the India International Arbitration Centre Act 2019 and the regulations framed thereunder as amended from time to time. The rules of SAROD are placed at Annex-I.

3.1.2 Subject to the provisions of The Limitation Act, 1963, as amended from time to time, Arbitration may be commenced during or after the Contract Period, provided that the obligations of Authority and the Contractor shall not be altered by reason of the Arbitration being conducted during the Contract Period.

3.1.3 The venue of Arbitration shall be New Delhi, or a place selected by governing body of SAROD or IIAC, as the case may be, and the language for all documents and communications between the Parties shall be English.

3.1.4 Each Party shall bear its own costs and expenses incurred in connection with the arbitral proceedings.

3.1.5 The arbitrators. shall make a reasoned award (the "Award"). Any Award made in any arbitration held pursuant to this Article / shall be final and binding on the Parties as from the date it is made, and the Contractor and the Authority agree and undertake to carry out such Award without delay.

3.1.6 The Contractor and the Authority agree that the Award may be enforced against the Contractor and/or the Authority, as the case may be, and their respective assets wherever situated.

3.2 Any Dispute between the Parties, the sum of which is of value Rupees 10 Crores or above, which remains unresolved between the Parties through the mechanisms available or prescribed in the Agreement, which has not been agreed upon/ reached settlement by the Parties, will be resolved by Conciliation as per the Arbitration and Conciliation Act, 1996.

3.3 The Contractor and the Authority agree that the Award or a settlement agreement may be enforced against the Contractor and/or the Authority, as the case may be, and their respective assets wherever situated.

3.4 This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any Arbitration hereunder. Further the Parties unconditionally acknowledge and agree that notwithstanding any Dispute between them, each Party shall proceed with the performance of its respective obligations, pending resolution of Dispute in accordance with this Article.

3.5 This provision relating to Conciliation under the Arbitration and Conciliation Act, 1996 shall cease to apply once the provisions relating to substitution of conciliation process by mediation are notified under Mediation Act, 2023, Thereafter "Conciliation" herein be referred to as Mediation as per the provisions of the Mediation Act 2023.

3.6 Notwithstanding anything to the contrary contained in the Agreement, it is agreed that any Dispute between the Parties the sum of which is of value equal to or above Rupees 10 Crores shall not be referred to Arbitration. It is further agreed that all declaratory disputes or non-monetary disputes shall not be referred to Arbitration. For the avoidance of doubt, it is clarified that nothing herein shall prevent the Parties from seeking resolution of such Disputes through civil courts.

LIABILITY AND INDEMNITY

36.1 General indemnity

36.1.1

The Contractor shall indemnify, defend, save and hold harmless the Authority and its officers, servants, agents, Government Instrumentalities and Government owned and/or controlled entities/enterprises, (the “**Authority Indemnified Persons**”) against any and all suits, proceedings, actions, demands and claims from third parties for any loss, damage, cost and expense of whatever kind and nature, whether arising out of any breach by the Contractor of any of its obligations under this Agreement or any related agreement or on account of any defect or deficiency in the provision of services by the Contractor to the Authority or to any User, or from any negligence of the Contractor under contract or tort or on any other ground whatsoever, **except to the extent that any such suits, proceedings, actions, demands and claims have arisen due to any negligent act or omission, or breach or default of this Agreement on the part of the Authority Indemnified Persons.**

36.1.2

The Authority shall indemnify, defend, save and hold harmless the Contractor against any and all suits, proceedings, actions, demands and claims from third parties for any loss, damage, cost and expense of whatever kind and nature arising out of (a) defect in title and/or the rights of the Authority in the land comprised in the Site, and/or (b) breach by the Authority of any of its obligations under this Agreement or any related agreement, which materially and adversely affect the performance by the Contractor of its obligations under this Agreement, save and except that where any such claim, suit, proceeding, action, and/or demand has arisen due to a negligent act or omission, or breach of any of its obligations under any provision of this Agreement or any related agreement, and/or breach of its statutory duty on the part of the Contractor, its subsidiaries, affiliates, contractors, servants or agents, the same shall be the liability of the Contractor.

36.2 Indemnity by the Contractor 36.2.1

Without limiting the generality of Clause 36.1, the Contractor shall fully indemnify, hold harmless and defend the Authority and the Authority Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:

- (a) Failure of the Contractor to comply with Applicable Laws and Applicable Permits;
- (b) Payment of taxes required to be made by the Contractor in respect of the income or other taxes of the Contractor's contractors, suppliers and representatives; or
- (c) Non-payment of amounts due as a result of materials or services furnished to the Contractor or any of its contractors which are payable by the Contractor or any of its contractors.

36.2.2

Without limiting the generality of the provisions of this clause, the Contractor shall fully indemnify, hold harmless and defend the Authority Indemnified Persons from and against any and all suits, proceedings, actions, claims, demands, liabilities and damages which the Authority Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other intellectual property, proprietary or confidentiality rights with respect to any materials, information, design or process used by the Contractor or by the Contractor's Contractors in performing the Contractor's obligations or in any way incorporated in or related to the Project. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Contractor shall make every reasonable effort, by giving a

satisfactory bond or otherwise, to secure the revocation or suspension of the injunction or restraint order. If, in any such suit, action, claim or proceedings, the Project, or any part thereof or comprised therein, is held to constitute an infringement and its use is permanently enjoined, the Contractor shall promptly make every reasonable effort to secure for the Authority a license, at no cost to the Authority, authorizing continued use of the infringing work. If the Contractor is unable to secure such license within a reasonable time, the Contractor shall, at its own expense, and without impairing the Specifications and Standards, either replace the affected work, or part or process thereof with non-infringing work or part or process, or modify the same so that it becomes non-infringing.

36.3 Notice and contest of claims

In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity under this clause (the “**Indemnified Party**”), it shall notify the other Party (the “**Indemnifying Party**”) within 15 (fifteen) days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction.

36.4 Defence of claims 36.4.1

The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such Party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder, and reasonable costs and expenses thereof shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in respect of loss to the full extent provided by this clause, the Indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or proceeding, liabilities, payments and obligations at its expense and through the counsel of its choice; provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defence.

The Indemnified Party shall not be entitled to settle or compromise any claim, demand, action, suit or proceeding without the prior written consent of the Indemnifying Party, unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure the loss to be indemnified hereunder to the extent so compromised or settled.

36.4.2

If the Indemnifying Party has exercised its rights under Clause 36.3, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

36.4.3

If the Indemnifying Party exercises its rights under Clause 36.3, the Indemnified Party shall nevertheless have the right to employ its own counsel, and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of the Indemnified Party, when and as incurred, unless:

- (a) The employment of counsel by such party has been authorized in writing by the Indemnifying Party;
- (b) The Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defence of such action;

(c) The Indemnifying Party shall not, in fact, have employed independent counsel reasonably satisfactory to the Indemnified Party, to assume the defence of such action and shall have been so notified by the Indemnified Party; or

(d) The Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either:

(i) that there may be specific defences available to it which are different from or additional to those available to the Indemnifying Party; or

(ii) that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement;

Provided that if Sub-clauses (b), (c) or (d) of this Clause 36.4.3 shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defence of such claim, demand, action, suit or proceeding on behalf of the Indemnified Party, and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

36.5 No consequential claims

Notwithstanding anything to the contrary contained in this clause, the indemnities herein provided shall not include any claim or recovery in respect of any cost, expense, loss or damage of an indirect, incidental or consequential nature, including loss of profit, except as expressly provided in this Agreement.

36.6 Survival on Termination

The provisions of this clause shall survive Termination.

**Form of Bank Guarantee for BID Security
(Refer Clauses 3.3 & 8 of Section II)**

B.G. No. Dated:

1. In consideration of you, National Highways Authority of India, having its Regional Office Kolkata at Synthesis Business Park, Wing-C, 8th Floor, CBD/1, JL-23, Action Area-II, New Town, Kolkata-700156 (hereinafter referred to as the "Authority", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the BID of and having its registered office at (hereinafter referred to as the "Bidder" which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns), for the <Name of the Project> (hereinafter referred to as "the Project") pursuant to the Bidding Document dated issued in respect of the Project and other related documents including without limitation the draft contract Agreement (hereinafter collectively referred to as "Bidding Documents"), we (Name of the Bank) having our registered office at and one of its branches at (hereinafter referred to as the "Bank"), at the request of the Bidder, do hereby in terms of **Clauses 3.3 & 8 of Section II**, irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents (including the Bidding Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of Rs. **** (Rupees ***** only) (hereinafter referred to as the "Guarantee") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.

2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive and binding on the Bank.

3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not, merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Documents including failure of the said Bidder to keep its BID open during the BID validity period as set forth in the said Bidding Documents for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. **** (Rupees ***** only).

4. This Guarantee shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the BID Due Date inclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.

5. We, the Bank, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its BID open during the BID validity period set forth in the said Bidding Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.

6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.

7. In order to give full effect to this Guarantee, the Authority shall be entitled to treat the Bank as the principal debtor. The Authority shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the BIDs or the BID validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to the Authority, and the Bank shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.

8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.

9. We undertake to make the payment on receipt of your notice of claim on us addressed to [name of Bank along with branch address] and delivered at our above branch which shall be deemed to have been duly authorised to receive the said notice of claim.

10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealised.

11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Authority in writing.

12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Guarantee for and on behalf of the Bank.

13. For the avoidance of doubt, the Bank's liability under this Guarantee shall be restricted to Rs. **** (Rupees **** only). The Bank shall be liable to pay the said amount or any part thereof only if the Authority serves a written claim on the Bank in accordance with paragraph 9 hereof, on or before [*** (indicate date falling 180 days after the BID Due Date)].

14. This guarantee shall also be operatable at our Branch at **Kolkata**, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

15. The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of NHAI, details of which is as under:

Sr no	Particulars	Details
1	Name of Beneficiary	National Highways Authority of India
2	Beneficiary Bank Account	95911010007131
3	Beneficiary Bank Name	Canara Bank
4	IFSC Code	CNRB0019525

Signed and sealed this day of 20.....at

SIGNED, SEALED AND DELIVERED

For on behalf of Bank by:

Signature_____

Name_____

Designation_____

Code number_____

Address_____

FORM OF BANK GUARANTEE FOR PERFORMANCE SECURITY/ ADDITIONAL PERFORMANCE SECURITY**To**

**The Chief General Manager (Tech)
National Highways Authority of India
Regional Office - Kolkata
Synthesis Business Park, Wing-C
8th Floor, CBD/1, JL-23, Action Area-II
New Town, Kolkata-700156**

WHEREAS (Name and address of contractor) here in after called "the contractor" has undertaken, in pursuance of Letter of Acceptance No..... Dated_____ to execute (name of Contract and brief description of Works) (hereinafter called "the contract").

AND WHEREAS the Contract requires the Contractor to furnish the Performance Security/ Additional Performance Security for due and faithful performance of its obligations, under and in accordance with the Contract, during the {Contract Period/Construction Period/ Defects Liability Period and Maintenance Period} in a sum of Rs..... cr. (Rupees crore) (the "Guarantee Amount").

AND WHEREAS we, through our branch at (the "Bank") have agreed to furnish this Bank Guarantee (hereinafter called the "Guarantee") by way of Performance Security. NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the {Contract Period/ Construction Period/ Defects Liability Period and Maintenance Period) under and in accordance with the Contract, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of General Manager. National Highways Authority of India, that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Contract shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Contract and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this (Guarantee. Guarantee Amount for Performance Security and Additional Performance Security shall be calculated as per Contract.

4 It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee

5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Contract or to extend the time or period for the compliance with, fulfillment and/ or performance of all or any of the obligations of the Contractor contained in the Contract or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Contract and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its Liability and obligation under this Guarantee

and the Bank hereby waives all of its rights under any such law.

6. This Guarantee is in addition to and not in substitution of any other guarantee or security now of which may hereafter be held by the Authority in respect of or relating to the Contract or for the fulfillment, compliance and/or performance of all or any of the obligations of the Contractor under the Contract.

7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified. in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder

8. The Guarantee shall cease to be in force and effect on ****, Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.

9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue This Guarantee and the undersigned has full powers to do so on behalf of the Bank.

10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive

11 This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Contract.

12 This Guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded,

13 This guarantee shall also be operable at our..... Branch at Kolkata, from whom Confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

14 The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of NIIAI, details of which is as under:

Sr no	Particulars	Details
1	Name of Beneficiary	National Highways Authority of India
2	Beneficiary Bank Account	95911010007131
3	Beneficiary Bank Name	Canara Bank
4	IFSC Code	CNRB0019525

Signed and sealed this day of 20.....at

SIGNED, SEALED AND DELIVERED

For on behalf of Bank by:

Signature_____

Name _____

Designation_____

Code number_____

Address_____