



RFP No. - 55276/ BMC/ 2025-26
(File No. XXVII-Electrical-252/2026)

Date: 10/09/2026

**REQUEST FOR PROPOSAL
FOR
SELECTION OF AGENCY FOR SUPPLY, INSTALLATION, OPERATION &
MAINTENANCE OF LED STREET LIGHTS FOR
BHUBANESWAR MUNICIPAL CORPORATION (BMC) AREA**

Bid Identification No. BMC-EE-Tender Cell-66/2026-27 dt. 10.09.2026

Tender ID: 2026_ORULB_140886

BHUBANESWAR MUNICIPAL CORPORATION

ICOMC Tower, Unit-IX
Janpath, Bhubaneswar
Website- **bmc.gov.in**

DISCLAIMER

The information contained in this Request for Proposal document ("RFP") or any other information subsequently provided to Bidders, whether verbally or in documentary or any other form by or on behalf of the Authority or any of its employees or advisers, is provided to the Bidders on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by the Authority to the prospective Bidders or any other person. The purpose of this RFP is to provide interested Bidders with information that may be useful to them in the formulation of their Proposals pursuant to the RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Services. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the Authority, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in this RFP may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidders is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

The Authority, its employees and advisers make no representation or warranty and shall have no liability to any person including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense, which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this selection process.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise however caused or arising from reliance of any Bidder upon the statements contained

in this RFP.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the selected Agency, as the case maybe, to provide the Services and the Authority reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Proposal, regardless of the conduct or outcome of the selection process.

Table of Contents

DISCLAIMER	2
DATA SHEET	7
SECTION: 1	8
LETTER OF INVITATION	8
SECTION: 2	11
INSTRUCTION TO BIDDERS	11
1. Pre-Qualification Criteria:	12
2. Bid Processing Fee:	14
3. Earnest Money Deposit/ Bid Security:	14
4. Validity of the Proposal:	14
5. Pre -bid Queries / Pre-bid Meeting:	14
6. Preparation and Submission of Proposal:	15
7. Opening of the proposal:	16
8. Evaluation of Proposal:	16
9. Evaluation Process:	18
10. Performance Bank Guarantee (PBG):	19
11. Contract Negotiation	19
12. Award of Contract:	19
13. Conflict of Interest:	20
14. Disclosure:	20
15. Anti-corruption Measure:	20
16. Language of Proposals:	21
17. Cost of Bidding:	21
18. Legal Jurisdiction:	21
19. Governing Law and Penalty Clause:	21
20. Confidentiality:	22
21. Amendment of the RFP Document:	22
22. Authority's right to accept any proposal and to reject any or all proposal(s):	22
23. Copyright, Patents and Other Proprietary Rights:	22
24. Force Majeure:	22
25. Settlement of Dispute:	23
26. Disqualification of Proposal:	23
27. Liability:	23
28. Indemnity:	24
SECTION: 3	25
TERMS OF REFERENCE (TOR)	25

1.	Background	26
2.	Objective	26
	Scope of Services	27
3.		27
3.1	Installations	27
	i. Covering New /Greenfield Stretches	27
	ii. Covering Existing/Retrofitting Stretches	28
3.2	Operation & Maintenance of Public Street Lighting System	29
3.3	Maintenance activity schedule	33
3.4	Installed Street Lighting Fixtures for O&M	33
4.	Site Visit	34
5.	Tools & Tackles, Equipment, Machinery and Manpower	34
6.	Approval of Sample	34
7.	Rejection Of Materials	34
8.	Agency's Site Offices	35
9.	Emergency Work:	35
10.	Asset Ownership	35
	10.1 Existing Lighting Facilities	35
	10.2 Newly Installed Equipment and Systems	35
	10.3 Buyback of Exiting LED fixtures and cables with accessories:	35
11.	Representatives	36
	11.1 BMC Representative	36
	11.2 The Agency Representative	36
12.	Payment Schedule	36
	12.1 Payment for Operation & Maintenance Cost	36
13.	Technical Interventions	37
14.	Performance Review and Reporting	39
15.	Facilities not to be provided by the Authority:	39
16.	Commencement And Duration	40
17.	Employees And Training	41
18.	Scope Expansion & Appointment of Independent Engineer.	41
19.	Delay Liquidated Damages	42
20.	Penalty for Non-Compliance to Minimum Up-Time	42
II)	System Introduction	50
III)	RF /LoRa/NB IOT(4G/5G/LTE) Components	51
A)	RF Gateway	51
	Radio Frequency (RF) Module	51
B)	RF Node/ Outdoor Light Controller (OLC)	52
	• Wireless System – 865-868MHz	52

• Light Control / management	52
• Light monitoring	53
• Energy measurement	53
Data Retention and Security Compliance	54
SECTION : 4	113
TECHNICAL PROPOSAL SUBMISSION FORMS	113
TECH -1	114
TECH -2	117
TECH -3	119
TECH -4	120
TECH -5	121
TECH -6	123
TECH -7	124
TECH -8	125
Manufacturer's Authorization Form (MAF) (To be submitted on OEM Letter head for Poles, LED Fixtures and CCMS SOFT With Accessories)	126
SECTION: 5	127
FINANCIAL PROPOSAL SUBMISSION FORMS	127
SECTION 6	128
BID SUBMISSION CHECK LIST	128
Section 7	132
Procedure under E-Tendering	132

DATA SHEET

Sl.No	Particulars	Details
1.	Name of the Authority	The Commissioner Bhubaneswar Municipal Corporation (BMC), ICOMC Tower, Unit-9, Janpath, Bhubaneswar- 751022, Odisha
2.	Method of Selection	Least Cost (L1) Basis
3.	Proposal Validity	180 Days
4.	Publication of RFP	12/09/2026
5.	Deadline for Submission of Pre-Proposal / Pre-Bid Queries	Pre-bid queries shall be sent by 18/09/2026 by 4 PM to tendercell@bmc.gov.in
6.	Pre-bid meeting	The pre-bid meeting shall be held on 19/09/2026 at 04:00 PM at Office Chamber of Executive Engineer (Central Tender Cell), UG Floor, Bhubaneswar Municipal Corporation (BMC), ICOMC Tower, Unit-9, Janpath, Bhubaneswar- 751022, Odisha
7.	Proposal Due Date	05/10/2026, 3:00 PM
8.	Date of opening of Technical Proposal	05/10/2026, 3:30 PM
9.	Date of Technical Presentation	To be intimated later
10.	Date of opening of Financial Proposal	To be intimated later
11.	Bid Processing Fee (Non-Refundable)	Rs. 11,800/- (Rupees Eleven Thousand and Eight Hundred Only)- including GST through online mode
12.	Earnest Money Deposit (EMD)	Rs.10,00,000/- (Rupees Ten Lakhs Only) through online mode
13.	Performance Bank Guarantee (PBG)	10 % of the contract agreement amount
14.	Contact Person	The Executive Engineer (Electrical) Bhubaneswar Municipal Corporation
15.	Place of Opening of Proposal:	Bhubaneswar Municipal Corporation, ICOMC Tower, Unit-9, Janpath, Bhubaneswar- 751022, Odisha,

1. RFP can be downloaded from www.tendersodisha.gov.in.
2. Subsequent corrigendum, if required, shall appear in this website or BMC website

SECTION: 1

LETTER OF INVITATION

LETTER OF INVITATION

Name of the Assignment: Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

1. Bhubaneswar Municipal Corporation (BMC), (the “**Authority**”) invites proposal from reputed agencies for providing services relating to **Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area**. For the purpose of this RFP, BMC aims to select an Agency for operation and maintenance of Street Lights in its three different zones i.e. South east Zone, South-west Zone and North Zone in three different packages. Also, BMC envisions to implement LED Street Lights in its greenfield stretches alongwith retrofitting of the existing ones.
2. Bidder shall be selected on **Least Cost (L1) basis**.
3. This is an e-tendering process by Bhubaneswar Municipal Corporation (BMC). The proposal must be submitted through online only. In online mode, the electronic files are to be uploaded on the tender Portal www.tendersodisha.gov.in.
4. The proposal should be submitted in two parts as follows:
 - Part 1: Technical Proposal
 - Part 2: Financial Proposal

Evaluation of the proposals shall be made as per the evaluation criteria mentioned in the RFP prior to opening of financial proposal.
5. The total time period of the assignment will be for 5 Years. The contract is extendable depending upon the performance of the Agency and as per the approval of the Authority.
6. Selection will be done on the basis of 2-stage process. In the 1st stage, Preliminary evaluation of the proposals will be done to determine whether the requisite documents / information have been properly furnished by the bidder or not (as per Point 1 of RFP). The Bids which meets all the compliances will only be considered as responsive. In the 2nd stage, Financial Proposals of those Agencies whose bids are found responsive will be opened. The Financial Proposal has to be submitted online only. Submission in any other form shall not be acceptable. In the event, any of the instructions mentioned herein have not been adhered to, the Client may reject the Proposal. Proposals shall finally be ranked according to their financial quote. The award of work shall be done on least cost basis (Cost Based Selection approach) among the qualifying Agencies.
7. The Agency must possess compatible Digital Signature Certificate (DSC) of Class-II or Class-III. The online bidding procedure is indicated in the Section-7 of the RFP document.
8. The proposal, complete in all respect as specified in the RFP Document, must be accompanied with a **Non-refundable** amount of **Rs. 11,800/- (Eleven thousand & Eight Hundred only)** towards **Bid Processing Fee** and **Rs.10,00,000/-** towards **Bid Security/ EMD** in the form as prescribed in the RFP failing which the bid will be rejected.

9. The last date and time for submission of proposal, date of opening of technical proposal as mentioned in the Bidder Data Sheet.
10. This RFP includes following sections:
- a) Letter of Invitation **[Section – 1]**
 - b) Information to the Bidder **[Section – 2]**
 - c) Terms of Reference **[Section – 3]**
 - d) Technical Proposal Submission Forms **[Section – 4]**
 - e) Financial Proposal Submission Forms **[Section –5]**
 - f) Bid Submission Checklist **[Section –6]**
 - g) Standard Form of Contract **[Section –7] (omitted)**
 - h) Procedure under e-Tendering **[Section-8]**
 - i) Annexure **[Bid Submission Checklist & Performance Bank Guarantee Format provided]**
11. While all information/data given in the RFP are accurate within the consideration of scope of the proposed assignment to the best of the Authority's knowledge, the Authority holds no responsibility for accuracy of information, and it is the responsibility of the bidder to check the validity of information/data included in this RFP. The Authority reserves the right to accept / reject any / all proposals / cancel the entire selection process at any stage without assigning any reason thereof.

Sd-

Executive Engineer (Central Tender Cell)

On behalf of City Engineer

Bhubaneswar Municipal Corporation

SECTION: 2

INSTRUCTION TO BIDDERS

1. Pre-Qualification Criteria:

Prior to the evaluation of the Qualification Proposals, each Bidder's Eligibility Proposal will be assessed based on the following Eligibility Criteria (**Eligibility Criteria**). Each Bidder is required to provide copies of the following supporting documents/information as part of its Eligibility Proposal failing which the Proposal will be rejected.

SI No.	Description	Supporting Document
1	A Bidder shall be a Proprietorship Firm/ Registered Partnership Firm/ Limited liability/Partnership/ OEM or Company registered under the Indian law or an equivalent registered under relevant Acts.	Documentary evidence shall have to be submitted along with the Proposal
2	The Bidder/ Electrical Agency with Electrical Agency having HT/MV Electrical License, approved by Electrical License Board, of any State/ UT in India and with experience in LED Street Light supply, installations & maintenance for minimum 5 years within last Ten years from the bid due date.	Documentary evidence shall have to be submitted along with the Proposal i.e. Work orders/ Agreement with the successful completion certificate not below the rank of Executive Engineer as per Form TECH-5
3	Original Equipment Manufacturer (OEM for LED Lights) with manufacturing experience of minimum 5 years till the bid due date or any of its Authorized Agency duly authorized by the OEM to participate in the tender. One OEM is allowed to authorize only one Agency for this specific tender. In case OEM is participating then the OEM cannot authorize its Agency to participate. Multiple authorizations are liable for rejection from the tender	Valid Manufacturer Authorisation Form (MAF) & Factory registration certificate of LED light manufacture shall be provided by the OEM to Distributor as per Tech-9 .
4	The Bidder must have successfully completed work of Area Illumination/ Installation of Street Lighting of LED Light Points, in the aggregate, including Mast Lighting/ Pole and Cable line Erection Works during the last 7 (Seven) years from the bid due date in Central Govt./ State Govt./ PSU sector in India certified by not below the rank of Executive Engineer and such work has been commissioned and is currently in operation & maintenance by the Bidder for at least 1 (One) year; • Three (03) similar completed works each equal to (8,000 nos.) of the similar works. Or, • Two (02) similar completed works each equal to (15,000 nos.) of the similar works. Or, • One (01) similar completed work equal to (30,000 nos.) of the similar works	Copy of Work orders/ Agreement along with the successful completion certificate mentioning the scope as per Form TECH-5
5	The Bidder must have successfully completed installation of 10,000 nos. of LED Lights in one Project	Copy of Work orders/ Agreement along with the

	with integration with Command Control & Monitoring System (CCMS) and the same should be in operation and generating appropriate report in online mode at least for one year, through the data center established for the purpose	completion certificate as per Form TECH-5
6	The average turnover of the bidder in the last 3 (three) financial years (FY 2023- 2024, FY 2024- 2025 and FY 2025-2026) should be at least Rs.25 Cr.	Statutory Auditor certificate along with Balance Sheet and Profit & Loss Statement as per Form TECH-3
7	The organisation shall have a net worth of atleast INR 5 Cr.	Statutory Auditor certificate along with Balance Sheet and Profit & Loss Statement as per Form TECH-3
8	Bidder must not have been barred or blacklisted by the Gol, any state government, or any of its organisations from participating in any project or being awarded any contract and the bar subsists on the Proposal Due Date.	Undertaking as per Form TECH-7 on stamp paper of appropriate value.
9	A Bidder shall not have a Conflict of Interest. A Bidder shall be considered to have a Conflict of Interest if any of the conditions set out in Clause 13 of this RFP apply to the Bidder.	Self-Declaration from the Bidder as per Form TECH-6

Please note - For the purposes of this RFP, consortium / JV is not allowed.

1.1 Documents / Formats need to be submitted along with TECHNICAL PROPOSAL:

The bidders have to furnish the following documents duly signed in along with their Technical Proposal:

- Filled in Bid Submission Check List in Original (**Annexure-I**)
- Covering letter (TECH– 1) on Bidder's letterhead.
- Bid Processing Fee & Earnest Money Deposit (EMD) as applicable (receipt/challan copy to attach with the technical bid)
- General Details of the Bidder (TECH – 2)
- Financial Capacity of the Bidder (TECH – 3)
- Power of Attorney (TECH – 4) in favour of the person signing the Proposal on behalf of the Bidder.
- Project Experience of the bidder (TECH – 5)
- Undertaking regarding Conflict of Interest (TECH - 6)
- Undertaking for Non-Blacklisting (TECH-7)
- Approach, Methodology & Work Plan to undertake the assignment (TECH - 8)
- Details of Plant & Equipment to be deployed (Schedule – 3) along with the supporting documents of ownership or Lease.
- Details of manpower to be deployed (Schedule – 4) along with the supporting documents of employment.

Bidders should submit the required supporting documents as mentioned above. Bids not conforming to the eligibility criteria and non-submission of required documents as listed above may lead to rejection of the bid. Submission of forged documents will also result in rejection of the bid. Bidders are advised to study all instructions, forms, terms & conditions and other important information as mentioned in the RFP Document. The proposal must be complete in all respect and indexed. Each page should be numbered and signed by the authorized representative.

2. Bid Processing Fee:

The bidder must furnish as part of technical proposal, the required bid processing fee amounting to Rs. 11,800/- (Eleven Thousand & Eight Hundred Rupees) through online mode of transaction as prescribed in the RFP failing which the bid will be rejected.

3. Earnest Money Deposit/ Bid Security:

The Bidder shall furnish as part of its Proposal, a bid security of Rs.10,00,000/- (Rupees Ten Lakhs only) through online mode of transaction as prescribed in the RFP failing which the bid will be rejected (the "Bid Security"), returnable not later than 180 days from Proposal Due Date. In the event that the first ranked Bidder commences the assignment, the second ranked Bidder, whose proposal has been kept in reserve, shall be returned forthwith, but in no case not later than 180). In case successful bidder is announced, the Bid Security of all unsuccessful bidders shall be returned, while the Bid Security of the successful bidder shall continue to be effective until the successful bidder furnishes the Performance Bank Guarantee (as per the provisions of this RFP). The Bid Security shall be forfeited if (a) a successful bidder fails to sign the Agreement for whatever reason, or (b) the bidder withdraws the tender during the validity period of tender.

4. Validity of the Proposal:

Proposals shall remain valid for a period of 180 (One hundred and eighty) days from the date of opening of the technical proposal. The Authority reserves the rights to reject a proposal valid for a shorter period as non-responsive and will make the best efforts to finalize the selection process and award of the contract within the bid validity period. The bid validity period may be extended on mutual consent.

5. Pre-bid Queries / Pre-bid Meeting:

- a) Bidders are allowed to submit their queries in respect of the RFP and other details if any to BMC through e-mail to tendercell@bmc.gov.in till the timeline as per Bidder Data Sheet. Clarifications to the above will be either uploaded on the BMC Website or uploaded on the tender portal of Government of Odisha www.tendersodisha.gov.in
- b) The pre-bid meeting shall be held as per schedule mentioned in the bidder data sheet.
- c) If any information about the subject site is required by the prospective bidder prior to 3 (three) days from the last date of bid submission, the same can be obtained from:

Executive Engineer (Electrical)

Bhubaneswar Municipal Corporation (BMC),

ICOMC Tower, Unit-9, Janpath,

Bhubaneswar- 751022, Odisha,

- d) BMC reserves the right not to offer clarifications on any issue or if it perceives that the clarifications can only be made at a later stage, it can do so at a later date.
- e) No extension of any deadline will be granted on the basis or grounds that BMC have not responded to any question or not provided any clarification.

6. Preparation and Submission of Proposal:

- i. Detail RFP may be downloaded from www.tendersodisha.gov.in and the Application should be submitted online only. The procedure for E-Tendering is enclosed in this RFP at Section 8.
- ii. The following shall be the form of various documents in the Application:

6.1 Part 1- Technical Proposal [Only Electronic Form (to be uploaded on the Tender Portal)]

Part 1, the “**Technical Proposal**” should have the following documents.

- i. Filled in Bid Submission Check List in Original (Annexure-I)
- ii. Covering letter (TECH– 1) on Bidder’s letterhead.
- iii. Bid Processing Fee & Earnest Money Deposit (EMD) as applicable. (receipt/challan copy to attach with the technical bid)
- iv. General Details of the Bidder (TECH – 2)
- v. Financial Capacity of the Bidder (TECH – 3)
- vi. Power of Attorney (TECH – 4) in favour of the person signing the Proposal on behalf of the Bidder.
- vii. Project Experience of the bidder (TECH – 5)
- viii. Undertaking for Non-Blacklisting (TECH-7)
- ix. Undertaking regarding Conflict of Interest (TECH - 6)
- x. Approach, Methodology & Work Plan to undertake the assignment (TECH - 8)
- xi. Details of Plant & Equipment to be deployed (Schedule – 3) along with the supporting documents of ownership or Lease.
- xii. Details of manpower to be deployed (Schedule – 4) along with the supporting documents of employment.
- xiii. Certificate of Incorporation, Copy of PAN & GST Registration
- xiv. RFP Document duly signed by Bidder’s Authorized Signatory.

6.2 Part 2- Financial Proposal

The Part 2, the “**Financial Proposal**” should be submitted as per the format for Financial Bid given in **Section 5**. inclusive of all statutory taxes but excluding GST

- iii. The Applicant shall upload scanned copies of the Technical Proposal as specified above on the Tender Portal by the Proposal Submission due date and time as specified in Data Sheet. Financial Proposal as specified in clause 6.2 is to be submitted online only & no hard copy is to be submitted.

- iv. It may be noted that the scanned copies can be prepared in PDF file format for Technical Proposal and in excel format for Financial Proposal, uploaded by the Authority in the designated locations.
- v. Each page of the two parts should be page numbered and in conformation to the eligibility qualifications and clearly indicated using an index page. The Client will not consider any proposal that arrives after the deadline as prescribed in the Bidder Data Sheet. Any Proposal received after the deadline will be outrightly rejected by the Client.

Any deviation from the prescribed procedures / information / formats / conditions shall result in out-right rejection of the proposal. All the pages of the proposal have to be signed by the authorized representative of the bidder. Bids with any conditional offer shall be out rightly rejected. All pages of the proposal must have to be sealed and signed by the authorized representative of the bidder. Any conditional bids will be rejected.

7. Opening of the proposal:

- i. Completed proposal must be submitted on or before the time and date stated in the Data Sheet.
- ii. Opening of Proposals will be done through online.
- iii. For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory.
- iv. The Financial Proposal will be opened for the shortlisted applicants who qualify for financial opening as per RFP. The date of opening of Financial Proposal will be notified later.

8. Evaluation of Proposal:

A three-step evaluation process will be conducted as explained below for evaluation of the proposals:

- 8.1 Preliminary Evaluation (1st Stage):** Preliminary evaluation of the proposals will be done to determine whether the proposal comply with the prescribed eligibility condition (*pre-qualification criteria as mentioned in Sl. 1, Section-2*) and the requisite documents / information (as per Clause 6.1) have been properly furnished by the bidder or not.

**** Bids not complying with any of the above requirement will be out rightly rejected at the discretion of the Authority's authority.***

Only those bidders meeting both the following capability criteria will be “**Technically Qualified**” for the project

- 8.2 Technical Capability:** Technical evaluation will be done only for those applicants who clear the requirements set in the ‘Pre-Qualification Criteria’. The Technical eligibility of the candidate shall be assessed based on the following criteria:

S. N.	Evaluation Criteria	Maximum Marks	Relevant Technical Form
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1	The Bidder/ Electrical Agency with Electrical Agency having HT/ MV Electrical License, approved by Electrical License Board of Odisha*, and with experience in LED Street Light installations & maintenance for minimum 5 years • 5 to 7 years - 5 Marks • More than 7 years – 10 Marks <i>*Contractors registered elsewhere but not registered with Government of Odisha can also participate after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the State Government before award of work/signing of the Agreement as per the prevalent registration norms of the State. Or The Agency shall have MoU with such electricity Agency.</i>	10	TECH-5												
2	The average turnover of the bidder in the last 3 (three) financial years (FY 2023- 2024, FY 2024- 2025 and FY 2025-2026) should be at least Rs.25 Cr. • 5 Marks for meeting the minimum requirement. • Additional 1 mark for every additional Rs.1 Cr turnover	10	TECH-3												
3	The Bidder must have successfully completed work of Area Illumination/ Installation & maintenance of Street Lighting of LED Light Points, in the aggregate, including Mast Lighting/ Pole and Cable line Erection Works during the last 7 (Seven) years from the bid due date in Central Govt./ State Govt./ PSU sector in India certified by not below the rank of Executive Engineer and such work has been commissioned and is currently in operation & maintenance by the Bidder for at least 1 (One) year. Three (03) similar completed works each equal to (8000 nos.) of the similar works. Or, Two (02) similar completed works each equal to (15000 nos.) of the similar works. Or, One (01) similar completed work equal to (30000 nos.) of the similar works • Meeting the minimum criteria – 30 marks • For any additional similar completed works each equal to (8000 nos.). 5 Marks	40	TECH-5												
4	Requirement of Plant & Equipment <table border="1"> <thead> <tr> <th>Sl. No.</th><th>Equipment Description</th><th>Minimum Quantity to be Mobilized in Each Zone</th><th>Marks allotted</th></tr> </thead> <tbody> <tr> <td>1</td><td>FRP Ladders with minimum height of 8 meters</td><td>3 nos.</td><td>3</td></tr> <tr> <td>2</td><td>Hydraulic Lifts/ ladders for Street Lights maintenance (with</td><td>3 nos.</td><td>3</td></tr> </tbody> </table>	Sl. No.	Equipment Description	Minimum Quantity to be Mobilized in Each Zone	Marks allotted	1	FRP Ladders with minimum height of 8 meters	3 nos.	3	2	Hydraulic Lifts/ ladders for Street Lights maintenance (with	3 nos.	3	10	Schedule-
Sl. No.	Equipment Description	Minimum Quantity to be Mobilized in Each Zone	Marks allotted												
1	FRP Ladders with minimum height of 8 meters	3 nos.	3												
2	Hydraulic Lifts/ ladders for Street Lights maintenance (with	3 nos.	3												

		operating height more than 11 meters)				
	3	LCV	4 nos.	4		
5	Quality of the presentation – the presentation should contain. a. Company profile & Differentiating factors b. Similar work experience c. Approach & methodology (Proposed manpower, standard operating procedure and quality control mechanism, Work Plan, grievance redressal, value provided to Authority etc.) d. Details of Technology & Functioning of Central Control & Monitoring System.				30	TECH-8
	Total				100	

In the first stage, the Technical Proposal will be evaluated based on the parameters stated above. For each Technical Proposal, the total points that can be awarded for each Bidder are 100, **and the minimum Technical Score that a Bidder requires to qualify for opening of the Financial Proposal is 60.**

8.3 FINANCIAL EVALUATION (3rd Stage) : The financial proposals of the bidders qualifying the technical evaluation (2nd Stage) only shall be opened at this stage in the presence of the bidder's representative who wishes to attend the meeting with proper authorization letter. The name of the bidder along with the quoted financial price will be announced during the meeting.

Financial Proposal must be strictly using the formats attached in Section 5. No additional items/quantities other than that specified in the formats should be proposed by the Agency since the same shall not be considered for the evaluation/award.

The Financial Proposal should clearly identify as a separate amount, the local taxes (including social security), duties, fees, levies and other charges imposed under the applicable law, on the Agency, the sub-Agency, and their personnel (other than nationals or permanent residents of the government's country); unless the Data Sheet specifies otherwise. This cost, however, will not be considered in evaluation.

The name of the bidder along with the quoted financial price will be announced during the meeting.

9. Evaluation Process:

The award of work shall be done on least cost basis (cost-based selection approach) among the qualifying bidders, meeting eligibility requirements. The financial bids of the technically qualified bidders only shall be opened on the due date of opening.

- After the preliminary evaluation with regard to the compliances being met and bidder is found responsive, Authority may or may not notify those bidders whose proposals were not considered as per conditions of RFP. The Authority shall simultaneously notify qualifying firms indicating the date and time set for opening of the Financial Proposals.
- The name of the Agency and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened.

- c) The Evaluation Committee will determine whether the submitted Financial Proposals are complete (i.e. whether they have included cost of all items of the corresponding proposals; if not, then the cost towards such missing items will be considered as NIL, but the bidder shall, however, be required to carry out such obligations without any additional compensation. In case under such circumstances, if Authority feels that the work cannot be carried out within the overall cost as per the submitted financial proposal, such proposals shall be considered non responsive.
- d) The Evaluation Committee shall determine if the financial proposal is complete and without computational errors.

Proposals shall finally be ranked according to their financial quote. The award of work shall be done on least cost basis (Cost Based Selection approach) among the qualifying bidders.

10. Performance Bank Guarantee (PBG):

Within 7 days of notifying the acceptance of a proposal for award of contract, Selected Bidder shall have to furnish a Performance Bank Guarantee amounting to **10%** of the contract value in the form of BG pledged in favour of Commissioner, Bhubaneswar Municipal Corporation, payable at Bhubaneswar issued from any Nationalized/ Scheduled Bank, countersigned by its local branch at Bhubaneswar”, for a period of **three months beyond the entire contract period** (calculated from the date of effectiveness of the contract) as its commitment to perform services under the contract. Failure to comply with the terms & conditions of the contract agreement shall constitute sufficient grounds for the forfeiture of the PBG. The PBG shall be released immediately after three months of expiry of contract provided there is no breach of contract on the part of the qualified bidder. No interest shall be paid on the PBG.

11. Contract Negotiation

Contract negotiation, if required will be held at a date, time and address as intimated to the selected bidder/s. The bidder will as a pre-requisite for attendance at the negotiations, confirm availability of all the proposed staff for the assignment. Representative conducting negotiations on behalf of the bidder must have written authority to negotiate and conclude a contract. Negotiation will be performed covering technical and financial aspects, if any and scope of work.

12. Award of Contract:

After completion of the contract negotiation stage, the Authority will notify the successful bidder in writing by issuing a Letter of Award (LOA) for signing the contract and promptly notifying all other bidders about the result of the selection process. The successful bidders will be asked to sign the contract after fulfilling all formalities within 7 days of issuance of the offer letter. After signing of the contract, no variation or modification of the terms of the contract shall be made except by written amendment signed by both the parties. The contract will be valid for **Five (05) years** from the date of effectiveness of the contract and shall be extended for another **Two (02) years** on mutually agreed terms.

13. Conflict of Interest:

Conflict of interest exists in the event of:

- (i). Conflicting assignments, typically monitoring and evaluation of the same project by the empaneled bidder;
- (ii). Agency, agencies or institutions (individuals or organizations) who have a business or family relation with the Authority directly or indirectly; and
- (iii). Practices prohibited under the anti-corruption policy of the Government of India and Government of Odisha. The bidders are to be careful so as not to give rise to a situation where there will be any conflict of interest with the Authority as this would amount to their disqualification and breach of contract.
- (iv). Has participated directly or through an Associate as a consultant or advisor in the preparation of the design of or technical specifications for the Project.

14. Disclosure:

- (i). Bidders have an obligation to disclose any actual or potential conflict of interest. Failure to do so may lead to disqualification of the bidder or termination of its contract.
 - Bidders must disclose if they are or have been the subject of any proceedings (such as blacklisting) or other arrangements relating to bankruptcy, insolvency or the financial standing of the Bidder, including but not limited to appointment of any officer such as a receiver in relation to the Bidder's personal or business matters or an arrangement with creditors, or of any other similar proceedings.
- (ii). Bidders must disclose if they have been convicted of, or are the subject of any proceedings relating to:
 - a criminal offence or other serious offence punishable under the law of the land, or where they have been found by any regulator or professional body to have committed professional misconduct;
 - corruption including the offer or receipt of an inducement of any kind in relation to obtaining any contract;
 - failure to fulfill any obligations in any jurisdiction relating to the payment of taxes or social security contributions.

15. Anti-corruption Measure:

- (i). Any effort by Bidder(s) to influence the Authority in the evaluation and ranking of financial proposals, and recommendation for award of contract, will result in the rejection of the proposal.
- (ii). A recommendation for award of Contract shall be rejected if it is determined that the recommended bidder has directly, or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the contract in question. In such cases, the Authority shall blacklist the bidder either indefinitely or for a stated period of time, disqualifying it from participating in any related bidding process for the said period.

16. Language of Proposals:

The proposal and all related correspondence exchanged between the bidder and the Authority shall be written in the English language. Supporting documents and printed literature that are part of the proposal may be in another language provided they are accompanied by an accurate translation of the relevant passages in English with self-certification for accuracy, in which case, for the purposes of interpretation of the Proposal, the translated version shall govern.

17. Cost of Bidding:

The Bidder shall bear all costs associated with the preparation and submission of its proposal. The Authority shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process. A bidder is not allowed to submit more than one proposal under the selection process. Alternate bids are also not allowed.

18. Legal Jurisdiction:

All legal disputes are subject to the jurisdiction of civil court of Bhubaneswar only within Odisha.

19. Governing Law and Penalty Clause:

The schedule given for delivery is to be strictly adhered to in view of the strict time schedule. Any unjustified and unacceptable delay or discrepancies in delivery shall render the bidder liable for liquidated damages and thereafter the Authority holds the option for cancellation of the contract for pending activities and completes the same from any other Agency. The Authority may deduct such sum from any money from their hands due or become due to bidder. The payment or deduction of such sums shall not relieve the bidder from his obligations and liabilities under the contract. The rights and obligations of the Authority and the bidder under this contract will be governed by the prevailing laws of Government of India / Government of Odisha.

Any defects, shrinkages or faults which may appear arising from any defective, improper / poor quality of fixture, materials or workmanship, or due to any other reasons, whatsoever, will be amended and made good by the bidder at their own cost within 48 hours of notice, failing which, a penalty of Rs.1000/- per day per defect will be levied on the bidder till defects are rectified. If the defects are rectified by BMC then the same shall be recovered from the subsequent payment of Agency.

The amount will be deducted from the subsequent payment. In addition, the PBG amount may also be forfeited. The decision of the authority placing the contract, whether the delay in development has taken place on account of reasons attributed to the bidder shall be final. In such situations, the firm will be debarred from participation in future bids of this department for next five years from the date of this occurrence and notifications.

20. Confidentiality:

Information relating to evaluation of proposals and recommendations concerning awards shall not be disclosed to the bidders who submitted the proposals or to other persons not officially concerned with the process, until the publication of the award of contract. The undue use by any Agency of confidential information related to the process may result in rejection of its proposal and may be subject to the provisions of the Authority's antifraud and corruption policy. During the execution of the assignment except with prior written consent of the Authority, the agency or its personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the contract.

21. Amendment of the RFP Document:

At any time before submission of proposals, the Authority may amend the RFP by issuing an addendum either at www.bmc.gov.in or at <https://tendersodisha.gov.in> only. Any such addendum will be binding on all the bidders. To give bidders reasonable time in which to take an addendum into account in preparing their proposals, the Authority may, at its discretion, extend the deadline for the submission of the proposals.

22. Authority's right to accept any proposal and to reject any or all proposal(s):

The Authority reserves the right to accept or reject any proposal, and to annul or amend the bidding / selection / evaluation process and reject all proposals at any time prior to award of contract award, without assigning any reason there of and thereby incurring any liability to the bidders.

23. Copyright, Patents and Other Proprietary Rights:

BMC shall be entitled to all intellectual property and other proprietary rights including but not limited to patents, copyrights and trademarks, with regard to documents and other materials which bear a direct relation to or are prepared or collected in consequence or in the course of the execution of this contract. At the Authority's request, the Agency shall take all necessary steps to submit them to the Authority in compliance with the requirements of the contract.

24. Force Majeure:

For purpose of this clause, "Force Majeure" means an event beyond the control of the Agency and not involving the Agency's fault or negligence and not foreseeable. Such events may include, but are not restricted, wars or revolutions, fires, floods, riots, civil commotion, earthquake, epidemics or other natural disasters and restriction imposed by the Government or other bodies, which are beyond the control of the Agency, which prevents or delays the execution of the work. If a force Majeure situation arises, the Agency shall promptly notify Authority in writing of such condition, the cause thereof and the change that is necessitated due to the condition. Until and unless otherwise directed by the Authority in writing, the Agency shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. The Agency shall advise Authority in writing, the beginning and the end of the above causes of delay, within seven days of the occurrence and cessation of the Force

Majeure condition. In the event of a delay lasting for more than 15 days, if arising out of causes of Force Majeure, Authority reserve the right to cancel the contract without any obligation to compensate the Agency in any manner for whatsoever reason.

25. Settlement of Dispute:

In the case of dispute arising upon or in relation to or in connection with the contract between the Authority and the Agency, which has not been settled amicably, the same shall be resolved or settled by way of arbitration by the sole arbitrator to be appointed by Commissioner, BMC and the decision of the arbitrator shall be final & binding on both the parties. The arbitration shall be held in accordance to the provisions of Arbitration and Conciliation Act 1996 and the place of arbitration shall be only at Bhubaneswar

26. Disqualification of Proposal:

The proposal is liable to be disqualified in the following cases as listed below:

- Proposal submitted without Bid Processing Fee & EMD as applicable
- Proposal not submitted in accordance with the procedure and formats as prescribed in the RFP
- During validity of the proposal, or its extended period, if any, the bidder increases his quoted prices
- Proposal is received in incomplete form
- Proposal is received after due date and time for submission of bid
- Proposal is not accompanied by all the requisite documents / information
- A commercial bid submitted with assumptions, conditions or uncertainty.
- Bids with any conditional technical and financial offer
- If the bidder provides any assumptions in the financial proposal or qualifies the commercial proposal with its own conditions, such proposals will be rejected even if the commercial value of such proposals is the lowest / best value
- Proposal is not properly signed
- Proposal is not conforming to the requirement of the scope of the work of the assignment.
- Bidder tries to influence the proposal evaluation process by unlawful/corrupt/ fraudulent means at any point of time during the bid process
- If, any of the bid documents (including but not limited to the hard and soft/electronic copies of the same, clarifications provided by the bidder), excluding the commercial bid, submitted by the bidder is found to contain any information on price, pricing policy, pricing mechanism or any information indicative of the commercial aspects of the bid;
 - Bidders or any person acting on its behalf indulges in corrupt and fraudulent practices

27. Liability:

The Liability of the selected Agency under this agreement in any case shall not be beyond the amount of fees payable to the selected Agency under this agreement.

28. Indemnity:

Selected Agency shall at its expense and to the maximum extent permitted by law, will indemnify, defend and hold harmless BMC from all claims, judgements, actions or suits, proceedings, demands, liabilities, costs, losses damages and expenses arising out of or relating to (a) any negligent act or omission or intentional wrongdoing of the Selected Agency or its representatives; (b) any claim that the provision or utilisation of services or any portion thereof is not in compliance applicable laws, rules, regulations, orders of any governmental agency; (c) for injuries or damages to persons or property sustained by or claimed to have been sustained by anyone whomsoever by reason of the works undertaken by the Agency

SECTION: 3

TERMS OF REFERENCE (TOR)

Terms of Reference (ToR)

1. Background

The Bhubaneswar Municipal Corporation (BMC), under the authority vested by the Orissa Municipal Corporation Act- 2003, is initiating a tender opportunity to address crucial infrastructural needs within its jurisdiction. The focus of this endeavor is to enhance the efficiency and sustainability of street lighting across the BMC area.

BMC invite proposals from qualified agencies capable of supplying, installing, operating, and maintaining LED streetlights within the BMC area. This RFP provides detailed project specifications, evaluation criteria, and submission guidelines for interested bidders. We are seeking partnerships with agencies that share our vision of excellence and sustainability, aiming to enhance the urban landscape and promote efficient energy use.

The successful agency selected through this process will play a pivotal role in transforming street lighting infrastructure across BMC's jurisdiction. Interested agencies shall review the detailed project requirements and submit comprehensive proposals that reflect their capabilities and commitment to advancing urban sustainability and efficiency through innovative lighting solutions.

BMC encourages prospective bidders to factor these maintenance requirements and opportunities into their proposals, demonstrating their capacity for long-term reliability and service excellence in support of BMC's vision for a sustainable and healthy environment.

Interested bidders are requested to conduct a thorough survey of the project site before submitting their proposals. This preliminary assessment will enable bidders to accurately assess the scope of work and ensure that their quotations align with the specific requirements outlined in the RFP

2. Objective

The key objectives that the Authority wishes to achieve, in relation to the LED Public Street Lighting System through this Project include the following:

- a. Implementation of LED Public Street Lighting Systems in new road stretches and areas which are presently not provided with street lighting systems in the Corporation area. This includes installation of poles, outreach arms, cables, earthing, feeder panels etc., and road group wise standard rating Smart LED Luminaires in accordance with applicable standards;
- b. The Selected Agency required to immediately carryout operation & maintenance of all existing retrofitting installed light points from the date of Workorder issued by the Corporation. If any major Infrastructure Equipment's/Accessories (excluding Minor infrastructure items covered under O & M) required for replacement during the operation & maintenance, installation to be carried out with following proper approval of installation and validation process.
- c. Implementation of LED Public Street Lighting Systems in the existing stretches /areas which are presently covered under retrofitting Street lighting project or where only Poles, AB cables are available but no streetlighting Point is provided. Items requiring replacement is indicated under estimated Capex items in retrofit area. This includes installation and maintenance of poles/outreach arms/cables/earthing/ feeder panels/LED Lights etc.
- d. Operation & Maintenance of the existing Street Lights.

- e. Improvement in operation and maintenance practices, including but not limited to introduction of automation and predictive maintenance and improving citizen services and response time by integrating the system with Complaint Management Systems and Central Control & Monitoring System for existing operations of the Public Street Lighting Project in the respective ULBs and with Central Command Centre.
- f. Maintain the lighting levels in accordance with Lux Levels as set out by relevant standards for different road groups;
- g. For LED luminaires of wattage equal to or exceeding 70W, or equivalent lumen output, individual luminaire-level monitoring shall be mandatory. Individual luminaire monitoring shall include realtime glowing / non-glowing status and automatic failure alerts, which shall be logged, time-stamped, geo-referenced, and converted into maintenance tickets. For luminaires below 70W, feeder-level monitoring shall be acceptable;
- h. Introduction of feeder panel based remote operation and monitoring of street lighting systems which would also facilitate predictive repairs and replacements;
- i. Expansion by adding new points and /or stretches in future
- j. Training and capacity building of the Authority's and Corporation's staff to identify and introduce energy efficiency measures to manage and maintain the LED Public Street Lighting System.

3. Scope of Services

3.1 Installations

The Project is envisaged to be implemented under an Engineering, Procurement, and Construction (EPC) mode with a five (5) year fee-based Operations & Maintenance arrangement for the installed streetlights. The selection of the bidder is through this RFP.

i. Covering New /Greenfield Stretches

SN	Activity Name	Description
A.1	Survey	- Detailed survey of proposed stretches with GPS co-ordinates, Road Class as per prescribed format based on the estimated Quantities indicated in the RFP. - Cleaning of the area before installation shall be done by the Agency.
A.2	Preparation of Equipment Installation Plan	Preparation of stretch wise complete Public Street Light System infrastructure and LED Luminaire plan (Equipment Installation Plan) with listing of Bill of Quantities, in accordance with the terms of the RFP/ Contract.
A.3	Implementation/ Installation	- Setting up of infrastructure – Installation of LED Luminaire of appropriate / agreed ratings, poles, pole junction box, outreach arms, cabling, switching, monitoring and automation systems, protection systems, feeder panel etc. - Automation and connectivity to Centralized Control & Monitoring System (CCMS) of existing Projects, Setting-up and commissioning of CCMS at Corporation-level including communication systems for remote connectivity with feeder panels, data/internet connectivity, etc.

		• Prepare and submit Asset Register to the Corporation and further maintain Asset Register throughout the Project Term. • Asset Register to be prepared for all installed infrastructure Equipment's and to be jointly validated by Executive Engineer, Electrical of the Corporation, Selected Agency and Independent Engineers appointed for the project shall raise Tax invoice for full value of capital expenditure with applicable GST and payment statement as per RFP for payment of 80% of Capital Expenditure with 100% GST based on the above validated Assets register quantities, • Tax Invoice and payment Statement to be validated by Executive Engineer, Electrical / AEE of the Corporation and Independent Engineer. • The Independent Engineer shall examine and certify all submissions relating to Asset Register, Equipment Commissioning Certificates (ECC), and payment milestones within a period of seven (7) calendar days from the date of receipt of complete submissions from the Implementing Agency. • Any delay beyond the stipulated timelines shall be escalated by the Implementing Agency to the Authority, whose decision in this regard shall be final and binding.
A.4	Commissioning	• Equipment Commissioning Certificate (ECC) to be approved & issued by Independent Engineer based on validated report and payment of 80% of installed value plus 100% applicable GST will be released to the Agency by the Corporation. The deferred portion of Capital Expenditure payments shall be secured through an escrow mechanism to ensure timely quarterly disbursement of deferred CapEx amounts.

ii. Covering Existing/Retrofitting Stretches

Sl.	Activity Name	Description
A.1	Operation & maintenance of existing /retrofitting light points and related infrastructure/ Accessories	• The Selected Agency is required to carry out operation & maintenance of all existing/retrofitting installed light points from the date of LOI by the Authority.
A.2	Reverification of Installed quantities	• Field level verification of estimated Quantity of Capex in retrofit mentioned in RFP along with the installed quantities of LED and other related infrastructures with quantities mentioned in the Assets creation Register and also to identify the infrastructure Equipment's required for replacement excluding minor items***. • Joint survey report to be prepared and validated by the Executive Engineer, Electrical /AEE(Electrical) of the Corporation and Independent Engineer along with Equipment installation quantities requiring replacement for approval and confirmation of Order for supply & Installation.

A.3	Implementation/ Installation	• After Installation, Prepare and submit the Asset Register to the Corporation and further maintain Asset Register throughout the Project Term. Asset Register to be prepared for all installed infrastructure equipment and to be jointly validated by Corporation, Selected Agency and Independent Engineer. • Selected Agency shall raise Tax invoice for full value of capital expenditure with applicable GST and payment statement as per annexure-5 for 80% of Capital Expenditure with 100% GST based on the above validated Assets register quantities, Tax Invoice and payment Statement to be validated by Executive Engineer, Electrical / AEE (Electrical) of the Corporation and Independent Engineer. The deferred portion of Capital Expenditure payments shall be secured through an escrow mechanism to ensure timely quarterly disbursement of deferred CapEx amounts.
A.4	Commissioning	• Equipment Commissioning Certificate (ECC) to be approved & issued by Independent Engineer based on validated report and also shall release payment of 80% of installed value plus 100% applicable GST to the Agency. The deferred portion of Capital Expenditure payments shall be secured through an escrow mechanism to ensure timely quarterly disbursement of deferred CapEx amounts. • Partial Equipment Commissioning Certificates (Partial ECCs) shall be permitted for both Retrofit and Greenfield works. • The Independent Engineer shall issue a Partial ECC upon completion of each minimum tranche of twenty percent (20%) of the total approved Capital Expenditure value, calculated on executed quantities multiplied by the quoted item rates. • Upon issuance of a Partial ECC, the Authority shall release eighty percent (80%) of the certified executed Capex value for that tranche along with 100% applicable GST. • The balance twenty percent (20%) of the certified Capex value for that tranche shall be paid in equal quarterly instalments over a period of five (5) years. • Such quarterly payments shall commence from the day immediately following the date of issuance of the Partial ECC for the respective tranche and shall not be linked to the date of final project completion. A Final Equipment Commissioning Certificate (Final ECC) shall be issued upon completion of one hundred percent (100%) of the approved scope and submission of the consolidated final Asset Register.

***The Cost of minor infrastructure items required for O & M purposes (which include but are not limited to 3 Way Connector, GI Reducer, Piercing Connector, Pole Mounting Clamp bolt, PVC tape, 2core x10 Sqm service Cable, 1Cx1.5 sq mm Cu Cable, Arm Bolt, Bimetallic Clamp or Tape, LED Driver, SPD and PCB) are to be included in the quoted annual O&M charges. No additional charges shall be payable for any quantity or quantities of minor infrastructure accessories over the entire O&M period of 5 (five) years.

3.2 Operation & Maintenance of Public Street Lighting System

The Project shall include supply, implementing, commissioning, operating and maintaining the Project in accordance with the terms of this Agreement. If required, the Selected Agency shall install/

replace the LED fixtures and feeder panels in case of 100% damage and not in repairable condition. The replacement shall happen with due approval from the only competent Authority of BMC in accordance with the Equipment Installation Plan

- a. Initial survey with GPS tagging of each fixture.
- b. The Selected Agency is required to carry out operation & maintenance of all existing/ retrofitting installed light points from the date of issuance of LOI.
- c. With immediate effect from the Commencement Date, the Agency shall undertake field surveys of the street lighting fixtures covered in the Project Area to accomplish the following:
 - i. Understand the physical layout and single line diagram of various circuits and validate the type and quality of fixtures installed thereon.
 - ii. Assess the feasibility of metering and clubbing independent circuits for optimizing the number of switching points where feeder panels, including meters, are to be installed if required.
 - iii. The Agency shall undertake the preparation of an asset database and the marking of poles in accordance with the nomenclature as provided by the authority.
- d. Furthermore, upon BMC's approval of the metering plan for a particular switching point, the Agency shall undertake the implementation of the proposed metering arrangement by installing the feeder panel comprising the metering equipment housed in a separately openable and sealable compartment. For switching points where the meters to be installed by the Agency are to be considered as energy billing meter by TPCODL, the Agency shall ensure that such meters adhere to the specifications notified by TPCODL and are tested in TPCODL's meter testing labs, and are installed and sealed in accordance with TPCODL's procedures. BMC shall assist the Agency in coordinating with TPCODL to finalise the technical specifications for such meters, have such meters tested in TPCODL labs, and install and seal such meters on the respective switching points.
- e. Upon installing the feeder panels and meters on the switching points, the Agency shall coordinate the TPEA as elaborated along with the Independent Energy Auditor and BMC
- f. Operating and maintaining the street lighting fixtures and CCMS boxes or feeder panels, including making replacements during the Term of the Project, in line with good industry practice and relevant applicable standards.
- g. The Agency shall also be responsible for Operation and Maintenance of any new light fixtures (greenfield project) installed by BMC in any stretches over and above the number of light fixtures as provided in the RFP.
- h. Deputing qualified staff to carry out installation and maintenance of energy efficiency technologies during the Term of the Project.
- i. Ensuring compliance with all safety standards as per CEA Regulation 2023 and fulfilling all statutory obligations in respect of the deployed staff at its own cost during the Term of the Project.
- j. Establishing a central monitoring center for remote operations and monitoring of the entire population of handed over points; such monitoring center shall also host a call center facility for logging and tracking resolutions of citizen complaints regarding street lighting.
- k. Reporting the performance and functioning of street lighting systems covered under the

Project to BMC on a daily/weekly/monthly basis in accordance with the stipulated procedures.

- l. Transferring all the street lighting system along with fittings in working condition to BMC at the end of the Term.
- m. All necessary & additional equipment/plant and machines as deemed necessary & required as per the project requirement shall be mobilized by Agency at his own cost.
- n. The equipment/plant & machineries shall be installed & operated by the Agency at his own cost.
- o. The Agency shall schedule interruptions of street lighting service in a manner that minimizes such interruptions. Scheduled interruptions of street lighting service shall not exceed twenty four (24) hours at a given time.
- p. If any infrastructure equipment/accessories/cables are required for replacement during the operation & maintenance, installation is to be carried out after obtaining proper approval of installation and validation process from concerned authorities and the capital costs for the same shall be included in the Operation & maintenance costs only. No separate payment shall be made for the same apart from the items as mentioned in the BoQ.
- q. The Agency shall give guarantee that the BMC and Equipment supplied under the Contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials. The Agency shall provide guarantee covering the rectification of any and all defects in the design of System and Equipment, materials and workmanship for a period of Five (5) years from the date of commissioning. The Agency shall transfer all the Guarantees of the different components to the Beneficiary. The responsibility of operation of Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and BMC will not be responsible in any way for any claims whatsoever on account of the above.
- r. The Agency should give Guarantee against any manufacturing defects from the date of commissioning up to end of the contract period. For any manufacturing defects, bidder shall replace defective parts at free of cost during the CMC period and shall keep the system functional.
- s. Pruning / tree trimming wherever needed to maintain the adequate illumination.
- t. All the green garbage generated shall be dumped at the BMC designated places by the Agency.
- u. Any damage to public property during the execution of work or maintenance services shall be rectified by the Agency at its own cost.
- v. Establish Central Control and Monitoring Centre (CCMC) to provide centralized control & monitoring of streetlights from a single control center and shall be capable of controlling, monitoring and analyzing the details at light feeder Panel level (switching point level).

Central Control and Monitoring Centre (CCMC) & Automation System shall be comprised of automation controller, server cluster, control center, enterprise middleware system, enterprise Management wireless Central Information System and call center.
- w. At all time during the contract period, the selected Agency shall maintain the minimum stock list as per the items mentioned in **Schedule - 5**.
- x. Deployment of hydraulic cranes/ ladders and other tools and equipment as mandated in the

RFP.

- y. Deployment of qualified/ trained personnel specific to the Corporation for monitoring, inspection, maintenance, repair, replacement, citizen complaints handling related activities and for manning of CCMS and the data center at Corporation (computer & web server).
- z. Daily, weekly and monthly reporting on citizen complaints, operating status, replacement/ repair activities, energy consumption etc. of the Public Street Lighting System.
- aa. Support and/ or undertake various quality monitoring tests on the Public Street Lighting System in accordance with terms of RFP/ Contract.
- bb. Ensure compliance with all environment and safety standards and fulfil all statutory obligations in respect of deputed staff at its own cost for full project duration.
- cc. Ensure knowledge transfer and training to the Authority, staff of the Corporation for operation and maintenance of the Equipment implemented under the Project.
- dd. Handing over of fully functional Public Street Lighting System and CCMS along with updated Asset Register to the ULB at the end of project tenure.

The Cost of minor infrastructure items required for O & M purposes (which include but are not limited to all LED lamps, 3 Way Connector, Piercing Connector, Pole Mounting Clamp bolt, PVC tape, GI Arm, I-Hook (complete set), GI Strip, GI reducer, Repairing of CCMS Panel, Repairing of Feeder Pillar Panel, Repairing of JB, Service cable (3Cx10 sqmm. cu Cable for LED to JB or CCMS panel) etc. as per the site requirements) Arm Bolt, Bimetallic Clamp, extension bracket clamp if required, PVC tape etc. as required) and are to be included in the annual O&M charges. No additional charges shall be payable for any quantity or quantities of minor infrastructure accessories over the entire O&M period of 5 (Five) years.

O & M fees to be payable by the Corporation on monthly basis to the selected agency at the quoted per LED

The indicative number of stretches along with the LED light fixtures have been mentioned in Appendix-1 of Terms of Reference (ToR).

Note:

- i. **Before the completion of work, the safe keeping of materials is Agency's responsibility.**
- ii. **Additional cooping or concreting as per site condition should be certified by BMC engineer in charge.**
- iii. **Watch and ward of the installed Street lights along with its accessories shall be the responsibility of the Agency.**
- iv. **The Bidder is required to:**
 - (a) submit item-wise quote for the various Items and Equipment as specified in Technical Specification.
 - (b) submit annual Operation & Maintenance Fee on per luminaire basis for maintenance in new installed light points in new stretches/Greenfield and maintenance of existing street lighting infrastructures/in existing retrofitting light points.
 - (c) Quantities as mentioned in the Financial Proposal pertains to the existing number of streetlights, however, any new installation of the streetlights shall be added to this list of streetlights for O&M.

3.3 Maintenance activity schedule

The obligations of the Agency in respect of Maintenance Requirements shall include repair and rectification of the Defects and deficiencies specified in table of this Schedule within the time limit set therein.

Sl. No.	Maintenance Activity	Frequency
1.	Inspecting, checking, elementary testing, cleaning, lubricating and performing minor repairs on all Roadway Lighting System Components including luminaires, lighting brackets, wiring, poles, frangible and safety bases, pads and footings, lowering and raising devices, distribution assemblies, cabinets and power supplies on a regular basis.	On regular basis
2.	Visual inspection and repair of all grounding and bonding connections and terminations as part of the re-lamping cycle.	On regular basis
3.	Check that all connections and terminations are tight; and that wires are not corroded, frayed, or broken.	On regular basis
4.	Testing, repair and replacement of faulty components on all Roadway Lighting System Components including luminaires, lighting brackets, wiring, grounding, poles, pole bases, frangible and safety bases, pads and footings, lowering and raising devices, distribution assemblies, cabinets, External feeder Pillar, Earthing, Earth strips, LA on Masts, Aviation lighting on High Masts and power supplies a minimum of quarterly in every years. Luminaires that are replaced should be replaced with luminaires of similar photometric performance, or as directed by the Authority.	On regular basis
5.	Perform ground resistance testing at each power supply ground electrode, light post, luminaries, switchgear components a minimum of Four times in every year.	Every 3 months
6.	Lumen measurement every 1 year. The Lux level shall be maintained as per BIS. Suitable measures shall be taken to maintain the same if it continues to drop.	Every 1 year

3.4 Installed Street Lighting Fixtures for O&M

Type of LED Luminaries	No.s (Tentative)
16 W	2956
45 W	34321
70 W	12192
60 W	17264
90 W	3789
100 W	547
110 W	4793
120W	3589
220 W	117
250 W	67

However, Comprehensive maintenance shall be (Including AMC and O&M) of all LED luminaries, Poles, CCMS feeder pillar Panels and other relevant equipment ancillary to the street lighting avail across all stretches as per the technical specification mentioned in the RFP including routine, preventive and breakdown maintenance including repair/ replacement of worn out items with minimum down time and warranty and guarantee of repaired/ replaced parts.

The above-mentioned list is indicative one. The list shall be finalized after the joint survey by the Agency and BMC along with Asset marking.

4. Site Visit

Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting or quoting their tenders about the nature of the work and site situation, environments, facilities available, position of material and labour, means of transport and access to Site (so far as is practicable), the form and nature of the site, and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. No claim will be entertained later on the grounds of lack of knowledge of any of these conditions.

Bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract document. Submission of a tender by tenderer implies that he has read these instructions and all other contract documents and has made himself aware of the Scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

5. Tools & Tackles, Equipment, Machinery and Manpower

The successful bidder shall provide necessary tools, tackles, equipment, machinery, Lux meter, earth Tester, Clampon meter, megger and manpower for the operation and maintenance of LED light fixtures as per Schedule 3 & 4. Watch and ward responsibilities for these tools, tackles, equipment, and machinery shall be under the bidder's scope. The bidder is responsible for timely insurance of the machinery, its maintenance and manpower and its related costs.

Logistics support such as requirement of Hydra, Vibrator machine, Pole master shall be under the scope of the Agency.

6. Approval of Sample

Samples of all materials to be supplied by the Agency and to be used in the work shall have to be approved by the Engineer-in-Charge and checking the quality of such materials shall have to be done as directed by Engineer-in-Charge prior to utilization in the work.

Prior to installation of the Poles, lights, cables, testing at factory level shall be inspected in the presence of BMC authorized engineers. Expenditure for the same shall be borne by the selected Agency.

7. Rejection Of Materials

All materials brought to the site for use in the work shall be as per the specification of relevant item of work as per attached schedule. All materials brought to the site must be approved by the BMC prior to use in the work. Rejected materials must be removed by the Agency from the site within 24 hours of the issue of order to that effect. In case of non-compliance of such order, the Engineer-In-Charge

shall have the authority to cause such removal at the cost and expense of the Agency and the Agency shall not be entitled to claim for any loss or damage of that account.

8. Agency's Site Offices

The Agency shall construct his own offices, stores, godown etc. by providing all labour, materials etc. during the service tenure at his own cost and shall also demolish and remove these structures making the area perfectly clean as per direction of the Engineer-in-charge at his own cost during the service tenure.

9. Emergency Work:

If, Given Bhubaneswar's susceptibility to floods, cyclones & any other natural calamities, the bidder is required to promptly respond during such events. The bidder must prioritize restoration of power and work diligently in any emergency situation to ensure continuity of services and minimal disruption to operations.

10. Asset Ownership

10.1 Existing Lighting Facilities

BMC (and/or other relevant government authorities, as applicable) shall at all times during the Term remain the owner of the land and the Existing Lighting Facilities, with the exception of certain poles which are owned by TPCODL.

The Agency will not be liable for any liability in relation to the Existing Lighting Facilities existing prior to the Commencement Date or arising from any event or circumstance that occurred prior to the Commencement Date.

10.2 Newly Installed Equipment and Systems

All rights and titles to and interests in all improvements and equipment constructed, or systems installed are vested in BMC. The Agency shall surrender possession of the said equipment and systems to BMC in good and repairable condition. All LED luminaries/ fixtures and CCMS boxes replaced by the Agency must be in glowing conditions with specified lumens as on handover date.

10.3 Buyback of Existing LED fixtures and cables with accessories:

The buyback of only damaged fittings LED fixtures is crucial for cost efficiency and environmental responsibility. Bidders must account for the residual value of the only damaged fittings LED fixtures, cables and accessories while submitting their tenders. This involves evaluating the condition and market value of the fixtures to be replaced along with dismantling and deducting this from the overall project cost. The buyback process provides financial relief and promotes sustainable practices through recycling and proper disposal of old fixtures. This approach ensures that both economic and ecological factors are considered, aligning with broader environmental objectives. **All bidders are required to quote the price considering the buyback of the existing damaged LED fixtures, cables, poles etc. No dismantled material shall be dumped at the site/ roadside or government land without approval.**

11. Representatives

11.1 BMC Representative

BMC may from time to time replace its Representative by notifying the Agency (to be effective upon receipt by the Agency).

The BMC Representative shall have full authority and power to represent and act for BMC at all times during the Term. All notices, instructions, orders, certificates, approvals and all other communications under this Contract shall be given by, and to, the BMC Representative unless BMC notifies the Agency otherwise.

11.2 The Agency Representative

The Agency Representative shall have full authority and power to always represent and act on behalf of the Agency during the Term, including for sending or receiving notices, instructions, information and all other communication in relation to this Contract.

The Agency shall not revoke the appointment of the Agency Representative without notifying BMC of the new Agency Representative.

12. Payment Schedule

The Bidder will be required to quote, in its Financial Proposal, the Rate for each Item / Equipment to be deployed for the Corporation and the Annual Operation & Maintenance Fee on per luminaire basis for existing luminaries. The cost of O&M shall be included in the capex for newly installed lights and other Assets. No additional O&M charges shall be paid for such fixtures which is installed by the selected Agency. O&M cost shall only be paid on the already installed lights of BMC which is being handed over to the selected Agency for the purpose of O&M.

The Item / Equipment Rate (**hereinafter referred to as Item Rate**) shall be based on an ex-works basis at the Corporation and shall be inclusive of any applicable taxes, duties, cess, other levies etc. and any other cost associated with supply, installation and commissioning of the Equipment including transportation, storage and handling of Equipment. GST on the Equipment shall be allowed additionally at applicable rate. The Item Rate shall remain firm for a period of 5 (five) years term from the date of execution of the SIOM Agreement. Based on the Item Rate quoted by the Bidder, the Total Capital Expenditure will be calculated as and when quantities of various items are installed.

The Annual O&M Fees to be charged by the Bidder, on a per luminaries' basis, for undertaking the O&M of the Project for the entire term of the SIOM Agreement shall be automatically computed based the quoted per light point / luminaire rate.

The Item Rate, Total Capital Expenditure, O&M Fee and the Annual O&M Payment will be rounded off to the nearest rupee. For both Capital Expenditure and O&M Fees, applicable GST shall be payable extra at actuals.

12.1 Payment for Operation & Maintenance Cost

- a. The maintenance fee shall be paid monthly basis for which the agency needs to raise monthly invoices of the amount equal to 1/12 of the total amount as quoted for that year by the Agency and as accepted by the Authority.
- b. The quoted O&M Fee per year per street lighting fixture, inclusive of LED fixtures, will be

determined by the bidder.

- c. The Operations and Maintenance (O&M) Fee is calculated for each existing street lighting fixture that has been installed and is in use as well as the new streetlights installed. This fee covers the costs associated with operating and maintaining the fixtures as per the mentioned standards during the tenure of the contract.

d. 5% bonus on the monthly O&M Payment for achieving >98% uptime

e. 5% penalty on the monthly O&M Payment for <95%

12.2 Capital Expenditure Payment for new/greenfield stretches

Payment amounting to 80% of the total Project Capital Cost, to be paid by the Corporation to the selected Agency for installed quantities in Greenfield/new stretches, in accordance with the terms of the SIOM Agreements.

Balance 20% to be released on quarterly basis over 5 Years Period.

Partial Equipment Commissioning Certificates (Partial ECCs) shall be permitted for both Retrofit and Greenfield works. The Independent Engineer shall issue a Partial ECC upon completion of each minimum tranche of twenty percent (20%) of the total approved Capital Expenditure value, calculated on executed quantities multiplied by the quoted item rates.

Upon issuance of a Partial ECC, the Authority shall release eighty percent (80%) of the certified executed CapEx value for that tranche along with all applicable GST. The balance twenty percent (20%) of the certified CapEx value for that tranche shall be paid in equal quarterly instalments over a period of five (5) years.

Such quarterly payments shall commence from the day immediately following the date of issuance of the Partial ECC for the respective tranche and shall not be linked to the date of final project completion.

A Final Equipment Commissioning Certificate (Final ECC) shall be issued upon completion of one hundred percent (100%) of the approved scope and submission of the consolidated final Asset Register.

13. Technical Interventions

The LED Public Street Light System Project envisages to introduce the following technical interventions

Sl.	Intervention	Description
T1	LED Streetlighting infrastructure components	Installation of complete LED Public Street Lighting System
T2	Automation of Public Street Lighting System	Feeder panel installation and automation along with individual level light monitoring in the required wattages.
T3	Operation & control	Setting up of CCMS at Municipal Corporation level or centralized operation, monitoring, controls, complaints management etc.

T4	Operation & Maintenance	Undertake operation and maintenance of the Public Street Lighting System over 5-year term post-installation including rehabilitation / replacement works required to be performed and also maintain updated Asset Register for and on behalf of the Corporation.
T5	To maintain the prescribed Light levels	To maintain the lighting levels in accordance with Lux Levels as set out by relevant standards for different road groups

Timeline for individual Milestones for Survey, Installation, Validation, Commissioning & Payment of Uncovered/Greenfield and Existing/Retrofitting Stretch:

Sl.	Activity Name	Description	Timeline (Days)
A.0	LOA	LOA issued to Bidder	T1
A.1	Submission of Performance Guarantee	Performance Bank Guarantee to be submitted to the Corporation which shall be valid for 5 Years plus 3 months or till the completion of the contract whichever is later.	T2=T1+7

A.2	Joint Survey and Validation	Joint Survey with Validation Report to be completed (Agency+ Independent Engineer+ MC's—Representative) for Greenfield & Retrofitting Stretches. Detailed survey of proposed stretches (with GPS co-ordinates, Road Class) as per prescribed format based on the estimated Quantities indicated in the RFP to be undertaken by the Implementing Agency and MC's Officials and simultaneously duly verified and validated by the Independent Engineer with confirmation of the Power supply availability for all stretches. Independent Engineer will prepare Equipment Installation Plan (EIP) and derive the Project Cost based on the Bill of Quantities (BoQ) derived from joint survey and the unit rate quoted by the Selected Bidder and same shall be submitted to the Corporation.	T3=T1+21
A.3	Execution of SIOM Agreement	Supply, Installation, Operation & Maintenance (SIOM) Agreement to be executed in between Authority and Implementing Agency,	T4=T3+7
A.4	Mobilisation, Installation & Commissioning	Start mobilisation and simultaneous installation, commissioning and related operation.	T5=T4+60
A.5	Validation by ULB & IE	During installation, independent engineer/BMC shall verify and validate the quantity and quality of installations in Retrofitting & New/ Greenfield Stretches. Installed quantities as mentioned in Assets Register submitted by Agency, shall be verified and validated jointly by the Agency, Corporation's officials and Independent Engineer. - Independent Engineer will be responsible to commission the Asset Registers within 7 days of receipt. - Any further delay beyond timelines shall be escalated to the Authority for resolution.	T6=T5+15
A.6	Submission of Documents by Agency for Issue of ECC & Payment released	Submission of Validation Report, along with Invoice and Payment Statement duly approved by Executive Engineer, of the Corporation,	T7=T6+3

A.7	Equipment Commissioning Certificate & final Payment	ECC Certificate to be issued by Independent Engineer and release of final payment (80%) of CAPEX to Agency.	T8=T7+7
		Total	T8=T1+113

In the event of failure to achieve the intermittent timelines specified above for reasons attributable to the Agency, the Authority reserves the right to impose the Liquidated Damages as specified in the Clause 19 of the RFP. However, a grace period of 7 days shall be allowed before imposition of penalty. In the event the delay is beyond 30 days of the specified timelines the Authority reserves the right to issue notice and terminate the contract including forfeiture of the Performance Bank Guarantee.

Automation and Centralized Control & Monitoring System (CCMS) at Municipal Corporation level: Setting-up and commissioning of CCMS at Municipal Corporation level for both Greenfield/new stretches and Retrofitting Stretches including communication systems for remote connectivity with feeder panels, computer systems, servers, internet connectivity, software systems & tools.

14. Performance Review and Reporting

The Agency's performance would be reviewed periodically and monitored through the report submitted every month. During the Term, the Agency shall provide monthly reports to BMC about the following matters:

- i. Update on the assets
- ii. Operation and maintenance services.
- iii. Meter reading report.
- iv. Lamp failure report; and
- v. Fixture replacement report.
- vi. Monitoring and verification report.

If the Agency does not issue monthly reports within ten (10) days of the end of the relevant month for any three (3) months or there is major false information in more than three (3) reports during the Term of the Contract, this breach shall constitute an Agency Event of Default.

In addition to the reports mentioned in Article, the Agency shall provide daily reports during the entire Phase.

If the Agency does not issue daily reports for three (3) consecutive days or for more than ten (10) days in a Financial Year, this breach shall constitute an Agency Event of Default. The Report shall contain the problems encountered & solutions undertaken thereon and recommendations for future along with safety measures adopted and risk management.

Any correction/ modification/ alteration to the operation and maintenance suggested by the Authority shall be done promptly by the Agency and reported to the Authority within the time limit as set by the Authority.

A draft Reporting Format shall be prepared by the Agency and shall be finalized in consultation with the Authority.

15. Facilities not to be provided by the Authority:

Attention is drawn to the following items which are to be arranged by the Agency at his own cost.

a. Transportation of the manpower deployed in the field will be the responsibility of the Agency. Further, the Supervisor and the manpower for the maintenance work shall have to be positioned at their respective sites.

b. The Agency shall be responsible for making its own arrangements for the repair and maintenance of equipment.

16. Commencement And Duration

Sl.	Activity Name	Description	Timeline (Days)
1	LOI	LOI issued to Bidder by BMC	T1
2	Submission of Performance Guarantee	Performance Bank Guarantee to be submitted to BMC which shall be valid for 7 years or till the completion of the contract whichever is later.	T2=T1+7
3	Execution of Agreement	Operation & Maintenance Agreement to be executed between Authority and the Implementing Agency	T3= T2+7
4	Joint Survey and Validation	Joint Survey with Validation Report to be completed (Agency+ BMC Representative) for Streetlight Stretches. Detailed survey of proposed stretches (with GPS co-ordinates, Road Class) as per prescribed format based on the estimated Quantities indicated in the RFP to be undertaken by the Implementing Agency and BMC Officials and simultaneously duly verified and validated by the BMC with confirmation of the Power supply availability for all stretches. Field survey and identification of switching points wise the street lighting stretches/ feeders to be covered under the Project. Identification of actual street lighting fixtures and CCMS box wattage wise that are to be covered under the Project from those covered under the Project Area to be done at this stage based on a feasibility assessment;	T4=T2+21
5	Identification and Control room	The activities in this phase must be conducted on a per switching point basis and include: ➤ Completion of pole marking/ asset marking in accordance with nomenclature requirements identified in Schedule 3; ➤ Completion work related to metering/ feeder panel/CCMS box installation on identified switching points. Such meters must adhere to the specifications notified by TPCODL, are tested in TPCODL's meter testing labs, installed and sealed in accordance with TPCODL's procedures; ➤ Handover of all identified street lighting fixtures and switching points by BMC to the Agency ➤ Establishment of an in-house control room.	T5=T2+21
6	Replacements of the LED fixtures	➤ Replacement of all approved different watts LED fixtures and completion of all work in case of 100% damage and not in repairable condition. ➤ The replacement shall happen through buyback system with due approval from the only competent Authority of BMC in the mentioned streets as per the schedule outlined in this RFP.	T6=T4+30
7	O&M (5 years)	➤ The Selected Agency is required to carry out operation & maintenance of all existing/retrofitting installed light points from the date of issuance of LOI by the Authority.	T7=T3+5 years

17. Employees And Training

BMC shall remain the principal employer of the municipal employees working for BMC's street lighting department. Such employees may or may not, at the Agency's sole discretion, be seconded to the Agency for a specific duration and under terms and conditions to be agreed upon between the Parties. The Agency has no obligation under this Contract to employ directly or indirectly any municipal employees.

Notwithstanding the preceding paragraph, the Agency shall train the employees of BMC's street lighting department to operate, maintain and repair the equipment and systems installed by the Agency. Training shall include both classroom and a practical instruction. Course materials shall include the Agency's supplied operation and maintenance plans and manufacture manuals.

18. Scope Expansion & Appointment of Independent Engineer.

For any item or scope not covered under the original Bill of Quantities (BOQ), the Authority shall undertake a transparent price discovery process in accordance with applicable procurement norms.

The L1 price so discovered shall first be offered to the existing Implementing Agency, which shall have the right of first refusal to execute the additional scope at the discovered L1 price.

In the event the Implementing Agency declines to match the L1 price, the Authority shall have the discretion to award the said scope to any other eligible agency.

The decision of the Authority in this regard shall be final and binding on all parties. Independent Engineer Scope for LED Public Street Lighting Systems:

- i. Independent Engineer (IE) shall be appointed by the Authority, through open tendering process for the LED Public Street Lighting project in the Corporation.
- ii. Independent Engineer shall be engaged for 100% verification and validation of all the stretches, quantities of the Joint Survey Report submitted by the selected agency for both Greenfield and Retrofitting stretches.
- iii. Independent Engineer will prepare Equipment Installation Plan (EIP) and derive the Project Cost based on the Bill of Quantities (BoQ) derived from joint survey and the unit rate quoted by the Selected Bidder and same shall be submitted to Corporation for approval.
- iv. During installation, independent engineer shall verify and validate 100% of the quantity and quality of installations in Retrofitting & New/ Greenfield Stretches. Installed quantities as mentioned in Assets Register submitted by Agency, shall be verified and validated jointly by the Agency, Corporation's officials and Independent Engineer.
- v. Independent Engineer will be responsible to commission the Asset Registers **within 7 days** of receipt. Any further delay beyond timelines shall be escalated to the Authority for resolution.
- vi. Selected Agencies are required to comply with the observations of the IE pointed out during the verification at the time of installation.
- vii. All documents relating to quality of material as per Technical Specifications including and not limited to Manufacturer's Report, Test Certificates, Lab Reports, Warranty Certificates etc., as required by the Independent Engineer must be submitted by the Agency. Asset Register will be validated by the Independent Engineer in terms of above.

- viii. The Independent Engineer shall also verify each of the Vehicle-mounted Hydraulic lifts as for its physical presence and check all procurement documents in this regard and validate the same for issuance of Equipment Commissioning Certificate for these Hydraulic Lifts.
- ix. The Independent Engineer shall also verify the physical presence and configuration and operations of Data Centre (Computer & Web server) and the Software installed for Asset Management and Predictive maintenance of the public street lighting infrastructure as per the Technical Specifications attached as separate sheet as “Annexure P” and further check and certify its integration with existing PSL CCMS infrastructure and generation of all necessary Output Reports for the installations in both new/greenfield stretches and existing /retrofitting stretches..

The fees of the independent engineer shall be paid by the Corporation based on the conditions mentioned in Tender/Agreement with selected Independent Engineer.

19.Delay Liquidated Damages

Where the Agency fails to complete the Services within the Timeline provided under **Clause 13 & 16**, BMC shall be entitled to receive Delay Liquidated Damages as follows:

In the event the Agency fails to finalise the activities within the Timeline stipulated in **Clause 13 & 16**, the Agency shall be liable to pay BMC Delay Liquidated Damages of an amount equal to Rupees Twenty thousand only (Rs. 20,000/-) for each week of delay, subject to a maximum delay of eight (8) weeks. In the event the activities are not finalized by the Agency within the maximum delay of eight (8) weeks after the Timeline stipulated in Article Section-3, clause 24, this breach shall constitute a Agency Event of Default and BMC shall be entitled to terminate this Contract in accordance with Article.

Alternatively, BMC reserves the right to avail the from elsewhere /other Agency at the sole risk and the cost of the successful bidder/Agency and recover all such extra cost incurred by Authority in avail the services from resources available including EMD/ Bid Security/ encashment of bank Guarantee/Security Deposit or any other sources etc.

And also, BMC reserves the right to cancel the order completely or partly without any prejudice to the exercise of the action under causes above.

20.Penalty for Non-Compliance to Minimum Up-Time

20.1 In the event that the O&M Services do not meet the standards set out in Schedule, then the Selected Agency shall pay to the Authority liquidated damages in the following manner:

The Agency shall be responsible for maintaining the handed over street lighting fixtures under each switching point in good working condition and shall ensure that the non-working lamp hours on each switching point are maintained within acceptable limits at all times during the Term.

All street lighting faults arising out of failures or malfunctioning of equipment installed by the Agency shall be cured within a period of forty-eight (48) hours after the failure or malfunctioning is reported to BMC. Failure of the same shall result in a penalty of one thousand Indian Rupees (Rs. 1000 only) per street lighting fixture per day till defect is rectified and proof of rectification submitted to the satisfaction of competent authority. If the Agency does not rectify the same within seventy-two (72) hrs, BMC may proceed with such

rectification and deduct the cost of such work with penalty from the Agency's payment.

The Agency shall be liable to pay penalties for any loss of functional lamp hours on each switching point if such non-functional lamp hours exceed five per cent (5%). For every slippage of one per cent (1%) in non-functional lamp hours beyond the acceptable limit of five percent (5%), the Selected Agency shall pay Authority an amount equivalent to Five (5) percent of the value of monthly O&M Fees, in accordance with the following:

Penalty for non-compliance to non-working lamp hours= % Slippage X 5% of Monthly O&M Fee Amount

The following shall be the formula for determination of percentage of non-functional lamp hour:

$$\% \text{ non-functional lamp hours for a switching point} = \frac{\text{non-functional lamp hours}}{\text{total on hours} \times \text{No. of fixtures}}$$

- 20.2 Penalties for non-availability of maintenance team/s ₹20000 per month per team (non-availability for more than 5 days in any calendar months).
- 20.3 Bidder to ensure that each maintenance team must comprise qualified personnel i.e. at least 1 technician and 3 helpers per 4000 lights. In case the total amount of penalties mention above exceeds the amount of maximum provision under liquidated damages, BMC reserves the right to recover the same from PBG. However, in any case penalties cannot be more than the contract value. liquidated damages, In any case penalties cannot be more than the contract value.

Schedule 1

Technical Specifications of the Project

i. Minimum technical specifications for LED Luminaires

a. Requirement

Parameter	Requirement
Distribution of Luminaire illumination.	45 Watt, 70 Watt, 90 Watt, 120 Watt, 200 Watt, 250 Watt Luminaire

b. Detailed Minimum Technical Specifications for LED Luminaires

Parameter	Specification/Type of Test	Test Methods/ Standards
LED Packages		
LED Sourcing	Identical LED Packages, quoted below, are to be used in all luminaires of any given wattage rating (Make, Order Code/Part Number, Operating current and LUMINOUS EFFICACY at OPERATING CURRENT). Any changes in parameters of LED Packages (Ceramic package), w.r.t the details given by the bidder in the technical bids, will be treated as changes in design and such changes are allowed only with prior written concurrence of Authority.	
Operating Current of LED (Design)	• <70% of rated maximum forward current, in the range of 350 to 1000 mA. (having LM80 approval on this current rating) • Bidder to mention the details of Make and Order Code/Part Number of LEDs along with design operating current.	Bidders should submit LM 80, TM 21 data that current
Individual LED Wattage	• Maximum wattage of individual LEDs should be 1 W to 5W • Wattage of individual LEDs at operating current (Design) should be $\geq 1 \text{ W}$ & $\leq 5 \text{ W}$.	LM-80/ISI6105 report MRA/ technical data sheet of LED Chip from ILAC/ NVLAP/ test including TPL KOLASI EPA International Certifying Agencies
Luminous Efficacy	• ≥ 190 Lumens/watt (at T_j 85° C & at Operating current (Design)) Bidder to specify number of LED Packages which will be provided in each Luminaire (to be mentioned for each Luminaire rating) along with the wattage and luminous efficacy of LED at operating current.	
LED Source	• CREE, Nichia, OSRAM, Lumileds	
Color Rendering Index (CRI)	>70	
Lifespan of LEDs & Lumen depreciation	$\geq 50,000$ Hours (at operating current (design) & lumen depreciation less than 30% over the lifespan of 50,000 hours; (Submit L70 & TM 21 Test Report)	
Luminaire		
Wattage Rating	Bidder to mention the design wattage of Luminaires offered	
System Efficacy (Lumen/ watt)	> 150 Lumens /W	
CRI of Luminaires	>70	

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

Co-related Color Temperature of the Luminaire	Between 5000°K to 5700°K (ANSI)	LM 80/IS 16106-2012 from NABL certified TPL
Frequency	50 Hz +/- 3%	
Power Factor	>0.95	
Light Uniformity Ratio (Emin/Eavg),	As per BIS 1944 for given road type Based on IES File generated by IES: LM 79/ IS 16106 Testing	
Operating Voltage Range	140 V to 270	Test report from TPL NABL Accredited Lab
Surge Protection	- Driver internal surge protection of 4 KV (Applicability IS 15885, Driver Safety 16104-1/2); IEC61000-4-5. - External SPD for each fixture to be >minimum up to 20 KV/ 10 KA (As per ANSIC 136.2-2014), to be separately installed with each fixture.	
Driver efficiency	>85%	
Driver Life	≥ 15,000 Hrs Constant current potted driver Driving current 300 mA to 700 mA EMI & EMC Compliance of driver	
Luminaire body temperature rise	≤ 30°C from ambient (45°C) with tolerance of 100C after 24 hours of operation (NABL report to be submitted). - Solder point temperature, after 24 hours of continuous operation shall remain stable and within junction temperature. - Thermal Test Reporting as per ANS/UL 1598-2012 third edition to be provided before start of supplies.	
Heat Sink temperature rise above ambient	- Maximum Temperature point on LED Array shall not exceed Junction Temperature (specified in LM 80 report at which life >50,000 hours) - Submit design/ drawing indicating temperature point of LED array	
Operating Temperature	0°C to + 55°C	
Humidity	10% to 90 % RH	
Luminaire body	- Single housing construction side entry type made of corrosion free extruded Aluminum/High Pressure Aluminum die cast conforming to IP 66, grey color corrosion resistant polyester powder coating with separate optical and control gear compartments, fixing arrangement and maintenance friendly for all luminaires. Should be easily replaceable at field conditions. - Protection safety as per IEC 60598/ IS 10322.	TPL NABL Accredited Lab Test Report as per IS:10322 part 5 Sec-3 /IEC:60598-2-3
Lens/Lens module for LEDs	LED Lights shall be provided with Lenses/Lens modules. Lens should be of material resistant to de due gradation during service, to atmospheric components, to avoid adverse impact on light output.	
Cover Glass / Lens Cover	- Cover Glass - Distortion free, clear, heat resistant, toughened, UV stabilized glass; - Lens Cover - Lens should be of material resistant to de to due gradation during service, atmospheric components, to avoid adverse impact on light output.	
Cover Frame	Aluminum pressure Die Cast/Polycarbonate cover fixed to the housing by means of stainless steel screws.	
Outreach Arm Compatibility	Outreach Arm with Diameter of Range 40 mm to 50 mm -	CONFIRM

Earthing of Luminaires	The provisions of IS-3043, may be referred to in general and to Clause no. 21.3, 21.4 and 32.5 of the said IS Specifications in particular. Successful bidder may carry out, at his own cost, earth resistance measurement of neutral conductor of supply network during the initial commissioning phase and subsequently on yearly basis or as may be felt necessary for reliable operation of the Light Fixtures by taking up appropriate measures.	
Impact resistance	Luminaire shall be built in such a way that it can withstand windspeeds up to 180 Kmph	NABL lab report for impact resistance > or = IK10

ii. Technical Specifications for Feeder Panels

Parameter	Specifications / Details
Board Operational Features	Feeder panels should have GPRS/GSM based remote streetlight monitoring system with capacity for self-protection from short-circuit, over voltage and anti-theft alert.
	Street light controller installed in feeder panel should be provided with special emergency on/off facility with wireless control and to generate SMS alerts.
	Street light controller should be able to communicate with Central Control and Monitoring Centre (CCMC) in case of power failure and provided with battery backup for minimum 4 hours.
	Principle equipment should be designed on the basis of 'Lossless Series Reactance with compensation' technology ensuring efficiency of such principle equipment should not be less 99.4% between 50% - 110% of loading.
	Other than basic switching components, no other moving parts are allowed to be installed in the feeder panel.
	Provisions to be made to protect the technologies and all components of feeder panels even if quality of power supply at the feeder level is not as per standard of performance and supply code regulations of utility.
Rating & Switching Components	AR the principle equipment's along with input output switchgears, metering. Switches (by-pass and tp changers), contactors, fuses, auto transformer coils etc. should be of reputed manufacturers like Siemens/ABB/Schneider/GE/TAS etc and should meet best engineering practices and norms as applicable in IS 8623 for LV switchgear and control assemblies, IEC: 60947-1&4 7 IS:13947-1&4 IS 8828: 1996/ IEC 60898-2002. IEC 60947-3 standards and other relevant standards.
	Each feeder Panel is equipped with automatic street light controller compatible with GPRS / GSM or Suitable protocol at individual panel level. Controller would perform meter reading, switching, data logging, Communication and control as per remote instructions from Central Control and Monitoring Centre.
	Qualified Bidder/ Project SPV may optimize the number of feeder panels by clubbing more than one (1) switching points on a single Feeder Panel. However such optimization should not result in any Feeder Panel supplying to more than 200-250 Luminaires.
	The rating of the feeder Panel switchgear should be at least 1.3 times the lighting load as estimated for new LED Fixtures during the initial studies prior to replacement.
	Electrical Contactor used in feeder panel should be compliant to IEC: 60947-1 & 4 / IS:13947-1 & 4, Miniature Circuit Breaker (MCB) Specification should be compliant to IS 8828: 1996/ IEC 60898 2002 & specifications for 3 position Load Break Switch (Rotary type) to be used in On-Off-Bypass mode should be compliant to IEC 60947-3 standards.
	Feeder panels should be provided with appropriate rating of Harmonic filters to keep the % I _{run} at levels below as specified by Utility. Switched fuse units should be of 32 Amp continuous AC current capacities. Fuses used should be of 20 Amp. Rating of high rupturing capacity (S/c current at 50 kA max.)
	240 V AC 50 Hz Single Phase Two Wire / 415 VAC 50 Hz Three Phase Four Wire Input.

	Fixed capacitor with appropriate capacity shall be introduced in each feeder panel to maintain the power factor more than 0.99 or unity. The panels should be equipped with a microprocessor based Dual Channel Almanac Timer controller (Astronomical timer based controller) which should be user programmable to enable setting of ON/OFF times and also switching over to savings mode/bypass mode when required. In case of Single-phase controller units, one (1) contactor for switching on/off and in case of Three phase controller units, one (1) contactor for each phase is to be provided. The number of contactors Used should be suitable for ON/OFF and for changeover between full voltage to various voltage taps and interchanging between taps in line with specifications of voltage controller.
Metering	Energy Meters to be installed in separately sealable and operable (capable to be opened independently) compartment within the Feeder Panels as per the following specifications: As per Regulation 56(2) of Conditions of Supply Code, 2004 issued by OERC (Orissa Electricity Regulatory Commission), consumer may procure the Meter either from the Vendors certified by the DISCOMS conforming to DISCOMS Technical Specifications. The calibration and sealing of the Meter shall be in the response of DISCOMS. The same shall be coordinated by successful bidder.) as per the applicable Supply Code and regulations. • Energy Meters should have Accuracy class of Class 1 or better; • Meters could be either three phase whole current: or appropriate CT operated for LT as may be required based on the load connected to the feeder panel. The space to be created in the feeder Panel for housing the meters should consider the same. • Energy Meters should be capable of logging parameters for each 15-minute time block with stamping of date and time. Such data logs should be retained in the Energy meters for a period of 60 Days or more. These data logs can also be communicated to CCMC through street light controller installed in feeder panel. • The Multifunctional Metering System should be able to capture minimum following parameters a) Phase Wise Voltages b) Phase Wise Currents c) Phase Wise Power (Phase to Neutral) Factor & Frequency d) Total Active Power(KW) e) Total Apparent power(KVA) F) Metering kWh Cumulative g) Metering kVAh cumulative • Meters should have requisite port (Serial port communication enabling remote reading and for connection of Modem in for the same;
	• The following additional requirements to be applicable for switching points where the meters installed in the Feeder Panels shall act as the Energy Billing Meters for Utility: • Energy Meter specifications should meet the specifications specified by Utility and a sign-off on the same shall be obtained from Utility prior to finalizing • A signoff from Utility on the design and specifications of the compartment in the Feeder Panel where the meters are to be housed is also recommended;
Data Logging & Alerts Other than Metering System	Other than the parameters that are captured and logged by metering system, bidders should also ensure that the street light controller system is capable of capture & reporting of following additional parameters for each 15-minute time block with stamping of date and time. a) Number of hours the b) Phase Wise V THD c) Phase wise I THD lamps were glowing System should generate alert messages in the form of SMS to select contact numbers (minimum 5) in case of following events a) Phase-wise currents on b) Phase-wise voltages c) MCB trips on crossing threshold values crossing threshold values d) Theft alerts e) Group failure of lights f) Contractor failure g) No output supply h) Leakage to ground i) Manual switch activated
Communication Provisions	GPRS/GSM modem for communication, should be a Dual-band modem with power consumption less than 3 watts & modem should be programmed to be in Sleep-mode whenever communication is not done. If GPRS is used for communication, then in case when GPRS fails, GSM (SMS) should be selected for communication.

Enclosure & Fabrication	Enclosure Box of feeder panels shall be IP-55 compliant and should be fabricated out of MS sheet SWG 16 / 14 duly powder coated for corrosion resistance and long life. Panels should be provide with Hooterfor door open.
	• It should have Single Phase power socket for connecting utility tools like drill machine etc. (capacity phase 240Vac / 5Amp socket)
	• Utility Service lamp inside panel for use during maintenance work.
	• Gland plates for Cable Entry at Incomer and outgoing
	The bidder shall have to get the control panels fabricated from the vendor having type test certificate from CPRI for 31 MVA short-circuit rating up to 400 amps for cubical panels. The copy of the type test certificate shall also have to be produced failing which feeder pillar shall not be accepted
	Design life of the control panel should be mentioned in form of MTBF (mean time between failures) and it should be minimum 10 years.

iii. Technical Specifications for Voltage Controller

Parameter	Specifications / Details
Broad Features	Objective of voltage controller is to optimize the energy consumption of street lights by voltage control during off-peak hours.
	Should be compatible with Harmonic filters installed in feeder panels. And should take in to account Conditions of Supply Code, 2004 issued by OERC.
	Other than basic switching components, no other moving parts should be there.
Rating and Certifications	The rating of Voltage controller should be at least 1.3 times the lighting load as estimated for new LEDFixtures during the initial studies prior to replacement.
	Voltage Rating: 150V to 260V. Set output voltage should be within +/- 5V
	240 V AC 50 Hz Single Phase Two Wire Or 415 V AC 50 Hz Three Phase Four Wire Input Supply with 3 Taps to Control output voltage.
	Standard Output Voltage Taps In each Phase at 150/180/2 10 V AC (a 240 V AC to ensure maximum energy saving during off-peak hours.
	During voltage tap changing, lights should not be momentarily disconnected which will lead to re Ignition of lights. It is mandatory for supplier to make gapless change over arrangement when changing from by- pass mode to & from lower voltage energy saving mode and interchanging between the taps. This should be achieved by supplier by any specialized arrangements. The user is expected to produce the Performance assessment certificate for minimum continuous 100 such changeover operations without any lamps going off in any of the three phases at minimum and Maximum supply voltage conditions. This certificate should be received from reputed Laboratory organizations like CPRI, ETDC, ERTL, IDEMI, SAMEER etc.
	Voltage controller to be compatible with a microprocessor based Dual Channel Almanac Timer controller in feeder panel and also switching over to savings mode/bypass mode when required.
Communication Provisions	System losses for entire operating range should be less than 3% so as to achieve high efficiency.
	User settable selection between GSM / GPRS operation and manual local operation. Control of operation
	times settings from the central PC (in case of GSM)
	Specific data request whenever user desires from control PC
Enclosure & Fabrication	Fault reporting to central PC and user definable Cell Phone number
	Over-ride for local operation time settings from the central PC on every individual device for definable time frame with a specific display on the particular device where such override is implemented
	Voltage controller to be housed in the same cabinet/enclosure of Feeder panel.
	Design life should be 15 years or more.

iv. **Minimum Specifications for Central Control and Monitoring Centre (CCMC) & Automation System**

Street light automation solution is to provide centralized control & monitoring of street lights from a single control center and is capable of controlling, monitoring and analyzing the details at liht feeder Panel level (switching8 point level). This will facilitate optimizing the energy costs by timely Switching on/off of lamps & implementing voltage regulation/ dimming of lamps during, off-peak hours as well as savings in present street light maintenance cost by setting new standards in managing Street Lights with minimal expenditure.

Central Control and Monitoring Centre (CCMC) & Automation System is comprised of automation controller, server cluster, control center, enterprise middleware system, enterprise Management wireless Central Information System and call center. The broad specifications for various components of CCMC and Automation System are as below.

Parameter		Specifications / Details
Broad Operational Features		CCMC shall have a web-server to receive all data from the streetlight controllers installed in feeder panelsand voltage controllers.
		GIS Mapping should be done covering all switching points and the details of each switch point shall beviewable in the web application software through a Google map interface or web based digital map.
		Bulk messaging facility to be given so that any common changes to be effected into the individual street Light controller equipment's.
		CCMC should have real time control and should register all fault conditions through the instantaneousalert messages sent by the street light controller equipment's.
		Inbuilt scalability to support large lighting network. Up to 250 no's of Remote Terminal Units (RTUs)should be possible to be controlled from one Central Control Unit.
		Different user authorization levels should be settable and the central server should be capable of handling high traffic. The concerned personnel at the Municipality should have access to the data (viewing rights) on a real time basis as well as the reports.
		User settable Individual feeder panel ID & Password protected access to control functions
Key Components & Functions	Wireless Central Automation Controller	Act as heart of automation and should facilitate remote and auto on/off of street lights, remote dimming level settings (different for different feeder Panels) for street light connected on different feeder panels.
		Reports various parameters to server clusters. These are parameters that are captured by metering system and streetlight controller at individual feeder panels.
		Report faults at individual feeder panels such as fuse failure, power failure, MCB trips, Over load, contractor fault, activation of manual switch, ground fault, control cabinet door open, indication forstreet light failures, feeder panel door open etc.
	Server Cluster	This is group of high-end server system which allows unlimited redundant data storage using Oracle/My Sql/ any Other database systems
		The data collection server should work on open protocol having mechanism for assured delivery of datasent by hardware device
		Data Backup: The System should have automated back-up facility to have regular back up of the data to ensure availability of the data and information. This should be achieved through mirror imaging of two HDDs. The backup system should facilitate any data regarding performance of the system in the last 12 months in l working Day and any data regarding performance of the system during any period of the concession within 5 working Days.
		The Central Server should be adequately back up by 2hrs UPS system for operational reliability.
	Control Centre	Control Center to provide a snapshot of lighting status for a zone, entire city
		Complete monitoring on image of the entire geographic area at the screen and with projector attachment - on back wall, where the operators monitor the streetlight and dispatch maintenance teams. Any alarms and their exact location should be shown on the map for

		easy and fast overview
	Enterprise Middleware	The application software should be based on Service Oriented Architecture and platform independent.
	Enterprise Management Information System	Complete end to end enterprise software system to facilitate control, monitor and analysis Minimum Key modules of management information system should be maintenance planning, inventory management, contractor/maintenance, staff performance monitoring, reporting and access Control.
	Call Centre	For Public to report grievances/complaints, bidder shall maintain a TOLL FREE number. Track the complaints made by the public and to update the status of their complaints
Communication Provisions & Features		Communication Speed between Central automation controller (Masacr) and Rennote unit (Street Light Controller) should be such that maximum time required for acquiring the data should not be more than 30 minutes for 250 no's RTUs. CCMC should be able to communicate with any street light controller individually or collectively to control and monitor.
Personnel		Personal shall be placed at BMC Office for handling grievances.

I. General Smart Lighting Scope

The Smart Lighting infrastructure shall be made of three main components: the lighting controller also called IoT field device, the Gateway (which is the multiprotocol device which interacts with the IoT field device) and the CMS (which is the software platform to manage the smart lighting service and future services). All three components are needed to enable a Smart Lighting infrastructure. The definitions of those three devices are provided below:

- **Node or Controllers (ie. the IoT field devices):** the electronic programmable device that is to be installed with an application unit (eg. streetlight) to enable its “smartness” and “connectivity”. It must be able to receive commands, to execute them and to send back status and related information to a Central Management System. It must be able to perform the other features listed in the sections below. It must communicate using a wireless RF /LoRa/NB IOT (4G/5G/LTE) protocol to the Central Management Software.
- **Gateway or Bridge:** the electronic programmable device that routes messages, data and commands from the Central Management Software to the Node and manage the wireless RF /LoRa/NB IOT(4G/5G/LTE)network. It must be able to perform the other features listed in the sections below.
- **Central Management Software or CMS:** the software that enable users to install and configure the Nodes, collect and aggregate data from each Controller (failures, metering, status, levels, power consumption...), identify failures, help diagnose failures, centrally manage alarms, monitor any node in real-time, analyze energy consumption and perform the other features listed in the section below.

II) System Introduction

Individual light monitoring system use RF (866Mhz) /LoRa/NB IOT(4G/5G/LTE) technology to connect the individual light point to the Central Control and monitoring server.

RF /LoRa/NB IOT(4G/5G/LTE) Network

The local RF /LoRa/NB IOT(4G/5G/LTE) network can be deployed as a primary architecture. The Gateway location shall be decided based on the best RF design to accommodate the local RF /LoRa/NB IOT(4G/5G/LTE) network and connecting the light points.

The Radio Frequency used shall comply with the local regulations in the unlicensed frequency bands which for India is 865-868 MHz.

The Radio Frequency network deployed shall comply to IEEE 802.15.4, the operations standard for low-rate wireless personal area networks (LR-WPANs).

For the local RF /LoRa/NB IOT(4G/5G/LTE) network, the OEM/Bidder scope shall include the following:

- Network planning and layout for the RF /LoRa/NB IOT(4G/5G/LTE) network. Inappropriate network layout can lead to system faults, unreachable light points and higher communication costs.
- Installation of RF Gateway hardware installation.
- RF /LoRa/NB IOT(4G/5G/LTE) network setup and commissioning.

III) RF /LoRa/NB IOT(4G/5G/LTE) Components

RF /LoRa/NB IOT(4G/5G/LTE) system comprises of the following components

- RF Gateway: Gateway between the RF /LoRa/NB IOT(4G/5G/LTE) network and the Lighting management software on enterprise server on premise.
- OLC/RF Node: Outdoor individual light controller
- Lighting management software: Light Management software to be mandatorily hosted on enterprise server at premises.

In the local RF /LoRa/NB IOT(4G/5G/LTE) network, a RF gateway should act as an information hub for individual luminaries for data upload and download to the (Lighting management System) LMS (e.g. energy data, fault messages to server; calendars, firmware upgrades to light point).

A) RF Gateway

- Mountable on DIN rail in cabinet
- Software pre-loaded and remotely upgradable
- Work at 865-868 MHz
- With the range of minimum 75 meters line of sight between two OLCs.
- Can connect minimum 300 OLCs per RF Gateway in a radius of 3KM
- Data communication should be encrypted to ensure maximum security complying to AES 128 Bit encryption.
- 2G/4G internet connectivity.
- Telnet and SSH service connections.

Radio Frequency (RF) Module

- Located in RF Gateway cabinet
- Ordered as part of RF Gateway kit

- Antenna outside cabinet, polarized vertical +/- 15°
- Directly connected to RF Gateway
- Secure communication with OLCs (standards)
- Enclosed in an IP65 metallic cabinet.

Upon installation of the RF /LoRa/NB IOT(4G/5G/LTE) RF Gateway and connected luminaires in the field, the OLCs shall form a RF/LoRa/NB IOT(4G/5G/LTE) network and be automatically discovered in the LMS User Interface with the GPS location and asset information available post programming. There shall be a seamless end-to-end workflow experience for the installation of these luminaires in the field.

B) RF Node/ Outdoor Light Controller (OLC)

The Outdoor Light Controller (OLC) shall be pole mounted for integration of data.

B.i) OLC/RF Node Features

- o RF /LoRa/NB IOT(4G/5G/LTE) radio:865-868 MHz
- o Effective Radiated Power :<25 mW e.r.p.
 - o Protocol: IEEE 802.15.4
 - o Range (open field): minimum 300 m to RF Node Firmware upgrade over-the-air (FOTA) Individual luminaire control and monitoring
 - o Control Interface: Pole Mounting
 - o GPS: Yes
 - o Minimum 300 luminaires in one network
 - o Energy metering nominal(Wh)) : 1% (allowed accuracy variation) o Maximum Load 600VA, 5A
 - o Last Gasp feature to report power failure o Easy commissioning flow with GPS Minimum inbuilt Surge immunity 6kV/3kA o Operating temperature -5°C to 50°C Burn Hour tracking o The OLC should be manufactured using SOC (System on Chip) technology.
 - o Country of origin of all active communicable components of the OLC node should not be from any country sharing borders with India - Model Number and Country of Origin for the below components should be declared by the OEM on the stamp paper for Communications Modem with IMEI number, MCU / IC Chip, Antenna.
 - o Dimension of node – maximum 120 mm diameter o IP Rating: IP66
 - o IK Rating: IK10

B.ii) System Features Key Features

- **Wireless System – 865-868MHz**
 - o RF Gateway capable to connect to minimum 500 RF Node/OLC in one network and cover a radius of 3km.
- **Light Control / management**
 - o Flexible adaptation of light levels On /Off

- Individual Light point can be controlled, monitored
- Efficient lighting scheme planning through calendar scheduling
- Emergency override / manual override
- **Light monitoring**
 - Actual real time light status updated at an interval of 30 minutes.
 - On-demand real-time report of light point properties
 - Notification of faults and events
 - Auto-notifications of faults and events through emails
- **Energy measurement**

Energy consumption usage & full history reporting with 99% accuracy.

C) The system functionalities shall include:

Light Management System should be hosted on premise enterprise server having below features:

- Intranet portal/application on the enterprise server.
- User Interface consists of an accurate map, including satellite view
- Role based Access control and User Management
- Asset Management is inbuilt
- Report generation of Energy consumption, Burnhour, Failures and Faults to the granularity of individual light point.
- concurrent monitoring and control sessions by multiple authorized users from anywhere at any time.
- Open API to integrated with existing City management system. API integration with city management system shall not be in scope of lighting company/OEM & the same is to be taken up by the concerned IT department of the authority. OEM shall provide the API documentation to the authority as per OEM's standard format for integration with city management dashboards.
- The CCMS shall include (but not limited to) the following functionalities:
 - User interface
 - Regions, streets, groups
 - Data visualization
 - Fault notification
 - Event notification
 - Energy visualization & reporting
 - Search / data analysis & reporting
 - Calendar / light schedule
 - Real time property
 - System activity
 - Site settings
 - Lighting asset management functionalities
 - Application programming interfaces (REST APIs) for data interoperability with other systems.

IV) Compliances:

- Performance: IEC 62384/ Equivalent IS standard/ ○ EMI (emissions): CISPR15/ Equivalent IS standard. ○ EMI(Immunity): IEC61547/ Equivalent IS standard. ○ Harmonics: IEC61000-3-2/ Equivalent IS standard.
- RF performance IEC : 300 220-1/ Equivalent IS standard. EN300-220 ○ BIS & WPC Certified ○ EMI/EMC, 2G, 3G, 4G and IPV4/IPV6 (Gateway) ○ Safety: IEC61347-2-13/ Equivalent IS standard **IS 15885-2-13** ○ IS 10322 -5-3 Luminaire Safety

Data Retention and Security Compliance

Data backup shall be taken daily, and the user defined data shall be available for the tenure of 10 years. (Data will be archived after every 2 years and will be available on request by customer)

Security statement /certifications

- Security Test results for each network component / product shall be provided

Development lifecycle process shall comply against IEC 62443-4-1 & shall be supported by DEKRA certificate

V. Driver Technical Details:

1. Successful tenderer has to provide the test report for LED junction temperature should not $\geq 85^{\circ}\text{C}$ at the ambient temperature of 25°C and with internal surge protection of minimum 4 KV.
2. The driver should be epoxy encapsulated within the light fixture that has separate optical & driver compartment, driver single Integrated constant current potted electronic driver. The fixture, with the encapsulated driver inside, must be IP-66 compliant.
3. Serviceability of LED Luminaries: The driver can be replaced at site if required.
4. The efficiency shall be more than 87 % in all cases at all times during project period.
5. Maintenance friendly and a separate compartment in main housing for external SPD or external fixing arrangement (bolted only) for external SPD below the light on the non-light emitting surface of the housing.
6. Protection from Voltage surges (SPD) Firm may provide appropriate surge protection arrangement, at each STREET Light, to protect the STREET Light from switching surges, which are expected / prevalent in STREET Light supply networks in India. Additionally, as per ANSI C 136.2-2014/ UL-1449/ IEC 61643-11, External Surge protection (SPD) with Thermal Protection (TMOVs) of minimum 20KV/4KV with capability to withstand a minimum of 15 pulses of 20KV to be separately installed (fixed with screws) with each fixture below the Light with IP 66 protection for incoming and outgoing wires on SPD and Light. Alternatively, the external SPD may be provided inside the driver compartment or special enclosed compartment adjoining the driver compartment or adjoining it with proper fixing (bolting / DIN rail arrangement) for SPD inside. **The SPD shall follow IEC 62305 & IEC 61643-11-2011.**
7. Housing - Electrical Compartment of Driver box contains cable glands for cable entries, and push in terminals for mains and control input. Electrical connection box of Streetlight contains cable glands and push-in terminals enabling electrical connection to driver box. The end-caps can be easily opened to access the bolts to aim the Streetlight; the slot hole in the bracket facilitates flexible installation.
8. Safety test for Drivers as per IS: 15885 must be submitted for driver.

9. The driver should be EMI/EMC Compliance as per IEC:61547. and submit the BIS certificate of Driver.

POST PROJECT COD LUX LEVEL & ILLUMINATION RATIO MONITORING SCHEDULE

The Authority shall have the right to undertake Lux Level and Illumination Ratio measurements at any time from post Project COD till the end of Term of this Agreement. The Project SPV shall be required to meet the minimum prescribed levels of Lux Level and Illumination Ratio specific to wattage of LED Luminaires with Road Type wise are as provided in Table 1 below, throughout the term of the project:

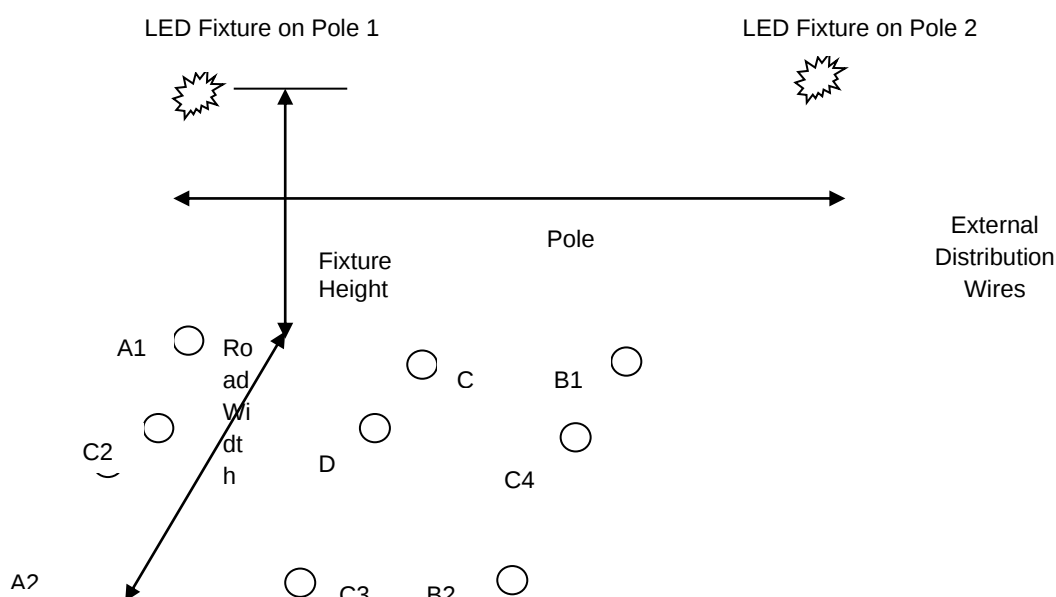
Table 1: Minimum Prescribed Lux Level & Illumination Ratio to be maintained throughout the Project Term

Road Type	Upper Limit of LED Rating (Watt)	Lux KPI (To be met by Project SPV Through Project Term)	Illumination Ratio (U_0) as KPI (To be met by Project SPV Through Project Term)
A2	110	23	0.4
B1	90	19	0.3
B2	70	10	0.3
C	45	9	0.3
C	16	6	0.3

Post Project COD, verification of Lux Level and Illumination Ratio of identified Street Lighting Points shall be undertaken as per the following:

- The Authority either by itself or through an independent agency shall be responsible for arranging requisite measuring equipment duly calibrated and certified from a recognized laboratory.
- Lux Level measurements shall be undertaken in accordance with the standard 9 point method. The method requires to choose a set of nine measurement points between two Street Lighting Points situated on the same side of the road and considering 3 number of measurement points in the longitudinal direction. Additional two measurement points are to be marked under each of the two Street Lighting Points while two similar measurement points are to be marked at the opposite side of the road as indicated in Figure 1 below.

Figure 1: Lux level measurement with Standard 9 Point method



As depicted above, the section of road between the Street Lighting Points is divided into four quadrants of equal size. The Lux levels at four corners (9 measurement points) of each quadrant shall be measured. The Lux value of each measurement point is evaluated to get the final value of average lux level based on following formula:

$$\text{Average Lux (E}_0\text{)} = \frac{A1+A2+B1+B2}{16} + \frac{C1+C2+C3+C4}{8} + \frac{D}{4}$$

In addition to average lux levels based on standard 9 point method, “uniformity values” shall also be evaluated to check whether it is within the minimum specified limits, based on following formula:

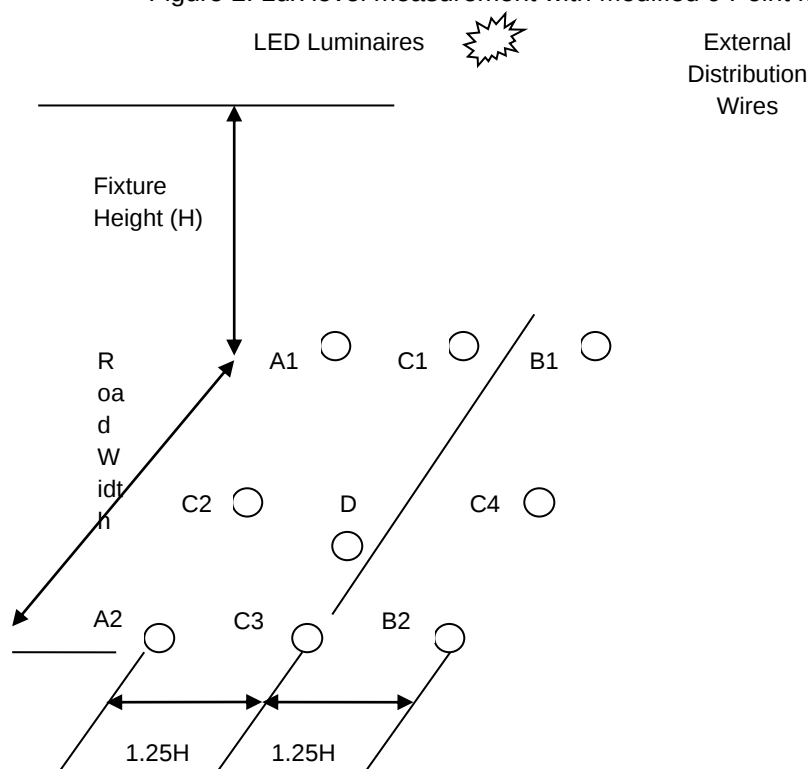
$$\text{Illumination Ratio (U}_0\text{)} = \frac{E_{\min}}{E_{\text{Avg}}} = \frac{\min(A1,A2,B1,B2,C1,C2,C3,C4,D)}{\text{Average}(A1,A2,B1,B2,C1,C2,C3,C4,D)}$$

- c) In case of Single Drop Points as well as for stretches with non-uniform pole span and /or fixture height deviating from the standard parameters specified in Table 2 below, Lux Level measurement shall be undertaken in accordance with the modified 9 point method to choose a set of nine measurement point as Illustrated in Figure 2 below.

Table 2: Standard Test Condition Parameters Specific to LED Luminaires

Road Type	Upper Limit of LED Rating (Watt)	Standard Parameters		
		Road Width (m)	Standard Fixture Height (m)	Standard Pole Span (m)
A2	110	9.5	9 to 10	30
B1	90	8.25	7.5 to 9	27
B2	70	8.25	7.5 to 9	24
C	45	7.5	<7.5	24
C	16	6	6	24

Figure 2: Lux level measurement with Modified 9 Point method



The average Lux Level (E_0) and Illumination ratio (U_0) is calculated as per formula defined in clause d above.

It is clarified that as far as possible those stretches where standard 9 point methodology can be deployed shall be chosen for sample points lux levels and Illumination ratio KPIs. It is also clarified that the Project SPV shall be required to meet the same Lux Levels and Illumination Ratio targets, as specified in Table 1, irrespective of the methodology applied for Lux level measurement.

- d) The measurement shall be conducted after sunset. The lamps must be switched on at least thirty (30) minutes prior to the measurements to allow for the lamps to get warmed up;
- e) Stray light from the surrounding areas should be minimized at the time of measurements & the measurement height should be one (1) meter above the road surface.

Earthing :

Earthing shall generally be carried out in accordance with the requirements of Indian Electricity Rules and the relevant rules and regulations of electrical supply authorities. The complete earthing work for the installation covered by these specifications shall also be provided taking into account Indian Standard Specification No.IS:732 and IS:3043. The earthing system adopted shall also have adequate mechanical strength.

The work shall include earthing of non-current carrying metallic parts of all the equipment, light fittings, conduit pipes, cable and cable supports and earth strips (the design to be approved by the Engineer in Charge) and all the inter connection between the earthing system to a value mutually agreed upon\ between the purchasers and the supplier.

Installation, testing and Commissioning:

The Contractor shall be responsible for the installation testing the commissioning of all the equipment and materials supplied by Supplier against this specification. This shall also include the provision of miscellaneous wiring and supports and earthing in compliance with Indian Electricity rules and to the full satisfaction of the Government Electrical Inspector. All small items such as clamps, bolts, nuts, racks, supports, miscellaneous wiring etc. required to make the installation complete, shall constitute the part of major items specified in the bill of quantities and the tenderer should quote for each item taking these into considerations.

The responsibility of the Contractor shall include receiving all the equipment and materials at site, storage for required period, handling the same at the site of erection, final execution, erections, revisions of equipment, if any, testing and commissioning and handing over the installation complete in all respect to the entire satisfaction of the Client authorized representative. The supplier Contractor shall make good of all the damaged equipment and materials during this period at his own expense. The Contractor shall submit sample of each and every equipment and materials for the final approval of the Client representatives immediately after the acceptance of offer. All the equipments and materials shall be supplied exactly as per to the approved samples. If at any stage the Client brings to the notice of the Contractor any discrepancy or defect the Contractor shall replace the same at his own expense.

The Contractor shall render all reasonable assistance to the Client getting the installation approved by the Government Electrical Inspector prior to the energization and supply necessary drawings, test certificates and both for tests carried out at the factory and site as well as the tests which the inspector may demand. In case any addition of alternations are required, to be made in the installation or in the equipment as per the directive of the Government Electrical Inspector / Local Authorities, the same will have to be carried out by the Contractor, at his own expense.

The position of light fittings, main board, switches, sockets and routes of pipes and cables shown in the drawings are only indicative. The actual position of these shall be decided at site at the time of execution joints by the Contractor and Client authorized representative. The position of light fittings, pipes and board if required, to be changed / shifted due to the change in the building design etc by the Client authorized representative, the same shall be carried out at no extra cost.

All the materials supplied to the contractor according to the Contract condition will be subject to inspection and approval of the Client from time to time. The contractor will provide all facilities of such inspections free of cost. At the time of inspection, Engineer in Charge will have full liberty to reject any such materials, which does not conform to the specification / requirement. No claim for any rejected materials will be entertained by the Client. The contractor will remove all rejected materials from site at his own cost. No surplus materials procured by the contractor will be accepted by the Client. The contractor will be responsible to get the Electric installations cleared by the Electrical Inspector of Odisha Government.

Installation and Maintenance Tools:

The Contractor along with the tender shall furnish a complete list of tools, appliances and accessories required for the installations of switch gear, light fittings, pipes cables and wires.

Drawings:

All drawings, test certificates, instructions manuals etc. shall be in English Language and all dimensions and weights shall be in metric units.

The Contractor shall submit with the tender general arrangement drawings for the installations work, typical methods and cabling and cables supports pipe work and pipe supports, typical methods of earthing and fixing of light fittings earthing etc. as offered by him in the tender. The contractor shall submit approval all layout, the general arrangement drawings as well as the typical details of all types of installation work in three sets before commencing the manufacture and the site installations work well in advance so that the site work shall not suffer.

After obtaining approval of the above drawings the contractor shall supply three sets of the following drawings:

- (a) The arrangement and support of conduit pipe
- (b) The position of light fittings, switches / plug socket and switch boards
- (c) Earthing installations
- (d) Layout plan showing the entire cable network

On completion of work, the successful tenderer shall supply one set of tracing in transparent linen and five sets of prints of all drawings incorporating all the changes / modifications affected during the execution of the contract. All wiring diagrams shall indicate clearly, the switch board, the runs of main and sub main wiring and the position of all the points with their controls. All the circuits shall be clearly indicated and numbered in accordance with IS:375. The technical literatures and operating instructions and the maintenance manuals shall also be supplied in triplicate to the purchasers after the completion of the installations work.

Test:

Manufactures standard tests in accordance with Indian Standard and other standards, adopted shall be carried out on all the equipment and accessories covered by this specification so as to ensure efficient and satisfactory performances of all the components and also the equipment as a whole under working conditions at site. The tenderer shall submit a

complete list of all such tests. If the Client, if so desired for special tests, to be carried out, under certain conditions the same shall be made by the successful tenderer at his own expenses. All equipment shall be tested at site before the commissioning in accordance with the adopted standard and Indian Electricity Rules. Voltage test shall be carried out on each circuit on completion of wiring and cabling.

Technical Data:

The bidders shall submit with their tender all such technical data, which are required for complete evaluation of the equipment offered. The Contractor shall give complete technical information of the equipment and relevant Indian standards. The tenderer should supply such details of all equipment and materials offered specially with regard to the following.

- a) Fuse switch board and distribution boards
- b) Light fittings
- c) Conduits and the accessories for them
- d) Switches / plug sockets
- e) Cable and wires

The tender shall give along with his tender the following details:

- a) Complete details of earthing electrodes, earthing station and earthing conductors
- b) Details of conduit supports
- c) Details of all the equipment and accessories to be supplied

Exception to Specifications:

The object of this specification is to have all tenderers quote for equivalent materials and workmanship. It is, however, understood the certain manufacturers may not be able to offer as specified in every case, where the tenderer may find it necessary to deviate from the exact letter and not the intent of the specification, he must specifically state what these deviations may be at the time he submits the tender. All deviations must be grouped in one statement. No deviations other than those includes in the tender & BOQ.

EARTHING SYSTEM:

GENERAL

EARTHING SYSTEM

o Electrical Earthing & Lightning protection system shall conform to latest editions of:

- IS: 3043, 1987 : Code of practice for Earthing.
- IEC 60364, pt. 4-41 : Low-voltage electrical installations: Protection for safety.
- IS/IEC 62305 : Protection against lightning.
- IEC 62561 : Lightning Protection-Earth enhancing compound.
- National Electrical Code (NEC), 2011.
- National Building Code (NBC), 2016.
- Indian Electricity Rules, 1956 and
- The regulations of the local Electricity Supply Authority.

o Two independent earth-pits for earthing of non-current carrying metallic parts of the electrical equipment shall be provided at a distance of minimum 1.5M from the Panel foundation line using suitably sized GI/Cu strips / GI wires as required.

o Each earth station, as per IS: 3043, shall comprise of:

- An earth pit connected to the earth strip of GI or Copper metal.
- An earth electrode; either of any, a GI / Copper Plate, a GI pipe or Copper clad MS rod (conforming to UL certification).
- Artificial treatment of the soil immediately surrounding the earth electrode, if required.
- Arrangement to add water to the earth electrode in the Earth pit.
- Structural bonding system as per IS/IEC 62305.

o All the earth electrodes shall be interconnected underground at (-) 1000 mm from G L.

o Earthing for safety, voltage reference, shielding and lightning current dissipation shall confirm to the requirement as per the above standards and as follows:

- TT system of Earth with double earthing for transformer / DG set (separate earthing for body & Neutral point), electrical panels and major equipment satisfying IS: 3043, IS: 732, IEC 60364 shall confirm to the regulations.
- To ensure safety during fault conditions, PE conductor shall be earthed at the installation satisfying double earthing requirement and shall reduce power frequency voltages within the allowed limits as per IS: 732.

EARTH PIT

The complete earth system including the earth pit shall consist of the following components:

EARTH ELECTRODES

The earth electrode shall be one of the following types:

PIPE ELECTRODE:

Pipe electrode shall be 38mm diameter GI perforated pipe of specified length but $\geq 2.5\text{m}$. The top edge of the pipe shall be $\geq 1.25\text{m}$ below the ground level.

EARTH STRIP

□ GI Strip:

- GI strip shall be fabricated with MS grade E-250 (FE-410).
- The galvanization of the strip shall be done in accordance with IS: 2629 with galvanized coating thickness $\geq 85\text{micron}$.
- The weight of zinc coating shall be $\geq 610\text{gms/m}^2$.
- The Zinc used for galvanization shall conform to Zn-90, IS: 209.

CONNECTION WITH EARTH ELECTRODE

o 40 mm diameter medium class GI pipe shall be provided and attached to the electrode- from the ground level to the top edge of the ground electrode. A funnel with GI wire mesh; shall be provided on the top of this pipe for moisturizing the earth around the earth- electrode.

- o The watering funnel attachment shall be housed in a masonry chamber of not less than 300x300x300mm size, flushed with the ground level. MS frame with hinged cover having locking arrangement; shall be provided at top face of this chamber. The top cover shall be able to sustain the motor vehicle axle load.
- o The MS frame shall be provided with at least two coats of red oxide paint and finally painted in gray shade to be approved by the owner / client. The inside of cover shall carry the earth station number in the following manner.

ARTIFICIAL TREATMENT OF SOIL

The soil immediately surrounding the earth electrode; shall be treated by addition of sodium chloride / calcium chloride / sodium carbonate / copper- sulphate salt, soft coke (wood charcoal) and wood saw-dust in alternate layers of 300mm to reduce the earth resistance. Alternatively, Bentonite compound may be used to reduce the earth resistance.

RESISTANCE TO EARTH

- o The over-all resistance of earth system shall be $\leq 1\Omega$ (One Ohm).
- o If the earth resistance is too high, multiple earth electrodes shall be provided.
- o All the earth electrodes shall be connected to each other in a ring formation with GI / Cu earth strip of specified size laid at a depth of 1000mm from G.L. The over-all resistance of this earth grid system shall be $\leq 1\Omega$.
- o The soil resistivity immediately surrounding the earth electrodes shall be reduced by soil treatment as mentioned above to reduce the grid earth resistance to $< 1\Omega$.

EARTH CONNECTION

- o All the non-current-carrying metal parts of electrical installation shall be properly connected to earth through equipotential bus bar following the stipulations of the relevant standards mentioned above.
- o All earth bus shall be solidly connected to the earth pits at two points with properly sized GI/Cu Strips/conductors as laid down in the relevant specifications.
- o Body of all switch-gear, distribution boards, switch boxes, outlet boxes, metal conduits / trunking and all other non-current carrying metal parts shall be bonded together and connected by means of two nos. specified earth conductors to the earth system.

EARTHING FOR SAFETY OF LV NETWORK

- o Additional earth studs need to be installed where electrical panels & electronic equipment are installed.
- o All electrical rooms as well as every floor level in electrical shaft must have a local equipotential bonding earth stud extended from the structural earthing.
- o Sizing of earth stud for electrical room shall be based on the Short circuit current requirement of the electrical system considering TN-S network.
- o Earth studs to test the efficiency of protection system; shall be provided in easily accessible places at top and bottom of the building at every 20m around the periphery of the building.

LT CABLE (1.1KV) XLPE INSULATED:

The LT (1.1KV) XLPE cable shall have Aluminium stranded conductors with Cross Linked Polyethylene (XLPE) insulation as per I S: 7098, pt-1 with the following requirements:

- o CORE IDENTIFICATION: The core identification for multi-core cables shall be provided with colour coding / numbering.

o CONDUCTORS: The conductors of power cables are made from electrical purity aluminium, and those of control cables are of annealed high conductivity copper. However, copper conductor power cables can also be made as required. All conductors conform to I S: 8130, 1984.

o INSULATION : High quality cross-linked Polyethylene (XLPE) unfilled insulating compound (with steam curing) is used for XLPE Cables of 1.1KV grade.

o LAYING UP : In multicore cables, cores shall be laid up as per the colour scheme and interstices filled up wherever necessary; to make the laid up cable circular in cross-section.

o INNER SHEATH: For all multi-core cables; inner sheath shall be either extruded GP PVC as per I S: 5831 or thermoplastic or proofed tape (refer BOQ).

o ARMOURING : For multi-core cables, armouring shall be applied over the inner sheath.

: In case of cables where the fictitious diameter over the inner sheath does not exceed 13mm, the armour shall consist of galvanised round steel wires;

: Above this size, normally the armour shall be of galvanised formed steel strips.

: For single-core cables, armour shall be Aluminium round wires.

o OVER ALL PVC SHEATH: For multi-core cable, the over-all PVC sheath insulation shall be of type ST-2 as per I S: 5831.

o In case of un armoured single-core cables, the over-all PVC sheath insulation shall be extruded over the insulation.

LT CABLE – PVC INSULATED

PVC cable shall be extruded PVC sheathed Aluminium or Copper stranded conductor. All other items shall be same as for XLPE cable. FRLS PVC CABLE

o Flame Retardant Low Smoke generating (FRLS) PVC cable shall be PVC insulated Aluminium conductor, FRLS PVC extruded / taped inner sheath, armoured, over All FRLS PVC sheathed cable conforming to I S: 1554 (Part-I) 1972 (Latest edition).

o Both; inner & outer sheaths of the Cable may or may not be FRLS depending on the specification. However, the outer sheath of the Cable shall be FRLS PVC

o The inner and outer sheaths shall be GP / HR PVC as specified in BOQ.

o The armour shall be G I strip or round wire as per the IS specification.

CABLE INSTALLATION

GENERAL

o LT cables shall be supplied, inspected, laid, tested and commissioned in accordance with drawings, specifications, latest edition of relevant Indian Standard Specifications, National Electrical Code (latest edition), cable manufacturer's instructions and as instructed by the engineer-in-charge.

o The cable shall be delivered at site in original drums with manufacturer's name clearly written on the drum.

o The recommendation of the cable manufacturer with regard to joining and sealing shall be strictly followed.

o Beyond 10sq.mm Cu wire size, Cables shall be considered.

CABLE LAYING

- o Cables shall be laid by skilled and experienced workmen using adequate rollers to minimize cratching and twisting of cables.
- o While shifting for a small distance the cable drum shall be rolled such that the cable does not unwind, then it shall be placed on jacks before unwinding the cable to avoid formation of kinks. The drum shall be unrolled and cable run over wooden rollers in a trench placed at intervals not exceeding 2 meters.
- o Cables shall be laid in trenches or on cable trays as per indicated route. While laying cables in trench, at least 10 cm of fine sand cushion shall be put under them.
- o Cable ties shall be used to keep the cables in position at every 1.5 meters when laid horizontally and 1 meter when laid vertically on tray.
- o At change of direction in horizontal and vertical planes, the cable shall be bent smoothly with a radius of bend not less than 12 times the diameter of the cable.
- o Minimum 3 meters long loop shall be provided at both sides of every straight joint and at each end of the cable.
- o Identification marks indicating cable number as per cable schedule shall be put on cable tags tied on the cable at intervals for identification.
- o Insulation tapes of appropriate voltage in red, yellow and blue color shall be wrapped just below the sockets for phase identification. The insulation tape for neutral wire shall be black and for earth it shall be green.

LABELS ON CABLES

Labels shall be of anodized aluminium strip of minimum thickness of 1.6mm with white engraving on black background. They shall be properly secured to the cable with fasteners.

JOINTS IN CABLES

- o The cables received at site; shall be apportioned to various locations in such a manner as to ensure maximum utilization avoiding joints. This apportioning shall be approved by the client before the cables are cut to required lengths.
- o Normally no jointing shall be permitted between feeder lengths unless the required length is more than the cable drum length. The cable jointing shall be done as per the recommendations of the manufacturer.

CABLE TERMINATION:

Cable entries and terminations shall be provided in the Distribution board to suit the number, type and sizes of power and control cables specified for in-coming and out-going feeders.

- o Provision shall be made for top and/or bottom entry of cables in the Distribution board as required with the position of cable gland and terminals such that cables can be conveniently and safely terminated without any forces on the termination points.
- o Barriers or shrouds shall be provided to permit safe working at the terminals of one circuit without accidentally touching that of other live circuit.
- o Cable risers shall be adequately supported to withstand the effects of rated short circuit currents without damage and without causing secondary faults.

CONTROL WIRING

- o Control wiring shall be carried out with 1100 / 660V grade single core PVC insulated Cu wire conforming to I S: 694 having stranded copper conductor of minimum 1.5sq mm for potential circuits and 2.5sq mm for current circuits.
- o Wiring shall be neatly bunched, adequately supported and properly routed to allow for easy access and maintenance.

- o Control wiring shall be identified by interlocking type numbering ferrules at both ends.
- o All control fuses shall be mounted in front of the panel and shall be easily accessible.

TERMINAL BLOCKSs

- o Terminal blocks shall be 500Volts grade of the stud type ELMAX make or equivalent.
- o Insulating barriers shall be provided between adjacent terminals.
- o Terminal blocks shall have a minimum current rating of 10amps and shall be shrouded.
- o Provision shall be made for label inscriptions.

CABLE IDENTIFICATION

Cable identification shall be provided as per the requirements of I S by embossing on the outer sheath the following:

- Manufacturer's name / trade mark,
- Voltage grade,
- Year of manufacture,
- Type of insulation,
- Nominal area of cross-section of the conductors & No. of cores.

Cable shall be jointed / terminated using standard cable jointing / termination kits – heat shrinkable / cold shrinkable type, suitable for in-door / out-door cable termination.

PACKING

Cables shall be supplied in non-returnable drums made of wood / steel. The drums shall be of heavy construction as per I S requirements.

TESTS

TESTS AT MANUFACTURER'S WORKS

Type tests as agreed; shall be carried out at the manufacturer's works as per I S: 7098 (Pt- 1)(latest edition).

All routine tests specified in I S: 7098, Pt-1 (latest edition) shall be carried out and test certificates submitted to the Engineer-in-charge.

TESTS BEFORE LAYING

Insulation test shall be done between phases and between phase & earth for each length of cable before laying the cable.

TESTS AFTER LAYING

☐ On completion of cable laying work, the following test shall be conducted in the presence of the Owner's representative:

- Insulation resistance Test. (Sectional & overall)
- Continuity Resistance Test.
- Sheathing continuity Test.
- Earth Test.

☐ All tests shall be carried out:

- In accordance with relevant Indian Standard Code of Practice and Indian Electricity Rules.

AB Cabling:

The contractor will provide the AB Cables only. Also other items required for construction of New lines, up gradation or replacement of conductors, AB cabling works with inter posing of poles, repair of old damaged poles, replacement of damaged X-arms, Post insulators with GI pin, replacement of tension fittings with Insulators(70KN), Mid-span joint, Al. tape, H/W fittings armored rods concreting materials etc, along with suspension clamp, 'Eye' hook with shackle insulators, insulation piercing connector and dead end clamps reqd. for AB Cables etc are to be supplied by contractor.

Stringing of Aerial Bunched Cable (ABC) Fixing of Suspension & Tension/ Dead end fittings to the Poles. The suspension clamp is to be hung on eye hook/ suspension hook, which is fixed to the pole at a minimum distance of 0.15 mt. from top end of the pole. The messenger wire of bunched cable resting on a pulley is separated from the cable by separating wedges and inserted in the conductor groove of the suspension clamp. The bolt is tightened to a torque of 20 N after which the pulley and wedges are to be removed. The cable is tied to the messenger wire with nylon tie on both sides of clamps. Pole clamps 50 x 8 mm flat shall be used. Eye hook of 20mm dia MS rod to be used as per the drawing. The pole clamp shall be made to suite the pole width.

Fittings & Accessories The following hardware fittings and accessories shall be used to install, erect & join the aerial bunched cable. a) Suspension Clamp with Eye-Hook – The Contractor shall install the suspension clamp with eye hook. This hook shall be used to attach the AB cable on the pole by means of a dead end clamp in terminal poles and for attaching a suspension clamp suitable for holding AB cables in straight lines and angle up to 90 Deg.-

b) Suspension fittings & the corresponding eye hook shall be as per REC Construction Standard No. e – 34. The eye hooks shall be made from minimum 20mm dia MS rods with eye on one end and the other end being suitably flattened with two holes for M16 bolt & nut to fix with the back clamps made from minimum 50x8mm flats as per drawing. The eye hook, back clamp and bolts & nuts are to be hot dip galvanized. c) Dead End fittings shall be bolted type as per REC Construction Standard No. E-35 & the corresponding eye hook shall be as specified above. The dead clamps are to be anchored with the pole with similar arrangement of eye hook & back clamp. In this case, the back clamp shall have two nos. of holes on both sides for M16 bolts. One side of the clamp shall be used for holding the eye hook with dead end clamp and the other side shall be used for anchoring the Stay.

d) Nylon Tie- The contractor shall supply nylon ties. These ties shall be used for tying the conductors with the messenger wire to prevent the phase conductors from chatting against suspension clamp. The nylon tie is made of weather resistant black nylon. e) Connectors- The contractor shall supply connector. These shall be used as non-tension aluminum to aluminum connections for conductor joints. f) Plastic Covers for Connectors- The contractor shall install Plastic Covers for Connectors. These covers shall be used with aluminum/aluminum connectors to protect connectors against corrosion caused by climatic conditions. Installation of Cable The contractor shall be fully responsible for all activities related to installation of AB cable. His responsibilities consists of handling, pulling, stringing & jointing of the cable and effecting service connection to consumers as per direction of the Engineer-in-charge. The total no. of consumers per KM in urban area and rural area is approximately 200 & 50 nos. respectively. But payment shall be made as per actual use of piercing connectors to effect service connection to the consumer.

The contractor shall observe following precautions while handling the AB Cable: The cable drums must be stored and transported in an upright position. While loading/unloading, the drums shall not be thrown from transport vehicles. Cable contact with sharp articles shall be avoided. In order to prevent damage to the insulation, the cable shall not be dragged on the ground. Pulleys shall be used for this purpose. In order to prevent strands from spreading, always cut the cable with a cutter. Use nylon ties or electrical tape to prevent the cable from spreading away from messenger wire after the cutting. Staple the end of the cable on to the drum in order to prevent loosening. Do not remove the protective boards from the cable drum before the cable is pulled off the drum. While moving the drum by rolling it on ground, always roll the drum

in the direction indicated by the arrow on the flange. When pulling the cable, the spinning direction must be opposite. Do not store the drums on wet soil, sandy or humid places. Store the accessories in good order for quick easy and correct handling.

Pulling the Cable:

The principle is to pull the cable under mechanical tension so that contact with the ground or any other obstacles is avoided. The cable drum should be perfectly in alignment with line to be strung and fixed about 15-20 mts. From the holding the first pulley. Open the cover of the drum to check and ensure that the insulation is not damaged. The pulling which is sent up upto the cable drum is about 15-20 mts from the pole holding to the last pulley. The pulleys are directly hung to such hook on the poles. The pulley tandem is to be used on angle poles if the line is deviating more than 60° Pull the guiding rope through all the pulleys. Normal care shall be taken to assume a smooth passage of whole cable through the pulleys, especially in the first pole and on angle poles. One worker should act s brakeman at the cable drum so that the cable is not loosened during the pulling. One worker should follow the cable going through the pulleys and stop the pulling if anything goes wrong. Stringing Operations. The contractor shall follow one of the following methods for stringing. 1. Sag Method Fix a dead-end clamp on the neutral messenger wire at 2. Dynamometer Methods Start the operation as above up to the stage. Install the dynamo meter on the come-along Tighten the cable at the required value by reading the Dynamo meter Finish the stringing as in the sag method operation. the pole. The messenger shall be bent behind the clamp to ensure sufficient friction between the messenger and the clamp in the initial stays during stringing. Bind the conductor together beside the dead end clamp using a nylon tie. Hand the clamp on the hook at the end pole Rewind simultaneously the slack cable length on the cable drum. Attach the 'come along' on the neutral messenger wire at the first pole of the line. Tighten the cable by the shackle or the winch when required sag is obtained. Hand the dead end clamp on the hook and install it on the neutral messenger. Remove the come along Bind the conductors together on the messenger wire using a nylon tie Check the length of the cable needed and cut it at an appropriate point.

Stringing Operations. The contractor shall follow one of the following methods for stringing. 1. Sag Method Fix a dead-end clamp on the neutral messenger wire at the pole. The messenger shall be bent behind the clamp to ensure sufficient friction between the messenger and the clamp in the initial stays during stringing. Bind the conductor together beside the dead end clamp using a nylon tie. Hand the clamp on the hook at the end pole Rewind simultaneously the slack cable length on the cable drum. Attach the 'come along' on the neutral messenger wire at the first pole of the line. Tighten the cable by the shackle or the winch when required sag is obtained. Hand the dead end clamp on the hook and install it on the neutral messenger. Remove the come along Bind the conductors together on the messenger wire using a nylon tie Check the length of the cable needed and cut it at an appropriate point.

Jointing of Cables Jointing of cable shall be in accordance with clause 12.3.3 of IS 1255:1993 and manufacturers special instructions given hereunder. This joining is to be done by skilled personnel. Cable Damage and Repairs: If the cable is damaged for whatever reasons, it shall be brought to the notice of the engineer and shall not be used without his approval. No joint or splice shall be made in spans crossings over main roads, small rivers or in tension spans. Not more than on joint in the cable shall be allowed in one span.

The stringing rate include rates for paving, stringing, clamping, jointing, tensioning and fitting of all necessary accessories. Insulated piercing connectors suitable for AB cable size from 16mm² to 95mm² and service connection cable of size 2.5mm² to 35mm² shall be used for effecting service connections to the consumers. Final Checking, Testing and Commissioning After stringing have been done as approved by the engineer, to ensure that everything is complete in all respects, the works shall be thoroughly inspected keeping in view the following main points. All the bolts and nuts should be of hot dip galvanized materials as per relevant IS. The stringing of the cable has been done as per the approved sag and desired clearances are achieved. No damage, minor or major to the cable, messenger wire and

accessories The contractor shall submit a report to the above effect to the Engineer in Charge, who shall inspect and verify the correctness of the report. In case it is noticed that some or any of the above is not fulfilled, the engineer shall get such items rectified by the contractor no extra cost to the purchaser. After final checking, the line shall be tested for insulation resistance in accordance with IS 1255:1983. All arrangements for such testing or any other test desired by the Engineer-in-charge shall be done by the contractor and necessary labour, transport and equipment shall be provided by him. Any defect found out as a result of such tests shall be rectified by the contractor, forthwith at no extra cost to the purchaser. In addition to the above, the contractor shall be responsible for testing and ensuring that the total and relative sags of the cable as within the specified tolerance. Such tests shall be carried out at selected points along the route as required by the Engineer-in-charge and the contractor shall provide all necessary equipment and labour to enable the tests to be carried out. After satisfactory test on the line and approval by the Engineer in Charge, the line shall be energized at full operating voltage before handing over. The cable shall be megger tested before and after jointing. The AB cable shall be tested for i) Continuity of messenger wire and conductors ii) Absence of cross phasing iii) Insulation resistance to earth iv) Insulation resistance between conductors v) DC Resistance vi) Capacitance As per IS 1255:1983 of the latest issue and as per manufacturers instructions. Sufficient backfilled earth covers each foundation pit and is adequately compacted. All poles are used strictly according to final approved drawing and are free of any defect or damage whatsoever. The stringing of the conductors and earth wire has been done as per the approved sag and tension charts and desired clearances as clearly available. All conductor and messenger wire accessories are properly installed. All other requirements for completion of works such as fixing of danger plate and anticlimbing device have been fulfilled. The insulation of the line as a whole is tested by the Contractor through provision of his own equipment, labour etc., to the satisfaction of the owner. Proper earthing of the poles.

Reference Standards The codes and/or standards referred to in the specifications shall govern, in all cases wherever such references are made. In case of a conflict between such codes and/or standards and the specifications, latter shall govern. Such codes and/or standards, referred to shall mean the latest revisions, amendments/changes adopted and published by the relevant agencies unless otherwise indicated. Other internationally accepted standards which ensure equal or better performance than those specified shall also be accepted, subject to prior approval by the owner.

BIS Standards:

Sl. No.	Standard	Description of Standard	Applicable to/ Comments
1	IS:209	Specification for zinc	
2	IS:2062/8500	Structural steel (Standard quality)	
3	IS:432	Mild Steel & Medium tensile bars and hard drawn steel wire for complete reinforcement	
4	IS:802	Code of practice for use of structural steel in overhead transmission line. Part-I Load and permissible stresses. Part-II: Fabrication, Galvanizing Inspection and Packing. Part-III: Testing.	
5	IS: 1367	Technical supply conditions for threaded fasteners.	
6	IS: 1893	Criteria of Earthquake resistant design structures.	
7	IS: 2016	Plain washers.	
8	IS: 2551	Danger Notice Plates.	
9	IS: 2629	Recommended practice for hot dip galvanizing of Iron & Steel.	
10	IS: 2633	Method of testing uniformity of casting of zinc coated articles.	
11	IS: 3063	Single coil rectangular section spring washers for bolts, nuts screws.	
12	IS: 5358	Hot dip galvanized coatings on fasteners.	

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

13	IS: 5613 Part-I & II Section-I	Code of practices for design. Installation maintenance of overhead power lines.	
14	IS: 6610	Specification for heavy washers for steel structures	
15	IS: 6745	Methods of determination of weight of zinc coating of zinc coated Iron and Steel articles.	
16	IS: 12427	Hexagonal bolts for steel structures	
17		Electricity Act, 2003	
18		Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023	
19	SP 72, 2010 (Part 3) (also known as National Lighting Code, 2010)	Electric light source and their accessories	
20	SP 72, 2010 (Part 4)	Luminaires	
21	SP 72, 2010 (Part 6)	Exterior illumination	
22	SP 72, 2010 (Part 8)	Road lighting	
23	SP 72, 2010 (Part 9)	Energy effective lighting systems	
24	SP 72, 2010 (Part 10)	Installation aspects	
25	SP 72, 2010(Part 13)	Lighting maintenance	Maintenance of lighting installations
26	IS 1944: 1970	Code of practice for lighting of public thoroughfares	Classification of road: Standard for road lighting
27	Guiding principles of the Bureau of Energy Efficiency Lighting Code, 2006	Nine point methodology	Lux level measurement on the stretch of road. post implementation of the ECMs, as described in Article 16.3
28	IS standards mentioned as Necessary adjuncts under SP 72	All IS standards mentioned as necessary adjuncts under SP 72 for the various parts mentioned above	
29	IS 8130-1984	Specifications for conductors for insulated cables	Aluminium conductors
30	IS 5831	Specifications for PVC insulation and sheath of electric cables	Inner sheath of cables
31	1EC 60947	IEC standards for low voltage Switchgear and control gear	Circuit breakers and Standard Contactors
32	IEC 6100-3-2	Limits for harmonics current emission	Limits for harmonics for low-voltage equipment with rated current under 16A
33	IS 2418 (Part 1) 1977	General lighting service part I general requirement and test	FTL tube lights
34	IS 10322 (Part 5/Sec 3, reaffirmed 2005)	Control gears	
35	IS: 1569 - 1976 (Reaffirmed 2001) (Incorporating Amendment No. 1)	Condensers	
36	IS: 10276 - 1982(Part I & II)	Lamp holders	
37	IS 2418 (Part 1) 1977 (Part 2) and IS 15111 (Part 2) 2002	Tube lights	
38	IS 3043	Code of practice for earthing	
39	IS 7752 (Part I): 1975	Guide for the improvement of power factor in consumer installations: Part I low and medium supply voltages	
40	IS 3961	Recommended current ratings for cables	Cables used by the contractor (if applicable)
41	SP 30 2011 National electrical code - Part 5, sections 1,2, 3	Section I Public Lighting Installations, Section 2 Temporary Outdoor Installations, Section 3 Permanent Outdoor Installations	
42	IS 16107	Luminaires Performance (Part I and Part 2)	LED lamps
43	IS 15885 (Part 2/Sec 13): 2012	Lamp control gear	LED lamps

44	IS 16106: 2012	Method of Electrical and Photometric Measurements of Solid State Lighting (LED) Products	LED lamps
45	IS 16105: 2012	Method of measurement of lumen maintenance of LED sources	LED lamps
46	IS 16104:2012	Electronic control gear for LED lamps	LED lamps
47	IS 16102: 2012	Performance requirement for self ballasted LED lamps	LED lamps

The Agency shall share the test certificate and GTP of the AB Cables. BMC shall inspect the same before installation

Schedule 2

Monitoring and Verification Plan

The monitoring and verification mechanism shall include the following in their order of sequence:

1. Asset Marking and Meter Installation by the Agency:

The Agency shall conduct a detailed asset survey and complete pole marking using nomenclature approved by BMC. Such nomenclature shall capture details such as the particular switching point/ energy billing meter or connection number, street, pole number, fixture type etc. Such pole number should be painted or put at a legible point on each street lighting pole at a height of five (5) foot from the ground level with a minimum font size of three inches (3").

- The coding/ nomenclature for numbering shall clearly indicate the following:
- Utility electricity billing meter/ connection or switching point;
- Street;
- Pole number on the particular switching point;
- Type of fixture; and
- Number of fixtures.

The following recommended nomenclature (AAA/AAA/NNN/A/N) shall be adopted for the purpose of asset/ pole marking, with due approvals from BMC if any changes are made:

Parameter	Utility Electricity Billing Meter/ Connection or Switching Point	Street	Pole Number on the Switching Point	Type of Fixture	Number of Fixtures
Nomenclature	AAA (Alphabetical code comprising three characters)	AAA (Alphabetical code comprising three characters)	NNN (Numeric code comprising three digits)	A (Number code representing type of fixture installed on the particular pole)	N (Number of fixtures installed on the particular pole)

The Agency shall provide details of the nomenclature developed for street light numbering to BMC and update BMC for any additions or deletions that may be necessary from time to time. Also, the Agency shall provide the detailed asset inventory and numbering to BMC for each stretch/ metering point once they are completed.

The Agency shall thereafter install the feeder panels comprising of the metering unit in accordance with the meter specifications notified by TPCODL.

Monitoring and Verification Format

Daily Non-Functional Points Reports

Report Date:						
Switching Point No./Name	Total Number of Points as on Date (EOD)	Total Number of Non-Functional Points as on Previous Day (EOD)	Total Number of Non-Functional Points as on Date (EOD)	Number of Non-Functional Points for the Day	Action Taken	Remark

Ward No: _____

Stretch: _____

GPS Coordinates: _____

Schedule 3

MINIMUM PLANT AND EQUIPMENT/TOOLS & TACKLES TO BE DEPLOYED BY THE AGENCY FOR OPERATION & MAINTENANCE

It is entirely the responsibility of the Agency to deploy sufficient plant and mechanical equipment to ensure compliance with his obligations under the Agency, the following list is an indicative list of the minimum essential basic holding of plant and mechanical equipment which the bidder must own/arranged through hire purchase.

Sl. No.	Equipment Description	Minimum Quantity to be Mobilized in Each Zone	Minimum Quantity to be Mobilized in all Zones
1	Ladders with minimum height of 8 meters	3 nos.	9 nos.
2	Hydraulic Lifts/ ladders for Street Lights maintenance (with operating height more than 11 meters)	3 nos.	9 nos.
3	LCV	4 nos.	12 nos.

NOTES:

1. The above given quantity is the minimum quantity of the critical equipment's in good working condition, required to be mobilized by the Agency to complete the work within the Schedule. The actual deployment Schedule of Equipment shall be approved by Engineer-in-charge. Agency shall augment the above list with additional numbers/categories of equipment's, tools & tackles, as required and directed by Engineer-In charge to complete the work within the completion time Schedule and quoted price.
2. Agency shall also provide Safety Equipment like PPE Kit including safety Belt, Jackets & Shoes.
3. The Agency shall also have Earth tester, Megger, clamp meter, Lux meter readily available with them.
4. Agency to confirm that the above key equipment's are available with him in good working condition with all valid certificate and shall be timely mobilized on this project site. Agency has the option to hire some of these equipment's from equipment-hiring agencies also.
5. The Authority reserves the right to physically check & verify the availability of these equipment's prior to award of work.
6. Agency shall replace any defective/damaged equipment's promptly to complete the work without any time & cost implication to the Authority.
7. Testing Equipment's/ Instruments (as applicable) to be made available with valid calibration certificate, issued by NABL accredited laboratory.
8. All the above vehicles shall have BMC branding as per the design approved by BMC.
9. Before issue of the Lol, the Authority may inspect to verify the equipment & facilities. In case of not found satisfactory, the bidder may lead for rejection.

For & on behalf of Bidder

Schedule 4

KEY MANPOWER REQUIREMENTS

Whereas it is entirely the responsibility of the Agency to deploy sufficient manpower to ensure compliance with his obligations under the Agency towards operation & maintenance services, the following list is an indicative list of the minimum requirement, bidder can deploy more numbers of persons as per the requirement of the project.

Sl. No.	Designation	Minimum Quantity to be Mobilized for each Zone	Minimum Quantity to be Mobilized for all Zones
1.	Project Manager	1 no.	
2.	Electrical Engineer	2 nos.	
3.	Technician (Lineman MV license from ELBO)	12 nos.	36 nos.
4.	Helpers	12 nos.	36 nos.
5.	Drivers	3 nos.	9 nos.
6.	Drivers cum operator	3 nos.	9 nos.
7.	Supervisor	2 no.	6 nos.
8.	Night Patrol Team (5 pm till 1 am) (1 Vehicle with 1 driver, 1 Technician & 1 helper)	1 no. team	3 nos. of teams
9.	Control room operators	3 nos.	

Note :

All the field staff deployed shall wear Uniform with BMC logo. The design for the same shall be provided by BMC and the Uniforms shall be provided by the selected Agency as per the design.

- All the zonal manpower defined from Sl. No.3 to 7 shall report to the Zonal heads daily.
- Project Manager, Electrical engineers & Control room operators shall be place at BMC office. All the reports shall be furnished by this team from time to time.
- All insurances of the staff shall be done by the Agency. BMC shall not be liable for any accident or insurances.

Phone numbers of the Project Manager, Electrical engineers, supervisors & Control room operators shall be shared with the Authority/ BMC for coordination purpose.

(Signature, name and designation of the authorized signatory)

For and on behalf of

Schedule 4 A

STOCK LIST TO BE MAINTAINED

List to be Stock of Items for O&M			
Sl.No	Description of Work / Item(s)	No.of Qty	Units
1	Unarmoured XLPE Cable ,1.1kv , 2C Aluminium 2C X 25 + 1X 16 sqmm 7strand LT XLPE AB Cable	50,000	Rmt.
2	3.5C X 25 Sqmm LT XLPE Ar. Cable	15,000	Rmt.
3	Service Wire 2.5mm	5,000	Mtr
4	4C X 16 Sqmm LT Armoured XLPE UG Cable-1.1 Kv-4C Aluminium with End termination, Removing of old cable, conduiting , excavation and back filling in direction of EIC.	35,000	Rmt.
5	G.I earth pipe 3mtr. Long 40 mm dia ISI mark including accessories and providing masonry encloser with cover plate having locking arrangement and watering pipe etc with charcoal and salt as required as per BIS specifications.	50	Nos.
6	45 W LED Street Light	1716	Nos.
7	70 W LED Street Light	610	Nos.
8	60 W LED Street Light	863	Nos.
9	90 W LED Street Light	190	Nos.
10	100 W LED Street Light	28	Nos.
11	110 W LED Street Light	240	Nos.
12	120W LED Street Light	180	Nos.
13	220 W LED Street Light	6	Nos.
14	250 W LED Street Light	4	Nos.
15	Timer 5A	1500	Nos.
16	Contactor 63A	1000	Nos.
17	Contactor 40A	600	Nos.
18	Contactor 32A	800	Nos.
19	Contactor 100A	20	Nos.
20	LDR, 10A	1500	Nos.
21	MCB, C-32 , SP	1500	Nos.
22	MCB, C-32 , DP	1500	Nos.
23	MCB C-63, SP	20	Nos.
24	MCB C-63, DP	20	Nos.
25	8 Mtr Tubular pole	200	Nos.
26	9 Mtr Tubular pole	100	Nos.
27	Single arm	100	Nos.
28	Double arm	100	Nos.
29	Clamp & nut bolt	200	Nos.
30	Black Tape	50	Pc

(Signature, name and designation of the authorized signatory)

For and on behalf of

Schedule 5

LUX LEVELS, ILLUMINATION RATIO & LED LUMINAIRE WATTAGE REQUIREMENT BY AUTHORITY FOR DIFFERENT ROAD GROUPS

1. The IS 1944 (Parts I and II)-1970 provides code of practice for lighting of public streets and specifies the street categorisation criteria based on traffic density of roads, which is presented in table below,

Road Class	Classification Criteria
Group A	
Group A1	Very important routes with rapid and dense traffic where the only considerations are the safety and speed of the traffic and the comfort of drivers
Group A2	Main Roads with considerable volume of mixed traffic, such as main city streets, arterial roads and thoroughfares.
Group B	
Group B1	Secondary roads with considerable traffic such as main local traffic routes, shopping streets
Group B2	Secondary roads, with light traffic
Group C	Residential and unclassified roads not included in previous groups

a) Requirement on Lux level, illumination ratio and preferred Luminaire type by Authority for Greenfield Public Street Lighting System

In line with road categorisation above, taking in to account considerations of principles of vision, criteria of quality and characteristics of sources and luminaires, the Lux level and illumination ratio requirements by Authority, which need to be adhered to by the Implementing Agency as instruction of Engineer in charge..

b) Wattage of LED Luminaire to be Installed for different road stretches covered under Project for Greenfield Public Street Lighting System as specified by Authority

The wattages for the proposed LED Luminaires to be installed for different road groups for new road stretches covered under Project for Greenfield Public Street Lighting System should be in accordance with Schedule 3 with minimum system efficacy of 150 lumens /watt.

The above LED Luminaire rating are in reference to those specified in the LM-80 certification for the LED Luminaires proposed to be supplied under the Project. The Bidder shall submit LM-80 test reports issued by NABL-accredited Government laboratories such as CPRI, CETL, or ERDA, certifying lumen output and luminaire efficacy; such reports shall not be older than three (3) years from the bid submission date.

The Lux levels, illumination uniformity ratio (Emin/Eavg) and other lighting performance parameters specified in Annexure P shall be the governing requirements. The wattage ranges indicated for each

road classification are indicative/reference values only and shall not be treated as mandatory, provided the Bidder meets or exceeds the prescribed lighting performance parameters.

The Bidder may propose LED luminaires of lower or different wattage than the indicative wattages specified, provided that the offered luminaire achieves the required lumen output and road surface lighting performance (Lux level and uniformity ratio) for the respective road classification, as demonstrated through photometric design and supporting test reports.

Any advantage in the Financial Bid evaluation on account of offering lower wattage for equivalent lumen output shall be computed in accordance with the methodology adopted in the existing PPP SIOM Project for the 5 Municipal Corporations of Odisha.

2. Specification of LED Street Light

- **Supply & Installation of 25W (±5%) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz, operating Temperature-10° c to 55°C, Driver power factor ≥ 0.95, Driver THD

≤10%, Driver efficiency≥85% and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with LEDs of CREE/Osram/Lumiled/Nichea make with a LED Chip level efficacy of at least ≥190 lumens per watt and a system efficacy ≥150 lumens per watt with a CRI ≥70(±2) and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate 120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be ≥50,000 Hours, Higher voltage Auto Cut- off ≥320 VAC with Phase-to Phase sustainability of 8 Hours with short circuit protection and reverse polarity Protection. The weight of the luminaire should be at least 1.3 kg. LED streetlight must have BS Certification.

- **Supply & Installation of 45W (±5%) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz, operating Temperature-10° c to 55°C, Driver power factor ≥ 0.90, Driver THD ≤10%, Driver efficiency≥85% and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with LEDs of CREE/Osram/Lumiled make with a LED Chip level efficacy of at least ≥190 lumens per watt and a system efficacy ≥150 lumens per watt with a CRI ≥70(±2) and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate

120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be ≥50,000 Hours, Higher voltage Auto Cut- off ≥320 VAC with Phase-to Phase sustainability of 8 Hours with short Circuit Protection and Reverse Polarity Protection. The weight of the luminaire should be at least 1.6 kg. LED streetlight must have BS Certification.

- **Supply & Installation of 70W (±5%) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz, operating Temperature-10° c to 55°C, Driver power factor ≥ 0.90, Driver THD

≤10%, Driver efficiency≥85% and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with

LEDs of CREE/Osram/Lumiled make with a LED Chip level efficacy of at least ≥ 190 lumens per watt and a system efficacy ≥ 150 lumens per watt with a CRI

$\geq 70(\pm 2)$ and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate

120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be $\geq 50,000$ Hours, Higher voltage Auto Cut- off ≥ 320 VAC with Phase-toPhase sustainability of 8 Hours with short Circuit Protection and Reverse Polarity Protection. The weight of the luminaire should be at least 2.5 kg. LED streetlight must have BS Certification.

- **Supply & Installation of 90W ($\pm 5\%$) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz,

Operating Temperature-10°C to 55°C, Driver Power Factor ≥ 0.90 , Driver THD

$\leq 10\%$, Driver efficiency $\geq 85\%$ and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with LEDs of CREE/Osram/Lumiled make with a LED Chip level efficacy of at least ≥ 190 lumens per watt and a system efficacy ≥ 150 lumens per watt with a CRI

$\geq 70(\pm 2)$ and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate

120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be $\geq 50,000$ Hours, Higher voltage Auto Cut- off ≥ 320 VAC with Phase-toPhase sustainability of 8 Hours with short Circuit Protection and Reverse Polarity Protection. The weight of the luminaire should be at least 3.8 kg. LED streetlight must have BS Certification.

- **Supply & Installation of 110W ($\pm 5\%$) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz,

Operating Temperature-10°C to 55°C, Driver Power Factor ≥ 0.90 , Driver THD

$\leq 10\%$, Driver efficiency $\geq 85\%$ and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with LEDs of CREE/Osram/Lumiled make with a LED Chip level efficacy of at least ≥ 190 lumens per watt and a system efficacy ≥ 150 lumens per watt with a CRI

$\geq 70(\pm 2)$ and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate

120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be $\geq 50,000$ Hours, Higher voltage Auto Cut- off ≥ 320 VAC with Phase-to Phase sustainability of 8 Hours with short Circuit Protection and Reverse Polarity Protection. The weight of the luminaire should be at least 5.18 kg. LED streetlight must have BS Certification.

- **Supply & Installation of 120W ($\pm 5\%$) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz,

Operating Temperature-10°C to 55°C, Driver Power Factor ≥ 0.90 , Driver THD

$\leq 10\%$, Driver efficiency $\geq 90\%$ and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with LEDs of CREE/Osram/Lumiled make with a LED Chip level efficacy of at least ≥ 190 lumens per watt and a system efficacy ≥ 150 lumens per watt with a CRI $\geq 70(\pm 2)$ and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate

120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be ≥50,000 Hours, Higher voltage Auto Cut- off ≥320 VAC with Phase-toPhase sustainability of 8 Hours with short Circuit Protection and Reverse Polarity Protection. The weight of the luminaire should be at least 5.18 kg. LED streetlight must have BS Certification.

• **Supply & Installation of 150W (±5%) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz,

Operating Temperature-10°C to 55°C, Driver Power Factor ≥ 0.90, Driver THD

≤10%, Driver efficiency≥90% and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with LEDs of CREE/Osram/Lumiled make with a LED Chip level efficacy of at least ≥190 lumens per watt and a system efficacy ≥150 lumens per watt with a CRI

≥70(±2) and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate

120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be ≥50,000 Hours, Higher voltage Auto Cut- off ≥320 VAC with Phase-toPhase sustainability of 8 Hours with short Circuit Protection and Reverse Polarity Protection. The weight of the luminaire should be at least 6.3 kg. LED streetlight must have BS Certification.

• **Supply & Installation of 200W (±5%) LED Street light** with batwing spread in grey corrosion free powder coated aluminium pressure die-cast housing (ADC 12). The IP 66 (ingress protection) and IK07 (impact resistance) heat resistance toughened glass with potted non-dimmable electronic driver should deliver an operating input voltage range of driver (volts) 140-275 VAC , Operating input frequency range of driver (Hz) 50 Hz-60 Hz,

Operating Temperature-10°C to 55°C, Driver Power Factor ≥ 0.90, Driver THD

≤10%, Driver efficiency≥90% and an inbuilt surge protection of 4KV and additional surge protection of 20 KV/10KA with working humidity range should be 0-95%. The streetlight should come with LEDs of CREE/Osram/Lumiled make with a LED Chip level efficacy of at least ≥190 lumens per watt and a system efficacy ≥150 lumens per watt with a CRI

≥70(±2) and CCT of 5700K -6500K (IESNA tolerance). The UV resistant polycarbonate

120° lens should provide a focused photometry to provide uniform lighting. The LED life span should be ≥50,000 Hours, Higher voltage Auto Cut- off ≥320 VAC with Phase-to Phase sustainability of 8 Hours with short Circuit Protection and Reverse Polarity Protection. The weight of the luminaire should be at least 6.8 kg. LED streetlight must have BS Certification.

3. Technical Specification of Poles

3.1 Technical specification of Octagonal Pole-5 meters

Sl. No	Parameters	Value
1	Total Height	5 Meter
2	No of segment	1 No
3	Segment length	5000mm
4	Bottom (OAF)	130mm
5	Top (OAF)	70mm
6	Shaft thickness of 1 st Segment	3mm
	Door & Reinforcement	
7	Door Height (Cut out)	500 mm

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

8	Door elevation	750 mm
9	Size of Reinforcement Rod/Flat	30x4 mm
	Base Plate & Foundation	
10	Size of Base plate	200 SQ mm
11	Thickness of Base plate	12 mm
12	Hole PCS	200 mm
13	Hole Dia (Slot)	22x38mm
14	Foundation Bolt Dia	M16
15	Foundation Bolt Total Length	600 MM
16	No. of Foundation Bolt	4 Nos
17	Hole on Template	18 mm
	Bucket	
18	No of Arms	1 Nos

3.2 Technical specification of Octagonal Pole-6 meters

Sl. No	Parameters	Value
1	Total Height	6 Meter
2	No of segment	1 No
3	Segment length	6000 mm
4	Bottom (OAF)	130 mm
5	Top (OAF)	70 mm
6	Shaft thickness of 1 st Segment	3 mm
	Door & Reinforcement	
7	Door Height (Cut out)	500 mm
8	Door elevation	750 mm
9	Size of Reinforcement Rod/Flat	30x4 mm
	Base Plate & Foundation	
10	Size of Base plate	200 SQ mm
11	Thickness of Base plate	12 mm
12	Hole PCS	205 mm
13	Hole Dia (Slot)	22x 40mm
14	Foundation Bolt Dia	M20
15	Foundation Bolt Total Length	600 MM
16	No. of Foundation Bolt	4 Nos
17	Hole on Template	22 mm
	Bucket	
18	No of Arms	1 Nos

3.3 Technical specification of Octagonal Pole-7 meters

Sl. No	Parameters	Value
1	Total Height	7 Meter
2	No of segment	1 No
3	Segment length	7000 mm
4	Bottom (OAF)	130 mm
5	Top (OAF)	70 mm
6	Shaft thickness of 1 st Segment	3 mm
	Door & Reinforcement	
7	Door Height (Cut out)	500 mm
8	Door elevation	750 mm
9	Size of Reinforcement Rod/Flat	30x4 mm
	Base Plate & Foundation	
10	Size of Base plate	200 SQ mm
11	Thickness of Base plate	12 mm
12	Hole PCS	205 mm
13	Hole Dia (Slot)	22x 40 mm
14	Foundation Bolt Dia	M20
15	Foundation Bolt Total Length	750 MM
16	No. of Foundation Bolt	4 Nos
17	Hole on Template	22 mm
	Bucket	
18	No of Arms	1 Nos

3.4 Technical specification of Octagonal Pole-8 meters

Sl. No	Parameters	Value
1	Total Height	8 Meter
2	No of segment	1 No
3	Segment length	8000 mm
4	Bottom (OAF)	135 mm
5	Top (OAF)	70 mm
6	Shaft thickness of 1 st Segment	3 mm
	Door & Reinforcement	
7	Door Height (Cut out)	500 mm
8	Door elevation	750 mm
9	Size of Reinforcement Rod/Flat	30x4 mm
	Base Plate & Foundation	
10	Size of Base plate	225 SQ mm

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

11	Thickness of Base plate	16 mm
12	Hole PCS	210 mm
13	Hole Dia (Slot)	22x 40 mm
14	Foundation Bolt Dia	M20
15	Foundation Bolt Total Length	750 MM
16	No. of Foundation Bolt	4 Nos
17	Hole on Template	22 mm
	Bucket	
18	No of Arms	1 Nos

3.5 Technical specification of Octagonal Pole-9 meters

Sl. No	Parameters	Value
1	Total Height	9 Meter
2	No of segment	1 No
3	Segment length	9000 mm
4	Bottom (OAF)	155 mm
5	Top (OAF)	70 mm
6	Shaft thickness of 1 st Segment	3 mm
	Door & Reinforcement	
7	Door Height (Cut out)	500 mm
8	Door elevation	750 mm
9	Size of Reinforcement Rod/Flat	30x4 mm
	Base Plate & Foundation	
10	Size of Base plate	260 SQ mm
11	Thickness of Base plate	16 mm
12	Hole PCS	250 mm
13	Hole Dia (Slot)	28 x 50 mm
14	Foundation Bolt Dia	M24
15	Foundation Bolt Total Length	750 MM
16	No. of Foundation Bolt	4 Nos
17	Hole on Template	22 mm
	Bucket	
18	No of Arms	1 Nos
19	Title Angle	

IS Standard to be followed for Octagonal Pole:

- For Pole Sections-Hot Rolled M.S PL Equivalent to BS EN 10025:2004 Gr S355JO/JR IS2062:2011
- For Base Plate: As per IS 2062:2011, Gr E250A-410 UTS

- iii. For FDN Bolt: Gr 68/EQ To EN8 Grade
- iv. Hot Dip Galvanized As per IS 4759: 1996/IS 2629:1985

4. Foundation Specifications for Pole Height

4.1 Foundation Specifications for Pole Height up to 6 Meters

- a. Depth of foundation should be 1100 mm minimum.
- b. Plan dimensions of footing should be 900 mm x 900 mm having depth D=200 mm Minimum.
- c. Reinforcement in foundation in both directions.
 - i. Bottom reinforcement-T 10 @ 150 MM c/c
 - ii. Top reinforcement to be as per IS456, 2000 (Reaffirmed in 2016)
- d. Four anchor bolts of 16 mm Dia and 500 mm total length are required
- e. Grade of concrete to be used shall be M 20 (1:1.5:3) and grade of reinforcement steel shall be Fe 500
- f. Concrete Pedestal
 - i. Size-300 mm x 300 mm
 - ii. Main vertical reinforcement shall be 4 nos bars of 12 mm dia bars iii. Shear reinforcement (stirrups) shall be 8 mm dia bars at 200 mm c/c iv. This foundation design of pole will be applicable for all types of soils i.e soft soil, medium soil and hard soil.

4.2 Foundation Specifications for Pole Height up to 10 Meters

- a. Depth of foundation should be 1600 mm minimum.
- b. Plan dimensions of footing should be 1200 mm x 1200 mm having depth D=300 mm Minimum.
- c. Reinforcement in foundation in both directions.
 - i. Bottom reinforcement-T 10 @ 150 MM c/c ii. Top reinforcement to be as per IS456, 2000 (Reaffirmed in 2016)
- d. Four anchor bolts of 16 mm Dia and 500 mm total length are required
- e. Grade of concrete to be used shall be M 20 (1:1.5:3) and grade of reinforcement steel shall be Fe 500
- f. Concrete Pedestal
 - i. Size-350 mm x 350 mm
 - ii. Main vertical reinforcement shall be 8 nos. bars of 12 mm dia bars
 - iii. Shear reinforcement (stirrups) shall be 8 mm dia bars at 200 mm c/c iv. This foundation design of pole will be applicable for all types of soils i.e soft soil, medium soil and hard soil.

5. Major Project components & Authority's minimum requirement

a) Major Project components

- I. **Supply and Installation of Greenfield Public Street Lighting System:** supply and installation of greenfield street lighting infrastructure components on new road stretches including but not limited to **LED Luminaires**, outreach arms, poles, pole junction boxes, feeder panels and street light automation components, supply cables, switchgear, earthing systems, control and protection devices etc. LED Luminaires to be supplied and installed has to ensure that the Lux level for different road groups as mentioned in this Schedule are maintained throughout the Term of the Agreement.

- II. **Centralized Control & Monitoring System (CCMS):** Implementing Agency shall set-up and commission CCMS at Municipal Corporation level (in the premises provided by Authority) including communication systems for remote connectivity with feeder panels, computer systems, servers, internet connectivity, software systems & tools. Implementing Agency also to operate and maintain a CCMS to facilitate centralised operations, monitoring, and control of the Greenfield Public Street Lighting System. The CCMS shall be used solely for the purposes of monitoring and operating the Project Greenfield Public Street Lighting System. Control and monitoring is at feeder panel level facilitated through CCMS for proactive complaint management.
- III. **Operation & Maintenance of Greenfield Public Lighting System and CCMS system installed:** Implementing Agency to undertake operation and maintenance of the Greenfield Public Lighting System during the Term and shall be responsible for any Equipment rehabilitation / replacement works required to be performed under the Agreement.
- IV. **Monitoring & Verification (M&V) of KPIs:** The Project shall generate, review and monitor feeder panel wise availability of LED Luminaires and other key performance indices (KPIs) specific to Municipal Corporation, as specified in Schedule 5.

b) Authority's minimum requirements

Parameter	Authority's minimum requirement
Broad level operational Project features	- The entire Greenfield Public Street Lighting System has to be smart & intelligent controllable from Municipal Corporation level Centralised Control & Monitoring System to be installed and operated by Implementing Agency. - CCMS along with feeder panel automation should be able to facilitate feeder panel level (group level) control of LED Luminaires installed under Project for Greenfield Public Street Lighting System. - Individual feeder panels supplying LED Luminaires should have the capability to receive the instructions from CCMS and act accordingly. - One no. Feeder panel is to be installed for every 500 mtr Cable length OR 6 kw load which ever lower. (As per site condition and as directed by Authority) - Every Feeder Panel has to maintain a minimum of 25% Tolerance. - Greenfield Public Street Lighting System along with CCMS should have flexibility to re-define the operating hours protocol as modified by respective ULB from time to time specific to individual feeder panel. - Authority should be able to see the real time status of the Greenfield Public Street Lighting System on a Municipal Corporation map view covering all the ULBs in the Municipal Corporation. - The Greenfield Public Street Lighting System should be able to communicate system issues or failures to the CCMS facilitated through feeder panel automation. - Instant Alarm management: Failures to be recorded, identified and localized in real-time. Information should be automatically sent to operators by a mobile telephone call, SMS or mail.

System warranty	• Comprehensive on-site warranty for the term of the Project with option to extend beyond that, if Authority desires so.
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6. Technical specifications for Public Street Lighting System

a) Minimum technical specifications for LED Luminaires

The Implementing Agency should submit a detail Equipment Installation Plan to Authority with number of LED Luminaires of different ratings specific to each group of roads considering the ULB requirements on wattage of LED Luminaires for different road groups as specified in section 1 of this schedule.

Along with Equipment Installation Plan, Implementing Agency should provide Authority with Sphere Spectro radiometry Test Data in LM 79 report specific to proposed LED luminaire ratings and other technical details of LED Luminaires as specified below.

Parameter	Specification/ type of test	Test methods/ standards
LED packages		
Parameter	Specification/ type of test	Test methods/ standards
LED Sourcing	Identical LED packages, quoted below, are to be used in all LED Luminaires of any given wattage rating (make, order code/part number, operating current and luminous efficacy at operating current).	
Operating current of LED (design)	<70% of rated maximum forward current, in the range of 350 to 1000 mA. (Having LM80 approval on this current rating) - Implementing Agency to mention the details of make and order code/part number of LEDs along with design operating current.	For Equipment Installation Plan approval, Implementing Agency should submit LM 80, TM 21 data at that current
Luminous efficacy	≥155 Lumens/watt (at T_j 85° C & at operating current (design)) - Implementing Agency to specify number of LED Packages which will be provided in each LED Luminaire (to be mentioned for each LED Luminaire rating) along with the wattage and luminous efficacy of LED at operating current.	LM-80/IS16105 test report including technical data sheet of LED Chip from ILAC/ MRA/ KOLAS/ NVLAP/ EPA / OSRAM/ PHILLIPS/ CREE/ NICYA international certifying agencies – to be submitted for Equipment Installation Plan Approval
Color rendering index (CRI)	>70	
Lifespan of LEDs & lumen depreciation	> 50,000 Hours (at operating current (design) & lumen depreciation less than 30% over the lifespan of 50,000 hours; (submit L70 & TM 21 Test Report)	

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

LED Luminaire		
Wattage Rating	200W, 150W, 120W, 110W, 90W, 70W, 45W & 25W for different road groups or locations / sites as specified in section 1 of this schedule Implementing Agency to mention the wattage of LED Luminaires offered for different road groups or locations / sites as Part of Equipment Installation Plan.	
System efficacy (Lumen/ watt)	> 150 Lumens /W	The Bidder shall submit LM-80 test reports issued by NABL-accredited Government laboratories such as CPRI, CETL, or ERDA, to be provided by Implementing Agency as part of Equipment Installation Plan. All electrical parameters should have test report.
CRI of LED Luminaire	>70	
Frequency	50 Hz +/- 3%	
Parameter	Specification/ type of test	Test methods/ standards
Power factor	>0.95	
Light uniformity ratio (E _{min} /E _{avg}),	As per BIS 1944 for given road type as specified in section 1a of this schedule, based on IES File generated by IES: LM 80/ IS 16106 Testing	
Operating voltage range	140 V to 270V	Test report from TPL NABL accredited lab to be
LED Luminaire light output	• Full lumen output should be available at standard voltage of 230 V, Single φ	
Surge Protection	• Driver internal surge protection of 4 KV (applicability IS 15885, driver safety 16104-1/2) ; IEC61000-4-5 • External SPD for each LED Luminaire to be > 20 KV/ 10 KA (as per ANSI C 136.2-2014)	
Driver efficiency	> 85 %	
Driver	BIS potted constant current driver having short circuited, overload, open circuit, EMI (Electromagnetic Interference) & EMC (Electromagnetic Compatibility) and no-load protection.	

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

Luminaire body temperature rise	• $\leq 30^{\circ}\text{C}$ from ambient (45°C) with tolerance of 10°C after 24 hours of operation (NABL report to be submitted). • Solder point temperature, after 24 hours of continuous operation shall remain stable and within junction temperature. • Thermal test reporting as per ANSI/UL 1598-2012 third edition to be provided before start of supplies.	provided along with Equipment Installation Plan
Heat Sink temperature rise above ambient	• Maximum temperature point on LED array shall not exceed junction temperature (specified in LM 80 report at which life > 50,000 hours) • Submit design/drawing indicating maximum temperature point of LED array.	
Operating temperature	• 0°C to $+ 55^{\circ}\text{C}$	
Luminaire body	• Single housing construction made of corrosion free high pressure aluminum die cast conforming to IP 66, with the manufacturers name embossed in the housing and should be visible from outside. • Protection safety as per IEC 60598/ IS 10322.	TPL NABL accredited lab test report as per IS:10322-part 5 Sec-3 /IEC:60598-2-3, to be provided along with Equipment Installation Plan.
Parameter	Specification/ type of test	Test methods/ standards
Lens/Lens module for LEDs	• LEDs shall be provided with lenses/lens modules. Lens should be of material resistant to de-gradation during service, due to atmospheric components, to avoid adverse impact on light output.	
Mention of brand name on LED Luminaire	Implementing Agency to mention the brand name on the LED Luminaire in non-erasable form to maintain the traceability and effective monitoring and verification with regards to quality issues and complaints specific to LED Luminaire supplier.	CONFIRM
Earthing of LED Luminaires	The provisions of IS-3043, may be referred to in general and to Clause no. 21.3, 21.4 and 32.5 of the said IS Specifications in particular. Implementing Agency may choose to carry out, at his own cost, earth resistance measurement of neutral conductor of supply network during the initial commissioning phase and subsequently on yearly basis or as may be felt necessary for reliable operation of the LED Luminaires by taking up appropriate measures.	CONFIRM
Impact resistance	LED Luminaire shall be built in such a way that it can withstand wind speeds up to 180 Kmph	NABL lab report for impact resistance > or = IK10

Model Consistency and Post-Award Substitution

1. The luminaire model offered in the Bid, supported by LM-80 test reports, shall be the same model supplied and installed under the Project.
2. No change in LED package, driver, optics, housing, efficacy, or internal configuration shall be permitted after submission of the Bid without prior written approval of the Authority.
3. Any proposed substitution shall:
 - Meet or exceed all technical specifications,
 - Be supported by fresh LM-79 and LM-80 documentation,
 - Not result in reduction of lumen output or system efficacy.
4. Unauthorized change of model or configuration shall constitute a material breach of contract.

b) Technical specifications for feeder panels

Electrical	
Operational Voltage Range	130 - 440 VAC
Frequency	50 - 60 Hz
Output load rating	16-63 Amps (Depends on Requirement)
Switching endurance	> 5,000 cycles
Device power consumption	< 1.5 watt
Communication	
Quad-Band	850/ 900/ 1800/ 1900 MHz
Operational Modes	
Real-Time Based Operation Mode	as per set 24-hour clock times
Astronomical Clock Mode	Location based sunrise, sunset times
Manual Override Mode	24 hrs. ON/24 hrs. OFF
Sensor Mode:	
For Switching ON	<60 lux for >30 sec.*
For Switching OFF	>10 lux for >30 sec.*
Safety Features	
Automatic high voltage trip threshold	> 280 volts**
Automatic high voltage reset threshold	< 265 volts**
Automatic low voltage trip threshold	< 150 volts**
Automatic low voltage trip reset threshold	> 165 volts**
Over voltage Sustainability	440 VAC on a sustained basis (continuously)
Operating conditions	
Input Voltage Range	150V - 415V

Input Frequency Range	50Hz - 60Hz
Power factor	> 0.9
Ambient Temperature Range	-100 C to +550 C
Relative Humidity	Up to 95% RH at 450 C

c) Technical specifications for streetlight Controller

• **Switching components:**

Other than basic switching components, no other moving parts are allowed to be installed in the feeder panel Principal equipment should be designed on the basis of 'Lossless Series Reactance with Secondary Compensation' technology ensuring efficiency of such principal equipment should not be less than 99.4% between 50% - 110% of loading.

All the principal equipment's along with input output switchgears, metering, switches (bypass and tap changers), contactors, fuses, auto transformer coils etc. will be of reputed manufacturers like Siemens/ABB/Schneider/C&S/L&T/GE/TAS etc.

All the components should meet best engineering practices and norms as applicable in IS 8623

for LV switchgear and control assemblies, IEC: 60947-1&4 / IS:13947-1&4, IS 8828: 1996 / IEC 60898-2002, IEC 60947-3 standards and other relevant standards.

Functional Features:

1. Controller will communicate with Server using GSM/GPRS
2. Remote control of the device via server to turn on/Off
3. Remotely configure:
 - a. Operating Modes
 - i. Manual On/Off
 - ii. On/Off as per set schedule
 - iii. Switching ON/OFF based on Astronomical Clock
 - iv. Ambient light based On/Off
 - v. Use combination of Astronomical timer and Light sensor to turn light on/off
 - b. Set Threshold for safety features
 - c. Set On/Off schedules
4. Remotely monitor device parameters like:
 - a. Energy consumption
 - b. Load Status
 - c. Alerts and errors
5. Controller to generate alerts:
 - a. Over voltage
 - b. Under voltage
 - c. Input power fail
 - d. Input power restored
 - e. Load failure
6. Remote Firmware Update (FOTA)
7. Capability to remotely reset MCB
8. Device to work as per last programmed mode in case of network or server outage.

• **Feeder Panel Rating & switching components**

Implementing Agency should consider standard feeder panel ratings of 3 kW, 5 kW & 7.5 kW depending upon the kW load for given road stretch as per Joint Survey Report and maximum length of road stretch.

that can be supplied from one feeder panel considering the maximum allowed voltage drop in the supply cables.

The rating of the feeder Panel switchgear should be at least 1.25 times the lighting load estimated for new LED Luminaires based on Joint Survey and to prepare Equipment.

Installation Plan:

Electrical contractor used in feeder panel should be compliant to IEC: 60947-1&4 / IS:139471&4, miniature circuit breaker (MCB) Specification should be compliant to IS 8828: 1996 / IEC 60898-2002 & specifications for 3 position load break switches (rotary type) to be used in on-off-bypass mode should be compliant to IEC 60947-3 standards.

Feeder panels should be provided with appropriate rating of harmonic filters to keep the % ITHD at levels below as specified by power distribution utilities. Switched fuse units should be of adequate continuous AC current capacities. Fuses used should be of adequate current rating of high rupturing capacity (S/c current at least 20 kA) Feeder panels should be equipped with a microprocessor-based controller with inbuilt almanac timer controller (Astronomical timer-based controller) which should be user remotely programmable to enable setting of on /off times and also switching over to savings mode/bypass mode when required. There shall also be a provision for remote manual bypass ON or OFF at any time. However, Implementing Agency may utilize alternate technology option for remote switching on /off as a group control option along with CCMS.

Power supply voltage of 240 V AC 50 Hz single phase two wire input with feeder panels

- **Energy parameters and consumption monitoring**

Energy meters to be installed in separately sealable and operable (capable to be opened independently) compartment within the feeder panel as per the following specifications: As per Regulation 56(2) of conditions of supply code, 2004 issued by OERC (Orissa Electricity Regulatory Commission), consumer may procure the meter either from the vendors certified by the Discoms conforming to Discom's technical specifications. The calibration and sealing of the meter shall be as per the applicable supply code and regulations.

Energy meters should be single phase whole current and should have accuracy class of Class 1 or better; Energy meters to be installed inside the feeder panel in space provided for housing the meters should consider the same Energy meters should be capable of logging parameters for each 15-minute time block with stamping of date and time. Such data logs should be retained in the energy meters for a period of 60 days or more. These data logs can also be communicated to CCMS through streetlight controller installed in feeder panel. The CCMS controller communication should also include 3G/4G/5G/LTE/GSM options. Metering system should be able to capture minimum following parameters,

- a) Phase voltage (phase to neutral).
- b) Phase current
- c) Power factor & frequency
- d) Total Active Power (kW)
- e) Total Apparent Power (kVA)
- f) Metering kWh Cumulative
- g) Metering kVAh cumulative

Meters should have requisite port (Serial port communication – RS232 or RS485) with an optical cord- based communication and LCD display for enabling remote reading and for connection of modem for the same.

The following additional requirements to be applicable for switching points where the meters installed in the feeder panels shall act as the energy billing meters for utility:

- a) Energy meter specifications should meet the specifications specified by utility and a sign-off on the same shall be obtained from utility prior to finalizing the specifications
- b) A signoff from utility on the design and specifications of the compartment in the feeder panel where the meters are to be housed is also recommended;

- **Individual Luminaire Monitoring Requirement**

1. For all LED street luminaires having wattage of seventy watts (70W) or above, or equivalent lumen output corresponding to the specified road classification, individual luminaire-level monitoring shall be mandatory.
2. The individual monitoring system shall, at a minimum, provide:
 - Real-time status of each luminaire (ON / OFF);
 - Fault detection in case of non-glowing condition;
 - Timestamped event logging;
 - Automated fault alert generation in the CCMS.
3. The system shall enable identification of non-functioning luminaires without requiring manual field inspection.
4. Feeder-level monitoring alone shall not be considered compliant for luminaires of 70W or above (or lumen-equivalent).

- **Cloud Features:**

1. Enable GIS aided asset management system for lights, controllers, and other accessories.
2. The web server shall facilitate sending a command to any individual switching point or group messages in one go to all the networked points.
3. The device shall facilitate grouping based on the requirement of the user. For example, this can be ward wise, section wise or operator wise or area wise or even a zone wise. The access shall be based on group.
4. Process, store and represent data collected from controllers in form which is easy to interpret and aids in reducing downtime.
5. Server application should send SMS/email alerts to relevant authorities in case of errors.
6. Enable users to download reports and data in CSV format.
7. Mobile application for O&M, monitoring and Citizens
8. Enable / disable SMS alerts for Input Power failure and resumption, output MCB trip and reset, high, and low voltage trip and reset.
9. Modify authorized mobile users/ current/voltage/power thresholds.
10. Customizable Reports and Dashboard 11. Workflow to track O&M activities in field

d) Technical specifications for poles, cables and other accessories

i. Street light pole (ms), accessories and earthing specifications

Parameter	Specification /Details
Road Classification	AS per IS 1944
Distance between adjacent poles (pole span)	To be decided by Joint Survey Team on case-to-case basis for new road stretches 22 meters pole span for single side pole arrangement with pole height of 7/8 meters 27 meters pole span for single side, double side and median pole arrangement with pole height of 9 meters 36 meters pole span (between poles on same side) for double side –Zic Zac pole arrangement with pole height of 9 meters.
Pole height above ground level	To be decided by Joint Survey Team on case-to-case basis for new road stretches in accordance with provisions of IS 1944.
Clearance from road edge	0.6 m
Bracket / outreach arm	Supply and erecting of street light bracket (with pole top mounting arrangements for installation of LED Luminaire) with 40 mm diameter 1m/1.5m long B grade G.I. pipe along with pole cap of 100 mm diameter and 400 mm long duly welded. Double arm bracket in case of median pole arrangement for all other pole arrangements single arm bracket. Implementing Agency may choose bracket / outreach arm diameter between 40 mm to 50 mm in line with suitability for installation of LED Luminaire.
Tilt angle	As per design - considering LED specifications
Overhang	As per design - considering LED specifications
Lighting Earthing	Earthing to be done as follows:
	a) Pipe earthing (only for Lighting (Semi / Mini) Mast (Semi / Mini) & Feeder Panels) - 2.5 meter long 40 mm diameter with ISI mark, B class GI earth pipe electrode with accessories and salt /charcoal/bentonite powder. The earth electrode shall be laid in ground after boring as per CPWD specifications. b) Coil earthing (individual Poles) - 50mm Dimension,150Turns with 2.5Mtr Lead GI 8 SWG for Tubular, Polygonal/Octagonal Pole. Coil Earthing Depth to be 1Mtr c) Jointing shall be done using G.I. nut bolt & spring washer size 50 mm Minimum Distance of Earthing to be 1200 mm from Pole centre; d) Specification of LED Wattage wise, Poles not there. Need to be included. At least 3 to 4 make of the cable type needs to be included. A technical demo of all bidders showing both hardware and software needs to be added as shortlisting technical eligibility criteria.

Pole junction box/ looping / terminal box	Each tubular and octagonal pole shall have a weatherproof pole junction/looping/terminal box clamped at 450 mm from top of the pole. Implementing Agency to supply and install FRP pole junction box including clamps, bolts, GI/painting, glands, DIN rail terminals, insulation, locking arrangement and for providing connection to incomer cable and outgoing wire. To be provided with a suitable busbar arrangement to loop 2 to 3 cables of size up to 25 sq.mm, 6A MCB and bi-metallic connectors to be provided in each junction box for supply to LED Luminaires.
D' iron clamps complete with CI knob for holding overhead supply cables	Supplying and erection of galvanised 'D' iron clamps to be installed at 500 mm from top of the pole, complete with CI knob, G.I. bolts, nuts and washers, coach screws etc. as required
Supply provisions to Luminaires	1100V grade FR PVC insulated multi-stranded bright annealed copper conductor wires supplying LED Luminaires will Run inside the pole & bracket from Junction box till LED Luminaire to be supplied.

Overall pole height including planting depth of 1800 mm	SP number of pole as per Table 2 of IS 2713 Part II 1980 as was prevalent prior to IS Amendment no. 2 dated June 2018	
	For coastal districts with wind speed = 250 km /hour	For non-coastal districts with wind Speed < 180 km / hour
11 m	410 SP 54	410 SP 49
9 m	410 SP 36	410 SP 34
8 m	410 SP 15	410 SP 13
7m	410 SP 02	410 SP 03

Outside diameter, thickness, section lengths and section joint overlaps for above SP Nos. should be as per provisions of IS 2713 for swaged type tubular pole manufacturing.

Minimum planting depth of the poles shall be in 1:6 proportion (IS code 1675 - 1998) with grouting based foundation fully to be done by the Implementing Agency using concrete of appropriate strength grade M15(1:2:4) with minimum dia 600 mm.

First and Last Pole of every Stretch must be with appropriate Stay and the Stay Rod implanted / grounded with Concrete of Grade M15 and Depth of Stay Road shall be minimum 1.2 Mtr .

Hot Dip Galvanized MS Poles to be provided with a base plate 300 x300x25 mm that should be Properly welded with Pole

Polygonal/Octagonal pole & Lighting (Semi / Mini) Mast		
• Material-Shaft - High tensile sheet/Plate Equivalent to BSEN 10025:2004/IS 2062:2011 Gr. E350BR. • Base Plate- As per IS 2062:2011 Gr. E250A, • Foundation Bolt - IS 1367:1994 • Galvanizing - As per IS 875 (Part-3):2015/As per customer requirement • Design - As Per IS 875 Part-3:2015, IS 800, IS 6533:1989, BS 5649:1985/EN 40 • Welding - As per IS 10178 : 1995/ IS 9595 : 1996 • Design Safety Factor - As per ILE TR 7:2000 • Tolerances - As per BS 5649 : 1978/EN 40, IS 1852: 1985		
3- Mtr long Hot Dip Galvanized Conical pole. Top Dia 50 & Bottom Dia 100 MM 3 mm sheet, Base Plate Size 200X200X16 MM, Internal Hinges lucking system, 4 Nos M20X700MM long J Bolt along with Temp plate, 3 Nos Nut & washer, including in build JB, containing (SP MCB, Terminal Stud, Backlite Sheet, SS hardware Etc)		
4- Mtr long Hot Dip Galvanized Conical pole. Top Dia 50 & Bottom Dia 100 MM 3 mm sheet, Base Plate Size 200X200X16 MM, Internal Hinges lucking system, 4 Nos M20X700MM long J Bolt along with Temp plate, 3 Nos Nut & washer, including in build JB, containing (SP MCB, Terminal Stud, Backlite Sheet, SS hardware Etc)		
5- Mtr long Hot Dip Galvanized Octagonal pole. Top Dia 70 & Bottom Dia 135 MM 3 mm sheet, Base Plate Size 200X200X16 MM, Internal Hinges lucking system, 4 Nos M20X700MM long J Bolt along with Temp plate, 3 Nos Nut & washer, including in build JB, containing (SP MCB, Terminal Stud, Backlite Sheet, SS hardware Etc)		
6- Mtr long Hot Dip Galvanized Octagonal pole. Top Dia 70 & Bottom Dia 135 MM 3 mm sheet, Base Plate Size 200X200X16 MM, Internal Hinges lucking system, 4 Nos M20X700MM long J Bolt along with Temp plate, 3 Nos Nut & washer, including in build JB, containing (SP MCB, Terminal Stud, Backlite Sheet, SS hardware Etc)		
7- Mtr long Hot Dip Galvanized Octagonal pole. Top Dia 70 & Bottom Dia 155 MM 3 mm sheet, Base Plate Size 260X260X16 MM, Internal Hinges lucking system, 4 Nos M20X700MM long J Bolt along with Temp plate, 3 Nos Nut & washer, including inbuild JB, containing (SP MCB, Terminal Stud, Backlite Sheet, SS hardware Etc)		
8- Mtr long Hot Dip Galvanized Octagonal pole. Top Dia 70 & Bottom Dia 155 MM 3 mm sheet, Base Plate Size 260X260X16 MM, Internal Hinges lucking system, 4 Nos M20X700MM J Bolt along with Temp plate, 3 Nos Nut & washer, including in build JB, containing (SP MCB, Terminal Stud, Backlite Sheet, SS hardware Etc)		
9- Mtr long Hot Dip Galvanized Octagonal pole. Top Dia 90 & Bottom Dia 190 MM 3 mm sheet, Base Plate Size 300X300X20 MM, Internal Hinges lucking system, 4 Nos M24X850MM long J Bolt along with Temp plate, 3 Nos Nut & washer, including in build JB, containing (SP MCB, Terminal Stud, Backlite Sheet, SS hardware Etc)		
Lighting High Mast		

12 High Mast Structure		
1.	Height of Mast	12 Mtr
a.	No of Section	Two Section
b.	Material Construction	As per BS-EN 10025 :1993 or equiv. IS
c.	Thickness of the section	Top: 3 mm (Minimum) Bottom: 3 mm (Minimum)

d.	No. of Longitudinal welds / section	One
e.	No of Circumferential welds/section	None
f.	Length of Individual Section	Top: 3 mm, Length:6250 mm Bottom: 3 mm Length 6250 mm,
g.	Cross Section of Mast	20 sided polygon continuously tapered telescopically joint as per BS 5135 or equivalent IS
h.	Base Diameter and Top Diameter (A/F)	Bottom :360
i.	Type of joints	Top : 150 mm
j.	Length of Overlap	Minimum overlap distance shall be 1.5 times the diameter at penetration.
k.	Metal Protection System	Hot dip galvanised both inside & outside conforming to IS 4759-1984, IS-2629-1985, IS- 2633-1972
l.	Average thickness of galvanization	As per BSEN ISO 1461
m.	Size of opening and door base	900 x 250 mm
n.	Type of Locking arrangement	Weather and Vandal Resistant with heavy duty lock.
o.	Diameter of Base Plate	520 mm
p.	Thickness of base plate	25 mm
q.	Lightning protection finial	GI single spike of suitable length to protect lightning with provision of earthing connection.
r.	Earthing of the Mast	Three Nos. Earthing terminals using 12 mm. Diameter Stainless steel bolt shall be provided at a convenient location on the base of the mast, one exclusively for the lightning conductor & other two for earthing the mast as per IS:3043-1987
s.	Aviation Obstruction Light	Top of the Mast fixed on the Lantern Carriage.
t.	Max.wind speed	180 Km/Hr as per IS: 875 (Part - III)
u.	Number of foundation bolts	8 nos.
v.	PCD of foundation bolts	440 mm
w.	Type / diameter / length of foundation bolts	TS 600 / 30 mm dia / 850 mm long
4	LANTERN CARRIAGE	
a.	Material of construction Diameter of carriage ring (mm) Construction Number of joints Buffer between carriage & masts Load carrying capacity Total weight of assembly with fittings Number of fittings. Type of fittings/fixture	40 NB ERW Class B - M. S. Pipe,600 mm (ID) ,6 Arm, Welded, 2 sections, Carrying Capacity 6-12 Luminaire. Hot dip Galvanised steel.

4.	CABLE	
a.	Type Material Current carrying capacity Conductor size No. of cores	Trailing cable Copper conductor, EPR insulated and PCP sheathed 24 Amp (minimum) 4 sq. mm.(minimum).
5	WINCH	
a.	Type of winch Gear Ratio Capacity Method of operation Lubrication arrangement Type of lubricant	Double drum type as per IS-807. Suitable to design for optimum mechanical advantage. To lift the design load. Manual and Electrical both. SWL-500 Kg Permanent oil bath SAE 90. /SAE 140
6	STAINLESS STEEL WIRE ROPE Grade Number of ropes Construction Centre core material Diameter (mm) Braking load capacity	AISI 316 2 Continuous Internal ropes suitable to winch and 3 Nos lantern carriage to Disc with no intermediate joints. 7 / 19 and shall have factor of safety not less than five times the safe working load. Stainless Steel core 6 mm (minimum)
7	POWER TOOL (Integral to System) Input Voltage Wattage / HP Number of speeds	3 PH, 415 Volts. $\pm$ 1 HP Rating of the Motor suitable to the design with control & torque limiting protection Single speed or Variable speed.
1	SWITCHING DEVICE/FEEDER PANEL Type Feeder Panel Box	Photoelectric light sensitive and astronomical ON OFF timers to switch for automatic controlling the lights at predetermined time and as per ambient lighting level and other accessories with protection and suitable arrangement to raise or lower the lantern carriage. Made of minimum 14SWG CRCA sheet metal.
2	Aviation Obstruction Light	Single LED Aviation Light
12 High Mast Structure		
1.	Height of Mast	12 Mtr
a.	No of Section	Two Section
b.	Material Construction	As per BS-EN 10025 :1993 or equiv. IS
c.	Thickness of the section	Top: 3 mm (Minimum) Bottom: 3 mm (Minimum)
d.	No. of Longitudinal welds / section	One
e.	No of Circumferential welds/section	None
f.	Length of Individual Section	Top: 3 mm, Length:6250 mm Bottom : 3 mm Length 6250 mm,

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

g.	Cross Section of Mast	20sided polygon continuously tapered telescopically joint as per BS 5135 or equivalent IS
h.	Base Diameter and Top Diameter (A/F)	Bottom :410mm
i.	Type of joints	Top : 150 mm
j.	Length of Overlap	Minimum overlap distance shall be 1.5 times the diameter at penetration.
k.	Metal Protection System	Hot dip galvanised both inside & outside conforming to IS 4759-1984,IS-2629- 1985,IS- 2633-1972
l.	Average thickness of galvanization	As per BSEN ISO 1461
m.	Size of opening and door base	1200 x 250 mm
n.	Type of Locking arrangement	Weather and Vandal Resistant with heavy duty lock.
o.	Diameter of Base Plate	570 mm
p.	Thickness of base plate	25 mm
q.	Lightning protection finial	GI single spike of suitable length to protect lightning with provision of earthing connection.
r.	Earthing of the Mast	Three Nos. Earthing terminals using 12 mm. Diameter Stainless steel bolt shall be provided at a convenient location on the base of the mast, one exclusively for the lightning conductor & other two for earthing the mast as per IS:3043-1987
s.	Aviation Obstruction Light	Top of the Mast fixed on the Lantern Carriage.
t.	Max.wind speed	250 Km/Hr as per IS : 875 (Part - III)
u.	Number of foundation bolts	8 nos.
v.	PCD of foundation bolts	490 mm
w.	Type / diameter / length of foundation bolts	TS 600 / 30 mm dia / 850 mm long
4	LANTERN CARRIAGE	
a.	Material of construction Diameter of carriage ring (mm) Construction Number of joints Buffer between carriage & masts Load carrying capacity Total weight of assembly with fittings Number of fittings. Type of fittings/fixture	40 NB ERW Class B - M. S. Pipe,600 mm (ID) ,6 Arm, Welded, 2 sections, Caring Capacity 6-12 Luminaire. Hot dip Galvanised steel.
4.	CABLE	
a.	Type Material Current carrying capacity Conductor size No. of cores	Trailing cable Copper conductor, EPR insulated and PCP sheathed 24 Amp (minimum) 4 sq. mm.(minimum).

5	WINCH	
a.	Type of winch Gear Ratio Capacity Method of operation Lubrication arrangement Type of lubricant	Double drum type as per IS-807. Suitable to design for optimum mechanical advantage. To lift the design load. Manual and Electrical both. SWL-500 Kg Permanent oil bath SAE 90. /SAE 140
6	STAINLESS STEEL WIRE ROPE Grade Number of ropes Construction Centre core material Diameter (mm) Braking load capacity	AISI 316 2 Continuous Internal ropes suitable to winch and 3 Nos lantern carriage to Disc with no intermediate joints. 7 / 19 and shall have factor of safety not less than five times the safe working load. Stainless Steel core 6 mm (minimum)
7	POWER TOOL(Integral to System) Input Voltage Wattage / HP Number of speeds	3 PH, 415 Volts.± 1 HP Rating of the Motor suitable to the design with control & torque limiting protection Single speed or Variable speed.
1	SWITCHING DEVICE/FEEDER PANEL Type Feeder Panel Box	Photoelectric light sensitive and astronomical ON OFF timers to switch for automatic controlling the lights at predetermined time and as per ambient lighting level and other accessories with protection and suitable arrangement to raise or lower the lantern carriage. Made of minimum 14SWG CRCA sheet metal.
2	Aviation Obstruction Light	Single LED Aviation Light

16 High Mast Structure		
1.	Height of Mast	16 Mtr
a.	No of Section	Two Section
b.	Material Construction	As per BS-EN 10025 :1993 or equiv. IS
c.	Thickness of the section	Top: 3 mm (Minimum) Bottom: 4 mm (Minimum)
d.	No. of Longitudinal welds / section	One
e.	No of Circumferential welds/section	None
f.	Length of Individual Section	Top: 3 mm, Length: 5470 mm Bottom : 4 mm, Length: 10980 mm
g.	Cross Section of Mast	20 sided polygon continuously tapered telescopically joint as per BS 5135 or equivalent IS
h.	Base Diameter and Top Diameter (A/F)	Bottom :410
i.	Type of joints	Top : 150 mm
j.	Length of Overlap	Minimum overlap distance shall be 1.5 times the diameter at penetration.

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

k.	Metal Protection System	Hot dip galvanised both inside & outside conforming to IS 4759-1984, IS-2629-1985,IS-2633-1972
l.	Average thickness of galvanization	As per BSEN ISO 1461
m.	Size of opening and door base	1200 x 250 mm
n.	Type of Locking arrangement	Weather and Vandal Resistant with heavy duty lock.
o.	Diameter of Base Plate	540 mm
p.	Thickness of base plate	30 mm
q.	Lightning protection finial	GI single spike of suitable length to protect lightning with provision of earthing connection.
r.	Earthing of the Mast	Three Nos. Earthing terminals using 12 mm. Diameter Stainless steel bolt shall be provided at a convenient location on the base of the mast, one exclusively for the lightning conductor & other two for earthing the mast as per IS:3043-1987
s.	Aviation Obstruction Light	Top of the Mast fixed on the Lantern Carriage.
t.	Max. wind speed	180 Km/Hr as per IS: 875 (Part - III)
u.	Number of foundation bolts	8 nos.
v.	PCD of foundation bolts	490 mm
w.	Type / diameter / length of foundation bolts	TS 600 / 30 mm dia / 850 mm long
4.	LANTERN CARRIAGE	
a.	Material of construction Diameter of carriage ring (mm) Construction Number of joints Buffer between carriage & masts Load carrying capacity Total weight of assembly with fittings Number of fittings. Type of fittings/fixture	40 NB ERW Class B - M. S. Pipe,710 mm (ID) ,8 Arm, Welded, 2 sections, 9-18 Luminaire. Hot dip Galvanised steel
4.	CABLE	
a.	Type Material Current carrying capacity Conductor size No. of cores	Trailing cable Copper conductor, EPR insulated and PCP sheathed 24 Amp (minimum) 4 sq. mmx 5 C.(minimum) .
5.	WINCH	
a.	Type of winch Gear Ratio Capacity Method of operation Lubrication arrangement Type of lubricant	Double drum type as per IS-807. Suitable to design for optimum mechanical advantage. To lift the design load. Manual and Electrical both. Permanent oil bath SAE 90. /SAE 140

6	STAINLESS STEEL WIRE ROPE Grade Number of ropes Construction Centre core material Diameter (mm) Braking load capacity	AISI 316 2 Continuous Internal ropes suitable to 3 Nos /6 mm (Three Wire Rope) Non corrosive marine grade Stainless Steel Wire Rope.
7	POWER TOOL(Integral to System) Input Voltage Wattage / HP Number of speeds	3 PH, 415 1.5 HP Rating of the Motor suitable to the design with control & torque limiting protection Single speed or Variable speed.

1	SWITCHING DEVICE/FEEDER PANEL Type Feeder Panel Box	Photoelectric light sensitive and astronomical ON OFF timers to switch for automatic controlling the lights at predetermined time and as per ambient lighting level and other accessories with protection and suitable arrangement to raise or lower the lantern carriage. Made of minimum 14SWG CRCA sheet metal.
2	Aviation Obstruction Light	Single Dome LED Aviation Light
16 High Mast Structure		
1.	Height of Mast	16 Mtr
a.	No of Section	Two Section
b.	Material Construction	As per BS-EN 10025 :1993 or equiv. IS
c.	Thickness of the section	Top: 3 mm (Minimum) Bottom: 4 mm (Minimum)
d.	No. of Longitudinal welds / section	One
e.	No of Circumferential welds/section	None
f.	Length of Individual Section	Top : 4mm, Length: 5470 mm Bottom : 5 mm, Length: 10980 mm
g.	Cross Section of Mast	20 sided polygon continuously tapered telescopically joint as per BS 5135 or equivalent IS
h.	Base Diameter and Top Diameter (A/F)	Bottom :720
i.	Type of joints	Top: 150 mm
j.	Length of Overlap	Minimum overlap distance shall be 1.5 times the diameter at penetration.
k.	Metal Protection System	Hot dip galvanised both inside & outside conforming to IS 4759-1984, IS-2629-1985, IS-2633-1972
l.	Average thickness of galvanization	As per BSEN ISO 1461
m.	Size of opening and door base	1200 x 250 mm

n.	Type of Locking arrangement	Weather and Vandal Resistant with heavy duty lock.
o.	Diameter of Base Plate	720 mm
p.	Thickness of base plate	30 mm
q.	Lightning protection finial	GI single spike of suitable length to protect lightning with provision of earthing connection.
r.	Earthing of the Mast	Three Nos. Earthing terminals using 12 mm. Diameter Stainless steel bolt shall be provided at a convenient location on the base of the mast, one exclusively for the lightning conductor & other two for earthing the mast as per IS:3043-1987
s.	Aviation Obstruction Light	Top of the Mast fixed on the Lantern Carriage.
t.	Max.wind speed	250 Km/Hr as per IS : 875 (Part - III)
u.	Number of foundation bolts	8 nos.
v.	PCD of foundation bolts	650 mm
w.	Type / diameter / length of foundation bolts	TS 600 / 30 mm dia / 850 mm long
4	LANTERN CARRIAGE	
a.	Material of construction Diameter of carriage ring (mm) Construction Number of joints Buffer between carriage & masts Load carrying capacity Total weight of assembly with fittings Number of fittings. Type of fittings/fixture	40 NB ERW Class B - M. S. Pipe, 710 mm (ID) , 8 Arm, Welded, 2 sections, 9-18 Luminaire. Hot dip Galvanised steel
4.	CABLE	
a.	Type Material Current carrying capacity Conductor size No. of cores	Trailing cable Copper conductor, EPR insulated and PCP sheathed 24 Amp (minimum) 4 sq.mmx 5 C.(minimum) .
5	WINCH	
a.	Type of winch Gear Ratio Capacity Method of operation Lubrication arrangement Type of lubricant	Double drum type as per IS-807. Suitable to design for optimum mechanical advantage. To lift the design load. Manual and Electrical both. Permanent oil bath SAE 90. /SAE 140
6	STAINLESS STEEL WIRE ROPE Grade Number of ropes Construction Centre core material Diameter (mm) Braking load capacity	AISI 316 2 Continuous Internal ropes suitable to 3 Nos /6 mm (Three Wire Rope) Non corrosive marine grade Stainless Steel Wire Rope.

7	POWER TOOL (Integral to System) Input Voltage Wattage / HP Number of speeds	3 PH, 415 1.5 HP Rating of the Motor suitable to the design with control & torque limiting protection Single speed or Variable speed.
1	SWITCHING DEVICE/FEEDER PANEL Type Feeder Panel Box	Photoelectric light sensitive and astronomical ON OFF timers to switch for automatic controlling the lights at predetermined time and as per ambient lighting level and other accessories with protection and suitable arrangement to raise or lower the lantern carriage. Made of minimum 14SWG CRCA sheet metal.
2	Aviation Obstruction Light	Single Dome LED Aviation Light

ii. **Electrical Specifications for supply cables**

Parameter	Specification /details
Cable size & type	Supplying & erecting of 1.1 kV, twin core XLPE AB cable 2x16 & 2x25 along with 25 sq. mm messenger wire PVC Insulated unarmoured cable multi strand aluminium conductor with each cable having minimum 7 strand as per IS:14255-1995, XLPE sheathed cable conforming to IS :1554 (part I) Overhead supply arrangements. Work shall be done as per TPCODL specifications. Supplying & erecting of 1.1 kV, 4CX16 & 4CX25 sq.mm XLPE insulated, armoured, XLPE sheathed cable conforming to IS :1554 (part I) Underground supply arrangements for High Mast & Octagonal pole power supply.
	Supply and Erection of 3CX1.5 sq.mm. Copper Round cable for high mast light wiring & Street light pole junction box to Street light.
UG Cable Ducting	Laying of HDPE/DWC pipe with Inner diameter 40/50 mm ISI mark using at Street light pole to pole & high mast incoming.
Power Supply source Point	Power Supply point will be located centrally across the new road stretch or at both ends to ensure adequate power supply voltage. Electric power supply till input to the feeder panel at 230-volt, single phase, two wire, 50 Hz. to be arranged and provided with required arrangements by respective ULB.
Maximum allowed voltage drop for cable	Not more than 5% at the end (at fixture / junction box) at full load condition @ nominal single-phase voltage of 230 V
Cable voltage rating and insulation	Electric cable required for the street lighting installation shall be 1100 volt grade, XLPE insulated and sheathed, unarmoured/armoured cable having two core aluminium conductors of stipulated rating.

Cable overhead supply arrangements	- D' iron clamps complete with CI knob for holding overhead supply cables to be installed at 500 mm from top of the pole - With each pole have a weather proof pole junction/looping/terminal box clamped at 450 mm from top of the pole, a loop of 0.5 mtr. of cable shall be provided near each street light pole for all incoming and outgoing cable to the pole junction box. - For UG cable terminal box to be located 1mtr at Ground level - Cable shall be terminated to the attached junction box on each Pole. Approved make of cable sockets shall be provided.
Implementing Agency to select the cable rating based on the length of stretch per circuit that can be supplied after considering load to be supplied and the voltage drop criteria. Implementing Agency may refer to table below indicating tentative length of stretch per circuit for different cable ratings depending upon the total electrical load to be supplied.	
Cable Size	Length of stretch that can be supplied per Circuit
16/25 Sq mm	up to 1000 m

iii. Specifications for Central Control and Monitoring System (CCMS) & Automation System

Objective of centralized street light automation solution is to provide centralized control & monitoring of street lights from a single control centre at Municipal Corporation and is capable of controlling, monitoring and analysing the details at streetlight feeder Panel level. This will facilitate optimizing the energy costs by timely switching on/off of lamps & implementing voltage regulation for LED Luminaires during operating hours as well as savings in present street light maintenance cost by setting new standards in managing street lights with minimal expenditure.

General Design:

- A pole mountable SMC (Sheet Moulded Compound Box) along with a pad lock housing with IP 55
- Remotely selectable switching operation modes including:
 - Infrared Photo Sensor for Dusk to Dawn operation, and
 - An Astronomical Clock coupled with Photo Sensor based switching, and
 - A time schedule-based operation
 - Manual override mode
- There shall be a Contactor and MCBs of sufficient rating as per the table in this document
- A class 1 energy meter along with an optical cord-based communication and LCD display
- Shall facilitate automatic switching ON/OFF, monitoring and analysis of street lighting load.
- There shall also be a provision for remote manual bypass ON or OFF at any time.
- The entire functionality shall have a remote communication interface based on GSM/GPRS

iv. General Specifications and construction of hardware:

- a. Wiring System: Three Phase 4 Wire in case of a Three Phase electronic controller and a Single Phase 2 Wire in case of a Single-Phase electronic controller.
- b. The SMC box shall be equipped with a suitably designed mechanical fixing arrangement based on GI material for fixing on the pole. The fitment mechanism shall be universal and be suitable to a pole of any shape up to a maximum circumference of 700 mm.
- c. The SMC enclosure shall have an openable door for connections and maintenance. The provision for entry of cable shall be from the bottom.
- d. Terminal Blocks, Cable Glands etc. shall be suitable for 3.5 core x 16 square mm cable. The cable gland shall be of PVC 25 mm size and be suitable for entry of cable of 27mm Diameter.
- e. The enclosure door will have a transparent portion for light entry to the sensing window of the control unit and for reading the energy meter display. The transparent portion of the window shall be made of UV resistive PC of 2mm thickness. It shall be sealed from inside.
- f. The enclosure will facilitate the use of a universal/Unique panel lock and common key for convenience. It shall also provide for fixing of a pad lock.
- g. The enclosure shall contain details regarding the electrical circuit diagram. The words DANGER indicating a potential electrical hazard shall be displayed on the top of the SMC enclosure.
- h. Earthing bolt made of SS will be provided outside the SMC enclosure. All the metal parts will be interconnected.
- i. All the control wiring shall be of 1.5 sq.mm PVC insulated copper cable and all power cable shall be of 4 sq. mm PVC insulated copper cable.

v. Rating and size of SMC enclosure:

The SMC Enclosure shall be made of material conforming to IS 13410-1992 of 2.5mm thickness and must have sufficient space to facilitate the fixing of Energy Meter and other control gear items. The enclosure must have a door constructed with rubber beadings constructed to give a water tight compartment. The enclosure must have a rectangular cutout with Poly Carbonate window cover to facilitate meter reading and for ambient light entry to the Photo sensor unit. The enclosure must be rust proof, termite proof, and water tight and non hygroscopic in nature and shall conform to IP54

vi. Rating of mounting panel board made of SMC:

The Controller, electrical control gear like Contactor, MCB shall be mounted on an Insulating base of at least 2 mm thickness made of SMC material conforming to IS13410- 1992.

vii. Rating of MCB:

MCBs at the output of the electronic controller shall be rated for 32 Amps/63 Amps with a C Type delay curve and with breaking current rating of 10 kA and shall confirm to IS/IEC 60898.SS

viii. Rating of Energy Meter:

10-30A or wider Class 1.0 Single Phase and Three phase Energy Meters complying with IS 13779 of reputed make

ix. Details and Specification of Power Switching Unit:

The Power Contactor shall be suitable to switch LED lamps rated at 32 Amps per pole. The Contactor's coil shall be driven by the control unit. The power contactor shall have a coil rated for operation at 240 volts AC and shall conform to IS-13947-4-1 or equivalent IEC specifications.

x. **Web Server and Communication:**

The software shall be cloud-hosted on reputed service providers platform with recovery measures implemented. Server and application shall be maintained online >99% of time.

xi. **IR and Temperature Tests (Type Tests):**

IR value between phase and earth shall be > 50 M Ohm.

Shall withstand high voltage of 1.5 kV for 1 minute between live parts (current carrying parts) and earth terminal without breakdown of insulation.

Shall be tested for:

- a. 55 deg C Dry Heat;
- b. Damp Heat Cyclic Test at 95% RH, 45 deg C, 2 cycles of 24 hrs each;
- c. Cold Test at -10 deg C
- d. Burn In Test for 48hrs at 55 deg C

xii. **Controller specifications:**

An electronic controller consisting of a circuit housed in a molded plastic casing sealed to conform to IP 65. The circuit consists of surge suppressors, infrared sensor and/or autonomous astronomical clock or digital timer based automatic switching schedule generation for the street lighting circuits.

Functional Specifications of the controller:

Operating Voltage : 150 to 400 VAC+/- 21%, 50 +/- 3Hz.

RangeCurrent rating : 15 Amps. (Maximum)

Switching endurance : Minimum 5,000 cycles

Operating Illuminance

LevelsFor Switching ON : < 60 lux for >30 sec

For Switching OFF : >10 lux for >30 sec

Operating Schedule for Sensor assisted Astronomical mode)

For Switching ON : < 60 lux for >30 sec or Twilight Dusk
whichever is later For Switching OFF : >10 lux for >30
sec OR twilight Dawn whichever is earlier

Max. Device Power Consumption : 1.5

Watt at 230 VAC Operating Temperature

Range : 0° C to +55°C

(Ambient)Operating Humidity Range :

Up to

95% RH at 45°C

Surge Immunity : 4kV criterion A as per IEC 61000-4-5

Remotely selectable Automatic Over / Low

Voltage trip, reset levels and alerts. Remotely
selectable automatic over/low **power** trip, reset
levels and alerts.

Remotely selectable automatic over/low **Current** trip, reset
levels and alerts.

Remotely Programmable Switching schedule options/ alert preferences

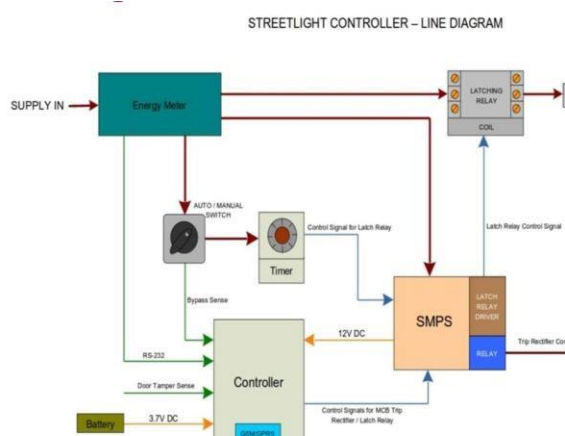
- i. Switching ON/OFF based on only lux level, and
- ii. Switching ON/OFF based on Astronomical Clock coupled with Sensor, and
- iii. Pure astronomical clock-based switching time, and
- iv. Real time schedule, enable / disable SMS alerts for Input Power failure and resumption, output MCB trip and reset, high, and low voltage trip and reset.
- v. Modify authorized mobile users/RTC/ current/voltage/power thresholds

Street Light Controller (CCMS) - Technical Specifications	
Connection Type	Single Phase (2Wire) / Three Phase (4Wire) (Depends on the variant)
Power Supply	240 VAC P-N (+20% to -40% Vref) per phase, 50 Hz
Controller Operating Voltage	110 VAC - 415 VAC, 50 Hz
Metering	1Phase / 3Phase Class 1.0 ISI Energy Meter with DLMS
	Parameters measured: Voltage, Current, Power Factor, kW, kVA, kVAR, kWh
Load Control Capacity	Upto 32A/Phase in 1Phase and Upto 63A/Phase in 3Phase
Surge Protection	CAT B (4kV) (Only for electronic components inside the panel)
Protective Features	Over Voltage
	Under Voltage
	Over Load
	Short Circuit
Event Notification	Over/Under Voltage
	Input Supply / Power Failure
	Over Current
	MCB Trip
	AUTO/Bypass Status
	Meter Communication Failure
	Door Open

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

Additional Features	Battery backed Digital Timer for Bypass operation
	Automatic MCB Trip Rectification for nuisance MCB trips
GPRS Communication	Frequency: Quad-band 850/900/1800/1900MHz GPRS multi-slot class 12/10 GPRS mobile station class B Compliant to GSM phase 2/2+ –Class 4 (2 W @ 850/900MHz) –Class 1 (1 W @ 1800/1900MHz) Support GPS/GLONASS/BD
Operating Conditions	0°C to +55°C
Enclosure	IP65 Metal Enclosure
Size (in mm)	600 x 475 x 175
Mounting Options	Pole Mount for 1Ph
	Stand Mount for 3Ph

Line Diagram



Parameter	Specifications / details
Broad operational features	CCMS shall have a web-server to receive all data from the streetlight controllers installed in feeder panels along with voltage controllers.
	GIS Mapping should be done covering all feeder panels specific to each ULB and the details of each ULB wise feeder panel shall be viewable in the web application software through a Google-map interface or web based digital map.
	Bulk messaging facility specific to each ULB to be given so that any common changes to be affected into the individual streetlight controller equipment's.

		CCMS should have real time control and should register all fault conditions through the instantaneous alert messages sent by the streetlight controller equipment's.
		Inbuilt scalability to support large lighting network. Up to 250 no's of remote terminal units (RTUs) should be possible to be controlled from one central control unit.
		Different ULB authorization should be settable and the central server should be capable of handling high traffic. The Authorised Representatives at the ULBs should have access to the data (viewing rights) on a real time basis as well as the reports.
		User settable individual feeder panel ID & Password protected access to control functions
		System architecture shall be capable of supporting individual luminaire level monitoring and control, even if not initially deployed.
Key components & functions	Wireless central automation controller	Act as heart of automation and should facilitate remote and auto on/off of street lights, remote operating hours settings (different for different feeder Panels) for street light connected on different feeder panels.
		Reports various parameters to server clusters. These are parameters that are captured by metering system and streetlight controller at individual feeder panels.
		Report faults at individual feeder panels such as fuse failure, power failure, MCB trips, over load, contactor fault, activation of manual switch, ground fault, control cabinet door open, indication for street light failures, feeder panel door open etc.
	Server cluster	This is group of high end server system which allows unlimited redundant data storage using Oracle/MySQL / any other database systems
		The data collection server should work on open protocol having mechanism for assured delivery of data sent by hardware device
		Data backup: The system should have automated back-up facility to have regular back up of the data to ensure availability of the data and information. This should be achieved through mirror imaging of two HDDs. The backup system should facilitate any data regarding performance of the system in the last 12 months in 1 working day and any data regarding performance of the system during any period of the concession within 5 working days.
		The central server should be adequately back up by 2 hrs UPS system for operational reliability.
	Control centre	Control center to provide a snapshot of lighting status for a Municipal Corporation

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

		Complete monitoring on image of the entire geographic area at the screen and with projector attachment – on back wall, where the operators monitor the streetlight and dispatch maintenance teams. Any alarms and their exact location should be shown on the map for easy and fast overview.
	Enterprise middleware system	The application software should be based on service oriented architecture and platform independent.
	Enterprise management information system	Complete end to end enterprise software system to facilitate control, monitor and analysis
		Minimum key modules of management information system should be maintenance planning, inventory management, contractor/maintenance, staff performance monitoring, reporting and access Control.
	Call centre	For ULB to report grievances/complaints, bidder shall maintain and provide a number.
		Track the complaints made by the ULBs and to update the status of their complaints
Communication provisions & features		Communication speed between central automation controller (Master) and remote unit (streetlight controller) should be such that maximum time required for acquiring the data should not be more than 30 minutes for 250 no's RTUs.
		CCMS should be able to communicate with any streetlight controller individually or collectively to control and monitor.
		CCMS should support to export reports on website to other application formats like MS Excel, MS Access, DB, SQL, Oracle etc.
		Printout facility available on web pages
Report generation		Reports such as feeder panel failure report, % uptime, etc. should be generated on a daily basis specific to each Municipal Corporation from the readings received from the individual street light controller equipment
		Asset management software showing defective units, if any and other user-defined reports should also be available in the CCMS.
Enterprise MIS/Key - Modules		The CCMS shall include a configurable workflow engine enabling: - Automated ticket generation from alarms - Configurable SLA definitions per fault type - Escalation matrix based on time thresholds - Role-based approval hierarchy - Field technician assignment and closure validation Time-stamped audit trail of all actions

The CCMS shall expose secure REST-based APIs, if required, for integration with:

- Integrated Command & Control Centre (ICCC)
- Utility billing systems
- Third-party analytics platforms
- GIS platforms

Service Level Agreement (SLA) and Fault Rectification Requirements

- The Bidder shall ensure continuous functioning of all installed LED street luminaires during the O&M period.
- Fault detection shall be automated through the CCMS for luminaires covered under individual monitoring.
- The following maximum response and rectification timelines shall apply:
- Major road / Arterial road faults: Rectification within 48 hours
- Sub-arterial / Collector roads: Rectification within 72 hours
- Residential roads: Rectification within 72 hours
- Fault response time shall be measured from the time of fault alert generation in the CCMS or official complaint registration, whichever is earlier.
- Failure to meet prescribed rectification timelines shall attract penalties as defined in the Project Agreement.
- The CCMS shall maintain complete timestamped logs of fault detection, response initiation, and rectification closure.
- SLA compliance reports shall be auto-generated monthly and made available to the Authority.

SPECIFICATIONS FOR VEHICLE-MOUNTED HYDRAULIC LIFTS / ACCESS PLATFORM (11-13-15 MTRS) *Note : All the Vehicles shall have BMC Branding as per the design as approved by BMC*

Specification	Model size		
	11 m	13 m	15 m
Max. Working height	11.0M	13.0M	15.0M
Cage floor height from ground	9.5M	11.5M	13.5M
Max. outreach	4.5M	5.0M	6.0M
Slewing range	360° cont.	360° cont.	360° cont.
Safe working load	200 kg	200 kg	200 kg
Stabilizers	Controls 2 nos.	2/ 4 nos.	4 nos.
Stabilizers up and	Manual 2/4 spool valve at base only		

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area

down	
Boom controls	Dual controls [base and basket]
Safety accessories	Lock valves to stabilizers
	Lock valves to booms
	Emergency hand pump
	Emergency stop switch
	Boom to stabilizers interlocks
	Rotation interlock
	Pressure relief valve
	Safety belt anchorage points

Rate Calculation for Foundation of octagonal poles (For One Pole)			
Sl. No	Item Description	Qty.	Units
1	2	3	4
1	Earth work in excavation of foundation in hard soil within 50m initial lead & 1.5 M initial lift including rough dressing and levelling the bed and depositing the excavated materials away from the working areas as directed by the Engineer- in-Charge	0.36	Cum
2	Quarring, collecting, supplying, filling sand from the local area with all leads, lifts and delifts or by mechanical means including cost and conveyance of all materials etc. and spreading the same in layers not exceeding 0.30 mtr. Depth for compaction as per direction of Engineer- in-Charge	0.036	Cum
3	P.C.C of (1:3:6) with 40cm down H.G.C.B metal including hoisting, laying, compacting, curing, and watering etc. with all T&P required for the work including cost conveyance royalty and all other taxes of materials complete in all respect as per Engineer-in-Charge.	0.036	Cum
4	R.C.C. M-25 with 20mm, downgraded black hand granite crushed broken stone chips including cost and conveyance of all materials with all taxes, royalty, labour and T&P required for the work etc. complete as directed by the Engineer-in-Charge.	0.431	Cum
5	Supply M.S. reinforcement for R.C.C. work including cutting, bending, binding and straightening with cost conveyance, labour, T&P, all taxes of M.S. Rod including cost of binding wire 18 to 20 gauge.	0.13	MT
6	Rigid and smooth cantering and shuttering for R.C.C. work including false works and dismantling them after casting including cost of materials complete in ground floors. R.C.C. foundation, plinth band and footing base of column	0.64	Sqm
7	16mm thick cement plaster in cement mortar (1:6) over brick including cost and conveyance of all materials with all the taxes, royalty, labour, T&P required for the work etc. complete as directed by the Engineer-in- Charge.	0.64	Sqm
8	Priming one coat with approved Water bound cement primer including cost of Primer.	0.96	Sqm

9	Finishing walls with water proofing cement paint of approved shade in new work two coats to give an even shade including cost of paint.	0.96	Sqm
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The above-requirement is indicative one, the final calculation shall be as per the wind speed, height of the pole and as instructed by the Engineer in charge.

Name of the work: Construction of Foundation for 12 mtr High Mast Light

Detailed Estimate Sheet						
Sl. No	Detail of Work	No	Measurement in Meter			Amount
			L.	B.	D.	

1. Earth work excavation in all kind of soil including mooram and earth mixed with boulders except sheet rock and boulders requiring blasting including dressing and levelling the bed up to the required depth and depositing the excavated materials at places away from the work site with initial lead of 0.50m and initial lift of 1.5m direct of E-I-C.

$$\text{Qty.} \quad 1 \quad \times 2.15 \times 2.15 \times 1.70 \quad = \quad \underline{7.86\text{cum}} \\ 7.86 \text{ cum}$$

2. Carriage of Excavated earth by mechanical means within 5km lean including loading and unloading with all cost conveyance T&P sundries etc complete as per direction of Engineer- in-Charge. = 7.86 cum

3. Supply and filling in foundation and plinth with river sand, in layers including watering, with cost, conveyance, royalties, and taxes of all materials, cost of all labour, carriage of water, sundries T&P required for the work etc all complete as per the specification & direction of E-I-C.

$$\text{Qty} \quad 1 \times 2.15 \quad \times \quad 2.15 \quad \times 0.10 = 0.46 \text{ cum}$$

4. PCC in prop (1:4:8) in foundation and bed using 4cm size H.G.C.B metal of approved quality and approved quarry including hoisting lowering, laying, concrete and compacting the same to require level, with compaction, watering and curing including cost, conveyance, royalties and taxes of all materials with cost of all labours, sundries and T&P such as hire charges of concrete mixer, concrete vibrator required for the work etc complete as per the specification and direction of E-I-C.

$$\text{Qty} \quad 1 \times 2.15 \quad \times \quad 2.15 \quad \times 0.10 = 0.46 \text{ cum}$$

5. R.C.C work of M25 grade with 20mm downgraded chips (C.B) including hoisting & laying cost of all materials, labour T&P sundries etc complete.

$$\begin{aligned} \text{Qty} \quad 1 \times 2.00 \quad \times \quad 2.00 \quad \times 0.40 &= 1.60 \text{ cum.} \\ 1 \times 0.75 \quad \times \quad 0.75 \times 1.40 &= \underline{0.79 \text{ cum}} \\ &2.39 \text{ cum} \end{aligned}$$

6. Rigid smooth centering and shuttering for RCC or CC work including false works, supplying of centering materials, its hire charges, cost of labour T&P and dismantling after casting the concrete etc. all complete as per direction of E-I-C.

$$\begin{aligned} \text{Side} \quad 4 \times 0.75 \times 1.40 &= 4.20 \text{ sqm} \\ 4 \times 2.00 \times 0.40 &= \underline{3.20 \text{ sqm}} \end{aligned}$$

7.40 sqm

7. Cutting, straightening, coiled on bent up MS rod or tor steel, welding or jointing if necessary including bending, binding, trying the steel rod as required for RCC work including hoisting, lowering and placing in proper position according to approved design and drawing, including cost, conveyance, loading, unloading, taxes of MS rod or tor steel of binding wires of 18 to 20 gauge required for the works and cost of all labour and sundries T&P and scaffolding all complete as per the specification and direction of E-I-C.

As per item-5 $2.39 \times 0.50 \text{ qtl/m}^3 = 1.15 \text{ Qtl}$

Name of the work: Construction of Foundation for 16 mtr High Mast Light

Detailed Estimate Sheet						
Sl.No	Detail of Work	No	Measurement in Meter			Amount
			L.	B.	D.	

1. Earth work excavation in all kind of soil including moorum and earth mixed with boulders except sheet rock and boulders requiring blasting including dressing and leveling the bed up to the required depth and depositing the excavated materials at places away from the work site with initial lead of 0.50 m and initial lift of 1.5m and laying in layers not exceeding to 0.30 m and breaking clods and as per direction of E-1-C.

Qty $1 \times 2.75 \times 2.75 \times 1.90 = \underline{14.37 \text{ cum}}$

14.37 cum

2. Carriage of Excavated earth by mechanical means within 5 km lead including loading and unloading with all cost conveyance T & P sundries etc complete as per direction of Engineer- in-charge.

= 14.37 cum

3. Supply and filling in foundation and plinth with river sand, in layers including watering, with cost, conveyance, royalties, and taxes of all materials, cost of all labour, carriage of water, sundries T & p required for the work etc all complete as per the specification & direction of E-I-C.

Qty $1 \times 2.75 \times 2.75 \times 0.10 = 0.76 \text{ cum}$

4. PCC in prop. (1:4:8) in foundation and bed using 4 cm size h.g CB metal of approved quality and approved quarry including hoisting, lowering, laying concrete, and compacting the same to required level, with compaction, watering and curing including cost, conveyance, royalties, and taxes of all materials with cost of all labours, sundries and T & p such as hire charges of concrete mixer. concrete vibrator required for the work etc complete as per the specification and direction of E-I-C.

Qty $1 \times 2.75 \times 2.75 \times 0.10 = 0.76 \text{ cum}$

5. R.C.C. work of M25 grade with 20 mm downgraded chips (C.B.) including hoisting & laying cost of all materials, labour T&P sundries etc complete.

Qty $1 \times 2.60 \times 2.60 \times 0.50 = 3.38 \text{ cum.}$

$1 \times 0.90 \times 0.90 \times 1.60 = \underline{1.30 \text{ cum}}$
4.68 cum

6. Rigid smooth centering and shuttering for RCC or CC work including false works, supplying of centering materials, its hire charges, cost of labour T & P and dismantling after casting the concrete etc all complete as per direction of E-I-C.

Side $4 \times 0.90 \times 1.60 = 5.76 \text{ sqm}$

$4 \times 2.60 \times 0.50 = \underline{5.20 \text{ sqm}}$

10.96 sqm

7. Cutting, straightening, coiled on bent up MS rod or tor steel, welding or jointing if necessary including bending, binding, tying the steel rod as required for RCC work including hoisting, lowering and placing in proper position according to approved design and drawing, including cost, conveyance, loading, unloading, taxes of MS rod or tor steel of binding wires of 18 to 20 gauge required for the works and cost of all labor and sundries T & P and scaffolding all complete a per the specification and direction of E-I-C.

As per item-5 $4.68 \times 0.60 \text{ qtl/m}^3 = 2.81 \text{ Qtl}$

Hierarchy and Interpretation of Technical Requirements

1. In case of any inconsistency between indicative wattage tables and prescribed lighting performance parameters (Lux level, uniformity ratio, lumen output), the lighting performance parameters shall prevail.
2. In case of any inconsistency between technical specifications and evaluation criteria, the evaluation criteria defined in the relevant section shall prevail for the purpose of commercial comparison.
3. The Bidder shall be responsible for ensuring that the proposed luminaires meet the prescribed lighting performance requirements through proper photometric design, irrespective of the nominal wattage offered.
4. Any interpretation that attempts to rely solely on nominal wattage without meeting performance requirements shall render the Bid non-responsive.

SECTION : 4

TECHNICAL PROPOSAL SUBMISSION FORMS

TECH -1

COVERING LETTER

(ON BIDDER'S LETTER HEAD)

[Location, Date]

To,

The Executive Engineer (Tender Cell),

Bhubaneswar Municipal Corporation

ICOMC Tower

Janpath, Unit-9

Bhubaneswar - 751022, Odisha

Subject: Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area.

Dear Sir,

1. With reference to your RFP document no. _____, dated _____, I/We, having examined the RFP Documents and understood their contents, hereby submit my/our proposal for the aforesaid Project. The Proposal is unconditional and unqualified.
2. I acknowledge that the Authority will be relying on the information provided in the Proposal and the documents accompanying the proposal for selection of the Agency for the aforesaid Project, and we certify that all information provided in the proposal and its Annexures along with the supporting documents are true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the proposal are true copies of their respective originals.
3. This statement is made for the express purpose of our selection as Agency for the execution of the aforesaid Project and maintenance of the Project during the Maintenance Period.
4. I shall make available to the Authority any additional information it may find necessary or require to supplement or authenticate the BID.
5. I acknowledge the right of the Authority to reject our BID without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
6. I certify that in the last three years, we have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.

7. I declare that:
- (a) I have examined and have no reservations to the Bidding Documents, including any Addendum issued by the Authority; and
 - (b) I have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in the RFP document, in respect of any tender or request for proposal issued by or any Agreement entered into with the Authority or any other public sector enterprise or any government, Central or State; and
 - (c) I hereby certify that we have taken steps to ensure that in conformity with the provisions of the RFP, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice; and
 - (e) the undertakings given by us along with the Application in response to the RFP for the Project were true and correct as on the date of making the Application and are also true and correct as on the BID Due Date and I shall continue to abide by them.
8. I understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any BID that you may receive nor to invite the Bidders to BID for the Project, without incurring any liability to the Bidders, in accordance with the RFP document.
9. I certify that in regard to matters other than security and integrity of the country, we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
10. I undertake that in case due to any change in facts or circumstances during the Bidding Process, we are attracted by the provisions of disqualification in terms of the guidelines referred to above, we shall intimate the Authority of the same immediately.
11. I further acknowledge and agree that in the event such change in control occurs after signing of the Agreement up to its validity, it would, notwithstanding anything to the contrary contained in the Agreement, be deemed a breach thereof, and the Agreement shall be liable to be terminated without the Authority being liable to us in any manner whatsoever.
12. I hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of the Bidder, or in connection with the Bidding Process itself, in respect of the above mentioned Project and the terms and implementation thereof.
13. In the event of i/we were declared as the Selected Bidder, I/we agree to enter into an Agreement in accordance with the draft that has been provided to me/us prior to the BID Due Date. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.

14. I have studied all the Bidding Documents carefully and also surveyed the project area. We understand that except to the extent as expressly set forth in the Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the Authority or in respect of any matter arising out of or relating to the Bidding Process including the award of Agreement.
15. The BID Security/EMD is attached.
16. The documents accompanying the Technical Bid, as specified in the RFP, have been submitted in separate files.
17. I agree and understand that the BID is subject to the provisions of the Bidding Documents. In no case, I shall have any claim or right of whatsoever nature if the Project / Contract is not awarded to me or our BID is not opened or rejected.
18. The BID Price has been quoted by me after taking into consideration all the terms and conditions stated in the RFP, draft Agreement, our own estimates of costs and after a careful assessment of the site and all the conditions that may affect the project cost and implementation of the project.
19. I agree and undertake to abide by all the terms and conditions of the RFP document.
20. I shall keep this offer valid for 180 (one hundred and eighty) days from the BID Due Date specified in the RFP.
21. I hereby submit our BID and offer a BID Price as indicated in Financial Bid for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.

In witness thereof, I submit this BID under and in accordance with the terms of the RFP document.

Yours faithfully,

Authorized Signatory with Date and Seal:

Name and Designation: _____

Address of Bidder: _____

TECH -2

Bidder's Organization (General Detail)

Sl. No.	Description	Full Details
1	Name of the Bidder	
2	Address for communication: Tel : Fax: Email id:	
3	Name of the authorized person signing & submitting the bid on behalf of the Bidder: Mobile No. : Email id :	
4	Registration / Incorporation Details Registration No: Date & Year. :	
5	Local office in Odisha If Yes, Please furnish contact details	Yes / No
6	Bid Processing Fee Details Amount: Online reference No. : Date: Name of the Bank:	
7	EMD Details Amount : Online reference No.: Date: Name of the Bank:	

Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights
for Bhubaneswar Municipal Corporation (BMC) Area

8	PAN Number	
9	Goods and Services Tax Identification Number (GSTIN)	
10	Willing to carry out assignments as per the scope of work of the RFP	YES
11	Willing to accept all the terms and conditions as specified in the RFP	YES

Authorized Signatory [*In full and initials*]: _____

Name and Designation with Date and Seal: _____

TECH -3

Bidder Organization (Financial Details)

Financial Information in INR				
Details	FY <u>23-24</u>	FY <u>24-25</u>	FY <u>25-26</u>	Average
Average Annual Turnover (in Crore).				
Net worth as on date				
Supporting Documents: Audited certified financial statements for the last Three FYs (preceding the Financial year in which the proposal is due) (Submission of copies of Income & Expenditure Statement and Balance Sheet for the respective financial years is mandatory along with this form). If the audited financial statements are not available for FY 2025-26, then provisional Financial Statements certified by a Chartered Accountant shall be furnished. <i>Filled in information in this format must have to be jointly certified and sealed by the CA and the authorized representative of the bidder and to be furnished in original along with the technical proposal failing which the proposal will be out rightly rejected. No scanned copy will be entertained.</i>				

Signature and Seal of the Company Auditor with Date in original

Authorized Signatory [In full initials with Date and Seal]: _____

Communication Address of the Bidder: __

[NB: No Scanned Signature will be entertained]

TECH -4

FORMAT FOR POWER OF ATTORNEY

(On Stamp Paper)

Know all men by these presents, We [name of the company/firm/trust/organization/agency and address of the registered office] do hereby irrevocably constitute, nominate, appoint and authorize Mr./ Ms. (name),and presently residing at, who is presently employed with us, as our true and lawful attorney (hereinafter referred to as the **Attorney**) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Proposal for providing Services to **BMC**), including but not limited to signing and submission of all Proposal documents and other documents and writings, participate in investor consultations and other conferences and providing information/responses to BMC, representing us in all matters before BMC, signing and execution of all contracts including undertakings consequent to acceptance of our Proposal, and generally dealing with BMC in all matters in connection with or relating to or arising out of our Proposal and/or upon award of the Project to us and/or till the entering into of the service agreement with BMC.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE,, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF, 20.....

For

.....

(Signature, name, designation and address)

Witnesses:

1.

2.

(Notarized)

Accepted

.....

(Signature)

(Name, Title and Address of the Attorney)

TECH -5

(BIDDER'S PAST EXPERIENCE DETAILS)

Details of the similar assignments undertaken / completed during the last Five years

S. No.	Name of Project	Name of Client with address and contact numbers	Date of Award of Contract	Date of completion of assignment (for both completed and ongoing projects)	Period of Service	Description of services provided with number of Lights	Contract Value (in INR)	Description of services provided
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Details of the projects with CCMS

S. No.	Name of Project	Name of Client with address and contact numbers	Date of Award of Contract	Date of completion of assignment	Period of Service	Description of services provided with number of Lights connected to CCMS	Contract Value (in INR)	Description of services provided
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Authorized Signatory [In full and initials]: _____

Name and Designation with Date and Seal: _____

Note: Bidders are requested to furnish the list of assignments of similar nature undertaken during the last 5 Years (preceding the Proposal Due Date) as per the above prescribed format only. Information not conforming to the above format will be treated as non-responsive. Copies of the Work order / Contract Document and Completion Certificate from the previous Clients need to be furnished along with the above information..

Details of Tools & Plants available with the Agency

Sl. No.	Equipment Description	Minimum Quantity to be Mobilized in Each Zone	Minimum Quantity to be Mobilized in all Zones	Owned/ Lease	Condition/ Year of purchase
1	Ladders with minimum height of 8 meters	3 nos.	9 nos.		
2	Hydraulic Lifts/ ladders for Street Lights maintenance (with operating height more than 11 meters)	3 nos.	9 nos.		
3	LCV	4 nos.	12 nos.		

Note: The invoices or hire purchase agreement for each of the Tools & Plants shall be furnished mandatorily.

TECH -6

INFORMATION REGARDING ANY CONFLICTING ACTIVITIES AND DECLARATION THEREOF

Are there any activities carried out by your Agency which are of conflicting nature as mentioned in Section 2: [Information to the Bidder] under Eligibility Criteria: Clause 1, Point (9). If yes, please furnish details of any such activities.

If no, please certify,

IN BIDDER' S LETTER HEAD

I, hereby declare that our Agency _____ as Individual is not indulged in any such activities which can be termed as the conflicting activities as mentioned in **Section 2: [Information to the Bidder] under Eligibility Criteria: Clause 1, Point (9).**

I, also acknowledge that in case of misrepresentation of any of the information, our proposal / contract shall be rejected / terminated by the Authority which shall be binding on us.

Authorized Signatory [In full initials with Date and Seal]: _____

Communication Address of the Bidder: __

TECH -7

Undertaking for Non-Blacklisting on Stamp Paper

[On the Stamp Paper of Rs.100/- value in shape of a notarized affidavit]

I/we, hereby undertake that, our organization has not been blacklisted / debarred by any of the Central / State Government Ministry / Department/ Office or by any Public Sector Undertaking (PSUs) and I/we are not blacklisted by any authority and that no debarment/blacklisting subsists as on the Proposal Due Date.

Yours sincerely,

Authorized Signature

[In full and initials]: _____

Name and Designation of the Signatory:

Name of the Bidder and Address

TECH -8

DESCRIPTION OF APPROACH, METHODOLOGY & WORK PLAN TO UNDERTAKE THE ASSIGNMENT

[Technical approach, methodology and work plan are key components of the Technical Proposal. In this Section, bidder should explain his understanding of the scope and objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. Further, he should highlight the problems being addressed and their importance and explain the technical approach to be adopted to address them. It is suggested to present the required information divided into following four sections]

A. Understanding of Scope, Objectives and Completeness of response

Please explain your understanding of the scope and objectives of the assignment based on the scope of work, the technical approach, and the proposed methodology adopted for implementation of the tasks and activities to deliver the expected output(s), and the degree of detail of such output.

Please do not repeat/ copy the ToR here.

B. Company profile & Differentiating factors

C. Similar work experience

D. Approach & methodology (Proposed manpower, standard operating procedure and quality control mechanism, Work Plan, grievance redressal, value provided to Authority etc.)

E. Technological solutions deployed by agency:

The bidder should propose technological solutions that would be adopted under the proposed assignment with sub-activities

“Tech-9”

Manufacturer's Authorization Form (MAF) (To be submitted on OEM Letter head for Poles, LED Fixtures and CCMS SOFT With Accessories)

Ref. No. _____ dated _____

To
Divisional Head
IDCO, Bhubaneswar

Dear Sir,

Tender Reference No./ NIT: _____

Name of the tender: “Selection of Agency for Supply, Installation, Operation & Maintenance of LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area.”

We _____ who are established and reputable manufacturers of _____ having factories for Octagonal Poles at _____ and LED light fittings at _____ do hereby authorize M/s. _____ (Name and address of Agent / Dealer) to participate in the above tender.

We hereby extend our technical assistance to the bidder during design engineering and inspection of the product. We have studied the requirements of the product and confirm that we will adhere to the specifications of the tender and quality plan and extend all support during the inspection and provide documentary evidence at the time of inspection for the verification by TPI /Client.

Yours faithfully

(Name)

For and on behalf of M/s. _____

(Name of manufacturers)

SECTION: 5

FINANCIAL PROPOSAL SUBMISSION FORMS

(as per BoQ attached)

SECTION 6

BID SUBMISSION CHECK LIST

Annexure – I

Sl. No.	Description	Submitted (Yes/No)	Page No.
TECHNICAL PROPOSAL			
1	Filled in Bid Submission Check List (ANNEXURE-I)		
2	Covering Letter (TECH -1)		
3	Bid Processing Fee of Rs. ___/- in form of DD/BG		
4	Bid Security/ EMD		
5	General Details of the Bidder (TECH - 2)		
6	Financial Details of the Bidder (TECH - 3)		
7	Power of Attorney (TECH - 4) in favour of the person signing the bid on behalf of the bidder.		
8	Similar Project Experience of the Bidder (TECH - 5)		
9	Self-Declaration on Potential Conflict of Interest (TECH - 6)		
10	Undertaking for Non-Blacklisting on Stamp Paper (TECH – 7)		
11	Description of approach, methodology & work plan to undertake the assignment (TECH – 8)		
12	Manufacturer Authorization Form(MAF) (TECH-9)		

Undertaking:

- *All the information have been submitted as per the prescribed format and procedure.*
- *Each part has been separately bound with no loose sheets and each page of all the two parts are page numbered along with Index Page.*
- *All pages of the proposal have been sealed and signed by the authorized representative.*

Authorized Signatory [In full and initials]:_____

Name and Designation with Date and Seal: _____

Annexure – II

PERFORMANCE BANK GUARANTEE FORMAT

To,

The Commissioner,
Bhubaneswar Municipal Corporation
ICOMC Tower
Janpath, Unit-9
Bhubaneswar - 751022, Odisha

Subject: Selection of Agency for Operation & Maintenance of Existing LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area.

WHEREAS __ (Name and address of the Agency) (hereinafter called “the Agency”) has undertaken, in pursuance of RFP No _____ dated _____ to undertake the service for “**Selection of Agency for Operation & Maintenance of Existing LED Street Lights for Bhubaneswar Municipal Corporation (BMC) Area.**”(herein called contract) **AND WHEREAS** it has been stipulated by **City Engineer, BMC, Odisha** in the said contract that the agency shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract; **AND WHEREAS** we have agreed to give the supplier such a bank guarantee; **NOW THEREFORE** we hereby affirm that we are guarantors and responsible to you, on behalf of the Agency, up to a total of _ (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the Agency to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Agency before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Agency shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This performance bank guarantee shall be valid until the __day of _, <Year>

Our branch at Bhubaneswar (Name & Address of the Bank) is liable to pay the guaranteed amount depending on the filing of claim and any part thereof under this Bank Guarantee only and only if you serve upon us at our Bhubaneswar branch a written claim or demand and received by us at our Bhubaneswar branch on or before Dt_____ otherwise bank shall be discharged of all liabilities under this guarantee thereafter.

.....

(Signature of the authorized officer of the Bank)

.....

Name and designation of the officer

.....

.....

Seal, name & address of the Bank & Branch

Section 7

Procedure under E-Tendering

DEFINITIONS

- a) **Tender portal:** The E-Procurement Portal of Government of Odisha introduced for the process of E-Tendering which can be accessed on <https://www.tendersodisha.gov.in>
- b) Use of valid Digital Signature Certificate of appropriate class (Class II or class III) issued from registered certifying authorities (CA) as stipulated by Controller of Certifying Authorities (CCA), Government of India such as [n-Code](#), Sify, [TCS](#), [MTNL](#), [e-Mudhra](#) is mandatory for all users.
- c) For all purpose, the server time displayed in the e-Procurement portal shall be the time to be followed by all the users.
- d) Words in capital and not defined in this document shall have the same meaning as in the Request for Proposal (“RFP”).

1. PARTICIPATION IN BID:

- 1.1 **PORTAL REGISTRATION:** The Contractor/Bidder intending to participate in the bid is required to register in the portal using his/her active personal/official e-mail ID as his/her Login ID and attach his/her valid Digital signature certificate (DSC) to his/her unique Login ID. He/She has to submit the relevant information as asked for about the firm/contractor. The portal registration of the bidder/firm is to be authenticated by the State Procurement Cell after verification of original valid certificates/documents such as (i) PAN and (ii) Registration Certificate (RC) / GSTIN. The time period of validity in the portal is at per with validity of RC/GSTIN. Any change of information by the bidder is to be re-authenticated by the State Procurement Cell. After successful authentication bidder can participate in the online bidding process.
- 1.2 Bidders participating through Joint Venture shall declare the authorised signatory through Memorandum of Understanding duly registered and enroll in the portal in the name and style of the Joint venture Company. It is mandatory that the DSC issued in the name of the authorised signatory is used in the portal. For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory. In case the authorized signatory holding Power of Attorney and Digital Signatory are not the same, the bid shall be considered non-responsive.
- 1.3 Any third party/company/person under a service contract for operation of e-Procurement system in the State or his/their subsidiaries or their parent companies shall be ineligible to participate in the procurement process that are undertaken through the e-Procurement system irrespective of who operates the system.

2. LOGGING TO THE PORTAL:

The Contractor/Bidder is required to type his/her *Login ID* and password. *The system will again ask to select the DSC and confirm it with the password of DSC as a second stage authentication.* For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique Login ID, password and DSC combination and authenticates the login process for use of portal.

3. DOWNLOADING OF BID:

The tender documents uploaded by the Tender Inviting Officer in the website <https://tendersodisha.gov.in> will appear in “Latest Active Tender” Section of the homepage. The publication of the tender will be for specific period of time till the last date of submission of bids after which the same will be removed from the list of Active Tenders. The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-line and upload the completed tender at his convenience before the closing date and time of submission.

4. CLARIFICATION ON BID:

The bidder may ask question related to tender online in the e-procurement portal within the period of seeking clarification. The Officer inviting the bid / Procurement Officer-Publisher will clarify queries related to the tender. The clarification to the queries will be hoisted in the tender portal.

5. PREPARATION & SUBMISSION OF BID:

- 5.1 Detailed RFP may be downloaded from Tender Portal for detail study and preparation of bid. The bidder shall carefully go through the RFP document & prepare the required documents for Technical Proposal & Financial Proposal as specified in Cl.No.4.1 of Section-2 & upload the scanned copies of Technical proposal documents in PDF format & Financial proposal in excel format template uploaded by the Authority.
- 5.2 The bidders should check the system generated confirmation statement on the status of the submission.
- 5.3 The bidder shall log on to the portal with his /her DSC and move to the desired tender for uploading the documents in appropriate place one by one simultaneously checking the documents.
- 5.4 Bids cannot be submitted after due date and time. The bids once submitted cannot be viewed, retrieved or corrected. The Bidder should ensure correctness of the bid prior to uploading and take print out of the system generated summary of submission to confirm successful uploading of bid. The bids cannot be opened even by the OIT or the Procurement Officer Publisher/opener before the due date and time of opening.
- 5.5 Each process in the e-procurement is time stamped and the system can detect the time of log in of each user including the Bidder.
- 5.6 The Bidder should ensure clarity/legibility of the document uploaded by him to the portal.
- 5.7 The system shall require all the mandatory forms and fields filled up by the bidder during the process of submission of the bid/tender
- 5.8 The Bidder should upload sufficiently ahead of the bid closure time to avoid traffic rush and failure in the network.

- 5.9 The tender inviting officer is not responsible for any failure, malfunction or breakdown of the electronic system used during the e-procurement process.
- 5.10 The Bidder is required to upload documents related to his eligibility criteria and qualification information and Financial Proposal template duly filled in.
- 5.11 The Bidder will not be able to submit his bid after expiry of the date and time of submission of bid (server time). The date and time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer Inviting the Bid.

6. SIGNING OF BID:

The 'online bidder' shall digitally sign on all statements, documents, certificates uploaded by him, owning responsibility for their correctness / authenticity as per IT ACT 2000. If any of the information furnished by the bidder is found to be false / fabricated / bogus, his EMD/Bid Security shall stand forfeited & his name shall be recommended for blocking of portal registration and the bidder is liable to be blacklisted.

7. SECURITY OF BID SUBMISSION:

- 7.1 All bid uploaded by the Bidder to the portal will be encrypted.
- 7.2 The encrypted Bid can only be decrypted / opened by the authorised openers on or after the due date and time.

8. RESUBMISSION AND WITHDRAWAL OF BIDS:

- 8.1 Resubmission of bid by the bidders for any number of times before the final date and time of submission is allowed.
- 8.2 Resubmission of bid shall require uploading of all documents including price bid a fresh.
- 8.3 If the bidder fails to submit his modified bids within the pre-defined time of receipt, the system shall consider only the last bid submitted.
- 8.4 The bidder should avoid submission of bid at the last moment to avoid system failure or malfunction of internet or traffic jam or power failure etc.
- 8.5 The Bidder can withdraw his bid before the closure date and time of receipt of the bid by uploading scanned copy of a letter addressing to the Procurement Officer Publisher (Officer Inviting Tender) citing reasons for withdrawal. The system shall not allow any withdrawal after expiry of the closure time of the bid.

9. OPENING OF THE BID:

- 9.1 Bid opening date and time is specified during tender creation or can be extended through corrigendum / addendum. Bids cannot be opened before the specified date & time.

9.2 The bidders & guest users can view the summary of opening of bids from any system. Contractors are not required to be present during the bid opening at the opening location if they so desire.

9.3 In the event of the specified date of bid opening being declared a holiday for the Officer inviting the Bid, the bids will be opened at the appointed time on the next working day.

10. EVALUATION OF BIDS:

10.1 All the opened bids shall be downloaded and printed for taking up evaluation. The officer authorized to open the tender shall sign and number on each page of the documents downloaded and furnish a certificate that "the documents as available in the portal containing 99nos of pages".

10.2 The bidder may be asked in writing/ online to clarify on the uploaded documents provided in the Technical Bid, if necessary, with respect to any doubts or illegible documents. The officer inviting tender may ask for any other document of historical nature during Technical evaluation of the tender. Provided in all such cases, furnishing of any document in no way alters the Bidder's price bid. Non submission of legible documents may render the bid non-responsive.

10.3 The bidders will respond in not more than 7 days of issue of the clarification letter, failing which the bid of the bidder will be evaluated on its own merit.

10.4 The Technical evaluation of all the bids shall be carried out as per information furnished by Bidders.

10.5 The Procurement Officer-Evaluators; will evaluate bid and finalize list of responsive bidders.

10.6 The financial bids of the technically responsive bidders shall be opened on the due date of opening. The Procurement Officer-Openers shall log on to the system in sequence and open the financial bids.

10.7 The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorised representative who wish to be present.

10.8 At the time of opening of "Financial Bid", bidders whose technical bids were found responsive will be opened.

10.9 The responsive bidders' name, bid prices will be announced.

10.10 Procurement Officer-Openers shall sign on each page of the downloaded Financial Proposal and the Comparative Statement and furnish a certificate to that respect.

10.11 Bidder can witness the principal activities and view the documents/summary reports for that particular work by logging on to the portal with his DSC from anywhere.

10.12 System provides an option to Procurement Officer Publisher for reconsidering the rejected bid with the approval of concern Executive Engineer / Head of Department

DISCLAIMER

The Applicant must read all the instructions in the RFP and submit the same accordingly.

"Annexure- A"

**Manufacturer's Authorization Form (MAF)
(To be submitted on OEM Letter head for Octagonal Poles and LED Street Light)**

Ref. No. _____ dated _____

To
Divisional Head
IDCO, Bhubaneswar

Dear Sir,

Tender Reference No./ NIT : _____

**Name of the tender: "SELECTION OF AGENCY FOR OPERATION & MAINTENANCE OF
EXISTING LED STREET LIGHTS FOR BHUBANESWAR MUNICIPAL CORPORATION (BMC)
AREA."**

We _____ who are established and reputable manufacturers of
_____ having factories for octagonal Poles at _____
and LED light fittings at _____
do hereby authorize M/s. _____ (Name and address of Agent /
Dealer) to participate in the above tender.

We hereby extend our technical assistance to the bidder during design engineering and inspection of the product.

We have studied the requirements of the product and confirm that we will adhere to the specifications of the tender and quality plan and extend all support during the inspection and provide documentary evidence at the time of inspection for the verification by TPI /Client.

Yours faithfully

(Name)

For and on behalf of M/s. _____

(Name of manufacturers)

Annexure B: Details of the Existing Street Lights

**SUPER WEALTH FINANCIAL ENTERPRISES PVT.LTD.
BHUBANESHWAR ENERGY SAVING PROJECT**

Sr. No.	REP ORT No.	NAME OF SW. POINT	CESU METER No.	COSUM- - ER No.	IMPLEMENTED LED FIXTURE DETAIL										TOTAL No. OF LED INST. QTY.
					16W LED	45W LED	70W LED STL	90W LED STL	100W LED STL	110W LED STL	120W LED STL	LED HIGH MAST			
					16	45	70	90	100	110	120	110W	220W LED	250W LED	
1	R1	Jaganathsadak Garage Chhaka To Samntrapur	L&T 21194	99ST	0	0	0	0	6	92	0	0	0	0	98
2	R2	Ravi Talkies-Garage Chhaka Opp. MESCO Steel Nr.Sukanya Petrol Pump	17258384	81ST	0	0	0	0	0	58	0	0	0	0	58
3	R3	BJB College To Ravi Talkies	L&T 8066998	88ST	0	6	0	0	0	94	0	0	0	0	100
4	R4	Jaydev Vihar To Swasti Plaza	8067576	135SI	0	0	0	0	47	10	0	0	0	0	57
5	R5	Swasti Plaza To Kalinga Hospital	CSU 04012 Found Replaced On 6.02.15	158SI	0	0	0	0	64	4	0	0	0	0	68
6	R6	Beside Ecor : Kalinga Hospital To Damana Chhak	CSC25418	1022SI	0	0	0	0	48	0	0	0	0	0	48
7	R7	Govt Press Colony School To Kalinga Hospital (Nr Kalimata Temple)	L&T8067058	288SI	0	0	0	0	0	50	0	0	0	0	50
8	R8	Beside Hindustan Wheels Yahama Showroom (Appolo Hospital To Sainik School)	8068394	264SI	0	0	0	0	0	0	62	0	0	0	62
9	R9	Chintamaneswar Temple	1006366	77ST	0	28	0	0	0	0	0	0	0	0	28
10	R10	Dav School To Gopubandhu Smriti Sansad	CSO60187 New 8344778 New 61052512 New151603	35ST	0	0	15	25	0	0	0	0	0	0	40
11	R11	From Rupali Chhak(Panda Lifestyle) To Smasana Kali Temple	No Meter	3 ST/SDO 3	0	3	0	0	0	1	28	8	0	0	40
12	R12	From Smasana Kali Temple To Vidya Vihar Road (Vani Vihar)	No Meter	3 ST/SDO 3	0	4	0	0	0	0	24	0	0	0	28
13	R13	Vidya Vihar To Rammandir (Rajdhani Roxy)	No Meter	3 ST/SDO 3	0	0	0	0	0	0	8	6	0	0	14
14	R14	Station To Rajmal Road (Bata Show Room)	No Meter	2ST BCDD-I UNIT-II SECTION LOAD REDUCTION	0	0	8	0	0	0	30	0	0	0	38
15	R15	Rabindra Mandap-Nicco Park (Nr. Nic Sp)	CSC- 28921/33ST/ BCDD-I	33ST	0	0	0	0	0	0	32	0	6	0	38
16	R16	Damana Chakka To Patiya Sq.(Opp. Club Town Appt.)	CSC05071	1255 SI	0	0	0	0	0	72	0	0	0	0	72
17	R17	Patiya Square. To Kiit Square. (Nr.Sishuvihar Colony)	8068201	1434SI	0	0	0	0	0	72	0	6	0	0	78
18	R18	Kiit Square To Nanadankanan Rd. (Nr. Maa Santoshi Motors.)	8067782	1435SI	0	0	0	0	0	72	0	6	0	0	78
19	R19	Palaspalli Hospital Flyover- Naveen Niwas	16506184 L&T	69ST	0	26	0	4	38	0	0	0	0	0	68
20	R20	BMC To Mausima Square	Montel 3106965	56ST	0	2	19	0	0	0	0	0	0	0	21
21	R21	Mausima Flyover (Inside Sisubhavan Hospital)	No Meter		0	0	20	0	0	1	0	0	0	0	21
22	R22	Lingaraj Temple Station To Palaspalli Fly Over	CSC15889 New Meter RCUD0960	64ST	0	105	0	6	0	0	0	0	0	0	111
23	R23	Unit-I, Market (Rajmahal To AG)	ORB01763	40ST	0	14	0	0	18	0	0	0	0	0	32
		TOTAL No. OF TYPEWISE LED			0	188	62	35	221	526	184	26	6	0	1248
		TOTAL No. OF TYPEWISE LED FITTING B/F			0	188	62	35	221	526	184	26	6	0	1248
24	R24	Unit-II, Market (AG To Rajmahal)	CSU04795 NEW	41ST	0	13	0	0	17	0	0	0	0	0	30
25	R25(i	PMG Square To AG	New Mtr	31ST BCDD-I	0	0	0	0	42	0	17	0	0	0	59
26	R25(i	PMG Square High Mast	CSO 03694	47ST	0	0	0	0	0	0	0	0	9	0	9
27	R26	Gandmunda (ITR Road) To Pokhariput	L&T 8067109	555MI	0	68	0	0	3	9	0	0	0	0	80
28	R27	NICCO Park To Acharya Vihar (RIE Bus	L&T31102	34ST	0	20	0	0	0	0	29	0	0	0	49

29	R28	Sainik School To Press Chhak	L&T 8067285	265SI	0	0	0	0	0	52	0	0	0	0	52
30	R29	Pokhariput-Gandmunda St Light (Beside	CSU25136/CS	73ST	0	86	0	0	8	0	0	0	0	0	94
31	R30	Gandmunda Square To Khandagiri Square	L&T	2014SI	0	10	33	0	0	19	0	0	0	0	62
32	R31	Nakagate(Ghatikia) To Khandagiri NH-5	L&T30405	3039SI	0	49	0	32	0	0	0	0	0	0	81
33	R32	Beside Bhubaneswar Hotel (CTC Road)	L&T8068764	78ST	0	0	0	102	0	0	0	6	0	0	108
34	R33	Budheswari To Jyoti Service Stn.	ORB3889	41ST	0	0	0	44	0	0	0	0	0	0	44
35	R34	Bomikhal New Overbridge (Nr Kalpataru	No Meter	4ST	0	0	0	16	0	0	0	0	0	0	16
36	R35	Opp. State Quality Control	17258348/	54ST	0	0	44	0	0	0	0	0	0	0	44
37	R36	Rajmahal To Sishubhavan (Opp. Apsara	No Meter	2ST	0	0	2	0	0	0	0	0	0	0	2
38	R37	Press Chakka To Mahanadi Coalfield Office	L&T 08067926	289SI	0	66	0	0	0	0	0	0	0	0	66
39	R38	PMG To NICCO Park	CSU03707	32ST	0	28	0	0	0	0	36	14	0	0	78
40	R39	Nabard Officers Colony To Damana Square	17258352 L&T	1023SI	0	0	0	0	0	0	60	0	0	0	60
41	R40	Kalpana Chhak To Raj Mahal	3103510	48ST	0	0	9	0	0	19	0	0	0	0	28
42	R41	Power House Chhak To Dav (Nr. DAV P	L&T030614	100ST	0	0	0	0	0	48	0	0	0	0	48
43	R42	DAV School To CRPF Square	TP10107	99ST	0	0	0	0	0	90	0	4	2	0	96
44	R44	DTC On IAS Club-LIC Rd.,	CSC30487	84ST	0	75	0	2	0	4	0	0	0	0	81
45	R45	Acharya Vihar To Doordarsan (Planatorium)	8069092	266SI	0	0	0	0	0	0	65	0	0	0	65
46	R46	Gopabandhu Chhak To Jaleswar Temple	17258425	53ST	0	0	0	0	1	55	0	0	0	0	56
47	R47	Ekamra Square To Airport	L&T-29881	96 ST	0	0	0	0	0	0	40	0	9	0	49
TOTAL No. OF TYPEWISE LED					0	603	150	231	292	822	431	50	26	0	2605
TOTAL No. OF TYPEWISE LED					0	603	150	231	292	822	431	50	26	0	2605
48	R48	Kalpana to BMC Kalyan Mandap Bargarh	No Meter	47 ST	0	17	37	0	0	0	0	0	0	0	54
49	R49	Jharpada(Satya Nagar ROB) Bridge To	New Meter No.	42ST	0	0	0	42	0	0	0	0	0	0	42
50	R50	RBI Side (Keshari Talkies) Road To Janpath	60171	43ST	3	10	30	0	0	0	0	0	0	0	43
51	R51	Rasulgarh to IDCO Colony Chhak (Nr Jagat	L&T29912	111ST	0	0	79	0	0	3	0	0	0	0	82
52	R52	High Way INN to ARSS Chhak (Opp IDCO	L&T29984	112ST	0	0	97	0	0	0	0	0	0	0	97
53	R53	Bhanja Kala Mandap Gate, BJB Nagar Rd.	CSC75921 New	71ST	0	5	16	0	0	2	0	0	0	0	23
54	R54	Jaydev Vihar to (Biju Patnaik College) IRC	8341941 new	2151SI	0	0	0	0	0	36	0	0	0	0	36
55	R55	Keshari Talkies Back to Exhibition Ground	LC009603	65ST	0	0	49	0	0	0	0	0	0	0	49
56	R56	Pal Height to Mayfair Road (Nr Swarna	CSO71594	260SI	0	0	28	0	0	0	0	0	0	0	28
57	R57	Nr Nandadevi Apt Arvind Nagar Beside	Montel	1352SI	0	24	0	0	0	0	0	0	0	0	24
58	R58	Chandaka Indl Area, KIIT CMPS, Prashant	3107389	1384SI	0	0	12	0	0	0	0	0	0	0	12
59	R59	Damana Chakka to DAV Public Sch, Sailshree	2722297 Old	1558SI	0	0	0	0	0	0	0	0	0	0	0
60	R60	AG To Capital Hospital	CSC26532	83ST	0	0	0	0	0	32	0	0	0	0	32
61	R62	New Govt Colony & Adimata Colony Rd.	ORB02851/16 8SI/	168SI	4	56	3	0	0	0	0	0	0	0	63
62	R64	BMC Kalyan Mandap, VSS Nagar To NH	ORB39283/Ne	213SI	0	3	3	0	0	40	0	0	0	0	46
63	R65	BJB College, Botanical Garden Hostel	New Meter No.	40ST	0	2	5	28	0	0	0	0	0	0	35
64	R66	Beside NALCO, Mayfair Lagoon Rd.	No Meter		0	0	0	0	0	20	0	0	0	0	20
65	R67	Bargarh Brit Colony (Opp. Crematorium)	New CSU02606	51ST	0	0	1	0	0	29	0	0	0	0	30
66	R68	GRIDCO Colony, CESU Acharya Vihar	CSU 04090	91ST	0	0	29	0	0	0	0	0	0	0	29
67	R70	Health Office Road, Unit-III	NEW 63136439 I&t	92ST	0	0	17	0	0	0	0	0	0	0	17
68	R71	The Creche School	74092774 (L&T)	77ST	0	0	15	0	0	0	0	0	0	0	15
69	R72	Beside P&T Residential Colony Compound,	8067223	263SI	0	0	22	0	0	0	0	0	0	0	22
70	R73	Behind I.G. Park, Old Bus Stand	CSO60045 NEW	90 ST	0	0	44	0	0	0	0	0	0	0	44
71	R74	Nr. Jharpada Canal Road	CSC27544	83ST	0	0	18	0	0	39	0	0	0	0	57
TOTAL No. OF TYPEWISE LED					7	720	655	301	292	1023	431	50	26	0	3505
TOTAL No. OF TYPEWISE LED					7	720	655	301	292	1023	431	50	26	0	3505
72	R76	Patiya Station Rd.	New L&T	1346SI	54	23	0	0	0	0	0	0	0	0	77
73	R77	IAS /Bhubaneswar Club-LIC & Capital To	CSU004018	106ST	0	20	0	0	0	24	0	0	0	0	44
74	R78	Samantrapur To Kapileswar Canal Rd.	L&T8068694	44ST	0	0	0	34	0	0	0	0	0	0	34
75	R79	Nr OHT, PHD, (VSS Nagar VSS	No Meter Water	BCDD-II	0	0	0	0	0	32	0	0	0	0	32
76	R80	Brahmeswar Temple Road	No Meter/ BED	BED	0	0	0	0	0	14	0	0	0	0	14
77	R81	Sardar Patel Road	NEW 032963	37ST	0	0	0	0	0	0	0	0	0	0	0
78	R82	Ganga Nagar Square to LIC	CSO60046/CS	42ST	0	0	0	0	0	32	0	0	0	0	32
79	R83	Near Traffic Post, Laxmi Pooja Mandap	No Meter	BCDD-I	0	0	0	21	0	7	0	0	0	0	28
80	R84	Sarada Matha) (Samantrapur To Lingraj	No Meter	BED	0	7	7	37	0	0	0	0	0	0	51
81	R85	Beside GED Office, Kamala Nehru College	New CE 141860	70ST	0	0	29	0	0	0	0	0	0	0	29
82	R86	AG To Governer House (Ornamental)	CSC35639 NEW	58ST	0	0	0	0	0	56	0	0	0	0	56
83	R87	Nr 5R-1 Quarters Krishivihar Square Unit-8	40004	66ST	0	0	15	0	0	0	0	0	0	0	15

84	R88	Brijbandhu Kalyan Mandap To Snehlata	No Meter	5ST	0	0	0	0	0	31	0	0	0	0	31
85	R89	Snehlata Appt.to Mausima Square, S.V. Rd.	No Meter	5ST	0	0	0	0	0	31	0	0	0	0	31
86	R90	Crematorium To Rajdhani College Paik Nagar	3108905/1031	95ST	0	0	19	0	0	0	0	0	0	0	19
87	R92	Ward No. 39, Neelpadma Appt. Bomikhal	CSC27954	80ST	0	0	1	0	0	22	0	0	0	0	23
88	R93	Beside BMC Gov.High Sch.	ORBE6828	69ST	0	1	0	0	0	57	0	0	0	0	58
89	001A	Sainik School Campus To Dasraj Temple	08068172/262	262SI	0	0	13	0	0	0	0	0	0	0	13
90	002A	AG-Capital Hospital-Ekamra Square	8069141/ new	105ST	0	0	0	0	0	80	0	0	0	0	80
91	003A	Baramunda-Khandagiri NH	New RCUD0320	573MI	0	0	0	0	0	0	99	0	0	0	99
92	004A	Beside Big Bazar (Shriya Talkies Rd.), Big	74094488	87ST	0	0	40	0	0	0	0	0	0	0	40
93	005A	Bhimeswar Temple (Bhimkund) To Ani	MONTEL-	65ST	0	0	28	0	0	0	0	0	0	0	28
94	006A	Boys Highschool Road To OHT Jaleswar Rd.	CSO64950/67 ST/	67ST	0	0	15	0	0	0	0	0	0	0	15
95	007A	Ekamra College Road, Kapilprasad	0	52ST	0	0	9	0	0	0	0	0	0	0	9
TOTAL No. OF TYPEWISE LED					61	771	831	393	292	1409	530	50	26	0	4363
TOTAL No. OF TYPEWISE LED					61	771	831	393	292	1409	530	50	26	0	4363
96	008A	Gopubandhu Chhak to Governer House	61053775	85ST	0	0	0	0	0	0	0	0	0	0	0
97	009A	Housing Board Colony to Ruchika Mkt	74094696	166SI	0	0	0	0	0	34	0	0	0	0	34
98	010A	Ruchika Nursing Home	3099890/BCD D-II	278SI	0	11	6	0	0	0	0	0	0	0	17
99	011A	Indradhanu Mkt Nayapalli Police Stn to IRC	L&T	259SI	0	0	0	0	0	30	0	0	0	0	30
100	012A	Sishubhavan to Capital Hospital Pilot	Secure-	63ST	0	0	0	0	0	54	0	0	0	0	54
101	013A	Kendriya Vidyalaya 4 Lane 5 Unit-9	CSC27545/80 ST/	80ST	0	37	0	0	0	0	0	0	0	0	37
102	014A	Kargil Road	MONTEL-	67ST	0	0	0	0	0	31	0	0	0	0	31
103	015A	IOB Satya Ngr. To Toshali Plaza(Opp. Hotel	CSU04141/BC DD-	57ST	0	0	65	0	0	0	0	0	0	0	65
104	016A	ITER College Road Jagmohan Nagar	7978742/3002	1004166	0	0	13	0	0	0	0	0	0	0	13
105	017A	GGP Colony Rasulgarh	Old CSO75505/91	91ST	0	6	13	0	0	0	0	0	0	0	19
106	018A	Loyola high School-Salia Sahi	No Meter/ BCDD-II	123LI	0	36	0	0	0	0	0	0	0	0	36
107	019A	Pala Mandap to Nuasahi Canal Rd. Rasulgarh	CSU02971	87ST	0	20	17	0	0	3	0	0	0	0	40
108	020A	Nakagate to Ghatikia	CSC27616/201	2016SI	0	0	44	0	0	0	0	0	0	0	44
109	021A	Nakagate to Ghatikia	RCUD2112	2017SI	0	0	83	0	0	0	0	0	0	0	83
110	022A	Nr. Pole12 Bapuji Club	72389864	75ST	0	0	19	0	0	0	0	0	0	0	19
111	023A	Airport square nr Naveen Niwas to Nirmala	ORB90216/62	62ST	0	0	0	0	0	35	0	8	0	0	43
112	024A	Nakagate To Kalinga Studio Chhak	L&T30142/304	3040SI	0	0	0	0	0	0	0	0	0	0	0
113	025A	Near St. Joseph's School, GGP Colony	41570 /	92ST	0	0	48	3	0	0	0	0	0	0	51
114	026A	Opp Panchayat Raj office Deelip Tirkee Road	CSO60121/86	86ST	0	0	20	0	0	0	0	0	0	0	20
115	027A	Nr Odisha Drugs & Chemicals Mancheswar	ORU01229/BE D	119ST	0	0	32	0	0	0	0	0	0	0	32
116	028A	Opp. Plot No. 1248, Bomikhal Canal Road	16506350	93ST	0	12	0	0	0	0	0	0	0	0	12
117	029A	Nr Home Shop,	Meter Burnt	95ST	0	20	0	0	0	0	0	0	0	0	20
118	030A	Nr. Appollo Pharmacy, Nigamananda Nagar,	CSC75523/94	94ST	0	19	0	0	0	0	0	0	0	0	19
119	031A	Shouchalaya to Jaganath Mandir Rd. Nr	7978744/913S I/	913SI	0	0	29	0	0	0	0	0	0	0	29
TOTAL No. OF TYPEWISE LED					61	932	1220	396	292	1596	530	58	26	0	5111
TOTAL No. OF TYPEWISE LED					61	932	1220	396	292	1596	530	58	26	0	5111
120	032A	Science Park to Police Colony	CSC27633/7 SST/	75ST	0	17	0	0	0	0	0	0	0	0	17
121	033A	Nr Anantavihar Pokhaript,Odisha Joint Ent	OEB79145/ new	109ST	0	31	0	0	0	0	0	0	0	0	31
122	034A	Rd. Womens College To Kanak Durga-	No Meter/ BCDD-I		0	0	31	0	0	0	0	0	0	0	31
123	035A	Nr Satya Sai School Auto Stand Dumduma	Montel	2094SI	0	6	23	0	0	0	0	0	0	0	29
124	036A	Palaspalli ROB To Kargil Road	CSO60067	61ST	0	0	20	0	0	0	0	0	0	0	20
125	037A	Panda lifestyle to Happy Hour School SP	CSC02951	89ST	0	3	44	0	0	0	0	0	0	0	47
126	038A	Pandara Hitech Jaganath Mandir Rd.	No Meter/ BED	4STA	0	33	0	0	0	0	0	0	0	0	33
127	039A	Srivihar SP Patiya	1892882	1598SI	0	42	1	0	0	0	0	0	0	0	43
128	040A	Kedar Gouri Temple Rd. SP	01006300	96ST	0	0	22	0	0	0	0	0	0	0	22
129	041A	Gandhi Seva Niketan(Cosmopolice SP) To	NEW METER	2083	0	24	0	0	0	0	0	0	0	0	24
130	042A	GGP Chhak To Basudev Nagar	CSO60186	125ST	0	21	0	0	0	0	0	0	0	0	21
131	043A	HDFC bank (OERC) To Muntajali High-	08069032	88ST	0	23	21	0	0	0	0	0	0	0	44
132	044A	Governer House To Power House	ORB03764	56ST	0	0	0	0	0	0	26	0	0	9	35
133	045A	Power House To The World Mall	29646 New	44ST	0	0	0	0	0	80	0	9	0	0	89
134	046A	The World Mall To Jaydeo Vihar	No Meter	50LI	0	0	0	0	0	55	0	0	0	0	55
135	047A	Rammandir To Master Canteen	16506349	93ST	0	0	0	0	0	90	0	6	0	0	96
136	048A	Tech Mahindra Front Maitree Vihar	No Meter	152SI	0	0	0	0	0	14	0	0	0	0	14
137	049A	Sishuvihar Colony Patiya	2075061	1632SI	0	14	21	0	0	0	0	0	0	0	35
138	050A	LA Franklin Hotel Mancheswar	1743489	108ST	0	0	11	0	0	0	0	0	0	0	11

139	051A	Rabindra Mandap Backside To Swagat Hotel,	3119644	60ST	0	0	19	0	0	0	0	0	0	19	
140	052A	Srivihar To Damana Village Vishvanath	3113449	1597SI	26	29	0	0	0	0	0	0	0	55	
141	053A	Beside Damayanti Appt, Radha Krishna	2542489/CE	82ST	0	21	0	0	0	0	0	0	0	21	
142	054A	Brit Colony Nayapalli	No Meter	98 ST	0	0	19	0	0	0	0	0	0	19	
TOTAL No. OF TYPEWISE LED					87	1196	1452	396	292	1700	691	64	35	9	5922
TOTAL No. OF TYPEWISE LED					87	1196	1452	396	292	1700	691	64	35	9	5922
143	055A	Kalinga Stadium Chhak to Beherasahi	2721478 NEW	71ST	0	0	24	0	0	0	0	0	0	24	
144	056A	DTC At Bank of India Lane, Shahid Nagar	SUZ264593	79ST	0	8	21	0	0	12	0	0	0	41	
145	057A	Drop, Pole No.. 3, Meter At Nanda's Dental	CSO 80935 NEW	78ST	0	0	15	0	0	0	0	0	0	15	
146	058A	Beside Plot No.. 288 Sai Mandir Rd., Shahid	3115041(2721	76ST	7	27	11	0	0	0	0	0	0	45	
147	059A	Uco Bank Lane Nr Reliance Fresh Pl	NEW METER	72ST	0	0	14	0	0	0	0	0	0	14	
148	060A	Techzone front,Opp. Canara Bank, Saheed	74092748 (L&T)	74ST	0	0	6	0	0	0	0	0	0	6	
149	061A	Beside Orissa Vigyan Academy, Saheed	CSO 70906	73ST	5	4	11	0	0	0	0	0	0	20	
150	062A	PAHAL Village	CSO 75720	90ST	63	28	0	0	0	0	0	0	0	91	
151	063A	Nr OHT Patiya Babaji Jena Statue to	1991970/CEO	1397SI	0	10	0	0	0	0	0	0	0	10	
152	064A	Pole No..02020562001, Kalpana Fire Station	No Meter	1	6	51	0	0	0	0	0	0	0	57	
153	065A	Nr. Court of Additional District & Session	No Meter	1	1	8	0	0	0	0	0	0	0	9	
154	066A	Nr. BSNL Office	No Meter	1	0	13	0	0	0	0	0	0	0	13	
155	067A	In Front Of i Book Institute Pl. No. BJ19	No Meter	1	1	14	0	0	0	0	0	0	0	15	
156	068A	In front of BJB Colony , U.P School, Pole No..	No Meter	1	11	47	0	0	0	0	0	0	0	58	
157	069A	In Front of Regional Office For Health &	No Meter	1	1	10	0	0	0	0	0	0	0	11	
158	070A	Pole No. 01960041001	No Meter	1	6	37	0	0	0	0	0	0	0	43	
159	071A	F-Block Irrigation Colony	No Meter	1	2	23	0	0	0	0	0	0	0	25	
160	072A	Opp. Pl No. A-46	No Meter	3	8	12	0	0	0	0	0	0	0	20	
161	073A	Boys High School Backside	No Meter	3	7	26	12	0	0	0	0	0	0	45	
162	074A	In Front Of Capital Broiler	No Meter	3	9	34	0	0	0	0	0	0	0	43	
163	075A	In Front Of Vanivihar Railway Station	No Meter	3	7	10	0	0	0	0	0	0	0	17	
164	076A	I/F IMFA Recreation Centre 210D0056	No Meter	3	6	10	0	0	0	0	0	0	0	16	
165	077A	Beside System World	No Meter	3	1	16	6	0	0	0	0	0	0	23	
TOTAL No. OF TYPEWISE LED					228	1584	1572	396	292	1700	703	64	35	9	6583
TOTAL No. OF TYPEWISE LED					228	1584	1572	396	292	1700	703	64	35	9	6583
166	078A	Back Side of BDA-OMC Park	No Meter	3	6	16	0	0	0	0	0	0	0	22	
167	079A	Besides BMC Homeopathic Dispensary	No Meter	3	7	16	5	0	0	0	0	0	0	28	
168	080A	Behind Saheed Ngr. Hat 207E0083, Inf. Of Pl.	No Meter	3	0	30	0	0	0	0	0	0	0	30	
169	081A	In Front Of Akhandalamani Temple Opp. ESI	No Meter	3	9	22	0	0	0	0	0	0	0	31	
170	082A	Infront of Akhandlamani Temple 207D0131,	No Meter	3	9	15	0	0	0	0	0	0	0	24	
171	083A	Infront of Basudev Woods Nr. Manikeshwar	No Meter	3	2	16	0	0	0	0	0	0	0	18	
172	084A	Nr. Bhawani Mall Infront Of Grihasti Bazar	No Meter	3	4	16	4	0	0	0	0	0	0	24	
173	085A	Infront Of LEO Line Packers & Movers	No Meter	3	6	12	0	0	0	0	0	0	0	18	
174	086A	208D0282 Besides Peekay Systems	No Meter	3	2	8	8	0	0	0	0	0	0	18	
175	087A	Infront Of Hotel Friends	No Meter	3	0	12	19	0	0	0	0	0	0	31	
176	088A	Infront Of Sakshi World Association	No Meter	3	1	12	0	0	0	0	0	0	0	13	
177	089A	Back Side Of Vishnu Mandir	No Meter	3	8	26	0	0	0	0	0	0	0	34	
178	090A	208D0215	No Meter	3	6	12	0	0	0	0	0	0	0	18	
179	091A	Inside CESU Section Compound	No Meter	3	2	29	0	0	0	0	0	0	0	31	
180	092A	Back Side Of CET Coaching Centre Unit-8	No Meter	1	0	13	1	0	0	9	0	0	0	23	
181	093A	Infront Of Sarswati Sishu Play Ground Pole	No Meter	1	4	37	0	0	0	0	0	0	0	41	
182	094A	Infront Of SCTE & VT Office	No Meter	1	3	35	0	0	0	0	0	0	0	38	
183	095A	Beside Gopubandhu Vending Zone	No Meter	1	0	8	4	0	0	0	0	0	0	12	
184	096A	Nr Namrakali Genral Stores Qtr. No. 2RA	No Meter	1	0	7	0	0	0	0	0	0	0	7	
185	097A	CBI Lane OMFED 1240	No Meter	1	0	9	0	0	0	1	0	0	0	10	
186	098A	Infront Of OMC Colony	No Meter	1	0	14	0	0	0	0	0	0	0	14	
187	099A	I/F of 2RA/42/4 Pole No. 30/A/4	No Meter	1	4	23	0	0	0	0	0	0	0	27	
188	100A	Beside BEO Office Pole No.31/A/4/B3	No Meter	1	1	31	3	0	0	1	0	0	0	36	
189	101A	Nr. OCC Office	No Meter	1	2	4	0	0	0	0	0	0	0	6	
TOTAL No. OF TYPEWISE LED					304	2007	1616	396	292	1711	703	64	35	9	7137
TOTAL No. OF TYPEWISE LED					304	2007	1616	396	292	1711	703	64	35	9	7137
190	102A	Power House Colony	No Meter	1	0	20	0	0	0	0	0	0	0	20	
191	103A	Odissa Construction Company Ltd.	No Meter	1	1	18	0	0	0	0	0	0	0	19	

192	104A	Beside Oscar Sporting Pole 56/A6	No Meter	1	0	16	0	0	0	12	0	0	0	0	28
193	105A	I/f CESU U-8, Delta Section	No Meter	1	0	34	5	0	0	0	0	0	0	0	39
194	106A	Qtr. No. 2R6	No Meter	1	0	8	0	0	0	4	0	0	0	0	12
195	107A	I/F Omfed 816 Community Centre Lane	No Meter	1	0	7	0	0	0	6	0	0	0	0	13
196	108A	Beside IDBI Staff Qtrs	No Meter	1	1	31	9	0	0	1	0	0	0	0	42
197	109A	Governer House Colony	No Meter	1	2	26	0	0	0	0	0	0	0	0	28
198	110A	I/F 2RB-1 Governer House Colony	No Meter	1	4	15	0	0	0	0	0	0	0	0	19
199	111A	F Type Qtr. OCC	No Meter	1	2	48	0	0	0	0	0	0	0	0	50
200	112A	Rajbhavan -I/Kalyani Appt Unit-8	No Meter	1	0	9	0	0	0	0	0	0	0	0	9
201	113A	Geological Survey Of India	No Meter	1	0	34	12	0	0	0	0	0	0	0	46
202	114A	I/F 2RA 21 Rajbhavan Gate-1	No Meter	1	17	40	0	0	0	0	0	0	0	0	57
203	118A	I/F Pl No. N-4/300F	No Meter	50LI SDO	9	6	0	0	0	0	0	0	0	0	15
204	119A	I/F Pl No. N-4/222	No Meter	50LI SDO	12	11	0	0	0	0	0	0	0	0	23
205	120A	I/f Bari Hotel IRC	No Meter	50LI SDO	4	21	0	0	0	0	0	0	0	0	25
206	121A	I/f Pl. No. N2/173	No Meter	50LI SDO	20	13	0	0	0	0	0	0	0	0	33
207	122A	I/f Pl. N-1/81	No Meter	50LI SDO	9	12	0	0	0	0	0	0	0	0	21
208	123A	Nr Horticulture Trust Ekamra Ka	No Meter	50LI SDO	11	4	0	0	0	0	0	0	0	0	15
209	124A	N-3, Nr. Prajapati Bramhakumari Ashram,	No Meter	50LI SDO	8	17	0	0	0	0	0	0	0	0	25
210	125A	N-3, Infront Of Lily Beauty Parlour	No Meter	50LI SDO	6	4	0	0	0	0	0	0	0	0	10
211	126A	N-3, Infront Of Lily Beauty Parlour	No Meter	50LI SDO	5	6	0	0	0	0	0	0	0	0	11
212	127A	N-3, Infront Of TRAS Computer Academy	No Meter	50LI SDO	3	6	0	0	0	0	0	0	0	0	9
213	128A	N-3, Infront Of Subham Palace, CESU S/S	No Meter	50LI SDO	4	5	0	0	0	0	0	0	0	0	9
		TOTAL No. OF TYPEWISE LED		422	2418	1642	396	292	1734	703	64	35	9	7715	
		TOTAL No. OF TYPEWISE LED		422	2418	1642	396	292	1734	703	64	35	9	7715	
214	129A	N-3, Nr. Kootie Kids School Lane	No Meter	50LI SDO	7	18	0	0	0	0	0	0	0	0	25
215	130A	Infront of Plot No. N-3/195	No Meter	50LI SDO	6	7	0	0	0	0	0	0	0	0	13
216	131A	In front of Chillika Fresh Odisha Pl No. N2/72	No Meter	50LI SDO	2	8	0	0	0	0	0	0	0	0	10
217	132A	I/f of BDA Park Nr Pl N1/182 & N1/178	No Meter	50LI SDO	20	20	0	0	0	0	0	0	0	0	40
218	133A	I/F N-4/25	No Meter	50LI SDO	6	11	0	0	0	0	0	0	0	0	17
219	134A	Behind Laxminarayan Temple Pl. No. 1193,	No Meter	1	0	18	0	0	0	0	0	0	0	0	18
220	135A	In Front Of Plot No.117/653 Satya Nagar	No Meter	1	2	20	0	0	0	0	0	0	0	0	22
221	136A	Nr. Eklavya Coaching Center Satya Nagar	No Meter	1	1	13	0	0	0	0	0	0	0	0	14
222	137A	In Front Of Plot No.60	No Meter	1	1	7	0	0	0	0	0	0	0	0	8
223	138A	Pole No.. 50/A/5/62, Gandmunda Rd. Pole	No Meter	1ST/SDO-	3	23	0	0	0	0	0	0	0	0	26
224	139A	I/F Pl No. 31 SBI Colony	No Meter	102ST	6	24	0	0	0	0	0	0	0	0	30
225	140A	I/f Pl No. 1104/A SBI Colony	No Meter	101ST	1	13	0	0	0	0	0	0	0	0	14
226	141A	Beside Pl C-77 Pole No.44	No Meter	4ST/ SDO	4	9	0	0	0	0	0	0	0	0	13
227	142A	Nr. Pl No. A-12	No Meter	4ST/ SDO	9	15	0	0	0	0	0	0	0	0	24
228	143A	Nr. BDA Park Below Punava Gate Flyover	No Meter	4ST/ SDO	14	19	0	0	0	0	0	0	0	0	33
229	144A	Pole No. 0181 0081005	Meter No.	32ST	11	7	0	0	0	0	0	0	0	0	18
230	145A	Pole No. 0181 0071001	Meter No. CSO	28ST	29	11	0	0	0	0	0	0	0	0	40
231	146A	Pole No. 0181 0051001	Meter No.	33ST	12	8	0	0	0	0	0	0	0	0	20
232	147A	Pole No. 01810061001	Meter No. CSO	31ST	31	12	0	0	0	0	0	0	0	0	43
233	148A	Pole No. 02130391001	No Meter	1ST	1	8	0	0	0	0	0	0	0	0	9
234	149A	Pole No. 0213 0331001	No Meter	1ST	12	29	0	0	0	0	0	0	0	0	41
235	150A	Opp CELCON Mobile Training Institute	No Meter	1ST	4	9	0	0	0	0	0	0	0	0	13
236	151A	Opp BDA Park Pl.No. 45/A Kalpana Flat Pole	No Meter	1ST	2	29	0	0	0	0	0	0	0	0	31
237	152A	Nr BDA Central Store Pl.No. L.B. 44	No Meter	4STA	8	9	12	0	0	0	0	0	0	0	29
		TOTAL No. OF TYPEWISE LED		614	2765	1654	396	292	1734	703	64	35	9	8266	
		TOTAL No. OF TYPEWISE LED		614	2765	1654	396	292	1734	703	64	35	9	8266	
238	153A	I/f Pl.No. L P 11	No Meter	4STA/	7	15	0	0	0	0	0	0	0	0	22
239	154A	Opp. Lalbahadur Club Pl.No. E.B.192	No Meter	4STA/	11	17	0	0	0	0	0	0	0	0	28
240	155A	Opp. L.B.17	No Meter	4STA/	3	2	0	0	0	0	0	0	0	0	5
241	156A	Beside Ram Mandir	No Meter	4STA/	4	10	0	0	0	0	0	0	0	0	14
242	157A	Beside BDA Nursary	No Meter	4STA/	13	24	0	0	0	0	0	0	0	0	37
243	158A	Opp. Pl.No. E.B. 392	No Meter	4STA/	14	15	0	0	0	0	0	0	0	0	29
244	159A	Opp. Pl.No. E.B. 245	No Meter	4STA/	5	6	0	0	0	0	0	0	0	0	11
245	160A	Infront Of Kalinga Knowledge Centre Nr	No Meter	2	0	28	0	0	0	0	0	0	0	0	28
246	161A	Pole No. 0193 0632002 Nr. DTC-063	No Meter	2	2	25	0	0	0	0	0	0	0	0	27

247	162A	Pole No. 01930721002	No Meter	2	0	21	9	0	0	0	0	0	0	30
248	163A	Opp. SBI Transit House Pole No.	No Meter	2	3	7	0	0	0	0	0	0	0	10
249	164A	Pl. No.2132/4302	No Meter	2	0	23	0	0	0	0	0	0	0	23
250	165A	Pole No. 01930371001	No Meter	2	7	6	0	0	0	0	0	0	0	13
251	166A	Pole No. 01930272006	No Meter	2	5	32	0	0	0	0	0	0	0	37
252	167A	St. Light At Nageswar Tangi Beside	No Meter	89ST	1	10	0	0	0	0	0	0	0	11
253	168A	Old CESU Office Compound 4 Drops Unit-6	No Meter	1	5	55	0	0	0	0	0	0	0	60
254	169A	Beside Govt. UP school Capital Post Mortem	No Meter	1	2	23	0	0	0	0	0	0	0	25
255	170A	Nr.Qtr. No. VR/56	No Meter	1	3	5	0	0	0	0	0	0	0	8
256	171A	Opp. Pl.No. 28 Ganga Nagar	No Meter	1	0	9	0	0	0	0	0	0	0	9
257	172A	Pl.No. VIR-1 Unit-6	No Meter	1	2	15	7	0	0	0	0	0	0	24
258	174A	Nr. Marwari Society Jalchetra BBSR Club to	No Meter	1	4	17	7	0	0	0	0	0	0	28
259	175A	Pl. No.20 Maakali Printers Ganga Nagar	No Meter	1	7	19	0	0	0	0	0	0	0	26
260	176A	Nr. Qtr. No. 2RB89 & Nr. DTC	No Meter	1	0	30	0	0	0	0	0	0	0	30
261	177A	Opp. DP Model Public School	No Meter	1	1	5	0	0	0	0	0	0	0	6
TOTAL No. OF TYPEWISE LED				713	3184	1677	396	292	1734	703	64	35	9	8807
TOTAL No. OF TYPEWISE LED				713	3184	1677	396	292	1734	703	64	35	9	8807
262	178A	Opp. Pl. No. 72 & DTC 41	No Meter	1	1	40	0	0	0	0	0	0	0	41
263	179A	Beside Pl.No. A-16	No Meter	1	1	10	0	0	0	0	0	0	0	11
264	180A	Pole No. 43/A/2 Surya Nagar	No Meter	1	0	11	0	0	0	0	0	0	0	11
265	181A	Beside Jagannath Bhavan Appt. Pole No.	No Meter	1	3	11	0	0	0	0	0	0	0	14
266	182A	Nr Hotel Taj Pl No. 149 Bapuji Nagar	No Meter	2	5	20	25	0	0	0	0	0	0	50
267	183A	I/F of Mahalaxmi Traders Pl No. 206	No Meter	2	2	23	26	0	0	0	0	0	0	51
268	184A	Opp BSNL office /Behind Bazar Kolkata/KK	No Meter	2	3	17	18	0	0	0	0	0	0	38
269	185A	Infront of Laxminarayan Temple	No Meter	2	1	37	0	0	0	0	0	0	0	38
270	186A	Nr Pl No. 511 Nayapalli Smashan	No Meter	2	3	17	0	0	0	0	0	0	0	20
271	187A	Beside Prakruti Bhavan	No Meter	2	0	10	0	0	0	0	0	0	0	10
272	188A	Infront Of Pl. No. MIG A/27	No Meter	2	6	14	0	0	0	0	0	0	0	20
273	189A	Infront Of Pl.No. MIG A/27	No Meter	2	7	22	0	0	0	0	0	0	0	29
274	190A	Infront Of Pl. No. MIG A/15 & A/11	No Meter	2	1	24	0	0	0	0	0	0	0	25
275	191A	Near Laxminarayan Temple Beherasahi Sastri	No Meter	1	10	16	0	0	0	0	0	0	0	26
276	192A	Near Mangala Temple Sastri Nagar	No Meter	1	5	15	0	0	0	0	0	0	0	20
277	193A	I/F G S Tutorial Sastri Nagar Nayapalli	No Meter	1	0	6	3	0	0	0	0	0	0	9
278	194A	Ghatikia Village	3116689	2058SI	0	45	0	0	0	0	0	0	0	45
279	195A	Fire Station Sqr. To Munda Sahi Chhak BBSR	L&T30647	2132SI	0	0	0	0	0	27	0	0	0	27
280	196A	High Mast Light At Capital Hospital	17285274	59ST	0	0	0	0	0	0	0	3	0	9
281	197A	Nuagaon To Daya River	No Meter	5ST/ SDO	0	4	45	0	0	0	0	0	0	49
282	198A	High Mast At Raj Mahal Square	No Meter	2	0	0	0	0	0	0	0	3	3	6
283	199A	High Mast At 120 Battallion Front	5367273/3111	45ST	0	0	0	0	0	0	0	6	0	6
284	200A	High Mast At A.G. Square	No Meter	1	0	0	0	0	0	0	0	0	9	9
285	201A	Mini High Mast At Jaydeo Vihar Square	No Meter	3	0	0	0	0	0	0	0	0	4	4
TOTAL No. OF TYPEWISE LED				761	3526	1794	396	292	1761	703	73	38	31	9375
TOTAL No. OF TYPEWISE LED				761	3526	1794	396	292	1761	703	73	38	31	9375
286	202A	Naharkanta Hanspal Jaydeo College Rd.	CSU04684	68ST	60	17	0	0	0	0	0	0	0	77
287	203A	Nr. Angan Restaurant Gajapati Nagar	No Meter	50LI/Nay	4	10	0	0	0	0	0	0	0	14
288	204A	Opp. Canara Bank At Gajapati Nagar	No Meter	50LI/Nay	4	7	0	0	0	0	0	0	0	11
289	205A	Nr. Pl.No. 4786/5851(8)	No Meter	50LI/Nay	4	5	0	0	0	0	0	0	0	9
290	206A	Nr. Pl.No. 4706/5855	No Meter	50LI/Nay	10	31	1	0	0	0	0	0	0	42
291	207A	Nr. 100kVA DTC	No Meter	50LI/Nay	3	15	0	0	0	0	0	0	0	18
292	208A	Lane No.5 Satyasai Enclave DTC Beside	9332458	3236SI	26	7	0	0	0	0	0	0	0	33
293	209A	Satyasai Enclave	2518311	3237SI	22	0	0	0	0	0	0	0	0	22
294	210A	Nr. DTC 034 Pole No. 00610342002, Satyasai	9303858	3238SI	20	6	0	0	0	0	0	0	0	26
295	211A	Pole No. BMBD/ 59/1	No Meter	50LI/Nay	15	5	0	0	0	0	0	0	0	20
296	212A	Pl.No. B-28	No Meter	50LI/Nay	8	3	0	0	0	0	0	0	0	11
297	213A	Pl.No. C-191	No Meter	50LI/Nay	15	4	0	0	0	0	0	0	0	19
298	214A	Nr. Pl.No. C-101	No Meter	50LI/Nay	19	1	0	0	0	0	0	0	0	20
299	215A	Pl.No. MIG 66 Pole No. 27/1013 & MIG 74	No Meter	50LI/Nay	21	10	0	0	0	0	0	0	0	31
300	216A	I/f Pl.No.HIG 2 Pole No.22/1027 &	No Meter	50LI/Nay	19	10	0	0	0	0	0	0	0	29
301	217A	Pl.No. HIG 15 Pole No. 20/2005 & MIG 11	No Meter	50LI/Nay	22	1	0	0	0	0	0	0	0	23

302	218A	Infront Of Pl.No. 22 Samant Vihar	No Meter	50LI/Nay	0	24	0	0	0	1	0	0	0	25
303	219A	DTC S3	Meter No.	170SI	4	16	0	0	0	0	0	0	0	20
304	220A	DTC 2	Meter No.	169SI	6	8	0	0	0	0	0	0	0	14
305	221A	DTC-1	CSUO3330	167SI	5	22	0	0	0	0	0	0	0	27
306	222A	DTC 27	No Meter	5	12	30	21	0	0	0	0	0	0	63
307	223A	DTC 12 I/F Of Gandhi Public School Kedar	No Meter	1 ST	1	30	0	0	0	0	0	0	0	31
308	224A	Pole No. 1004	No Meter	123 LI	4	20	0	0	0	0	0	0	0	24
309	225A	I/F Pl.No. LP 922	No Meter	123 LI	1	33	19	0	0	0	0	0	0	53
TOTAL No. OF TYPEWISE LED				1066	3841	1835	396	292	1762	703	73	38	31	10037
TOTAL No. OF TYPEWISE LED				1066	3841	1835	396	292	1762	703	73	38	31	10037
310	226A	Nr. Pl.No. LB389 Bhimthangi Hsg. Board.	No Meter	3ST/Dha	1	16	0	0	0	0	0	0	0	17
311	227A	DTC Nr. St. Xavier School Bhimthangi	No Meter	3ST/Dha	0	11	0	0	0	0	0	0	0	11
312	228A	DTC 10 Nr. Odisha Youth Bhimathangi	No Meter	3ST/Dha	1	13	0	0	0	0	0	0	0	14
313	229A	I/F Qtr.No. E2/2 Unit-8	No Meter	1	1	7	0	0	0	0	0	0	0	8
314	230A	I/F Qtr. No. IV64	No Meter	1	0	18	0	0	0	0	0	0	0	18
315	231A	Pole No. 51/A/2/A3 Unit-8	No Meter	1	4	11	0	0	0	0	0	0	0	15
316	232A	I/F Qtr.No. 2RB 85	No Meter	1	6	12	0	0	0	0	0	0	0	18
317	233A	Beside OUAT Guest House	No Meter	1	1	18	0	0	0	0	0	0	0	19
318	234A	Nr. Tulasi Basti, Unit-8	No Meter	1	4	14	0	0	0	0	0	0	0	18
319	235A	Nr. Pl.No. C-28 DTC 55	No Meter	1	1	7	0	0	0	0	0	0	0	8
320	236A	Unit-8	No Meter	1	0	6	0	0	0	0	0	0	0	6
321	237A	Pole No.26/A/2/B2, Unit-8	No Meter	1	0	16	0	0	0	0	0	0	0	16
322	238A	Beside Qtr. No. E2/6, Unit-8	No Meter	1	1	7	0	0	0	0	0	0	0	8
323	239A	Pole No. 32/B/4 Siripur Hat Rd.	No Meter	1	0	5	11	0	0	0	0	0	0	16
324	240A	Inside Pump House OWPO Colony	No Meter	1ST	14	15	0	0	0	0	0	0	0	29
325	241A	Nr. Tarini Mandir Opp. Classic Sallon Unit-8	No Meter	1	0	8	8	0	0	0	0	0	0	16
326	242A	Opp. Shivamandir Panchasakha Nagar	No Meter	50LI/Nay	0	20	0	0	0	0	0	0	0	20
327	243A	Nr. Qtr. No. IVN-41 MLA	No Meter	2	11	15	0	0	0	0	0	0	0	26
328	244A	Nr. Qtr. No. IVN-62 RBI Colony Back Side	No Meter	2	2	19	0	0	0	0	0	0	0	21
329	245A	Opp. Sangit Mahavidyalaya Hostel DTC MLA	No Meter	2	0	7	0	0	0	0	0	0	0	7
330	246A	Opp. Jharpada Jail DTC-9	No Meter	4STA	24	25	0	0	0	0	0	0	0	49
331	247A	Nr. Trinath Mandir Opp. PHD GLR	No Meter	4STA	18	27	0	0	0	0	0	0	0	45
332	248A	Behind Shani Temple Laxmisagar Village	No Meter	4STA	0	10	0	0	0	0	0	0	0	10
333	249A	ANM Training Centre Unit-6	No Meter	1	2	19	0	0	0	0	0	0	0	21
TOTAL No. OF TYPEWISE LED				1157	4167	1854	396	292	1762	703	73	38	31	10473
TOTAL No. OF TYPEWISE LED				1157	4167	1854	396	292	1762	703	73	38	31	10473
334	250A	Nr. Khadi Gramodyog Board. Unit-5	No Meter	1	8	5	0	0	0	0	0	0	0	13
335	251A	Nr. E-19	No Meter	50LI/Nay	1	15	0	0	14	0	0	0	0	30
336	252A	Opp. BMC Zone Office 1 Rental Colony	No Meter	50LI/Nay	0	14	0	0	0	0	0	0	0	14
337	253A	Pole No. BM/R/1/10 Nr. Block E-45 Rental	No Meter	50LI/Nay	1	24	0	0	0	0	0	0	0	25
338	254A	Pole No. BM/R/7/1 Nr. E46	No Meter	50LI/Nay	2	10	0	0	0	0	0	0	0	12
339	255A	DTC R-9 Nr. Pl.No. A22	No Meter	50LI/Nay	0	3	9	0	12	0	0	0	0	24
340	256A	Pole No. 01930641002	No Meter	2	4	27	0	0	0	0	0	0	0	31
341	257A	Rangamatia Upto Railway Culvert	Montel 61052695	2163SI	0	32	0	0	0	0	0	0	0	32
342	258A	Museum Sgr. High Mast	SECURE ORB	0	0	0	0	0	0	0	0	9	0	9
343	259A	Master Canteen High Mast	CSC28972	36ST	0	0	0	0	0	0	0	0	9	9
344	260A	Gopubandhu Chhak High Mast	ORB03765/CS	49ST	0	0	0	0	0	0	0	9	0	9
345	261A	Kedar Gouri High Mast	CSO75924	53ST	0	0	0	0	0	0	6	0	0	6
346	262A	Delta Square High Mast	74083050/	68ST	0	0	0	0	0	0	0	6	0	6
347	263A	Siripur Square High Mast	ORB03762	48ST	0	0	0	0	0	0	0	9	0	9
348	264A	Kalinga Studio Chhak High Mast	CSUO1398	3095SI	0	2	3	0	0	0	0	0	9	14
349	265A	PMG-Master Canteen	RCUD0844	107ST	0	0	0	0	57	0	0	0	0	57
350	266A	Rental Colony F25 Block To D-16 Block	CSC26884	270SI	4	22	0	0	0	0	0	0	0	26
351	267A	Rental Colony Mundashi Chhak to D-I Block	1006007 NEW	268SI	0	1	0	0	0	0	0	0	0	1
352	268A	Rental Colony F28 Block To Jaganath Mandir	61655457	267SI	1	12	0	0	0	0	0	0	0	13
353	269A	Kalpana Chhak Fire Station High Mast	CSC29033	79ST	0	0	0	0	0	0	0	0	9	9
354	270A	Baramunda HIG Colony To Jaganath Vihar	CSO60175 NEW	279SI	0	0	18	0	0	0	0	0	0	18
355	271A	Opp Pl.No. 4977 Nr. Rabi Talkies & Metro	No Meter	2	3	22	5	0	0	0	0	0	0	30
356	272A	Pole No.01930681001	No Meter	2	2	7	0	0	0	0	0	0	0	9

357	273A	Beside UCO Bank ATM Lewis Rd.	No Meter	2	1	13	0	0	0	0	0	0	0	14
		TOTAL No. OF TYPEWISE LED		1184	4376	1889	396	292	1845	703	79	71	58	10893
		TOTAL No. OF TYPEWISE LED		1184	4376	1889	396	292	1845	703	79	71	58	10893
358	274A	Pole No. 01930671013 Opp.	No Meter	2	0	12	0	0	0	0	0	0	0	12
359	275A	Pole No. 01910272004	No Meter	1 ST	1	17	0	0	0	0	0	0	0	18
360	276A	Nr. F-12 Block Rental Colony	No Meter	50LI/Nay	0	15	0	0	0	0	0	0	0	15
361	277A	Nr. Hatiasuni Temple Tankapani Rd.	No Meter	2 ST	7	26	0	0	0	9	0	0	0	42
362	278A	I/F Plot No. 216/162 Nr. Naveen Niwas	No Meter	1	1	24	6	0	0	0	0	0	0	31
363	279A	I/f Minister Ashok Panda's House	No Meter	1	2	21	0	0	0	0	0	0	0	23
364	280A	Opp. Pl.No. 240/132	No Meter	1	0	32	0	0	0	0	0	0	0	32
365	281A	Opp. Pl.No. 618 Lane No. 10	No Meter	1	5	5	0	0	0	0	0	0	0	10
366	282A	Opp. Qtr.No. E/1 Palaspalli	No Meter	1	4	15	0	0	0	0	0	0	0	19
367	283A	Opp. Odisha Blind Association Big Bzr. Main	No Meter	1	0	6	8	0	0	11	0	0	0	25
368	284A	Opp. Pl.No. 73 Satya Nagar	No Meter	1	0	18	0	0	0	0	0	0	0	18
369	285A	Nr. Fahiada Green Vision Kalimandir Lane	No Meter	1	1	9	0	0	0	0	0	0	0	10
370	286A	Opp. Pabitra Arya Yogasram	No Meter	1	0	26	0	0	0	0	0	0	0	26
371	287A	Nr Ganapati Slum Behind ID Mkt. Nr. CPIML	No Meter	50LI SDO	4	41	5	0	0	0	0	0	0	50
372	288A	Opp. Pl.No. N-5, 339	No Meter	50LI SDO	2	21	0	0	0	0	0	0	0	23
373	289A	Opp. Pl.No. 15	No Meter	4STA	1	29	0	0	0	0	0	0	0	30
374	290A	Nr. Hotel Ashirwad & Payal Station Bazar	No Meter	4STA	0	17	8	0	0	0	0	0	0	25
375	291A	Opp. Bapuji Youth AssociAtion Badgad	No Meter	1	2	47	0	0	0	0	0	0	0	49
376	292A	Nr. Badgad Kalyan Mandap	No Meter	1	9	28	5	0	0	0	0	0	0	42
377	293A	Pole No. 01950151001	No Meter	1	0	6	10	0	0	0	0	0	0	16
378	294A	Mata Pokhari Basudev Nagar To Jaganath	No Meter	4STA	6	27	2	0	0	0	0	0	0	35
379	295A	Opp. Tarini Marriage Mandap GGP Canal To	No Meter	4STA	0	0	20	0	0	0	0	0	0	20
380	296A	Pl.No. 335 Brahmeswar Temple To Palasuni	New 8343769	107ST	0	17	0	0	0	0	0	0	0	17
381	297A	Pole No. 8/A/9	No Meter	50LI SDO	15	8	5	0	0	0	0	0	0	28
		TOTAL No. OF TYPEWISE LED		1244	4843	1958	396	292	1856	712	79	71	58	11509
		TOTAL No. OF TYPEWISE LED		1244	4843	1958	396	292	1856	712	79	71	58	11509
382	298A	Nr. Pl.No. 950	No Meter	50LI SDO	0	9	15	0	0	0	0	0	0	24
383	299A	Pole No. 0281001	No Meter	50LI/Nay	18	14	0	0	0	0	0	0	0	32
384	300A	DTC 206E4430 Nr. MIG 403	No Meter	50LI/Nay	6	3	0	0	0	0	0	0	0	9
385	301A	Pole No. 023/1001	No Meter	50LI/Nay	20	9	0	0	0	0	0	0	0	29
386	302A	Lingaraj Temple & Bhajan Mandap High	ORB03880	54ST	0	0	0	0	0	0	4	2	9	15
387	303A	Kalinga Hospital Chhak High Mast	ORB03875	1040SI	0	0	0	0	0	0	0	9	0	9
388	304A	Kapileswar Temple High Mast	No Meter	5 ST	0	0	0	0	0	0	3	3	0	6
389	305A	Mausima Chhak High Mast	GEN2708657	101ST	0	0	0	0	0	0	6	0	0	6
390	306A	Brhmeswar Chhak High Mast Tankapani Rd.	No Meter		0	0	0	0	0	0	4	2	0	6
391	307A	Ravi Talkies Chhak High Mast	74085394	55ST	0	0	0	0	0	0	6	0	0	6
392	308A	Near Jagannath Temple Pole No.	No Meter	4STA	34	4	0	0	0	0	0	0	0	38
393	309A	In-Front Of Plot. No. 16. Pole No.	No Meter	4STA	11	5	0	0	0	0	0	0	0	16
394	310A	Near Laxminarayan Temple Beherasahi Sastri	No Meter	1	15	25	0	0	0	0	0	0	0	40
395	311A	Nr Pl No.1684	No Meter	50LI SDO	1	15	21	0	0	0	0	0	0	37
396	312A	Beside IMFA Park Nr. Pl.No. 201	No Meter	3	2	10	0	0	0	0	0	0	0	12
397	313A	Nr. Pl.No. B-38	No Meter	3	0	10	2	0	0	0	0	0	0	12
398	314A	Nr. Pl.No. B49	No Meter	3	0	9	0	0	0	0	0	0	0	9
399	315A	DTC Opp. Bhavani Mall	No Meter	3	0	4	0	0	0	0	0	0	0	4
400	316A	Nr. Pl.No.150	No Meter	4STA	11	12	0	0	0	0	0	0	0	23
401	317A	Nr. Pl.No. 90	No Meter	4STA	8	9	0	0	0	0	0	0	0	17
402	318A	Nr. Pl. No. 19	No Meter	4STA	9	6	0	0	0	0	0	0	0	15
403	319A	Nr. Pl. No. AL 82	No Meter	3ST/Dha	7	40	0	0	0	0	0	0	0	47
404	320A	Nr. District Centre Owners Association Pl.No.	No Meter	123 LI	12	25	0	0	0	0	0	0	0	37
405	321A	Nr. Pl.No. 71	No Meter	123 LI	18	2	0	0	0	0	0	0	0	20
		TOTAL No. OF TYPEWISE LED		1416	5054	1996	396	292	1856	712	102	87	67	11978
		TOTAL No. OF TYPEWISE LED		1416	5054	1996	396	292	1856	712	102	87	67	11978
406	322A	Nr. Pl.No. 135	No Meter	123 LI	16	7	0	0	0	0	0	0	0	23
407	323A	Nr. Pl.No. 62	No Meter	123 LI	13	7	0	0	0	0	0	0	0	20
408	324A	Opp. Annapurna Tower Pole No.	No Meter	1 ST	0	20	0	0	0	8	0	0	0	28
409	325A	Opp. Bijaylaxmi Appt., Ratnakar Baug	No Meter	1 ST	2	41	0	0	0	4	0	0	0	47

410	326A	I/f PL.No. SN 42	No Meter	1 ST	6	36	0	0	0	0	0	0	0	42	
411	327A	Opp. Damayanti Appt. DTC 208D0208	No Meter	1	5	57	3	0	0	0	0	0	0	65	
412	328A	Opp. PL.No. 205/1668	No Meter	1	6	33	0	0	0	0	0	0	0	39	
413	329A	Nr. Sastri Nagar,	No Meter	1	8	27	0	0	0	0	0	0	0	35	
414	330A	Opp. PL.No. 1153/47	No Meter	3ST/Dha	16	26	13	0	0	0	0	0	0	55	
415	331A	Behind Mousima Satsang Kunjpatna Sahi	No Meter	5	0	23	0	0	0	0	0	0	0	23	
416	332A	Opp. Plot No. 2243 Pole No. 01920392018	No Meter	5	0	9	9	0	0	0	0	0	0	18	
417	333A	Nr. Plot No. 46, SBI Colony	No Meter	1	3	45	0	0	0	0	0	0	0	48	
418	334A	Opp. PL.No. 1542,	No Meter	1	0	8	0	0	0	0	0	0	0	8	
419	335A	PL.No. 25P To Pl. No. 224	Meter No.	2109SI	0	13	9	0	0	0	0	0	0	22	
420	336A	HIG 6 Jaydeo Vihar	Meter No.	50LI	0	0	19	0	0	0	0	0	0	19	
421	337A	Nr. Pabitra Yogasram, Satya Nagar	No Meter	3	0	22	0	0	0	0	0	0	0	22	
422	338A	Nr. PL.No. 651,	No Meter	50LI/	0	18	1	0	0	0	0	0	0	19	
423	339A	Mayfare Time Gate	No Meter	50LI/	0	0	15	0	0	0	0	0	0	15	
424	340A	Nr. PL.No. N6-255	No Meter	50LI/	0	8	8	0	0	0	0	0	0	16	
425	341A	Nr.Swapneswar Mandir ID Mkt. To	No Meter	50LI/	0	0	17	0	0	0	0	0	0	17	
426	342A	Nr. Qtr 2RAF 25/7,	No Meter	3	0	7	0	0	0	0	0	0	0	7	
427	343A	Nr. Qtr 2RAF 29/4,	No Meter	3	0	7	0	5	0	0	0	0	0	12	
428	344A	Nr. PL.No. 218	No Meter	3	0	20	10	0	0	0	0	0	0	30	
429	345A	Nr. BMC UP School Rangmatia	No Meter	Periphery	2	35	0	0	0	0	0	0	0	37	
TOTAL No. OF TYPEWISE LED					1493	5523	2100	401	292	1856	724	102	87	67	12645
TOTAL No. OF TYPEWISE LED					1493	5523	2100	401	292	1856	724	102	87	67	12645
430	346A	Nr. Somnath Enclave Rangmatia	No Meter	Periphery	0	17	0	0	0	0	0	0	0	17	
431	347A	Rangamatia Railway Culvert To DTC	NEW METER	261SI	0	18	0	0	0	0	0	0	0	18	
432	348A	Opp. Durga Puja Mandap Punava Gate Chhak	No Meter	5	0	32	5	2	0	0	0	0	0	39	
433	349A	Opp. PL.No. 87366/1 Pole No. 01830221001	No Meter	5	3	25	0	0	0	0	0	0	0	28	
434	350A	Hotel Pushpak To Deepali Hotel Nr. Bata	3103511/82S T	82ST	0	0	20	0	0	0	0	0	0	20	
435	351A	Nr. Ahilya Enclave Rangmatia	No Meter	Periphery	0	19	0	0	0	0	0	0	0	19	
436	352A	PWD IB To Panda Nursing Home	No Meter	3	0	10	0	0	0	0	0	0	0	10	
437	353A	PL.No. 6 Nayapalli Bhoisahi Damayanti Appt -	No Meter	1	0	0	12	0	0	0	0	0	0	12	
438	354A	Nr.MIG A-27 Neelkantha Nagar Deorai	No Meter	94 ST	0	0	12	0	0	0	0	0	0	12	
439	355A	Patiya High School Rd.	CSO 67886	1197SI	22	8	0	0	0	0	0	0	0	30	
440	356A	Bindusagar Periphery Ekamravan	L&T	106ST	0	35	0	0	0	0	0	0	0	35	
441	357A	Banguari Village Canal Road	CE010097	115ST	33	9	3	0	0	0	0	0	0	45	
442	358A	Nr. PL.No.MB79 Pole 01950291002	No Meter	1ST	1	8	0	0	0	0	0	0	0	9	
443	359A	Nr. PL.No. LB1	No Meter	1ST	0	19	0	0	0	0	0	0	0	19	
444	360A	Nr. PL.No. EB 518	No Meter	1	0	19	1	0	0	0	0	0	0	20	
445	361A	Nr. EB142	No Meter	1	1	14	0	0	0	0	0	0	0	15	
446	362A	Nr. PL.No. MA 54	No Meter	1	3	14	0	0	0	0	0	0	0	17	
447	363A	Nr. EB210	No Meter	1	4	32	0	0	0	0	0	0	0	36	
448	364A	Nr. PL.No. LB 106	No Meter	1	0	17	0	0	0	0	0	0	0	17	
449	365A	Opp. Sani Temple, Pandav Nagar Main Rd.	No Meter	1	1	29	0	0	0	0	0	0	0	30	
450	366A	Beside Navodaya Youth Association Nr.	No Meter	2	0	0	14	0	0	0	0	0	0	14	
451	367A	Nr. Odisha Subordinate Staff Selection	No Meter	2	0	0	30	24	0	0	0	0	0	54	
452	368A	Opp. Tribal Youth Hostel Unit-1	No Meter	2	2	0	8	0	0	0	0	0	0	10	
453	369A	Behind Congress Bhavan VA 36/2, Unit-2	No Meter	2	0	0	26	0	0	0	0	0	0	26	
TOTAL No. OF TYPEWISE LED					1563	5848	2231	427	292	1856	724	102	87	67	13197
TOTAL No. OF TYPEWISE LED					1563	5848	2231	427	292	1856	724	102	87	67	13197
454	370A	Opp. Diploma Engg Asso. Behind RBI, Unit-3	No Meter	2	0	0	6	0	0	0	0	0	0	6	
455	371A	Qtr. VR 7/2 Behind SBI, Unit-3	No Meter	2	0	6	4	0	0	0	0	0	0	10	
456	372A	Nr. IVB 5/1,	No Meter	2	0	0	14	0	0	0	0	0	0	14	
457	373A	Nr. IVB 5/1,	No Meter	2	0	5	17	0	0	0	0	0	0	22	
458	374A	Nr. PL.No. 20	No Meter	1	0	10	2	0	0	0	0	0	0	12	
459	375A	Nr. PL.No. B70	No Meter	1	0	14	4	0	0	0	0	0	0	18	
460	376A	Nr. PL.No. A261	No Meter	1	2	19	1	0	0	0	0	0	0	22	
461	377A	Nr. PL.No.20	No Meter	4STA	0	0	11	0	0	0	0	0	0	11	
462	378A	Opp. Taleswar Temple 01920281005 Kedar	No Meter	2	1	7	0	0	0	0	0	0	0	8	
463	379A	Opp. Trinath Mandir Nalmahasahi Sital Srusti	No Meter	2	0	6	15	0	0	0	0	0	0	21	
464	380A	Nr. Ekamra Medical Plant Garden Pole	No Meter	2	0	19	12	0	0	5	0	0	0	36	

465	381A	Opp. Tapasya Enclave Jaganath Avenue To	No Meter	4STA/	0	0	5	0	0	0	0	0	0	5
466	382A	Opp. Pl.No. 1478/3338	No Meter	4STA/	6	3	10	0	0	0	0	0	0	19
467	383A	Nr. Vivekananda Shiksha Kendra Jaganath	Meter No.	116ST	3	27	2	0	0	0	0	0	0	32
468	384A	Pole No. 01820291001 At	No Meter	5	0	10	20	0	0	0	0	0	0	30
469	385A	Pole No. 01950341001	No Meter	1	9	46	6	0	0	0	0	0	0	61
470	386A	Nr. Pl.No. 497 BSNL Tower Raja Rani	No Meter	1	0	29	0	0	0	0	0	0	0	29
471	387A	Opp.Cosmo Boutika Tankapani Rd.	No Meter	1	0	6	0	0	0	5	0	0	0	11
472	388A	DTC Nr. HIG 46 Maruti Villa	No Meter	123	10	24	0	0	0	0	0	0	0	34
473	389A	Nr.Aryapalli Security Pl.No. 29	No Meter	123	12	5	0	0	0	0	0	0	0	17
474	390A	Nr.HDFC Bank Pl.No. 11 District Centre	No Meter	123 LI	10	6	0	0	0	0	0	0	0	16
475	391A	Nr. Pl.No. 250, District Centre	No Meter	123 LI	11	5	0	0	0	0	0	0	0	16
476	392A	DTC XAV/GOP/SS/11	No Meter	50 LI	14	12	0	0	0	0	0	0	0	26
477	393A	Nr. Pl.No. S-128	No Meter	50 LI	19	18	0	0	0	0	0	0	0	37
		TOTAL No. OF TYPEWISE LED		1660	6125	2360	427	292	1861	729	102	87	67	13710
		TOTAL No. OF TYPEWISE LED		1660	6125	2360	427	292	1861	729	102	87	67	13710
478	394A	Nr. S-12, Tech Mahindra Road Maitree Vihar	No Meter	50 LI	4	5	0	0	0	0	0	0	0	9
479	395A	Opp.LB 13 Pole No. 2002 Bhimthangi HB Ph-	No Meter	4	8	32	0	0	0	0	0	0	0	40
480	396A	Opp M124	No Meter	4	9	36	5	0	0	0	0	0	0	50
481	397A	Nr. Pl. No. 2693/2118	No Meter	2	2	14	0	0	0	0	0	0	0	16
482	398A	Nr. Som Clinic Lab, Rath Road Pole No.	No Meter	2	0	4	24	0	0	24	0	0	0	52
483	399A	Opp. Pl.No.390, N-5 IRC	No Meter	50LI/	2	25	4	0	0	0	0	0	0	31
484	400A	Opp. Pl.No.460, N-5 IRC	No Meter	50LI/	0	5	0	0	0	0	0	0	0	5
485	401A	Opp. Pl.No. N-5 440 IRC	No Meter	50LI/	0	12	0	0	0	0	0	0	0	12
486	402A	Opp. Pl.No. 273 N-5 IRC	No Meter	50LI/	0	12	0	0	0	0	0	0	0	12
487	403A	Opp. Pl. No. 244 N-5 IRC	No Meter	50LI/	0	9	0	0	0	0	0	0	0	9
488	404A	Opp. Pl. No. 188 N-5 IRC	No Meter	50LI/	0	12	1	0	0	0	0	0	0	13
489	405A	Pole No. 01830161001	No Meter	2	0	39	18	0	0	0	0	0	0	57
490	406A	Opp. Pl. No. 609 Laxmivihar	No Meter	123 LI	2	27	0	0	0	0	0	0	0	29
491	407A	Pole No. 01820471001 Nr. Pl.No.1254/3019	No Meter	5	0	9	7	0	0	0	0	0	0	16
492	408A	Nr. Pl.No. D-4	No Meter	2	0	27	0	0	0	0	0	0	0	27
493	409A	Nr.Pl. No. 39 & 89	No Meter	2	2	18	5	0	0	0	0	0	0	25
494	410A	Pole No. 01820482001 Opp. Pl.No.1569	No Meter	5	3	60	30	0	0	0	0	0	0	93
495	411A	Pole No. 01910251018	No Meter	1	6	40	6	0	0	0	0	0	0	52
496	412A	Opp. Pl.No.1388,	No Meter	1	2	11	0	0	0	0	0	0	0	13
497	413A	Opp.Netaji Park, Syndicate Bank Gandmunda	Meter No. 2517643	2097SI	17	30	0	0	0	0	0	0	0	47
498	414A	Pole No. 01810352001	No Meter	4	19	4	0	0	0	0	0	0	0	23
499	415A	Pole No. 01830171001 Behind Lingaraj	No Meter	4	6	32	32	0	0	0	0	0	0	70
500	416A	Pole No. 02020851002	No Meter	4STA	0	50	0	0	0	0	0	0	0	50
501	417A	Pole No. 02020901001	No Meter	4STA	0	39	0	0	0	0	0	0	0	39
		TOTAL No. OF TYPEWISE LED		1742	6677	2492	427	292	1885	729	102	87	67	14500
		TOTAL No. OF TYPEWISE LED		1742	6677	2492	427	292	1885	729	102	87	67	14500
502	418A	Pole No. 02020891001	No Meter	4STA	0	7	0	0	0	0	0	0	0	7
503	419A	Pole No.02020262002	No Meter	4STA	2	27	0	0	0	0	0	0	0	29
504	420A	Opp. Pl.No. 2182	No Meter	4STA	1	10	0	0	0	0	0	0	0	11
505	421A	Pole No. 02020121001	No Meter	4STA	2	7	0	0	0	0	0	0	0	9
506	422A	Pole No. 02020191002	No Meter	4STA	7	24	0	0	0	0	0	0	0	31
507	423A	Pole No. 02130181001	No Meter	4STA	12	13	0	0	0	0	0	0	0	25
508	424A	Pole No. 02130261001 Opp. Pl.No.2157A	No Meter	4STA	5	20	0	0	0	0	0	0	0	25
509	425A	Opp Pl.No. 1238/4737	No Meter	4STA	0	13	0	0	0	0	0	0	0	13
510	426A	Behind Hotel Arya Palace Ashok Nagar	No Meter	2	0	0	18	0	0	0	0	0	0	18
511	427A	Behind Hotel Arya Palace DTC PHD Pump	No Meter	2	0	0	5	0	0	0	0	0	0	5
512	428A	Opp. Pl.No. 136 Ashok Nagar Basti	No Meter	2	0	0	25	0	0	0	0	0	0	25
513	429A	Opp. Pl.No.22	No Meter	2	0	0	22	0	0	0	0	0	0	22
514	430A	Nr Punjab National Bank Mastercanteen Main	No Meter	2	0	0	13	0	0	0	0	0	0	13
515	431A	Opp. Loknath Jewellers Rajmahal Sqr., Ashok	No Meter	2	0	0	5	0	0	0	0	0	0	5
516	432A	Pole No. 01950541006 Opp. Pl.No. LB 104	No Meter	1	0	29	17	0	0	0	0	0	0	46
517	433A	Pole No. 01950551022	No Meter	1	0	17	0	0	0	0	0	0	0	17
518	434A	Pole No. 01950161007	No Meter	1	2	8	0	0	0	0	0	0	0	10
519	435A	Nr. EB-360 Bargada P.S. Lane	No Meter	1	4	22	0	0	0	0	0	0	0	26

520	436A	Opp. HIG-219 7th Phase Sailshree Vihar	No Meter	123	24	20	8	0	0	0	0	0	0	52
521	437A	Nr. Plot No. EB 66 Balukeshwar Mandir	No Meter	4STA/	18	35	0	0	0	0	0	0	0	53
522	438A	Nr Plot No.30	No Meter	4STA/	3	16	0	0	0	0	0	0	0	19
523	439A	Nr. EB 44	No Meter	4STA/	6	7	3	0	0	0	0	0	0	16
524	440A	DTC Nr. Nandini Mansion Cuttack Road	No Meter	4STA/	5	5	0	0	0	0	0	0	0	10
525	441A	Garage Chhak To Sharda Math Canal Road	CSO60125	118ST	0	0	16	0	0	0	0	0	0	16
	TOTAL No. OF TYPEWISE LED			1833	6957	2624	427	292	1885	729	102	87	67	15003
	TOTAL No. OF TYPEWISE LED			1833	6957	2624	427	292	1885	729	102	87	67	15003
526	442A	Pole No. 01940171007	No Meter	5ST	0	14	18	0	0	0	0	0	0	32
527	443A	Pole No. 01820441021	No Meter	5ST	0	2	6	0	0	0	0	0	0	8
528	444A	Pole No. 01820461009 Nr. Pl.No. 1294/2	No Meter	5ST	0	23	12	0	0	0	0	0	0	35
529	445A	Nr. Puja Betel Shop, Kapileswar Village	No Meter	5ST	0	12	30	0	0	0	0	0	0	42
530	446A	Nr. Dreamland Furniture Behind Amber	No Meter	123	9	11	0	0	0	0	0	0	0	20
531	447A	Opp. Pl.No. 307	No Meter	123	10	3	0	0	0	0	0	0	0	13
532	448A	Nr. AKASH Institute, Advant District Centre	No Meter	123	12	10	0	0	0	0	0	0	0	22
533	449A	Nr. Patnaik Associates Pl.No. 240, Dist Centre	No Meter	123	10	5	0	0	0	0	0	0	0	15
534	450A	Pl.No. VIM 26	No Meter	123	17	8	0	0	0	0	0	0	0	25
535	451A	VIM 181	No Meter	123	14	9	0	0	0	0	0	0	0	23
536	452A	Nr. Zonal Dispensary, Unit-3, KharvelNagar	No Meter	2	0	5	19	0	0	0	0	0	0	24
537	453A	Nr. Qtr E2- 46	No Meter	1	1	7	0	0	0	0	0	0	0	8
538	454A	Opp. Stewart School Nr. 2RA 20	No Meter	1	0	4	0	0	0	0	0	0	0	4
539	455A	Opp. Pl. No. 4718	No Meter	50 LI	1	20	0	0	0	0	0	0	0	21
540	456A	Rupali Chhak To Vani vihar Road	No Meter	3	0	0	0	0	0	24	0	0	0	24
541	457A	Mini High Mast At Jaydeo Vihar Square of	No Meter	50LI/	0	0	0	0	0	0	4	0	0	4
542	458A	Mini High Mast Opp. KOEL CAMPUS	No Meter	123LI/	0	0	0	0	0	0	4	0	0	4
543	459A	Barmunda High Mast Ganga Nagar, UNIT-6	No Meter	1	0	0	0	0	0	0	6	0	0	6
544	460A	Sisubhavan Chhak FOREST PARK High	191991 new	52ST	0	0	0	0	0	0	9	0	0	9
545	461A	Bargad Kalyan Mandap Square High Mast	CSU01314	49ST	0	0	0	0	0	0	12	0	0	12
546	462A	Bargad Brit Colony High Mast Ward. 57	CSU03026	97ST	0	0	0	0	0	0	6	0	0	6
547	463A	Nr. Retail Mart Satyavihar	NEW Meter No.	45ST	19	32	4	0	0	0	0	0	0	55
548	464A	Nr. Mahaveer Construction Satyavihar	Meter No. NEW	46ST	22	47	0	0	0	0	0	0	0	69
549	465A	Nr. Pl No. 1294 Satyavihar	No Meter	4STA	7	16	0	0	0	0	0	0	0	23
	TOTAL No. OF TYPEWISE LED			1955	7185	2713	427	292	1885	753	143	87	67	15507
	TOTAL No. OF TYPEWISE LED			1955	7185	2713	427	292	1885	753	143	87	67	15507
550	466A	Infront of Acrux Residency SaheedNagar	No Meter	3	16	10	0	0	0	0	0	0	0	26
551	467A	Nr. Pl.No. 656/2811	No Meter	4 STA/	0	4	13	0	0	0	0	0	0	17
552	468A	Opp. CESU Section Laxmisagar Pole No.	No Meter	4 STA/	29	19	10	0	0	0	0	0	0	58
553	469A	Pole No. 02020242004 Nr. Pl.No. MIG-2	No Meter	123LI/	11	9	0	0	0	0	0	0	0	20
554	470A	Pole No. 00220102031	No Meter	123LI/	0	0	23	0	0	0	0	0	0	23
555	471A	Pole No. 00220192015	No Meter	123LI/	0	2	14	0	0	0	0	0	0	16
556	472A	Opp. Pl.No. 1096	No Meter	2	0	4	1	1	0	10	0	0	0	16
557	473A	Behind Mausima Satsang Kendra	No Meter	2	0	8	1	0	3	0	0	0	0	12
558	474A	Opp. Dhanalaxmi Traders Near Sai Temple	No Meter	2	0	10	27	0	0	0	0	0	0	37
559	475A	Opp. SOS Childrens Village Sum Hospital Rd.	Meter 53671	952SI	0	28	0	0	0	0	0	0	0	28
560	476A	Opp. Bharatpur Melan Padia Chandaka Main	METER No.	50LI/	2	26	0	0	0	0	0	0	0	28
561	477A	Pole No. 01830201001 Opp. Pl.No.	No Meter	3	0	18	20	0	0	0	0	0	0	38
562	478A	Pole No. 01830141001 Opp. Pl.No. 1645/225	No Meter	3	0	16	10	0	0	0	0	0	0	26
563	479A	Opp. Odisha Staff Selection Commission	No Meter	2	3	1	10	1	0	0	0	0	0	15
564	480A	Opp. 33/0.4kV Substation, Unit-5 Nr Secha	1356170-	1 ST	0	0	0	2	0	8	0	0	0	10
565	480A	Opp. 33/0.4Kv Substation, Unit-5 Nr. Secha	1352617-	1 ST	3	2	0	0	12	0	0	0	0	17
566	481A	DTC 22	No Meter	4	4	29	0	0	0	0	0	0	0	33
567	482A	DTC 23	No Meter	4	4	12	1	0	0	0	0	0	0	17
568	483A	Nr. AE-04 Opp Tarini Mandir Bhimthangi	No Meter	4	2	14	6	0	0	0	0	0	0	22
569	484A	Opp. Odisha Prashasanik Seva Sangha Off	No Meter	2	0	11	13	0	0	0	0	0	0	24
570	485A	Nr. SCR-97	No Meter	2	0	4	14	0	0	0	0	0	0	18
571	486A	Nr. Puratatva Niwas Block 6 Satya Nagar	No Meter	3	0	0	27	0	0	0	0	0	0	27
572	487A	Nr. Pl.No. VIM 761	No Meter	123LI/	13	0	18	0	0	0	0	0	0	31
573	488A	Nr. Pl.No. VIM 748	No Meter	123LI/	15	0	9	0	0	0	0	0	0	24
	TOTAL No. OF TYPEWISE LED			2057	7412	2930	431	292	1918	753	143	87	67	16090

			TOTAL No. OF TYPEWISE LED	2057	7412	2930	431	292	1918	753	143	87	67	16090
574	489A	Nr. PL.No. VIM 490	No Meter	123LI/	7	3	13	0	0	0	0	0	0	23
575	490A	Nr. Sreeji Vihar Behind Durga Mandap	No Meter	4STA/	3	21	11	0	0	0	0	0	0	35
576	491A	Nr. PL.No. 544/1653	No Meter	4STA/	4	17	0	0	0	0	0	0	0	21
577	492A	Opp. PL.No. 432	No Meter	3	2	33	11	0	0	0	0	0	0	46
578	493A	Behind Redcross Blood Bank Municipality	No Meter	3	0	0	7	0	0	0	0	0	0	7
579	494A	Opp. PL.No. 432	No Meter	3	0	6	13	0	0	12	0	0	0	31
580	495A	Nr. PL.No. HIG -49	No Meter	123LI/	10	5	40	0	0	0	0	0	0	55
581	496A	Pole No. 00230081000	No Meter	123LI/	38	16	0	0	0	0	0	0	0	54
582	497A	Nr. Apollo Pharmacy Pl. No. 646	No Meter	123LI/	22	17	0	0	0	0	0	0	0	39
583	498A	Nr. PL.No. 127	No Meter	123LI/	19	11	0	0	0	0	0	0	0	30
584	499A	Nr. Aryan Public School Neeladri Vihar	No Meter	123LI/	18	7	0	0	0	0	0	0	0	25
585	500A	Nr. Usha Medicine Pl No. 751	No Meter	123LI/	5	4	0	0	0	0	0	0	0	9
586	501A	Nr. SBI Samantrapur Sriram Nagar	No Meter	5ST	1	13	9	0	0	0	0	0	0	23
587	502A	Nr. Sani Temple Laxmisagar Village	No Meter	4STA/	4	43	10	0	0	0	0	0	0	57
588	503A	Nr. Dandasahi Opp Kapileswar Canal Road	No Meter	5	0	24	30	0	0	0	0	0	0	54
589	504A	Nr. Radharaman Colony Lane- 1	No Meter	5	0	2	88	0	0	0	0	0	0	90
590	505A	Behind UCO Bank, Main Branch MASTER	No Meter	2	0	0	14	0	8	0	0	0	0	22
591	506A	Hansapal NH To Banguari Canalside	Meter No. 3099679	114ST	35	0	6	0	0	0	0	0	0	41
592	507A	Nr. Usha Enclave & IOB Bank Hanspal	No Meter	4STA/	43	1	10	0	0	0	0	0	0	54
593	508A	Nr. PL.No. 363	No Meter	123LI/	7	2	8	0	0	0	0	0	0	17
594	509A	Opp. VIM 94	No Meter	123LI/	10	0	10	0	0	0	0	0	0	20
595	510A	Pl. No. 118	No Meter	123LI/	19	17	5	0	0	0	0	0	0	41
596	511A	Nr. Neeladri Agency Pl.No. 296	No Meter	123LI/	11	22	1	0	0	0	0	0	0	34
597	512A	Nr. CESU Office Unit-2	No Meter	2	0	0	22	0	0	0	0	0	0	22
			TOTAL No. OF TYPEWISE LED		2315	7676	3238	431	292	1938	753	143	87	16940
			TOTAL No. OF TYPEWISE LED		2315	7676	3238	431	292	1938	753	143	87	16940
598	513A	PL.No. IVA 10/1	No Meter	2	0	2	27	0	0	0	0	0	0	29
599	514A	Nr. IVR 10/4	No Meter	2	0	0	7	0	0	0	0	0	0	7
600	515A	Nr. IVA 25/1	No Meter	2	0	0	9	0	0	0	0	0	0	9
601	516A	Nr. BMC Keshari Mall	No Meter	2	6	9	0	0	14	0	0	0	0	29
602	517A	Nr. PL.No. IVA 44/6	No Meter	2	6	9	0	0	6	0	0	0	0	21
603	518A	Nr. Bank Of India Beside Crown Hotel	No Meter	50LI	0	10	15	0	0	0	0	0	0	25
604	519A	Nr. Rameswar Temple IRC N-6	No Meter	50LI	1	1	41	0	0	0	0	0	0	43
605	520A	Inside Rameswar Temple IRC N-6	No Meter	50LI	4	6	5	0	0	0	0	0	0	15
606	521A	Damana Square High Mast	CSU04907	1021SI	0	0	0	0	0	0	13	0	0	13
607	522A	OPP. Green Garden ID MKT Rd. IRC-N-6	No Meter	50LI	0	5	16	0	0	0	0	0	0	21
608	523A	Opp. Pl. No. N-6/82 IRC N-6	No Meter	50LI	4	4	1	0	0	0	0	0	0	9
609	524A	Beside Nayapalli Durga Mandap Gandhi Basti	No Meter	50LI	0	14	8	0	0	0	0	0	0	22
610	525A	Kalinga Basti Chari Chhak Badgad	No Meter	1	2	3	0	0	0	0	0	0	0	5
611	526A	Nr. Badgad Masani	No Meter	1	1	8	5	0	0	0	0	0	0	14
612	527A	Dolo Mandapsahi	No Meter	1	1	29	0	0	0	0	0	0	0	30
613	528A	Nr. PL.No. 4426	No Meter	1	0	15	8	0	0	0	0	0	0	23
614	529A	Nr. PL.No. EA53	No Meter	1	2	11	0	0	0	0	0	0	0	13
615	530A	Irrigation Colony -II F-Block	No Meter	1	1	11	0	0	0	0	0	0	0	12
616	531A	Nr. PL.No. H/4	No Meter	1	2	27	0	0	0	0	0	0	0	29
617	532A	Nr. PL.No. 696/922	No Meter	1	2	18	0	0	0	0	0	0	0	20
618	533A	Nr. Wire House Lane Opp. Jyoti Motors	No Meter	1	2	6	0	0	0	0	0	0	0	8
619	534A	Behind Priya Appt. BJB Nagar	No Meter	1	2	28	0	0	0	0	0	0	0	30
620	535A	Nr. Pl. No. 579	No Meter	1	0	6	0	0	0	0	0	0	0	6
621	536A	Opp. COSMO Boutique & Beauty Parlor	No Meter	1	1	25	0	0	0	0	0	0	0	26
			TOTAL No. OF TYPEWISE LED		2352	7923	3380	431	292	1958	753	156	87	17399
			TOTAL No. OF TYPEWISE LED		2352	7923	3380	431	292	1958	753	156	87	17399
622	537A	Nr. PL.No. 137 Lewis Road BJB Nagar	No Meter	1	1	6	0	0	0	0	0	0	0	7
623	538A	Opp. Mesco Steel Kedar Gouri Mandir Front	No Meter	2	0	12	17	0	0	0	0	0	0	29
624	539A	Nr. MMMM Transport Palasuni	No Meter	4STA/	0	0	18	0	0	0	0	0	0	18
625	540A	Stewart School Square High Mast	CSO60100	51ST	0	0	0	0	0	0	6	0	0	6
626	541A	Dashraj Temple To Sainik School Backside	17258350		0	84	2	0	6	0	0	0	0	92
627	542A	Khandagiri Caves Temple High Mast	CSU01150	3094SI	0	0	0	0	0	0	12	0	0	12

628	543A	Behind Sarswati Sishu Mandir Hathi Rd.	No Meter	50LI	0	38	0	0	0	0	0	0	0	38
629	544A	Nr. Bharatpur General Dispensary	No Meter	50LI	0	14	0	0	0	0	0	0	0	14
630	545A	Nr. Pl.No.7 Bharatpur Nr. Ayurvedic Hospital	No Meter	50LI	2	13	0	0	0	0	0	0	0	15
631	546A	Nr. Bharatpur Pala Mandap 16kVA DTC	No Meter	50LI	0	11	0	0	0	0	0	0	0	11
632	547A	Nr. CESU Office Adimata Colony	No Meter	50LI	0	46	8	0	0	0	0	0	0	54
633	548A	Pole No. 01820111001	No Meter	5	13	14	22	0	0	0	0	0	0	49
634	549A	Opp. Kapilprasad Youth Association	No Meter	5	12	10	30	0	0	0	0	0	0	52
635	550A	Nr. Kapilprasad Durga Mandap	No Meter	5	0	8	8	0	0	0	0	0	0	16
636	551A	Opp. Pl.No. 3183/A Pole No. 01920372001	No Meter	3	0	12	0	0	0	0	0	0	0	12
637	552A	Opp. OT3 CESU Office Pole No.	No Meter	3	0	0	0	0	8	0	0	0	0	8
638	553A	Opp. OT3 CESU Office Pole No.	No Meter	3	0	1	7	0	0	0	0	0	0	8
639	554A	Nr Sirdi Sai Temple Off, Rath Road Sital	No Meter	3	0	4	4	0	0	0	0	0	0	8
640	555A	DTC 208D 0173 Nr. Pl.No.58	No Meter	5	0	9	0	0	0	0	0	0	0	9
641	556A	Nr. HP Gas Godown Brahmeswar Baug	No Meter	5	0	9	1	0	0	0	0	0	0	10
642	557A	Nr. Matrushakti Constn Pvt. Ltd. IRC-N4	No Meter	50LI/	6	13	0	0	0	0	0	0	0	19
643	558A	Opp. Hotel Sonu Swapneswar Mandir Rd.	No Meter	50LI/	3	9	0	0	0	0	0	0	0	12
644	559A	Opp. N3-79 Nr Kalinga Vidyamandir School	No Meter	50LI/	10	32	0	0	0	0	0	0	0	42
645	560A	Opp. N1-40	No Meter	50LI/	4	6	0	0	0	0	0	0	0	10
TOTAL No. OF TYPEWISE LED				2403	8274	3497	431	300	1964	753	174	87	67	17950
TOTAL No. OF TYPEWISE LED				2403	8274	3497	431	300	1964	753	174	87	67	17950
646	561A	Opp.. N1-258 Millenium Hospital IRC	No Meter	50LI/	4	6	0	0	0	0	0	0	0	10
647	562A	Opp. N2-69 Nr Shining Star School IRC	No Meter	50LI/	11	2	0	0	0	0	0	0	0	13
648	563A	Nr. N4/F/12 IRC N4	No Meter	50LI/	6	0	0	0	0	0	0	0	0	6
649	564A	Nr. Indian Oil Petrol Tank IRC N-4 NH5	No Meter	50LI/	6	0	0	0	0	0	0	0	0	6
650	565A	Opp. N3 108 IRC N3	No Meter	50LI/	7	6	0	0	0	0	0	0	0	13
651	566A	Opp. CESU Section Dumduma Pole No.	No Meter	50LI/	0	2	10	0	0	0	0	0	0	12
652	567A	Opp. L526 Pole No. 00750221015 Dumduma	No Meter	50LI/	0	1	15	0	0	0	0	0	0	16
653	568A	Opp. L1548 Pole No. 00710371016 Duduma	No Meter	50LI/	0	7	0	0	0	0	0	0	0	7
654	569A	Behind Ambedkar Shiksha Kendra	No Meter	50LI/	0	2	10	0	0	0	0	0	0	12
655	570A	Opp. Masjid Dumduma	No Meter	50LI/	0	1	15	0	0	0	0	0	0	16
656	571A	Opp. Pl. No. 32/414 Begunia Village	No Meter	50LI/	0	7	0	0	0	0	0	0	0	7
657	572A	Opp. Bahumukhi Gosti Kendra Dispensary	No Meter	50LI/	0	8	0	0	0	0	0	0	0	8
658	573A	OPP. Pl.No. 1373	No Meter	50LI/	6	9	0	0	0	0	0	0	0	15
659	574A	Opp. Pl.No. MIG-138 Pole No.00220252006	No Meter	123LI/	7	5	1	0	0	0	0	0	0	13
660	575A	Opp. Pl.No. MIG-82 Pole No. 00220272002	No Meter	123LI/	14	2	0	0	0	0	0	0	0	16
661	576A	Opp. Pl.No. 45 Srihetravivihar	No Meter	50LI/	15	0	0	0	0	0	0	0	0	15
662	577A	Opp. Shrabani Palace Pl.No. 1285	No Meter	2	4	19	0	0	0	0	0	0	0	23
663	578A	Opp. Pl.No. 1051/1401	No Meter	2	1	8	0	0	0	0	0	0	0	9
664	579A	Behind Sayad Mumtajali Highschool	No Meter	2	0	20	0	0	0	0	0	0	0	20
665	580A	Opp. LIG-82	No Meter	2	4	2	0	0	0	0	0	0	0	6
666	581A	Opp. Block G-2 Reserve Police Colony	No Meter	2	0	2	10	0	0	0	0	0	0	12
667	582A	Opp. Qtr. No. IV 37/3 Unit 1	No Meter	2	0	2	43	0	0	0	0	0	0	45
668	583A	ITASC Computer Kamala Neheru College Rd.	No Meter	2	0	0	25	0	0	0	0	0	0	25
669	584A	Opp. Ganesh Temple Unit-1 Mkt.	No Meter	2	0	0	11	0	0	0	0	0	0	11
TOTAL No. OF TYPEWISE LED				2488	8385	3637	431	300	1964	753	174	87	67	18286
TOTAL No. OF TYPEWISE LED				2488	8385	3637	431	300	1964	753	174	87	67	18286
670	585A	Opp. Pl.No. 22 DTC 207D0930	No Meter	50LI/	0	8	0	0	5	0	0	0	0	13
671	586A	Opp. Pl.No. 46 DTC	No Meter	50LI/	1	18	0	0	0	0	0	0	0	19
672	587A	Opp. T/4 block Rental Colony	No Meter	50LI/	0	7	0	0	0	0	0	0	0	7
673	588A	Opp. T/10 Block Rental Colony	No Meter	50LI/	0	4	0	0	0	0	0	0	0	4
674	589A	Opp. F/16 Block	No Meter	50LI/	0	3	0	0	0	0	0	0	0	3
675	590A	Opp. Zonal Dispensary Rental Colony	No Meter	50LI/	1	4	0	0	0	0	0	0	0	5
676	591A	Opp. Pl.No. 541	No Meter	4STA/	2	18	0	0	0	0	0	0	0	20
677	592A	Opp. Pl.No. 541, DTC 250kVA	No Meter	4STA/	0	16	3	0	0	0	0	0	0	19
678	593A	Opp. Pl.No. 1055	No Meter	4STA/	9	0	0	0	0	0	0	0	0	9
679	594A	Opp. Sai Temple Beside Swosti Premium	No Meter	50LI/	0	0	0	0	5	0	0	0	0	5
680	595A	Nr. ASI Office 7 th Battalion Behind Coal	No Meter	50LI/	0	10	0	0	0	0	0	0	0	10
681	596A	Opp. Pl.No. 85	No Meter	123LI/	0	4	0	0	0	0	0	0	0	4
682	597A	Opp. HIG-77	No Meter	123LI/	0	9	0	0	0	0	0	0	0	9

683	598A	Opp. Pl.No. 849/5041	No Meter	123LI/	0	7	0	0	0	0	0	0	0	7
684	599A	Sikharchandi Basti Telanga Sahi	No Meter	123LI/	0	6	0	0	0	0	0	0	0	6
685	600A	Nr. BMC Homeopathic Hospital Nuagaon	No Meter	5	0	16	0	0	0	0	0	0	0	16
686	601A	Nr. Vivekananda Shiksha Kendra Gada	No Meter	5	0	5	0	0	0	0	0	0	0	5
687	602A	Opp. Pl.No. 2155/3605 Pole No.	No Meter	5	0	0	16	0	0	0	0	0	0	16
688	603A	Opp. BMC Staff Qtrs. Sriram Nagar Main Rd.	No Meter	5	0	5	13	0	0	0	0	0	0	18
689	604A	Beside VITs Hotel	No Meter	4STA	0	3	0	0	0	0	0	0	0	3
690	605A	Opp. Pl.No. 7	No Meter	4STA	2	2	6	0	0	0	0	0	0	10
691	606A	Opp. Pl.No. 55-C	No Meter	4STA	0	6	1	0	0	0	0	0	0	7
692	607A	Nr. Plot No. 27-C Jaydurga Nagar	No Meter	4STA	4	4	0	0	0	0	0	0	0	8
693	608A	Opp. Pl.No. 1151/1610	No Meter	4STA	0	0	8	0	0	0	0	0	0	8
TOTAL No. OF TYPEWISE LED					2507	8540	3684	431	300	1974	753	174	87	18517
TOTAL No. OF TYPEWISE LED					2507	8540	3684	431	300	1974	753	174	87	18517
694	609A	Opp. Hotel New Kalika Cuttack Rd. Jaydurga	No Meter	4STA	0	0	5	0	0	0	0	0	0	5
695	610A	Nr. Brahmeswar Hat Tankapani Rd.	No Meter	1ST	0	9	0	0	0	0	0	0	0	9
696	611A	Opp. BOI ATM Bargad Brit Main Rd.	No Meter	1ST	0	13	1	0	0	0	0	0	0	14
697	612A	Opp. Maa Dalkhai Pitha Pole	No Meter	4STA	0	23	9	0	0	0	0	0	0	32
698	613A	Opp. Hanuman Temple Jharpada	No Meter	4STA	0	8	12	0	0	0	0	0	0	20
699	614A	Opp. Kusum Enterprises Pl. No. 650	No Meter	4STA	0	11	0	0	0	0	0	0	0	11
700	615A	Unit-8, Girls HighSchool	No Meter	1ST	7	33	0	0	0	0	0	0	0	40
701	616A	Nr. Pl.No. 129	No Meter	50LI	1	14	0	7	0	0	0	0	0	22
702	617A	Opp. Pl.No. 231/2206	No Meter	50LI	0	10	3	0	0	0	0	0	0	13
703	618A	Nr. Pl.No. 846H	No Meter	4STA	0	6	0	0	0	0	0	0	0	6
704	619A	Opp. Jindal Steel Forest Park	No Meter	2ST	2	24	1	0	0	0	0	0	0	27
705	620A	Nr. Pl. No. 269/2448	No Meter	2ST	3	7	1	0	0	0	0	0	0	11
706	621A	CESU Section (Flat) Nr. Unit-9	No Meter	3ST	0	0	63	0	0	0	0	0	0	63
707	622A	Beside Block F-5 Unit-9	No Meter	3ST	0	0	13	0	0	0	0	0	0	13
708	623A	Rural Work Rest Shed Unit-9	No Meter	3ST	0	0	12	0	0	0	0	0	0	12
709	624A	Beside Block D7 Unit-9	No Meter	3ST	0	0	16	0	0	0	0	0	0	16
710	625A	Nr. 2RAF/29/2	No Meter	3ST	0	4	13	0	0	0	0	0	0	17
711	626A	Nr. 2RAF/28/5	No Meter	3ST	0	0	17	0	0	0	0	0	0	17
712	627A	Opp Venkateswar E.M.School Bhimthangi	No Meter	4ST	0	10	0	0	0	0	0	0	0	10
713	628A	Nr. Bhimthangi U.P. School Ph-2	No Meter	4ST	0	8	2	0	0	0	0	0	0	10
714	629A	Nr. Binayak Enclave Sytasai Enclave Area	No Meter	50LI	11	3	0	0	0	0	0	0	0	14
715	630A	Nr. Pl.No.18	No Meter	1ST	0	6	0	0	0	0	0	0	0	6
716	631A	Pole No. 02130361001	No Meter	4STA	2	5	0	0	0	0	0	0	0	7
717	632A	Opp. Pl.No. 72/A	No Meter	4STA	0	17	4	0	0	0	0	0	0	21
TOTAL No. OF TYPEWISE LED					2533	8751	3856	438	300	1974	753	174	87	18933
TOTAL No. OF TYPEWISE LED					2533	8751	3856	438	300	1974	753	174	87	18933
718	633A	Nr. Badgad Hat Central Bank Lane	No Meter	1ST	0	13	0	0	0	0	0	0	0	13
719	634A	Opp. Pl.No. 21A Kalpana Flat	No Meter	4STA	0	5	2	0	0	0	0	0	0	7
720	635A	Opp. Pl.No. 414 Chintamaneswar, Nr.	No Meter	4STA	0	17	22	0	0	0	0	0	0	39
721	636A	Pl.No. 146	No Meter	4STA	0	7	9	0	0	0	0	0	0	16
722	637A	Nr.Pl.No. 644	No Meter	4STA	0	0	9	0	0	0	0	0	0	9
723	638A	Nr. Pole No. 0222/022/1011 Bhotapada	No Meter	4STA	6	0	3	0	0	0	0	0	0	9
724	639A	Nr. Balaji Alloys Pvt. Ltd., 136 Mancheswar	No Meter	4STA	13	0	2	0	0	0	0	0	0	15
725	640A	Bhotpada Village, 16kVA DTC	Meter No. ORBM	85ST	47	0	0	0	0	0	0	0	0	47
726	641A	Pl.No. 483.	No Meter	2ST	1	11	0	0	0	0	0	0	0	12
727	642A	Pl.No. 2459/6	No Meter	2ST	4	33	1	0	0	0	0	0	0	38
728	643A	BMC Premises	No Meter	2ST	0	0	2	0	11	0	0	0	0	13
729	644A	Nr. Canara Bank Puri Rd. Pole No.	No Meter	3	3	0	38	0	0	0	0	0	0	41
730	645A	Opp. Pl.No. 1075/3043	No Meter	1 ST	9	0	15	0	0	0	0	0	0	24
731	646A	Opp. Pl.No. M A/4	No Meter	1	1	0	26	0	0	0	0	0	0	27
732	647A	Opp. Pl.No. MB/79 Pole No. 01950291001	No Meter	1	0	0	9	0	0	0	0	0	0	9
733	648A	K.V.School Regional Office To Netaji	CSC 30248	50 LI	0	18	0	0	0	0	0	0	0	18
734	649A	Nr. Pl.No. HIG-50	No Meter	123 Li/	10	0	7	0	0	0	0	0	0	17
735	650A	FR Block 106	No Meter	123 Li/	9	0	8	0	0	0	0	0	0	17
736	651A	Nr. FR Block 91 & 83 Sailshree Vihar	No Meter	123 Li/	8	0	10	0	0	0	0	0	0	18
737	652A	FR Block 92/5	No Meter	123 Li/	4	0	5	0	0	0	0	0	0	9

738	653A	Nr. FR Block 62/5	No Meter	123 Li/	12	0	4	0	0	0	0	0	0	0	16
739	654A	Nr.Pl.No. HIG-87	No Meter	4	2	0	10	0	0	0	0	0	0	0	12
740	655A	Bhouma Nagar To R&B Engineers	No Meter	2	0	0	11	0	0	0	0	0	0	0	11
741	656A	Machha Market, 250 kVA S/s UNIT-5	No Meter	1	3	0	4	0	0	5	0	0	0	0	12
	TOTAL No. OF TYPEWISE LED				2665	8855	4053	438	300	1990	753	174	87	67	19382
	TOTAL No. OF TYPEWISE LED				2665	8855	4053	438	300	1990	753	174	87	67	19382
742	657A	Nr. Kali Mandir Press Chhak Gajapati Nagar	No Meter	50 LI	0	0	10	0	0	0	0	0	0	0	10
743	658A	Nr. Durga Mandap Pokhariput	CSO60193	84ST	0	0	60	0	0	0	0	0	0	0	60
	TOTAL No. OF TYPEWISE LED				2665	8855	4123	438	300	1990	753	174	87	67	19452
	TOTAL No. OF TYPEWISE LED				2665	8855	4123	438	300	1990	753	174	87	67	19452
	TOTAL No. OF TYPEWISE LED FITTING				2665	8855	4123	438	300	1990	753	174	87	67	19452

SUPER WEALTH FINANCIAL ENTERPRISES PVT.LTD. BHUBANESHWAR ENERGY SAVING PROJECT													
Sr. No.	REPORT No.	NAME OF SW. POINT	IMPLEMENTED LED FIXTURE DETAIL										TOTAL No. OF LED INST. QTY.
			16W LED STL	45W LED STL	70W LED STL	90W LED STL	100W LED STL	110W LED STL	120W LED STL	LED HIGH MAST			
										110W LED STL	220W LED STL	250W LED STL	
1	R10	Dav School To Gopubandhu Smriti Sansad	16	45	70	90	100	110	120	110	220	250	6
2	R11	From Rupali Chhak(Panda Lifestyle) To Smasana Kali Temple	0	6	0	0	0	0	0	0	0	0	
3	R13	Vidya Vihar To Rammandir (Rajdhani Roxy)	0	0	0	0	0	0	0	3	0	0	3
4	R26	Gandmunda (ITR Road) To Pokhariput	0	2	0	0	0	0	0	0	0	0	2
5	R30	Gandmunda Square To Khandagiri Square (Jagamara Jatrapadia)	0	2	2	0	0	0	0	0	0	0	4
6	R48	Kalpana to BMC Kalyan Mandap Bargarh (Near Central Bank)	0	0	4	0	0	0	0	0	0	0	4
7	R53	Bhanja Kala Mandap Gate, BJB Nagar Rd.	0	14	0	12	0	0	0	0	0	0	26
8	R72	Beside P&T Residential Colony Compound, off Satsang Marg.	0	10	0	0	0	0	0	0	0	0	10
9	R74	Nr. Jharpada Canal Road	0	0	4	0	0	0	0	0	0	0	4
10	R81	Sardar Patel Road	0	0	63	0	0	0	0	0	0	0	63
11	R92	Ward No. 39, Neelpadma Appt. Bomikhal Shanti Ngr.(Jharpada Jail to Bomikhal Canel Rd.)	0	17	6	0	3	0	0	0	0	0	26
12	018A	Loyola high School-Salia Sahi	0	18	4	0	0	0	0	0	0	0	22
13	038A	Pandara Hitech Jaganath Mandir Rd.	0	4	3	0	0	0	0	0	0	0	7
14	051A	Rabindra Mandap Backside To Swagat Hotel, Kar Clinic Road	0	8	8	0	0	0	0	0	0	0	16
15	058A	Beside Plot No.. 288 Sai Mandir Rd., Shahid Nagar	0	0	3	0	0	0	0	0	0	0	3
16	060A	Techzone front,Opp. Canara Bank, Saheed Nagar	0	0	2	0	0	0	0	0	0	0	2
17	061A	Beside Orissa Vigyan Academy, Saheed Nagar	0	0	7	0	0	0	0	0	0	0	7
18	064A	Pole No..02020562001, Kalpana Fire Station Lane, Infront of Water Tank, Nr. Sanskruti Bhavan	0	28	4	0	0	0	0	0	0	0	32
19	066A	Nr. BSNL Office	0	3	2	0	0	0	0	0	0	0	5
20	067A	In Front Of i Book Institute Pl. No. BJ19	0	1	10	0	0	0	0	0	0	0	11
21	068A	In front of BJB Colony , U.P School, Pole No..01930061001	1	25	6	0	0	0	0	0	0	0	32
22	070A	Pole No. 01960041001 Mahatab Park, Nr Akhandalamani Temple	0	1	10	0	0	0	0	0	0	0	11
23	072A	Opp. Pl No. A-46 Nr. CESU Distribution Division office	0	8	2	0	0	0	0	0	0	0	10
24	074A	In Front Of Capital Broiler	0	1	7	0	0	0	0	0	0	0	8
	TOTAL No. OF TYPEWISE LED FITTING C/F		1	154	147	12	3	0	0	3	0	0	320
	TOTAL No. OF TYPEWISE LED FITTING B/F		1	154	147	12	3	0	0	3	0	0	320
25	075A	In Front Of Vanivihar Railway Station	0	2	0	0	0	0	0	0	0	0	2
26	076A	I/F IMFA Recreation Centre 210D0056	0	1	1	0	0	6	0	0	0	0	8
27	077A	Beside Svsstem World	0	5	4	0	0	16	0	0	0	0	25

28	078A	Back Side of BDA-OMC Park	0	0	4	0	0	0	0	0	0	0	4
29	080A	Behind Saheed Ngr. Hat 207E0083, Inf. Of Pl. No.713 Khanduala Mandir Lane	0	0	4	0	0	0	0	0	0	0	4
30	081A	In Front Of Akhandalamani Temple Opp. ESI Lane	0	2	5	0	0	0	0	0	0	0	7
31	082A	Infront of Akhandlamani Temple 207D0131, Inf. of Pl. No.728 Nr Abhishek Appt	0	5	2	0	0	0	0	0	0	0	7
32	084A	Nr. Bhawani Mall Infront Of Grihasti Bazar	0	0	4	0	0	0	0	0	0	0	4
33	086A	208D0282 Besides Peekay Systems	0	0	2	0	2	0	0	0	0	0	4
34	087A	Infront Of Hotel Friends	0	0	8	0	12	0	0	0	0	0	20
35	089A	Back Side Of Vishnu Mandir	0	0	3	0	0	0	0	0	0	0	3
36	090A	208D0215 Infront Of The Creche School	0	8	1	0	0	0	0	0	0	0	9
37	091A	Inside CESU Section Compound	0	2	10	0	0	0	0	0	0	0	12
38	092A	Back Side Of CET Coaching Centre Unit-8	0	5	3	0	0	0	0	0	0	0	8
39	093A	Infront Of Sarswati Sishu Play Ground Pole No.15/A/5	0	3	4	0	0	0	0	0	0	0	7
40	094A	Infront Of SCTE & VT Office	0	2	10	0	0	0	0	0	0	0	12
41	097A	CBI Lane OMFED 1240 Nr. Community Centre Unit-8	0	7	6	0	0	0	0	0	0	0	13
42	098A	Infront Of OMC Colony	0	1	3	0	0	0	0	0	0	0	4
43	099A	I/F of 2RA/42/4 Pole No. 30/A/4	0	16	1	0	0	0	0	0	0	0	17
44	100A	Beside BEO Office Pole No.31/A/4/B3	0	5	5	0	0	0	0	0	0	0	10
45	102A	Power House Colony	0	7	1	0	0	0	0	0	0	0	8
46	103A	Odissa Construction Company Ltd.	0	3	2	0	0	0	0	0	0	0	5
47	104A	Beside Oscar Sporting Pole 56/A6	0	3	8	0	0	0	0	0	0	0	11
48	105A	I/f CESU U-8, Delta Section	0	4	11	0	0	0	0	0	0	0	15
TOTAL No. OF			1	235	249	12	17	22	0	3	0	0	539
TOTAL No. OF			1	235	249	12	17	22	0	3	0	0	539
49	106A	Qtr. No. 2R6	0	0	3	0	0	0	0	0	0	0	3
50	107A	I/F Omfed 816 Community Centre Lane	0	0	3	0	0	0	0	0	0	0	3
51	108A	Beside IDBI Staff Qtrs	0	0	14	0	0	0	0	0	0	0	14
52	109A	Governer House Colony	0	4	5	0	0	0	0	0	0	0	9
53	110A	I/F 2RB-1 Governer House Colony	0	7	5	0	0	0	0	0	0	0	12
54	111A	F Type Qtr. OCC	0	0	10	0	0	0	0	0	0	0	10
55	112A	Rajbhavan -1/Kalyani Appt Unit-8	0	3	9	0	0	0	0	0	0	0	12
56	113A	Geological Survey Of India	0	0	18	0	0	0	0	0	0	0	18
57	114A	I/F 2RA 21 Rajbhavan Gate-1	0	6	3	0	0	0	0	0	0	0	9
58	127A	N-3, Infront Of TRAS Computer Academy	0	1	0	0	0	0	0	0	0	0	1
59	129A	N-3, Nr. Kootie Kids School Lane	0	1	0	0	0	0	0	0	0	0	1
60	130A	Infront of Plot No. N-3/195	0	0	4	0	0	0	0	0	0	0	4
61	131A	In front of Chillika Fresh Odisha Pl No. N2/72	0	1	0	0	0	0	0	0	0	0	1
62	133A	I/F N-4/25	0	2	35	0	0	0	0	0	0	0	37
63	134A	Behind Laxminarayan Temple Pl. No. 1193, NeelkanthaNagar Navapalli	0	0	4	0	0	0	0	0	0	0	4
64	138A	Pole No.. 50/A/5/62, Gandmunda Rd. Pole No.65/B/4/A4 Nr.Pl.No.12 Siripur Nuasahi	0	10	10	0	0	0	0	0	0	0	20
65	139A	I/F Pl No. 31 SBI Colony	1	25	4	0	0	0	0	0	0	0	30
66	140A	I/f Pl No. 1104/A SBI Colony	0	5	0	0	0	0	0	0	0	0	5
67	145A	Pole No. 0181 0071001 Pl.No. B-1/9Lingaraj Vihar	0	4	0	0	0	0	0	0	0	0	4
68	147A	Pole No. 01810061001 Opp. Pl.No. C-21 Lingaraj Vihar	0	5	0	0	0	0	0	0	0	0	5
69	148A	Pole No. 02130391001 Qtr. No. 2RA/412 Kalpana Flat	0	1	0	0	0	0	0	0	0	0	1
70	149A	Pole No. 0213 0331001 Beside Tarini Temple Sabarsahi	0	5	8	0	0	0	0	0	0	0	13
71	151A	Opp BDA Park Pl.No. 45/A Kalpana Flat Pole No. 0213 0312001	0	8	10	0	0	0	0	0	0	0	18
72	153A	I/f Pl.No. L P 11	0	0	6	0	0	0	0	0	0	0	6

		TOTAL No. OF	2	323	400	12	17	22	0	3	0	0	779
		TOTAL No. OF	2	323	400	12	17	22	0	3	0	0	779
73	160A	Infront Of Kalinga Knowledge Centre Nr CESU OT-II Section	0	5	12	0	0	0	0	0	0	0	17
74	161A	Pole No. 0193 0632002 Nr. DTC-063	0	0	2	0	0	0	0	0	0	0	2
75	162A	Pole No. 01930721002 Nageswar Thangi Market Pl.No. 2132/4299	0	0	6	0	0	0	0	0	0	0	6
76	164A	Pl. No.2132/4302 Pole No. 01930701001	0	0	3	0	0	0	0	0	0	0	3
77	165A	Pole No. 01930371001 NCC Office Rd. Nageswarthangi	0	3	0	0	0	0	0	0	0	0	3
78	166A	Pole No. 01930272006 Pl.No.54 HB Colony	0	0	3	0	0	0	0	0	0	0	3
79	168A	Old CESU Office Compound 4 Drops Unit-6	0	1	0	0	0	0	2	0	0	0	3
80	169A	Beside Govt. UP school Capital Post Mortem Road	0	0	5	0	0	0	0	0	0	0	5
81	171A	Opp. Pl.No. 28 Ganga Nagar	0	10	3	0	5	5	0	0	0	0	23
82	172A	Pl.No. VIR-1 Unit-6	0	8	2	0	0	0	0	0	0	0	10
83	174A	Nr. Marwari Society Jalchitra BBSR Club to Capital Rd.	0	4	5	0	0	11	0	0	0	0	20
84	175A	Pl. No.20 Maakali Printers Ganga Nagar	0	5	3	0	0	0	0	0	0	0	8
85	177A	Opp. DP Model Public School	0	3	1	0	0	0	0	0	0	0	4
86	178A	Opp. Pl. No. 72 & DTC 41 Beside Pl.No. A-23 Surva Nagar	0	3	2	0	0	0	0	0	0	0	5
87	179A	Beside Pl.No. A-16	0	1	1	0	0	0	0	0	0	0	2
88	180A	Pole No. 43/A/2 Surva Nagar	0	2	6	0	0	0	0	0	0	0	8
89	182A	Nr Hotel Taj Pl No. 149 Bapuji Nagar	0	0	20	0	0	0	0	0	0	0	20
90	183A	I/F of Mahalaxmi Traders Pl No. 206	0	1	5	0	0	0	0	0	0	0	6
91	184A	Opp BSNL office /Behind Bazar Kolkata/KK Electronics	0	0	11	0	0	0	0	0	0	0	11
92	185A	Infront of Laxminarayan Temple	0	9	3	0	0	0	0	0	0	0	12
93	186A	Nr Pl No. 511 Navapalli Smashan	0	8	8	0	0	0	0	0	0	0	16
94	188A	Infront Of Pl. No. MIG A/27	0	1	3	0	0	0	0	0	0	0	4
95	189A	Infront Of Pl.No. MIG A/27	0	2	17	0	0	0	0	0	0	0	19
96	191A	Near Laxminarayan Temple Beherasahi Sastri Nagar	0	4	11	0	0	0	0	0	0	0	15
		TOTAL No. OF	2	393	532	12	22	38	2	3	0	0	1004
		TOTAL No. OF	2	393	532	12	22	38	2	3	0	0	1004
97	192A	Near Mangala Temple Sastri Nagar	1	7	1	0	0	0	0	0	0	0	9
98	193A	I/F G S Tutorial Sastri Nagar Nayapalli	0	5	9	0	0	0	0	0	0	0	14
99	204A	Opp. Canara Bank At Gajapati Nagar	0	5	2	0	0	0	0	0	0	0	7
100	213A	Pl.No. C-191 Pole No. BM/BD/60/1 Pragya Vihar	0	2	0	0	0	0	0	0	0	0	2
101	218A	Infront Of Pl.No. 22 Samant Vihar	0	1	2	0	0	0	0	0	0	0	3
102	226A	Nr. Pl.No. LB389 Bhimthangi Hsg. Board.	0	3	1	0	0	0	0	0	0	0	4
103	227A	DTC Nr. St. Xavier School Bhimthangi	0	0	3	0	0	0	0	0	0	0	3
104	228A	DTC 10 Nr. Odisha Youth Bhimathangi Association, UP School	0	6	3	0	0	0	0	0	0	0	9
105	229A	I/F Qtr.No. E2/2 Unit-8	0	4	4	0	0	0	0	0	0	0	8
106	230A	I/F Qtr. No. IV64 Pole No. 49/A/13 Unit-8	0	6	3	0	0	0	0	0	0	0	9
107	232A	I/F Qtr.No. 2RB 85 Pole No. 52/A/4 Unit-8	0	6	2	0	0	0	0	0	0	0	8
108	233A	Beside QUAT Guest House	0	5	14	0	0	0	0	0	0	0	19
109	234A	Nr. Tulasi Basti, Unit-8	0	4	2	0	0	0	0	0	0	0	6
110	235A	Nr. Pl.No. C-28 DTC 55 Unit-8	0	7	10	0	0	0	0	0	0	0	17
111	236A	Unit-8 Boys High School	0	9	17	0	0	10	0	0	0	0	36
112	237A	Pole No.26/A/2/B2, Unit-8	0	0	10	0	0	0	0	0	0	0	10
113	238A	Beside Qtr. No. E2/6, Unit-8	0	4	2	0	0	0	0	0	0	0	6

114	239A	Pole No. 32/B/4 Siripur Hat Rd.	0	2	8	0	0	0	0	0	0	0	10
115	241A	Nr. Tarini Mandir Opp. Classic Sallon Unit-8	0	3	4	0	0	0	0	0	0	0	7
116	244A	Nr. Qtr. No. IVN-62 RBI Colony Back Side Ward No.36	0	1	7	0	0	0	0	0	0	0	8
117	245A	Opp. Sangit Mahavidyalaya Hostel DTC MLA Colony	0	0	4	0	0	0	0	0	0	0	4
118	246A	Opp. Jharpada Jail DTC-9	0	0	3	0	0	0	0	0	0	0	3
119	248A	Behind Shani Temple Laxmisagar Village	0	1	1	0	0	0	0	0	0	0	2
120	249A	ANM Training Centre Unit-6	0	9	10	0	0	0	0	0	0	0	19
TOTAL No. OF			3	483	654	12	22	48	2	3	0	0	1227
TOTAL No. OF			3	483	654	12	22	48	2	3	0	0	1227
121	250A	Nr. Khadi Gramodyog Board. Unit-5	0	3	2	0	0	0	0	0	0	0	5
122	253A	Pole No. BM/R/1/10 Nr. Block E-45 Rental Colony	0	3	0	0	0	0	0	0	0	0	3
123	255A	DTC R-9 Nr. Pl.No. A22 VIP Colony	0	8	1	0	0	0	0	0	0	0	9
124	256A	Pole No. 01930641002 Nr. PHD Pump House Ayurvedic Hospital	0	3	11	0	0	0	0	0	0	0	14
125	257A	Rangamatia Upto Railway Culvert	0	2	0	0	0	0	0	0	0	0	2
126	272A	Pole No.01930681001 Opp. Punyaprabha Appt.	0	1	1	0	0	0	0	0	0	0	2
127	273A	Beside UCO Bank ATM Lewis Rd.	0	4	0	0	0	0	0	0	0	0	4
128	277A	Nr. Hatiasuni Temple Tankapani Rd.	0	2	0	0	0	0	0	0	0	0	2
129	279A	I/f Minister Ashok Panda's House	0	2	0	0	0	0	0	0	0	0	2
130	280A	Opp. Pl.No. 240/132 Airodrome	0	18	0	0	0	0	0	0	0	0	18
131	283A	Opp. Odisha Blind Association Big Bzr. Main Rd.	0	0	0	0	0	3	0	0	0	0	3
132	287A	Nr Ganapati Slum Behind ID Mkt. Nr. CPIML IRC N-6	0	12	2	0	0	0	0	0	0	0	14
133	288A	Opp. Pl.No. N-5, 339	0	1	4	0	0	0	0	0	0	0	5
134	289A	Opp. Pl.No. 15 Nr. Chintamaneswar Temple Pole No. 02020271001	0	4	15	0	0	0	0	0	0	0	19
135	290A	Nr. Hotel Ashirwad & Payal Station Bazar	0	0	4	0	0	0	0	0	0	0	4
136	291A	Opp. Bapuji Youth AssociAtion Badgad	0	8	1	0	0	0	0	0	0	0	9
137	292A	Nr. Badgad Kalyan Mandap	0	2	0	0	0	0	0	0	0	0	2
138	293A	Pole No. 01950151001 Nr. Netaji Club Kalyan Mandap	0	16	6	0	0	0	0	0	0	0	22
139	294A	Mata Pokhari Basudev Nagar To Jaganath Enclave	0	13	13	0	0	0	0	0	0	0	26
140	297A	Pole No. 8/A/9 Nr. Mangala Mandir APICOL Office	0	2	2	0	0	0	0	0	0	0	4
141	298A	Nr. Pl.No. 950 Neelkantheswar Marg Baramunda	0	16	19	0	0	0	0	0	0	0	35
142	299A	Pole No. 0281001 Nr. Udyan Fresh, Nr HIG-62	0	11	2	0	0	0	0	0	0	0	13
143	300A	DTC 206E4430 Nr. MIG 403	0	7	2	0	0	0	0	0	0	0	9
144	309A	In-Front Of Plot. No. 16. Pole No. 02111101008 Bhagabat Sandhan	2	0	0	0	0	0	0	0	0	0	2
TOTAL No. OF			5	621	739	12	22	51	2	3	0	0	1455
TOTAL No. OF			5	621	739	12	22	51	2	3	0	0	1455
145	310A	Near Laxminarayan Temple Beherasahi Sastri Nagar	0	3	0	0	0	0	0	0	0	0	3
146	312A	Beside IMFA Park Nr. Pl.No. 201	0	0	4	0	0	0	0	0	0	0	4
147	313A	Nr. Pl.No. B-38 Saheed Nagar	0	1	2	0	0	0	0	0	0	0	3
148	314A	Nr. Pl.No. B49 SaheedNagar	0	2	2	0	0	0	0	0	0	0	4
149	316A	Nr. Pl.No.150 Santoshi Vihar	0	4	0	0	0	0	0	0	0	0	4

150	317A	Nr. Pl.No. 90 Santoshi Vihar	0	2	0	0	0	0	0	0	0	0	2
151	319A	Nr. Pl. No. AL 82 Bhimthangi Housing Board.	0	6	5	0	0	0	0	0	0	0	11
152	320A	Nr. District Centre Owners Association Pl.No. 214	0	5	1	0	0	2	0	0	0	0	8
153	325A	Opp. Bijaylaxmi Appt., Ratnakar Baug Pole No. 01930122001	0	2	1	0	0	0	0	0	0	0	3
154	326A	I/f Pl.No. SN 42 Pole No. 01930031001 Ratnakar Baug	0	1	1	0	0	0	0	0	0	0	2
155	327A	Opp. Damayanti Appt. DTC 208D0208 Sastri Nagar	0	6	3	0	0	0	0	0	0	0	9
156	328A	Opp. Pl.No. 205/1668 Sastri Nagar, Behera Sahi	0	14	4	0	0	0	0	0	0	0	18
157	329A	Nr. Sastri Nagar, Cultural Association Lane No. 2	0	0	3	0	0	0	0	0	0	0	3
158	333A	Nr. Plot No. 46, SBI Colony	0	5	0	0	0	0	0	0	0	0	5
159	339A	Mayfare Time Gate	0	0	0	0	0	22	0	0	0	0	22
160	340A	Nr. Pl.No. N6-255 PNB ATM Mayfare To Biju Patnaik College	0	9	10	0	0	0	0	0	0	0	19
161	341A	Nr. Swapneswar Mandir ID Mkt. To Swapneswar Mandir	0	1	0	0	0	0	0	0	0	0	1
162	342A	Nr. Qtr 2RAF 25/7, Unit-9 Flat	0	2	0	0	0	0	0	0	0	0	2
163	345A	Nr. BMC UP School Rangmatia	0	7	0	0	0	0	0	0	0	0	7
164	346A	Nr. Somnath Enclave Rangmatia	0	5	0	0	0	0	0	0	0	0	5
165	347A	Rangamatia Railway Culvert To DTC	0	1	0	0	0	0	0	0	0	0	1
166	348A	Opp. Durga Puja Mandap Punava Gate Chhak Pole 01830212002	0	0	1	0	0	0	0	0	0	0	1
167	349A	Opp. Pl.No. 87366/1 Pole No. 01830221001 Bank Colony	0	1	1	0	0	0	0	0	0	0	2
168	351A	Nr. Ahilya Enclave Rangmatia	0	3	2	0	0	0	0	0	0	0	5
		TOTAL No. OF	5	701	779	12	22	75	2	3	0	0	1599
		TOTAL No. OF	5	701	779	12	22	75	2	3	0	0	1599
169	355A	Patiya High School Rd.	0	4	3	0	0	0	0	0	0	0	7
170	357A	Banguari Village Canal Road	0	0	30	0	0	0	0	0	0	0	30
171	360A	Nr. Pl.No. EB 518 Pole No. 01950091010 Water Tank Bargad Brit Colony	0	3	2	0	0	0	0	0	0	0	5
172	364A	Nr. Pl.No. LB 106 Pole No. 01950551022 Bargad Brit Main Rd.	0	2	0	0	0	0	0	0	0	0	2
173	366A	Beside Navodaya Youth Association Nr. Pl.No. IV38/1 Unit-1	0	0	16	0	0	0	0	0	0	0	16
174	367A	Nr. Odisha Subordinate Staff Selection Commission Qtr. No. VR 1/1, Unit-1	0	2	16	6	0	0	0	0	0	0	24
175	368A	Opp. Tribal Youth Hostel Unit-1	0	1	4	0	0	0	0	0	0	0	5
176	369A	Behind Congress Bhavan VA 36/2, Unit-2	0	5	8	0	0	0	0	0	0	0	13
177	370A	Opp. Diploma Engg Asso. Behind RBI, Unit-3	0	0	5	0	0	0	0	0	0	0	5
178	371A	Qtr. VR 7/2 Behind SBI, Unit-3	0	3	8	0	0	0	0	0	0	0	11
179	372A	Nr. IVB 5/1, Unit-3, Opp. Congress Bhavan	0	6	6	0	0	0	0	0	0	0	12
180	373A	Nr. IVB 5/1, Unit-3, Opp. Congress Bhavan	0	11	4	0	0	0	0	0	0	0	15
181	375A	Nr. Pl.No. B70 Forest Park	0	4	4	0	0	0	0	0	0	0	8
182	376A	Nr. Pl.No. A261 New Forest Park Entrance	0	9	3	0	0	0	0	0	0	0	12

183	377A	Nr. Pl.No.20 GovindNagar	0	6	0	0	0	0	0	0	0	0	6
184	380A	Nr. Ekamra Medical Plant Garden Pole No.01930621001, GyanaNagar	0	5	6	0	0	0	0	0	0	0	11
185	384A	Pole No. 01820291001 At Bhoisahi Chhak Canal Rd. Kapileswar	0	2	1	0	0	0	0	0	0	0	3
186	385A	Pole No. 01950341001 Opp. Kedar Gouri Appt. Garage Chhak Radhakrishna Nagar	0	6	2	0	0	0	0	0	0	0	8
187	386A	Nr. Pl.No. 497 BSNL Tower Raja Rani Colony	0	25	0	0	0	0	0	0	0	0	25
188	388A	DTC Nr. HIG 46 Maruti Villa	0	0	5	0	0	0	0	0	0	0	5
189	392A	DTC XAV/GOP/SS/11 Nr. PH Section-3 Maitree Vihar	0	2	3	0	0	0	0	0	0	0	5
190	393A	Nr. Pl.No. S-128 Maitree Vihar	0	1	6	0	0	0	0	0	0	0	7
191	394A	Nr. S-12, Tech Mahindra Road Maitree Vihar	0	8	12	0	0	0	0	0	0	0	20
192	395A	Opp.LB 13 Pole No. 2002 Bhimthangi HB Ph-2	0	3	2	0	0	0	0	0	0	0	5
		TOTAL No. OF	5	809	925	18	22	75	2	3	0	0	1859
		TOTAL No. OF	5	809	925	18	22	75	2	3	0	0	1859
193	396A	Opp M124 Pole No. 01820151005 Bhimthangi HB Colony	0	2	10	0	0	0	0	0	0	0	12
194	398A	Nr. Som Clinic Lab, Rath Road Pole No. 0313002	0	35	5	0	0	0	0	0	0	0	40
195	399A	Opp. Pl.No.390, N-5 IRC	0	1	0	0	0	0	0	0	0	0	1
196	400A	Opp. Pl.No.460, N-5 IRC	0	10	0	0	0	0	0	0	0	0	10
197	401A	Opp. Pl.No. N-5 440 IRC	0	1	6	0	0	0	0	0	0	0	7
198	403A	Opp. Pl. No. 244 N-5 IRC	0	3	0	0	0	0	0	0	0	0	3
199	404A	Opp. Pl. No. 188 N-5 IRC	0	2	1	0	0	0	0	0	0	0	3
200	405A	Pole No. 01830161001 Opp. Jambeswar Patna Durga Mandap	0	6	1	0	0	0	0	0	0	0	7
201	406A	Opp. Pl. No. 609 Laxmivihar	0	4	0	0	0	0	0	0	0	0	4
202	410A	Pole No. 01820482001 Opp. Pl.No.1569 Keutsahi Main Rd.	0	2	0	0	0	0	0	0	0	0	2
203	411A	Pole No. 01910251018 Opp. Brahmeswar Temple	0	2	4	0	0	0	0	0	0	0	6
204	413A	Opp.Netaji Park, Syndicate Bank Gandmunda to Old Siripur Rd.	0	2	3	0	0	3	0	0	0	0	8
205	415A	Pole No. 01830171001 Behind Lingaraj Nagar Union Samiti	0	13	3	0	0	0	0	0	0	0	16
206	416A	Pole No. 02020851002 Opp. Pl.No.12 Budheswari	0	6	6	0	0	0	0	0	0	0	12
207	419A	Pole No.02020262002 Behind Chintamaneswar Temple	0	2	2	0	0	0	0	0	0	0	4
208	420A	Opp. Pl.No. 2182 Chintamaneswar	0	3	6	0	0	0	0	0	0	0	9
209	421A	Pole No. 02020121001 Opp. Ridhisidhi Enclave Chintamaneswar	0	4	3	0	0	0	0	0	0	0	7
210	422A	Pole No. 02020191002 Opp. Mahalaxmi Enclave Postal Colony Chintamaneswar	0	9	9	0	0	0	0	0	0	0	18
211	423A	Pole No. 02130181001 Opp. Pl.No. 1700 Old Chintamaneswar	0	0	8	0	0	0	0	0	0	0	8
212	424A	Pole No. 02130261001 Opp. Pl.No.2157A Vishvanath Ngr.Chintamaneswar	0	8	9	0	0	0	0	0	0	0	17
213	432A	Pole No. 01950541006 Opp. Pl.No. LB 104 Bargad Brit	0	0	3	0	0	0	0	0	0	0	3
214	433A	Pole No. 01950551022 Opp. LB 106 Bargad Brit	0	6	6	0	0	0	0	0	0	0	12

215	435A	Nr. EB-360 Bargada P.S. Lane	0	3	2	0	0	0	0	0	0	5
216	436A	Opp. HIG-219 7th Phase Sailshree Vihar	0	14	0	0	0	0	0	0	0	14
		TOTAL No. OF	5	947	1012	18	22	78	2	3	0	2087
		TOTAL No. OF	5	947	1012	18	22	78	2	3	0	2087
217	437A	Nr. Plot No. EB 66 Balukeshwar Mandir Stage-5	0	4	0	0	0	0	0	0	0	4
218	439A	Nr. EB 44 Behind Balaji Tower, Mahavir Nagar Rd. 1	0	6	6	0	0	0	0	0	0	12
219	442A	Pole No. 01940171007 Opp. Looks Beauty Parlor Sriram Nagar Main Rd.	0	9	4	0	0	0	0	0	0	13
220	443A	Pole No. 01820441021 Opp. Pl.No. 1875 Lane 7 Sriram Nagar	0	4	3	0	0	0	0	0	0	7
221	445A	Nr. Puja Betel Shop, Kapileswar Village	0	11	2	0	0	0	0	0	0	13
222	450A	Pl.No. VIM 26 Pole No. 00250042000 Sailshree Vihar	0	2	4	0	0	0	0	0	0	6
223	451A	VIM 181 Sailshree Vihar	0	1	5	0	0	0	0	0	0	6
224	454A	Opp. Stewart School Nr. 2RA 20 Delta C Colony	0	2	0	0	0	0	0	0	0	2
225	463A	Nr. Retail Mart Satyavihar	0	18	2	0	0	0	0	0	0	20
226	464A	Nr. Mahaveer Construction Satyavihar	0	5	20	0	0	0	0	0	0	25
227	465A	Nr. Pl No. 1294 Satyavihar	0	5	5	0	0	0	0	0	0	10
228	466A	Infront of Acrux Residensy SaheedNagar	0	2	0	0	0	0	0	0	0	2
229	468A	Opp. CESU Section Laxmisagar Pole No. 02030021001	0	11	10	0	0	0	0	0	0	21
230	469A	Pole No. 02020242004 Nr. Pl.No. MIG-2 Kanan Vihar Ph-2	0	2	4	0	0	0	0	0	0	6
231	470A	Pole No. 00220102031 Nr. Pl.No. 773 Nr. Corporator House Pativa	0	32	32	0	0	0	0	0	0	64
232	471A	Pole No. 00220192015 Opp. Bijay Residensy Pativa Village	0	7	13	0	0	0	0	0	0	20
233	472A	Opp. Pl.No. 1096 Rath Road	0	3	3	0	0	0	0	0	0	6
234	474A	Opp. Dhanalaxmi Traders Near Sai Temple Neelachal Hospital Area	0	0	1	0	0	0	0	0	0	1
235	480A (i)	Opp. 33/0.4kV Substation, Unit-5 Nr Secha Sadan & Chandeswar Temple	0	0	0	0	0	0	6	0	0	6
236	481A	DTC 22 Opp. RN B.ed. College Bhimthangi Phase 2	0	14	0	0	0	0	0	0	0	14
237	482A	DTC 23 Opp. RN B.ed. College Bhimthangi Phase 2	0	2	0	0	0	0	0	0	0	2
238	483A	Nr. AE-04 Opp Tarini Mandir Bhimthangi Phase 1	0	1	1	0	0	0	0	0	0	2
239	485A	Nr. SCR-97 Unit-3	0	0	3	0	0	0	0	0	0	3
240	487A	Nr. Pl.No. VIM 761 Sailshree Vihar Ph-6	0	4	0	0	0	0	0	0	0	4
		TOTAL No. OF	5	1092	1130	18	22	78	8	3	0	2356
		TOTAL No. OF	5	1092	1130	18	22	78	8	3	0	2356
241	488A	Nr. Pl.No. VIM 748 Saishree Vihar Ph-6	0	5	1	0	0	0	0	0	0	6
242	489A	Nr. Pl.No. VIM 490 Sailshree Vihar Ph-6	0	1	1	0	0	0	0	0	0	2
243	490A	Nr. Sreeji Vihar Behind Durga Mandap Bomikhal	0	4	17	0	0	0	0	0	0	21
244	491A	Nr. Pl.No. 544/1653 Bomikhal Village Pole No. 0461010	0	18	6	0	0	0	0	0	0	24
245	495A	Nr. Pl.No. HIG -49 JaganAth Temple Infocity Road Sailshree Vihar	1	5	0	0	0	0	0	0	0	6

246	496A	Pole No. 00230081000 Nr. Pl.No. 131 Neeladri Vihar Sector-1	0	5	0	0	0	0	0	0	0	0	5
247	497A	Nr. Apollo Pharmacy Pl. No. 646 Neeladri Vihar Sector-3	0	2	2	0	0	0	0	0	0	0	4
248	498A	Nr. Pl.No. 127 Neeladri Vihar Sector-3	1	8	2	0	0	0	0	0	0	0	11
249	499A	Nr. Aryan Public School Neeladri Vihar Sector-3	0	0	4	0	0	0	0	0	0	0	4
250	500A	Nr. Usha Medicine Pl No. 751 Neeladri Vihar Sector-3	0	8	2	0	0	0	0	0	0	0	10
251	501A	Nr. SBI Samantrapur Sriram Nagar	0	10	10	0	0	0	0	0	0	0	20
252	502A	Nr. Sani Temple Laxmisagar Village	0	7	9	0	0	0	0	0	0	0	16
253	503A	Nr. Dandasahi Opp Kapileswar Canal Road	0	17	2	0	0	0	0	0	0	0	19
254	504A	Nr. Radharaman Colony Lane- 1	0	8	4	0	0	0	0	0	0	0	12
255	506A	Hansapal NH To Banguari Canalside	0	2	2	0	0	0	0	0	0	0	4
256	508A	Nr. Pl.No. 363 Vishwas Institute Of Science Sailshree Vihar VIM Area	0	0	2	0	0	0	0	0	0	0	2
257	509A	Opp. VIM 94 Sailshree Vihar	0	7	5	0	0	0	0	0	0	0	12
258	510A	Pl. No. 118 Niladri Vihar Sector-2	0	8	0	0	0	0	0	0	0	0	8
259	511A	Nr. Neeladri Agency Pl.No. 296 Neeladri Vihar Sector-2	0	11	5	0	0	0	0	0	0	0	16
260	512A	Nr. CESU Office Unit-2	0	6	6	0	0	0	0	0	0	0	12
261	513A	Pl.No. IVA 10/1 Unit-2	0	4	7	0	0	0	0	0	0	0	11
262	514A	Nr. IVR 10/4 BSNL Office, Unit 2	0	0	4	0	0	0	0	0	0	0	4
263	515A	Nr. IVA 25/1 Unit 2	0	0	2	0	0	0	0	0	0	0	2
264	516A	Nr. BMC Keshari Mall	0	4	6	0	0	0	0	0	0	0	10
		TOTAL No. OF	7	1232	1229	18	22	78	8	3	0	0	2597
		TOTAL No. OF	7	1232	1229	18	22	78	8	3	0	0	2597
265	517A	Nr. Pl.No. IVA 44/6 Post Office Unit-2	0	3	6	0	0	0	0	0	0	0	9
266	518A	Nr. Bank Of India Beside Crown Hotel	0	0	1	0	0	0	0	0	0	0	1
267	519A	Nr. Rameswhar Temple IRC N-6	0	4	0	0	0	0	0	0	0	0	4
268	520A	Inside Rameswar Temple IRC N-6	0	1	1	0	0	0	0	0	0	0	2
269	523A	Opp. Pl. No. N-6/82 IRC N-6	0	0	1	0	0	0	0	0	0	0	1
270	526A	Nr. Badgad Masani	0	8	1	0	0	0	0	0	0	0	9
271	528A	Nr. Pl.No. 4426 Jharanasahi Badgad	0	4	0	0	0	0	0	0	0	0	4
272	529A	Nr. Pl.No. EA53 Nr. Masani Badgad	0	2	1	0	0	0	0	0	0	0	3
273	531A	Nr. Pl.No. H/4 Lewis Road BJB Nagar Lane Opp. Rajarani Petrol Tank	0	5	3	0	0	0	0	0	0	0	8
274	532A	Nr. Pl.No. 696/922 Behind Radhakrishna Temple Lane	0	13	1	0	0	0	0	0	0	0	14
275	533A	Nr. Wire House Lane Opp. Jyoti Motors	0	1	1	0	0	0	0	0	0	0	2
276	534A	Behind Priya Appt. BJB Nagar	0	18	3	0	0	0	0	0	0	0	21
277	536A	Opp. COSMO Boutique & Beauty Parlor Tankapani Rd.	0	3	1	0	0	0	0	0	0	0	4
278	538A	Opp. Mesco Steel Kedar Gouri Mandir Front Lewis	0	0	6	0	0	1	0	0	0	0	7
279	539A	Nr. MMMM Transport Palasuni	0	9	14	0	0	0	0	0	0	0	23
280	543A	Behind Sarswati Sishu Mandir Hathi Rd. Bharatpur	0	11	2	0	3	0	0	0	0	0	16
281	544A	Nr. Bharatpur General Dispensary	0	5	1	0	3	0	0	0	0	0	9

282	545A	Nr. Pl.No.7 Bharatpur Nr. Ayurvedic Hospital & Research Centre	0	4	0	0	0	0	0	0	0	0	4
283	546A	Nr. Bharatpur Pala Mandap 16kVA DTC	0	13	10	0	0	0	0	0	0	0	23
284	547A	Nr. CESU Office Adimata Colony	0	9	0	0	0	0	0	0	0	0	9
285	548A	Pole No. 01820111001 Opp. Sidheswar Temple Sunderpada	0	4	18	0	1	0	0	0	0	0	23
286	549A	Opp. Kapilprasad Youth Association Pole No. 01820141007	2	9	21	0	0	0	0	0	0	0	32
287	550A	Nr. Kapilprasad Durga Mandap	1	27	0	0	0	0	0	0	0	0	28
288	551A	Opp. Pl.No. 3183/A Pole No. 01920372001 Kedar Lane	0	2	0	0	0	0	0	0	0	0	2
TOTAL No. OF			10	1387	1321	18	29	79	8	3	0	0	2855
TOTAL No. OF			10	1387	1321	18	29	79	8	3	0	0	2855
289	552A	Opp. OT3 CESU Office Pole No. 01920392001 Lingaraj Mandir Rd.	0	45	0	0	0	0	0	0	0	0	45
290	553A	Opp. OT3 CESU Office Pole No. 01920381001 Lingaraj Mandir Rd.	0	43	3	0	0	0	0	0	0	0	46
291	556A	Nr. HP Gas Godown Brahmeswar Baug	0	13	0	0	0	0	0	0	0	0	13
292	557A	Nr. Matrushakti Constn Pvt. Ltd. IRC-N4	0	0	5	0	0	0	0	0	0	0	5
293	558A	Opp. Hotel Sonu Swapneswar Mandir Rd. IRC N4	0	8	1	0	0	0	0	0	0	0	9
294	559A	Opp. N3-79 Nr Kalinga Vidyamandir School IRC N3	0	2	0	0	0	0	0	0	0	0	2
295	560A	Opp. N1-40 Nr. SBI ATM IRC N-1	0	15	0	0	0	0	0	0	0	0	15
296	561A	Opp., N1-258 Millenium Hospital IRC	0	2	8	0	0	0	0	0	0	0	10
297	562A	Opp. N2-69 Nr Shining Star School IRC	0	7	2	0	0	0	0	0	0	0	9
298	563A	Nr. N4/F/12 IRC N4	0	13	3	0	0	0	0	0	0	0	16
299	564A	Nr. Indian Oil Petrol Tank IRC N-4 NH5	0	3	3	0	0	0	0	0	0	0	6
300	565A	Opp. N3 108 IRC N3	0	4	0	0	0	0	0	0	0	0	4
301	567A	Opp. L526 Pole No. 00750221015 Dumduma Pala Mandap to kids Hospital	0	38	5	0	0	0	0	0	0	0	43
302	569A	Behind Ambedkar Shiksha Kendra	0	6	8	0	0	0	0	0	0	0	14
303	570A	Opp. Masjid Dumduma	0	26	19	0	0	0	0	0	0	0	45
304	571A	Opp. Pl. No. 32/414 Begunia Village	0	22	6	0	0	0	0	0	0	0	28
305	572A	Opp. Bahumukhi Gosti Kendra Dispensary Rd. Raghunathpur	0	56	24	0	0	0	0	0	0	0	80
306	574A	Opp. Pl.No. MIG-138 Pole No.00220252006 Kanan Vihar Ph-2	0	6	5	0	0	3	0	0	0	0	14
307	575A	Opp. Pl.No. MIG-82 Pole No. 00220272002 Kananvihar Ph-2	0	3	9	0	0	0	0	0	0	0	12
308	576A	Opp. Pl.No. 45 Srikhetravihar	0	16	6	0	0	0	0	0	0	0	22
309	579A	Behind Sayad Mumtajali Highschool Shriramvihar Nayapalli	2	34	21	0	0	0	0	0	0	0	57
310	580A	Opp. LIG-82 Brit Colony Nayapalli	0	3	5	0	0	0	0	0	0	0	8
311	581A	Opp. Block G-2 Reserve Police Colony Nayapalli	0	25	14	0	0	0	0	0	0	0	39
312	582A	Opp. Qtr. No. IV 37/3 Unit 1	0	0	16	0	0	0	0	0	0	0	16
TOTAL No. OF			12	1777	1484	18	29	82	8	3	0	0	3413
TOTAL No. OF			12	1777	1484	18	29	82	8	3	0	0	3413
313	583A	ITASC Computer Kamala Neheru College Rd. Unit 1	0	2	33	0	0	0	0	0	0	0	35
314	584A	Opp. Ganesh Temple Unit-1 Mkt.	0	0	29	0	0	0	0	0	0	0	29
315	586A	Opp. Pl.No. 46 DTC Opp Pl.No. 41 Ekamra Villa	0	22	0	0	0	0	0	0	0	0	22
316	587A	Opp. T/4 block Rental Colony	0	0	5	0	0	0	0	0	0	0	5
317	588A	Opp. T/10 Block Rental Colony	0	0	2	0	0	0	0	0	0	0	2
318	589A	Opp. F/16 Block	0	0	1	0	0	0	0	0	0	0	1
319	590A	Opp. Zonal Dispensary Rental Colony	0	0	3	0	0	0	0	0	0	0	3

320	591A	Opp. Pl.No. 541 Pole No. 02030151001 Laxmisagar Village	0	8	3	0	0	0	0	0	0	0	11
321	592A	Opp. Pl.No. 541, DTC 250kVA Laxmisagar Village	0	11	1	0	0	0	0	0	0	0	12
322	593A	Opp. Pl.No. 1055 Pole No. 02030172001 Laxmisagar Village	0	4	4	0	0	0	0	0	0	0	8
323	595A	Nr. ASI Office 7 th Battalion Behind Coal India Colony	0	0	6	0	0	0	0	0	0	0	6
324	596A	Opp. Pl.No. 85 Pole No. 00110441017 Kanan Vihar Ph-1	6	22	6	0	0	0	0	0	0	0	34
325	597A	Opp. HIG-77 Pole No. 00110431004 Kanan Vihar Ph-1	7	9	14	0	0	3	0	0	0	0	33
326	600A	Nr. BMC Homeopathic Hospital Nuagaon	0	2	16	0	0	0	0	0	0	0	18
327	602A	Opp. Pl.No. 2155/3605 Pole No. 01940121048 Baruneswar Lane Samantrapur	0	12	8	0	0	0	0	0	0	0	20
328	603A	Opp. BMC Staff Qtrs. Sriram Nagar Main Rd.	0	26	5	0	0	0	0	0	0	0	31
329	606A	Opp. Pl.No. 55-C Pole No. 02040141008 Jaydurga Nagar	0	4	0	0	0	0	0	0	0	0	4
330	608A	Opp. Pl.No. 1151/1610 Jaydurga Nagar	0	8	0	0	0	0	0	0	0	0	8
331	609A	Opp. Hotel New Kalika Cuttack Rd. Jaydurga Nagar	0	11	0	0	0	0	0	0	0	0	11
332	610A	Nr. Brahmeswar Hat Tankapani Rd.	0	22	16	0	0	0	0	0	0	0	38
333	611A	Opp. BOI ATM Bargad Brit Main Rd. Pole No. 01950111002	0	13	20	0	0	0	0	0	0	0	33
334	612A	Opp. Maa Dalkhai Pitha Pole No.02010401019 Jharpada	0	16	1	0	0	0	0	0	0	0	17
335	613A	Opp. Hanuman Temple Jharpada Pole No. 02030221002	0	36	1	0	0	0	0	0	0	0	37
336	614A	Opp. Kusum Enterprises Pl. No. 650 Jharpada	0	14	0	0	0	0	0	0	0	0	14
TOTAL No. OF			25	2019	1658	18	29	85	8	3	0	0	3845
TOTAL No. OF			25	2019	1658	18	29	85	8	3	0	0	3845
337	615A	Unit-8, Girls HighSchool	0	1	5	0	0	0	0	0	0	0	6
338	618A	Nr. Pl.No. 846H Nr. IMFA Office Bomikhal	1	11	4	0	0	0	0	0	0	0	16
339	619A	Opp. Jindal Steel Forest Park	0	71	17	0	9	0	0	0	0	0	97
340	620A	Nr. Pl. No. 269/2448 New Forest Park	0	17	1	0	0	0	0	0	0	0	18
341	621A	CESU Section (Flat) Nr.Unit-9	0	10	10	0	0	0	0	0	0	0	20
342	622A	Beside Block F-5 Unit-9	0	0	9	0	0	0	0	0	0	0	9
343	623A	Rural Work Rest Shed Unit-9	0	2	0	0	0	0	0	0	0	0	2
344	624A	Beside Block D7 Unit-9	0	1	8	0	0	0	0	0	0	0	9
345	625A	Nr. 2RAF/29/2 Unit-9	0	0	3	0	0	0	0	0	0	0	3
346	626A	Nr. 2RAF/28/5 R&B A.E. office Sec.33 Unit-9	0	16	5	0	0	0	0	0	0	0	21
347	627A	Opp Venkateswar E.M.School Bhimthangi	0	14	4	0	0	0	0	0	0	0	18
348	628A	Nr. Bhimthangi U.P. School Ph-2	0	3	0	0	0	0	0	0	0	0	3
349	630A	Nr. Pl.No.18 Surya Nagar	0	1	0	0	0	0	0	0	0	0	1
350	635A	Opp. Pl.No. 414 Chintamaneswar, Nr. Sabarsahi High School Chintamaneswar	0	28	6	0	1	0	0	0	0	0	35
351	637A	Nr.Pl.No. 644 Chintamaneswar	0	1	0	0	0	0	0	0	0	0	1
352	638A	Nr. Pole No. 0222/022/1011 Bhotapada	0	6	0	0	0	0	0	0	0	0	6

353	640A	Bhotpada Village, 16kVA DTC	0	3	2	0	0	0	0	0	0	5
354	641A	Pl.No. 483, Opp.Jaganath Restaurant GauriNagar Junction Lewsis Rd.	0	4	1	0	0	0	0	0	0	5
355	642A	Pl.No. 2459/6 GauriNagar	0	2	2	0	0	0	0	0	0	4
356	644A	Nr. Canara Bank Puri Rd. Pole No. 01920341029	0	4	0	0	0	0	0	0	0	4
TOTAL No. OF TYPEWISE LED FITTING C/F			26	2214	1735	18	39	85	8	3	0	4128
TOTAL No. OF TYPEWISE LED FITTING B/F			26	2214	1735	18	39	85	8	3	0	4128
357	646A	Opp. Pl.No. M A/4 Pole No. 01950321001 Badgad Brit	0	11	6	0	0	0	0	0	0	17
358	647A	Opp. Pl.No. MB/79 Pole No. 01950291001 Badgad Brit	0	2	0	0	0	0	0	0	0	2
359	648A	K.V.School Regional Office To Netaji Subhash Enclave Gadakana	0	26	0	0	0	0	0	0	0	26
360	651A	Nr. FR Block 91 & 83 Sailshree Vihar	0	6	0	0	0	0	0	0	0	6
361	652A	FR Block 92/5 Pole No. 024/037/2001 Sailshree Vihar	0	3	5	0	0	0	0	0	0	8
362	653A	Nr. FR Block 62/5 Pole No. 024/009/1011 Sailshree Vihar	0	4	1	0	0	0	0	0	0	5
363	658A	Nr. Durga Mandap Pokhariput	0	27	16	0	0	0	0	0	0	43
TOTAL No. OF TYPEWISE LED FITTING C/F			26	2293	1763	18	39	85	8	3	0	4235
TOTAL No. OF TYPEWISE LED FITTING B/F			26	2293	1763	18	39	85	8	3	0	4235
364	E659A	Badgad Chintamaneswar Canal Rd.	0	0	30	0	0	0	0	0	0	30
365	E660A	R K Home Crystal Plaza Laxmisagar to Kansai Khana Jharpada Canal Rd.	0	0	46	0	0	0	0	0	0	46
366	E661A	Pani Tanki -HighSchool- Jail Jharpada	0	0	40	0	0	0	0	0	0	40
367	E662A	Pole No. 00720221004 Kalinga Nagar K-6 Opp. Pl.No. HIG-42	0	0	0	0	0	0	0	0	0	0
368	E663A	Pole No. 00720211004 Opp.Pl. No. HIG 172 Kalinga Nagar K-6	0	0	0	0	0	0	0	0	0	0
369	E664A	Phulnakhara Main Road	0	0	118	0	0	0	0	0	0	118
370	E665A	Opp. VIP 73 VIP Colony BDA Park Rental Area	0	7	34	0	0	0	0	0	0	41
371	E666A	Opp. Jharpada Smasan, Meherpalli Sahi	0	12	0	0	0	0	0	0	0	12
372	E667A	Nr. BMC DTC Jharpada Canal Road, Martha Sahi Jharpada	0	23	0	0	0	0	0	0	0	23
373	E668A	Opp. Pl. No. 269/2595 BairangNagar Jharpada	0	10	0	0	0	0	0	0	0	10
374	E669A	Plot No. 6 BairagiNagar Jharpada	0	33	0	0	0	0	0	0	0	33
375	E670A	High Mast Opp. Reliance Fresh Samantrapur	0	0	0	0	0	0	6	0	0	6
376	E671A	High Mast At Gosagareswar Chhak	0	0	0	0	0	0	6	0	0	6
377	E672A	High Mast At Xavier Chhak	0	0	0	0	0	0	6	0	0	6
378	E673A	High Mast At Budha Jayanti Park Eshaneswar Rd.	0	0	0	0	0	0	6	0	0	6
379	E674A	High Mast At DAV High School Chhak Tarini Mandir	0	0	0	0	0	0	6	0	0	6
380	E675A	Mini High Mast Nr.Durga Puja Mandap BDA Colony Ward No. 13	0	0	0	0	0	0	4	0	0	4
381	E676A	High Mast At Ganesh Mandap Laxmisagar to Bomikhal Canal Rd.	0	0	0	0	0	0	3	0	3	6
382	E677A	High Mast At GGP Chhak GGP Canal Rd.	0	0	0	0	0	0	6	0	0	6
383	E678A	High Mast Near Brahmeswar Temple	0	0	0	0	0	0	0	9	0	9
384	E679A	Mundasahi to Kalinga Studio Chhak Bharatpur	0	0	94	0	0	0	0	0	0	94
385	E680A	Drop 1-Pole No. 006200012002 Nr. Plot No. K-8 /756	1	31	12	0	0	0	0	0	0	44
TOTAL No. OF TYPEWISE LED FITTING C/F			27	2409	2137	18	39	85	51	3	12	4781
TOTAL No. OF TYPEWISE LED FITTING B/F			27	2409	2137	18	39	85	51	3	12	4781
386	E681A	Drop-2 Pole No. 006200012002 Nr.Plot No. K-8 /756	3	57	0	0	0	0	0	0	0	60

387	E682A	In front of IMS Campus Shiksha Anusandhan University	0	49	20	0	0	0	0	0	0	0	69
388	E683A	In front of K8 Pl.No. 1039 Kalinga Nagar	0	93	5	0	0	0	0	0	0	0	98
389	E684A	Pole No. 00620041001 Opp. Pl.No. K8 196	0	41	16	0	0	0	0	0	0	0	57
390	E685A	Durga Puja Mandap Housing Board Colony C.S.Pur	0	2	37	0	0	0	0	0	0	0	39
391	E686A	Opp. MIG 75 Anant Nagar Housing Board Colony Pokhariput	9	32	9	0	0	0	0	0	0	0	50
392	E687A	Pole No. 01810141001 Pl.No. HIG 120 Pokhariput BDA Colony	0	11	31	0	0	0	0	0	0	0	42
393	E688A	Pole No. 01810131001 Pl.No. HIG 148 BDA Colony Pokhariput	0	7	18	0	0	0	0	0	0	0	25
394	E689A	Pole No. 01810161001 Nr. Pl.No. HIG 137 BDA Colony Pokhariput	0	6	11	0	0	0	0	0	0	0	17
395	E690A	High Mast At Durga Puja Mandap Old AG Colony Unit-4	0	0	0	0	0	0	6	0	0	0	6
396	E691A	Old Bus Stand IG Park Stretch	0	0	0	0	0	27	0	0	0	0	27
397	E692A	Jajati Hotel To Giridurga Mandir	0	3	6	0	0	0	0	0	0	0	9
398	E693A	Pl.No. L363 Dumduma Phase I H.B.Colony	0	20	68	0	0	0	0	0	0	0	88
399	E694A	Opp. Pl.No. L1372 Dumduma Main Road Nagar Chhak	0	11	12	0	0	0	0	0	0	0	23
400	E695A	Badagada Kalyan Mandap To Patitapaban Nagar Canel Road	0	0	28	0	0	0	0	0	0	0	28
401	E696A	Opp. Plot No.-M/40, Kokila Enclave-1, Pokhariput	0	11	21	0	0	0	0	0	0	0	32
402	E697A	Opp. Pl.No. LIG 135 Baishnav Vihar Anant Nagar Phase III Pokhariput	0	18	8	0	0	0	0	0	0	0	26
403	E698A	Opp. Pl. MIG 72 Anant Nagar Phase III Pokhariput	0	25	10	0	0	0	0	0	0	0	35
404	E699A	Inside Bivab Estate, Siripur	0	24	0	0	0	0	0	0	0	0	24
405	E700A	Opp. Block E4, Nr.Sai Temple, BDA Colony Rd. MIG II C.S. Pur	0	15	20	0	0	0	0	0	0	0	35
406	E701A	Beside BDA Market BDA Colony (Nabard Colony To Nilmadhab Basti)	0	3	12	0	0	0	0	0	0	0	15
407	E702A	High Mast At Durga Mandap Chhak Sailshree Vihar Opp. HIG 214	0	0	0	0	0	0	6	0	0	0	6
408	E703A	Opp. Pl.No. 1281/3057 Jaydurga Nagar	0	7	0	0	0	0	0	0	0	0	7
409	E704A	Pole No. 02130051002 Opp.Nigamanand Nagar Welfare Association	0	13	2	0	0	0	0	0	0	0	15
TOTAL No. OF TYPEWISE LED FITTING C/F			39	2857	2471	18	39	112	63	3	12	0	5614
TOTAL No. OF TYPEWISE LED FITTING B/F			39	2857	2471	18	39	112	63	3	12	0	5614
410	E705A	Pole No. 02130031002 Opp. Reliance Fresh Bomikhal Canal Rd.	0	14	0	0	0	0	0	0	0	0	14
411	E706A	Beside Hotel VITS Cuttack Rd.	0	31	1	0	0	0	0	0	0	0	32
412	E707A	Beside Bharatpur Dispensary	0	40	2	0	0	0	0	0	0	0	42
413	E708A	Opp Bharatpur Angan Wadi Kendra	0	42	0	0	0	0	0	0	0	0	42
414	E709A	Opp. Pl.No. 308 Kalinga Nagar K-8	0	57	6	0	0	0	0	0	0	0	63
415	E710A	Opp. Qtr.No.20 Press Colony	5	15	1	0	0	0	0	0	0	0	21
416	E711A	LP 300, DTC-35, 250kVA Pole No. 00260352001 Prasanti Vihar	0	57	0	0	0	0	0	0	0	0	57
417	E712A	LP 922, DTC 250kVA Nr. OMFED Prasanti Vihar	0	62	0	0	0	0	0	0	0	0	62
418	E713A	Pl.No.739, Sikharchandi Cluster-3, Muslim Basti	0	55	0	0	0	0	0	0	0	0	55

419	E714A	Radhakrishna Temple Sikharchandi Cluster-2	0	87	0	0	0	0	0	0	0	0	87
420	E715A	Star City Pl.No. A10 Ward.	0	10	0	0	0	0	0	0	0	0	10
421	E716A	Nr.Bishwabharati Club & Laxmi Puja Mandap Gadakana	0	68	4	0	0	0	0	0	0	0	72
422	E717A	Opp. Durga Puja Mandap Gadakana	0	29	6	0	0	0	0	0	0	0	35
423	E718A	Nr. Bapuji UP School Gadakana	0	60	17	0	0	0	0	0	0	0	77
424	E719A	Beside Hanuman Temple Beherasahi Gadakana	0	21	0	0	0	0	0	0	0	0	21
425	E720A	Opp. Subhasree Enclave Gadakana	0	24	4	0	0	0	0	0	0	0	28
426	E721A	Pole 02010401019 Nr. Dalakhai Temple Jharpada	0	13	0	0	0	0	0	0	0	0	13
427	E722A	Nr. Bhagavat Tungi SurendraSai Vidya Mandir	0	44	0	0	0	0	0	0	0	0	44
428	E723A	GL Area Bhagavat Tungi VSS Nagar	0	21	0	0	0	0	0	0	0	0	21
429	E724A	Beside Pl.No. 4R/2 Police Qtr. VSS Nagar	0	19	0	0	0	0	0	0	0	0	19
430	E725A	Inside CESU Section, VSS Nagar	0	19	0	0	0	0	0	0	0	0	19
431	E726A	Beside Pl.No. BM-4 BM Colony VSS Nagar	0	10	0	0	0	0	0	0	0	0	10
432	E727A	Nr. Jay Clinic, Hathi Rd. Bharatpur	0	23	3	0	0	0	0	0	0	0	26
433	E728A	Opp. Radhakrishna Temple Bharatpur	0	13	4	0	3	0	0	0	0	0	20
TOTAL No. OF TYPEWISE LED FITTING C/F			44	3691	2519	18	42	112	63	3	12	0	6504
TOTAL No. OF TYPEWISE LED FITTING B/F			44	3691	2519	18	42	112	63	3	12	0	6504
434	E729A	Nr. GA Colony Auto Stand Bharatpur	0	33	1	0	0	0	0	0	0	0	34
435	E730A	Beside Andhra Bank Pokhariput	7	6	4	0	0	0	0	0	0	0	17
436	E731A	Pole No. 01810031043 Opp Urban Hostel Pokhariput	3	10	17	0	0	0	0	0	0	0	30
437	E732A	Behind MIG 31, DTC 250kVA Anant Nagar, Pokhariput	5	25	19	0	0	0	0	0	0	0	49
438	E733A	Behind MIG 31, DTC 100kVA Anant Nagar, Pokhariput	0	11	9	0	0	0	0	0	0	0	20
439	E734A	Pole No. 01810111011 Opp. Pl.No. 402/1222 Pokhariput Village	0	33	17	0	0	0	0	0	0	0	50
440	E735A	Opp. Pl.No. 295/3 Megheswar Colony, Badgad	4	5	29	0	0	0	0	0	0	0	38
441	E736A	Opp. Pl.No. 689/6499 Patitpavan Nagar, Badgad	0	9	4	0	0	0	0	0	0	0	13
442	E737A	Nr. Pl.No. 1133 Patitpavan Nagar, Badgad	0	19	6	0	0	0	0	0	0	0	25
443	E738A	Opp. Pl.No. 3572/3580 Nr. Palasuni Hat	0	14	4	0	0	0	0	0	0	0	18
444	E739A	Opp. Brahmeswar Temple GGP Canal	0	7	6	0	0	0	0	0	0	0	13
445	E740A	Nr. GGP Canal Chhak	0	19	7	0	0	0	0	0	0	0	26
446	E741A	Nr. Pl.No. MA64 GGP, HB Colony	0	13	15	0	0	0	0	0	0	0	28
447	E742A	Pole No. 01900211002 Opp. SBI Tankapani Rd. Brahmeswar Bag	0	15	16	0	0	0	0	0	0	0	31
448	E743A	Pole No. 01910301007 Opp. Pl No. 192 Brahmeswar Patna	0	15	3	0	0	0	0	0	0	0	18
449	E744A	Opp. Pl.No. 686/2348 Brahmeswar Patna	0	15	1	0	0	0	0	0	0	0	16
450	E745A	Nr. Pl.No.18 Suraj Vihar	0	4	2	0	0	0	0	0	0	0	6
451	E746A	Pole No. 01910011001 Pl.No. SN-1 Shivanagr	0	29	16	0	0	0	0	0	0	0	45
452	E747A	Opp. Pl.No. 126 Ratnakar Bag-1	0	10	2	0	0	0	0	0	0	0	12
453	E748A	Opp. Samantrapur Water Tank	0	15	0	0	0	0	0	0	0	0	15
454	E749A	Opp. Odissa Seeds Corporation Samantrapur	0	5	0	0	0	0	0	0	0	0	5
455	E750A	Nr. Pl.No. 205 Samantrapur	0	3	1	0	0	0	0	0	0	0	4
456	E751A	Nr. Patadevi Basti DTC 250kVA, Sameigadia	0	13	21	0	0	0	0	0	0	0	34
457	E752A	DTC 100kVA Nr. Manchhath Electricals Sameigadia	0	6	2	0	0	0	0	0	0	0	8
TOTAL No. OF TYPEWISE LED FITTING C/F			63	4025	2721	18	42	112	63	3	12	0	7059

		TOTAL No. OF TYPEWISE LED FITTING B/F	63	4025	2721	18	42	112	63	3	12	0	7059
458	E753A	DTC 250kVA Nr. Somnath Temple Sameigadia	0	17	10	0	0	0	0	0	0	0	27
459	E754A	DTC 100kVA Nr. Mansi Medical, Sameigadia	0	5	5	0	0	0	0	0	0	0	10
460	E755A	Nr. Somnath Yuva Parishad Sameigadaia	0	12	15	0	0	0	0	0	0	0	27
461	E756A	Nr. Pl.No. 306 Ashutosh Nagar, Sameigadia	0	15	0	0	0	0	0	0	0	0	15
462	E757A	DTC 100kVA Nr. Pl. No. 308 Ashutosh Nagar, Sameigadia	0	9	3	0	0	0	0	0	0	0	12
463	E758A	DTC 100kVA, Nr. Pl.No. 573/4 Behind Manchath UP School Sameigadia	0	8	9	0	0	0	0	0	0	0	17
464	E759A	Opp. Pl.No. RP116 Pandav Nagar Lane-2	0	69	9	0	0	0	0	0	0	0	78
465	E760A	Opp. Kharvel Hostel No. 6 OUAT Bhipur	0	26	48	0	0	0	0	0	0	0	74
466	E761A	Opp. Pl.No. 36 Sweety Complex Ph-2 Bhipur	0	13	15	0	0	0	0	0	0	0	28
467	E762A	OPP. Mayurbhanj Cultural Association VIP Colony	0	15	8	0	0	0	0	0	0	0	23
468	E763A	Opp. Pl.No. 39 VIP Colony	0	12	3	0	0	0	0	0	0	0	15
469	E764A	Behind Basista Nagar OMFED Shop	0	30	8	0	0	0	0	0	0	0	38
470	E765A	Opp Royal Enfield Lewis Rd. Saisradha Colony	0	0	4	0	0	0	0	0	0	0	4
471	E766A	CESU OT1 Section Nr. Lingaraj Mandir	0	32	7	0	0	0	0	0	0	0	39
472	E767A	Opp. Pl.No. 524 Jaganath Matha Lane	0	18	3	0	0	0	0	0	0	0	21
473	E768A	Pole No. 01820562032 Opp. Pl. No. 1309 Mahtab Road Friends Colony	0	20	3	0	0	0	0	0	0	0	23
474	E769A	Nr. Hitech Hospital Pandara Village Canal Road	0	52	15	0	0	0	0	0	0	0	67
475	E770A	Nr. Palasuni Durga Mandap NH-5	0	19	19	0	0	0	0	0	0	0	38
476	E771A	Pole No. 00110511001 Opp. CDS Public School Prachi Vihar Palasuni	0	17	16	0	0	0	0	0	0	0	33
477	E772A	Opp. Pl.No. 3462/6214 Kapileswar Vihar Palasuni	0	23	32	0	0	0	0	0	0	0	55
478	E773A	Nr. Sarswati Sisu Mandir Kalia Nagar Pandara	0	23	16	0	0	0	0	0	0	0	39
479	E774A	Behind jaganath Temple Kalia Nagar Pandara	0	7	5	0	0	0	0	0	0	0	12
480	E775A	Opp. Pl.No. 23 Rd. No.-13 Jaganath Nagar, GGP Colony	3	33	8	0	0	0	0	0	0	0	44
481	E776A	Opp. Pl.No.101/1842 Rd.No.- 11 Jaganath Nagar, GGP	1	5	0	0	0	0	0	0	0	0	6
		TOTAL No. OF TYPEWISE LED FITTING C/F	67	4505	2982	18	42	112	63	3	12	0	7804
		TOTAL No. OF TYPEWISE LED FITTING B/F	67	4505	2982	18	42	112	63	3	12	0	7804
482	E777A	Opp. Pl.No. 1 Road No. 12 Jaganath Nagar GGP	3	5	0	0	0	0	0	0	0	0	8
483	E778A	Opp. Pl.No. 1467, Road No. 8 Jaganath Nagar	1	3	21	0	0	0	0	0	0	0	25
484	E779A	Opp. House No.28 Srushti Villa GGP Colony	0	0	5	0	0	0	0	0	0	0	5
485	E780A	Opp. Pl.No. 3835/2045 GGP Colony	0	19	6	0	0	0	0	0	0	0	25
486	E781A	Opp. Pl.No. BE39 Bankers Enclave Pandara	0	16	10	0	0	0	0	0	0	0	26
487	E782A	Opp. Eshaneswar Temple Prachi Vihar, Palasuni	0	16	17	0	0	0	0	0	0	0	33
488	E783A	Opp. Pl.No.3684 Prachi Vihar, Palasuni	0	3	5	0	0	0	0	0	0	0	8
489	E784A	Opp. Pl.No. 3685/5599 Prachivihar Palasuni	0	6	5	0	0	0	0	0	0	0	11
490	E785A	Opp. Pl.No. 357 Brahmeswar Lane Palasuni Canal Rd.	0	0	8	0	0	0	0	0	0	0	8
491	E786A	Opp. MUFTI Showroom Janapath	0	0	18	0	0	0	0	0	0	0	18
492	E787A	Opp. Axis Bank HHI Road	0	10	18	0	0	0	0	0	0	0	28
493	E788A	Opp. Sriya Cinema HHI Road	0	0	12	0	0	0	0	0	0	0	12
494	E789A	Beside HHI Hotel Mali Sahi Road	0	11	7	0	0	0	0	0	0	0	18
495	E790A	Opp. SBI life insurance Janapath	0	16	18	0	0	0	0	0	0	0	34
496	E791A	Opp. Municipality Colony Recreation Club, NAC Colony	0	12	0	0	0	0	0	0	0	0	12

497	E792A	Opp. State Bank of Mysore Pl. No. 62 Kharvel Nagar Janapath	0	0	10	0	0	0	0	0	0	0	10
498	E793A	Opp. Unit-3 Watertank Master Canteen Area	0	0	11	0	0	0	0	0	0	0	11
499	E794A	Opp. Qtr. No. 2RA/38 Press Colony	0	0	38	0	0	0	0	0	0	0	38
500	E795A	Opp. State Bridge Construction Ltd. PWD Colony Panda Nursing Home Area	0	13	29	0	0	0	0	0	0	0	42
501	E796A	Opp. Panda Nursing Home PWD Colony	0	4	8	0	0	0	0	0	0	0	12
502	E797A	Opp. Govt. Womens Polytechnic (3 drops) Gopubandhu Acadamy Ekamrapa Villa Birsa Munda Statue	0	16	24	0	0	0	0	0	0	0	40
503	E798A	Aum Garden, Nr. Birsa Munda Statue	0	9	0	0	0	0	0	0	0	0	9
504	E799A	Opp. Birsa Munda Statue Saliasahi	0	4	11	0	0	0	0	0	0	0	15
505	E800A	Govt. Womens Polytechnic Qtrs. Nr. Maitree Vihar	0	9	3	0	0	0	0	0	0	0	12
TOTAL No. OF TYPEWISE LED FITTING C/F			71	4677	3266	18	42	112	63	3	12	0	8264
TOTAL No. OF TYPEWISE LED FITTING B/F			71	4677	3266	18	42	112	63	3	12	0	8264
506	E801A	Kalinga Stadium Chhak High Mast Nicco Park Beherasahi Cross Road	0	0	0	0	0	6	0	0	0	0	6
507	E802A	High Mast At Pala Mandap Dumduma	0	0	0	0	0	0	6	0	0	0	6
508	E803A	High Mast At Durga Mandap Bomikhal, Cuttack Road	0	0	0	0	0	0	8	0	0	0	8
509	E804A	High Mast At Rasulgarh Police Station, Cuttack Road	0	0	0	0	0	0	6	0	0	0	6
510	E805A	High Mast At Alumandi Aiginia, Khurda NH	0	0	0	0	0	0	6	0	0	0	6
511	E806A	High Mast At Indradhanu Market IRC	0	0	0	0	0	0	0	0	9	0	9
512	E807A	High Mast at SUM Hospital Square	0	0	0	0	0	0	0	0	9	0	9
513	E808A	High Mast At High Tech Hospital PANDARA	0	0	0	0	0	0	6	0	0	0	6
514	E809A	High Mast At Jharpada, Ganesh Mandap Opp UP School	0	0	0	0	0	0	6	0	0	0	6
515	E809A	High Mast At Rental Colony	0	0	0	0	0	0	6	0	0	0	6
516	E811A	High Mast At Jalasa Mandap Jadupur Dumduma	0	0	0	0	0	0	6	0	0	0	6
517	E812A	DTC At Opp. Arvapalli Ganapati Vihar	0	6	0	0	0	0	0	0	0	0	6
518	E813A	DTC At Bajrang Vihar Pokhari	0	14	2	0	0	0	0	0	0	0	16
519	E814A	DTC Opp. Syndicate Bank Patiya Infocity Rd. Nr. ODM School	0	2	4	0	0	0	0	0	0	0	6
520	E815A	DTC At CooperAtive Colony Radhakrishna Variety Store Multiple DTC	0	22	0	0	0	0	0	0	0	0	22
521	E816A	DTC At Rangeswar Nagar Ganapatipuram	0	12	0	0	0	0	0	0	0	0	12
522	E817A	Pl.No. 209/2111 Pragati Vihar	0	20	0	0	0	0	0	0	0	0	20
523	E818A	DTC At Basera Mansion Padmavati Vihar	0	11	0	0	0	0	0	0	0	0	11
524	E819A	Opp. Pl.No. VIIM 63, VIIM Area	0	38	3	0	0	0	0	0	0	0	41
525	E820A	DTC, Near Hanuman Temple Gayatri Vihar Opp. Pl.No. GA-63	0	18	7	0	0	0	0	0	0	0	25
526	E821A	Computerized Way Bridge, Nr. RTO, Behind Petrol Tank C.S.Pur	0	17	1	0	0	0	0	0	0	0	18
527	E822A	Nr. State Social Welfare Board, Nuasahi Nayapalli	0	11	3	0	0	0	0	0	0	0	14
528	E823A	Nr. Odisha Lift Irrigation Corporation, Nuasahi Nayapalli (3 drop)	0	42	8	0	0	0	0	0	0	0	50
529	E824A	Nr. Ganesh Placement Services, Neelkantha Nagar, Nayapalli	2	12	0	0	0	0	0	0	0	0	14
TOTAL No. OF TYPEWISE LED FITTING C/F			73	4902	3294	18	42	118	113	3	30	0	8593
TOTAL No. OF TYPEWISE LED FITTING B/F			73	4902	3294	18	42	118	113	3	30	0	8593
530	E825A	Beside Radhamohan Temple Nayapalli, Neel Kantha Nagar	4	15	6	0	0	0	0	0	0	0	25
531	E826A	Beside Unit-8 Kalyan Mandap	0	25	7	0	0	0	0	0	0	0	32
532	E827A	Nr. Unit-8 DAV School	0	10	4	0	0	0	0	0	0	0	14

533	E828A	Nr. Punjab National Bank, Siripur Branch, DAV Chhak, Neelkantha Nagar Nayapalli	0	6	0	0	0	0	0	0	0	0	6
534	E829A	Beside Gopala Enclave Nuasahi Nayapalli	0	10	7	0	0	0	0	0	0	0	17
535	E830A	Beside Pl.No. 361 P/1213 Nuasahi Nayapalli	0	6	5	0	0	0	0	0	0	0	11
536	E831A	Oum Variety Store & Ladies Corner Nuasahi Nayapalli	0	22	4	0	0	0	0	0	0	0	26
537	E832A	Nr. PHD Pump House, 7 Acre Area	11	15	3	0	0	0	0	0	0	0	29
538	E833A	Nr. Tarini Temple MIG-2 Area C.S.Pur	3	19	0	0	0	0	0	0	0	0	22
539	E834A	Nr. Adarsh Vidya Mandir C.S.Pur, HB Colony	0	22	3	0	0	0	0	0	0	0	25
540	E835A	DTC 100kVA, Nr. Milan Paradise Welfare Association	0	19	6	0	0	0	0	0	0	0	25
541	E836A	Aryavihar Community Centre Nr. Chandra Shekharpur DAV School MIG HIG	0	17	4	0	0	0	0	0	0	0	21
542	E837A	Opp. Sai Mandir Patiya	0	11	6	0	0	0	0	0	0	0	17
543	E838A	Drop Opp. Sridarsi Mishra School Of Debth Kanan Vihar Phase 1	8	13	10	0	0	0	0	0	0	0	31
544	E839A	Drop Opp. Pl.No. 117 AIMIL Ltd. Kanan Vihar, Ph-1	3	9	1	0	0	0	0	0	0	0	13
545	E840A	DTC Near Loknath Enclave Srivihar Lane No.5	1	16	4	0	0	0	0	0	0	0	21
546	E841A	DTC At Barsha Villa, Srivihar	1	6	1	0	0	0	0	0	0	0	8
547	E842A	DTC 63 kVA Srivihar Opp. Pl.No. 24/732 Lane No. 7	0	5	0	0	0	0	0	0	0	0	5
548	E843A	Pole No. 00850271010 Opp. Pl.No. A/63 Krishna Garden Ph 2 Jagamra	0	24	3	0	0	0	0	0	0	0	27
549	E844A	DTC 250kVA, Nr. Smasan Jagamra (3 DROPS)	0	59	55	0	0	0	0	0	0	0	114
550	E845A	Opp. Pl.No. 114/13 Airodrome Gate Bhimpur	0	14	31	0	0	0	0	0	0	0	45
551	E846A	Pole No. 01830231001 Opp. Pl.No. A/40 Rameswar Patna	0	6	5	0	0	0	0	0	0	0	11
552	E847A	Pole No. 01830251007 Opp. Pl.No. A/36 Rameswar Patna	0	5	10	0	0	0	0	0	0	0	15
553	E848A	Opp. Pl.No. 4418/4726 Jharnasahi BadGarh	0	10	1	0	0	0	0	0	0	0	11
TOTAL No. OF TYPEWISE LED FITTING C/F			104	5266	3470	18	42	118	113	3	30	0	9164
TOTAL No. OF TYPEWISE LED FITTING B/F			104	5266	3470	18	42	118	113	3	30	0	9164
554	E849A	Pole No. 00610591001 Opp. Pl.No. 275 Neeladri Nagar, Jagamra Village	0	3	21	0	0	0	0	0	0	0	24
555	E850A	Pole No. 01820162001 Opp. LB 243 Bhimthangi HB Colony, Ph-2	0	5	37	0	0	0	0	0	0	0	42
556	E851A	Opp Sector 4 Pl.No. 112 Nr. UP School Neeladri Vihar	0	39	1	0	0	0	0	0	0	0	40
557	E852A	Drop Nr. Pl.No. GA-136 Swarnapuri Appt. Neeladri Vihar	0	18	2	0	0	0	0	0	0	0	20
558	E853A	Nr. GA30 Sailshree Vihar	0	0	13	0	0	0	0	0	0	0	13
559	E854A	DTC Opp. Pl.No. GA-272 Sailshree Vihar	0	25	24	0	0	0	0	0	0	0	49
560	E855A	DTC Opp. Pl.No. GA-505 Kuntala Niwas, Sailshree Vihar	0	17	9	0	0	0	0	0	0	0	26
561	E856A	DTC Nr. PHD Pump House Opp. Pl. No. GA-114 Saishree Vihar	0	9	9	0	0	0	0	0	0	0	18
562	E857A	DTC-07 Nr.Pl.No. FR-7 Sailshree Vihar	0	9	11	0	0	0	0	0	0	0	20
563	E858A	DTC 08 Nr. Pl.No. FR-7 Sailshree Vihar	0	9	19	0	0	0	0	0	0	0	28

564	E859A	DTC 1000kVA Nr. LC 121 Block Sailshree Vihar	0	15	9	0	0	0	0	0	0	0	24
565	E860A	Opp. Plot No.-1468/3364, Nr. Lane No.-7, Fishery Lane	0	25	3	0	0	0	0	0	0	0	28
566	E861A	Opp. Sri Chintamani Citizens Asso.	0	17	3	0	0	0	0	0	0	0	20
567	E862A	Opp. Plot No.-1510/4207, Lane No.-9, Fishery Lane	0	22	1	0	0	0	0	0	0	0	23
568	E863A	Nr. Netaji E.M. School, Fishery Lane	0	13	0	0	0	0	0	0	0	0	13
569	E864A	Opp. Plot No. -5, Phase-1, Indraprasta, Pokhariput	0	12	0	0	0	0	0	0	0	0	12
570	E865A	Opp. Plot No.-441/342, Indraprasta Ph-1, Pokhariput	0	3	5	0	0	0	0	0	0	0	8
571	E866A	Nr Pataleswar Temple, Beside Pl.No. MIG II 14/27, BDA Colony C.S. Pur	0	34	13	0	0	0	0	0	0	0	47
572	E867A	DTC Near Aranya Vihar(Rail Vihar), Forest Dept. Qtrs. Area, BDA Colony C.S.Pur	0	15	6	0	0	0	0	0	0	0	21
573	E868A	DTC Nr. Sisu Vihar Colony Field	11	14	8	0	0	0	0	0	0	0	33
574	E869A	DTC 18 Vinayak Enclave Nr. Sishu Vihar Colony	8	1	0	0	0	0	0	0	0	0	9
575	E870A	DTC 25kVA At Basundhara Sisuvihar Nr.ODM Public School	2	1	0	0	0	0	0	0	0	0	3
576	E871A	Beside Pl.No. 81 Nr. Dharmavihar Park	0	15	5	0	0	0	0	0	0	0	20
577	E872A	Opp. Govt. High School Khandagiri	0	3	7	0	0	0	0	0	0	0	10
TOTAL No. OF TYPEWISE LED FITTING C/F			125	5590	3676	18	42	118	113	3	30	0	9715
TOTAL No. OF TYPEWISE LED FITTING B/F			125	5590	3676	18	42	118	113	3	30	0	9715
578	E873A	DTC-07 Opp. Pump House Dharmavihar	0	13	22	0	0	0	0	0	0	0	35
579	E874A	Beside Pl.No. 134 Dharmavihar	0	20	2	0	0	0	0	0	0	0	22
580	E875A	Nr. Durgamandap Chakkisaini	0	10	7	0	0	0	0	0	0	0	17
581	E876A	Nr Sarswati Darsan Book Store & Nr. Trinath Temple Chakkisaini	0	21	32	0	0	0	0	0	0	0	53
582	E877A	Opp. Shani Temple For Radhakrishna Nagar Chakkisaini	0	15	5	0	0	0	0	0	0	0	20
583	E878A	Nr. Ugalamani Temple Chakkisaini	0	19	42	0	0	0	0	0	0	0	61
584	E879A	Behind Ganesh Temple Chakkisaini DTC-39	0	21	18	2	0	0	0	0	0	0	41
585	E880A	Opp. Prachita Ladies Tailor Nr. Shriram Basti Chakkisaini	0	5	12	0	0	0	0	0	0	0	17
586	E881A	DTC-40 Nr. Mangala Temple Chakkisaini	0	7	3	0	0	0	0	0	0	0	10
587	E882A	DTC Multiple 16kVA Shrirambasti Chakkisaini	0	4	4	0	0	0	0	0	0	0	8
588	E883A	DTC 41 Nr. Paduka Temple Shrirambasti Chakkisaini	0	9	11	0	0	0	0	0	0	0	20
589	E884A	Multiple DTC No.51, 52 & 53 16kVA & 25kVA Shrirambasti Chakkisaini	0	6	5	0	0	0	0	0	0	0	11
590	E885A	Behind Sripaduka Temple Shrirambasti Chakkisaini	0	15	11	0	0	0	0	0	0	0	26
591	E886A	Ganeshvihar DTC 100 kVA Chakkisaini	0	14	10	0	0	0	0	0	0	0	24
592	E887A	DTC 100kVA Nr. Laxminarayan Temple Chakkisaini	0	3	6	0	0	0	0	0	0	0	9
593	E888A	Nr. Achinta Mandap Mancheswar	0	0	22	0	0	0	0	0	0	0	22
594	E889A	PL No. 944 /26 Nr. Post Office, Mancheswar Bhoisahi UP School	0	3	9	0	0	0	0	0	0	0	12
595	E890A	Opp. Pl.No. 30A Nr. BHEL Office Kharvel Nagar	0	10	0	0	0	0	0	0	0	0	10
596	E891A	Nr. Nalinidevi Womens College Pl.No. 52A .Kharvel Nagar	0	8	9	0	0	0	0	0	0	0	17
597	E892A	Nr. Plot A49 Nalinidevi Womens College Rd. Kharvel Nagar	0	6	7	0	0	0	0	0	0	0	13
598	E893A	Beside Qtr. No.- 3R/133, Road No.-5, Unit-9	0	0	16	0	0	0	0	0	0	0	16

599	E894A	Nr. NIFS College, Road No-8 Unit-9	0	2	7	0	0	0	0	0	0	0	9
600	E895A	Opp. Qtr. No.- 2RA/64, Nr. Bhagawati Basti, Road No.- 8, Unit-9	0	14	4	0	0	0	0	0	0	0	18
601	E896A	Beside Adisakthi Self Help Group,Road No.-8, Unit-9	0	12	17	0	0	0	0	0	0	0	29
TOTAL No. OF TYPEWISE LED FITTING C/F			125	5827	3957	20	42	118	113	3	30	0	10235
TOTAL No. OF TYPEWISE LED FITTING B/F			125	5827	3957	20	42	118	113	3	30	0	10235
602	E897A	Nr. Qtr. No.-2RA/135, Unit-9 Road-7	0	11	1	0	0	0	0	0	0	0	12
603	E898A	Opp. Qtr. No.-2R-1/4 Road- 1,Unit-9	0	19	0	0	0	0	0	0	0	0	19
604	E899A	DTC 500 kVA Odissa Infrastructure Const. Workers Union Nr. Qtr. No. 2RA 49 Road 3 Unit 9	0	14	17	0	0	0	0	0	0	0	31
605	E900A	Beside Qtr. No.-3R/133, Road-5, Unit-9	0	2	48	0	0	0	0	0	0	0	50
606	E901A	Nr. Blind School Road-1, UNIT-9	0	24	5	0	0	0	0	0	0	0	29
607	E902A	DTC 250kVA Nr Qtr No. 1R58 Road 6, Unit 9	0	15	3	0	0	0	0	0	0	0	18
608	E903A	Nr. Pl.No. 1579, Lane No. 5 Bhaktabandhu Nagar Gandmunda	0	36	20	0	0	0	0	0	0	0	56
609	E904A	Pole No. 01810361001 Nr. Pl.No. 1573/1, Lane No. 3 Bhaktabandhu Nagar Gandmunda	0	25	6	0	0	0	0	0	0	0	31
610	E905A	Nr. Pl.No. 1586, Bhaktabandhu Nagar Gandmunda	0	8	0	0	0	0	0	0	0	0	8
611	E906A	Nr. Pl.No. 1601/3329 Lane No.5, Lake Valley	0	39	2	0	0	0	0	0	0	0	41
612	E907A	Opp. Pl.No. 1488 Bhaktabandhu Nagar	0	6	2	0	0	0	0	0	0	0	8
613	E908A	Nr. Pl.No. 1571, Road No. 2 Bhaktabandhu Nagar	0	13	0	0	0	0	0	0	0	0	13
614	E909A	Pole No. 00610212046 Nr. Pl.No.146 Chidanandvihar Rajiv Nagar	0	17	6	0	0	0	0	0	0	0	23
615	E910A	Pole No. 00750131008 Nr. Pl. No. 538, Aiginia Village	0	33	6	0	0	0	0	0	0	0	39
616	E911A	Nr. Dadhibaman Durgapuja Mandap Aiginia Village	0	6	9	0	0	0	0	0	0	0	15
617	E912A	Opp. Plot No. -A/1,Paradeep Port Colony	0	16	4	0	0	0	0	0	0	0	20
618	E913A	Pole No.-0202 068 1001, Opp. Step in Hotel, Budha Nagar	0	21	12	0	0	0	0	0	0	0	33
619	E914A	Pole No.-0202 070 1001 Beside Federal Bank Budha Nagar	0	3	6	0	0	0	0	0	0	0	9
620	E915A	Opp. Hotel Vintage Villa, Station Bazar	0	21	12	0	0	0	0	0	0	0	33
621	E916A	Pole No.-0202 079 1001 Opp. Plot No. -16 B, Budha Nagar	0	7	1	0	0	0	0	0	0	0	8
622	E917A	Opp. Hotel Upasana, Budha Nagar	0	6	2	0	0	0	0	0	0	0	8
623	E918A	Opp. Hotel Satabdi CESU Office Lane BudhaNagar	0	7	3	0	0	0	0	0	0	0	10
624	E919A	Opp. Pl.No. 31, Budha Nagar	0	0	5	0	0	0	0	0	0	0	5
625	E920A	Nr. Mahima Alekha Ashram, Goutam Nagar	0	26	21	0	0	0	0	0	0	0	47
TOTAL No. OF TYPEWISE LED FITTING C/F			125	6202	4148	20	42	118	113	3	30	0	10801
TOTAL No. OF TYPEWISE LED FITTING B/F			125	6202	4148	20	42	118	113	3	30	0	10801
626	E921A	Beside The Grains Store, BMC To Mausima Temple Road	0	5	0	0	0	0	0	0	0	0	5
627	E922A	Opp. Utkal Theosophical Federation, Goutam Nagar	0	13	20	0	0	0	0	0	0	0	33
628	E923A	Opp. Municipal Govt. High School,Behind Utkal Royal Residency,Goutam Nagar	0	8	15	0	0	0	0	0	0	0	23
629	E924A	Nr. Namdhari GaRd.ens Kalyan Mandap, Goutam Nagar	0	16	6	0	0	0	0	0	0	0	22
630	E925A	Opp. Ruma Textiles, Nr. BMC Office, Goutam Nagar	0	9	1	0	0	0	0	0	0	0	10

631	E926A	Pole No.-02040361002, Behind Plot No.-SB/4 Shree Residency, Bomikhal	0	6	1	0	0	0	0	0	0	0	7
632	E927A	Opp. PNB, Bomikhal Cuttack Road	0	19	1	0	0	0	0	0	0	0	20
633	E928A	Plot No.-620, Sabar Sahi, Rasulgarh	0	18	2	0	0	0	0	0	0	0	20
634	E929A	Opp. Plot No. -569/1597, Sabarsahi , Rasulgarh	0	40	6	0	0	0	0	0	0	0	46
635	E930A	Opp. Sekhar Enclave, Netaji Nagar, Rasulgarh	0	5	6	0	0	0	0	0	0	0	11
636	E931A	Opp. BMC High School Kapilprasad Road	0	30	37	0	0	0	0	0	0	0	67
637	E932A	Opp. Kalesi Temple,Kapilprasad Road	0	9	25	0	0	0	0	0	0	0	34
638	E933A	Nr. TrinAth Club, Sundarpada Village	0	11	19	0	0	0	0	0	0	0	30
639	E934A	Nr. Muktheswar Dev Temple Opp. Lingaraj Station	0	13	0	0	0	0	0	0	0	0	13
640	E935A	Nr. Gate No.-4,Old AG Colony, Madhusudan Nagar	0	0	20	0	0	0	0	0	0	0	20
641	E936A	Opp. Pradhan Electricials, Plot No.-A60, Madhusudan Nagar	0	0	11	0	0	0	0	0	0	0	11
642	E937A	Beside Govt. Girls High School,Unit-4	0	0	20	0	0	0	0	0	0	0	20
643	E938A	Opp. Bank of India, Madhusudan Nagar	0	2	8	0	0	0	0	0	0	0	10
644	E939A	Nr Gate No. 2 Qtr.No. H10 To H166 Old AG Colony, Unit 4	0	26	0	0	0	0	0	0	0	0	26
645	E940A	Opp. Pl.No. 95, SatyaNagar	0	1	12	0	0	0	0	0	0	0	13
646	E941A	Beside Kamala Palace, SatyaNagar	0	13	7	0	0	0	0	0	0	0	20
647	E942A	Beside Sungreen Hotel, Punjabi Colony Satya Nagar	0	20	6	0	0	0	0	0	0	0	26
648	E943A	Nr. Plot No.-83,opp. Amrita Place Punjabi Colony	0	7	4	0	0	0	0	0	0	0	11
649	E944A	Opp. Neelkantha Hostel No. 4 OUAT Colony Siripur	0	13	18	0	0	0	0	0	0	0	31
TOTAL No. OF TYPEWISE LED FITTING C/F			125	6486	4393	20	42	118	113	3	30	0	11330
TOTAL No. OF TYPEWISE LED FITTING B/F			125	6486	4393	20	42	118	113	3	30	0	11330
650	E945A	Opp. Odisha Watershed Development Mission OUAT Colony, Siripur	0	3	5	0	0	0	0	0	0	0	8
651	E946A	Opp. Paris Bakery Shop, Ganesh Mandap Road, Jharpada For Swosti Dham	0	21	3	0	0	0	0	0	0	0	24
652	E947A	Beside Sisubhavan Hospital Jharanasahi	0	20	0	0	0	0	0	0	0	0	20
653	E948A	Plot No.-103, Dayananda Nagar, Bomikhal Nagar	0	12	0	0	0	0	0	0	0	0	12
654	E949A	Opp. Plot No.-1046 D , Chandimata Colony, Bomikhal Canel Rd.	0	9	9	0	0	0	0	0	0	0	18
655	E950A	250kVA Chillikatola Basti	0	17	1	0	0	0	0	0	0	0	18
656	E951A	DTC Opp. Sai InternAtional College Of Commerce Chillikatola Basti	0	24	1	0	0	0	0	0	0	0	25
657	E952A	DTC At Sampark Vihar Lane No.9	0	17	2	0	0	0	0	0	0	0	19
658	E953A	DTC At Adarsh Vihar Lane No. 1	0	31	0	0	0	0	0	0	0	0	31
659	E954A	DTC Nr. Pl.No.7 Genesis Villa	0	4	2	0	0	0	0	0	0	0	6
660	E955A	Nr. Saheen Boutique BL Colony, VSS Nagar	0	30	10	0	0	0	0	0	0	0	40
661	E956A	Beside Bhuvaneswari Temple DL Colony, VSS Nagar	0	28	5	0	0	0	0	0	0	0	33
662	E957A	Opp. Pl.No. AL-9 Near Patra Snacks, AL Colony, VSS Nagar	1	31	13	0	0	0	0	0	0	0	45
663	E958A	Nr. Pl.No. VM-14 Beside Institute Of Hotel Mgt. VSS Nagar	0	6	3	0	0	0	0	0	0	0	9
664	E959A	Opp. Pl.No. AE-232 Behind UP School, VSS Nagar	3	10	14	0	0	0	0	0	0	0	27
665	E960A	Opp. Community Centre Pl. No. CL1 CL Colony, VSS Nagar	0	14	0	0	0	0	0	0	0	0	14
666	E961A	Nr. Railway Crossing VSS Nagar	0	16	6	0	0	0	0	0	0	0	22

667	E962A	Nr. Mahabeer Basti Hanuman Temple, VSS Nagar	0	13	6	0	0	0	0	0	0	0	19
668	E963A	Nr. Pl.No. 3538/3539 Dumping Yard. To Ranganmatia Road Dhirkut Basti VSS	0	6	13	0	0	0	0	0	0	0	19
669	E964A	Nr. CL 44 Little Learners Play School VSS Nagar	0	17	0	0	0	0	0	0	0	0	17
670	E965A	Nr. Penta Coastal Mission Church & Inside Cesu Section VSS Nagar	0	23	16	0	0	0	0	0	0	0	39
671	E966A	Nr. Mangala Temple Beside Railway Crossing Patharband Basti	0	18	0	0	0	0	0	0	0	0	18
672	E967A	DTC 250 kVA Patharband Basti Behind P&T Residential Colony From VSS Ngr.	16	13	0	0	0	0	0	0	0	0	29
673	E968A	DTC 100kVA Patharband Basti From Satsang Vihar	0	19	2	0	0	0	0	0	0	0	21
TOTAL No. OF TYPEWISE LED FITTING C/F			145	6888	4504	20	42	118	113	3	30	0	11863
TOTAL No. OF TYPEWISE LED FITTING B/F			145	6888	4504	20	42	118	113	3	30	0	11863
674	E969A	Bayababa Basti Area Behind Bayababa Math 2 Drops	0	5	2	0	0	0	0	0	0	0	7
675	E970A	DTC 100kVA Behind Bayababa Math 2 Drops Bayababa Basti	0	13	6	0	0	0	0	0	0	0	19
676	E971A	Nr. Pl.No. 500 Behind Bayaba Math	0	6	9	0	0	0	0	0	0	0	15
677	E972A	Nr. Bharatpur Dolo Mandap Padia	0	32	7	0	0	0	0	0	0	0	39
678	E973A	Nr. R&B Office Bharatpur	0	14	8	0	0	0	0	0	0	0	22
679	E974A	Nr. Bharapur Water Tank PHD	0	8	2	0	0	0	0	0	0	0	10
680	E975A	Pole No. 006105520003 Opp KIVA Restaurant Cage Road Khandagiri Vihar	0	20	10	0	13	0	0	0	0	0	43
681	E976A	Pole No. 00610191001 Opp.Panthik OTDC Nr. Shauchalaya Khandagiri	0	6	1	0	0	0	0	0	0	0	7
682	E977A	Opp. Pl.No. E/22 Telco Colony Baramunda	0	8	0	0	0	0	0	0	0	0	8
683	E978A	Opp. F/36 Telco Colony Baramunda	0	7	0	0	0	0	0	0	0	0	7
684	E979A	Pole No. 00610212010 Opp. JaganAth Temple Shouchalaya Rd. Kolathia HB	0	10	13	0	0	0	0	0	0	0	23
685	E980A	Pole No. 00750051002 Nr. BSNL Aiginia Alugadi Rd.	0	17	1	0	0	0	0	0	0	0	18
686	E981A	OPP. Qtr. No. VA 15/3 Unit 2 Service Rd.	0	3	18	0	0	0	0	0	0	0	21
687	E982A	Opp. Pl.No. 1990/5409 Akarpuri Colony Rath Rd.	0	8	0	0	0	0	0	0	0	0	8
688	E983A	OPP. Pl.No. MIG 2-8/15 BDA Colony	0	16	0	0	0	0	0	0	0	0	16
689	E984A	Nr. Utkal Tent House Nr. Damana Hat	0	8	2	0	0	0	0	0	0	0	10
690	E985A	Nr. Siva Temple MIG 2 C.S. Pur	0	31	2	0	0	0	0	0	0	0	33
691	E986A	Nr. MIG 2, Block 63/1 C.S. Pur	2	5	8	0	0	0	0	0	0	0	15
692	E987A	Nr. Sai Temple, C.S Pur HB Colony	0	14	2	0	0	0	0	0	0	0	16
693	E988A	Nr. MIG 1, Block 18/1 C.S. Pur, HB Colony	0	18	0	0	0	0	0	0	0	0	18
694	E989A	Nr. Swagat Homeo Clinic C.S Pur HB Colony	4	28	8	0	0	0	0	0	0	0	40
695	E990A	Nr. Pl.No. 105,424,72 Neeladrivihar Sector-5 (3 Drops)	0	51	13	0	0	0	0	0	0	0	64
696	E991A	Nr. Pl.No. 162,283 Neeladrivihar Sector-5 (2 drops)	0	31	12	0	0	0	0	0	0	0	43
697	E992A	Opp. Eshaneswar Temple	0	9	10	0	0	0	0	0	0	0	19
TOTAL No. OF TYPEWISE LED FITTING C/F			151	7256	4638	20	55	118	113	3	30	0	12384

		TOTAL No. OF TYPEWISE LED FITTING B/F	151	7256	4638	20	55	118	113	3	30	0	12384
698	E993A	Opp. LIG F4 BDA Colony C.S. Pur	0	18	11	0	0	0	0	0	0	0	29
699	E994A	Nr. MIG 1 Block 17 BDA Colony C.S.Pur	0	8	7	0	0	0	0	0	0	0	15
700	E995A	DTC At EWS Colony Block 6	1	19	9	0	0	0	0	0	0	0	29
701	E996A	Opp. LIG Block 7 & Block 3, LIG 1, BDA Colony, C.S.Pur (3 Drops)	0	19	16	0	0	0	0	0	0	0	35
702	E997A	Nr. ER-48, DTC 250kVA BDA Colony C.S. Pur	0	20	2	0	0	0	0	0	0	0	22
703	E998A	Opp. EWS 1 BDA Colony C.S. Pur	0	17	1	0	0	0	0	0	0	0	18
704	E999A	Nr. Akhandalamani Temple Nayapalli Nuasahi	0	7	0	0	0	0	0	0	0	0	7
705	E1000 A	DTC Behind HIG 2 Pl.No. 30 Ekamra College To Kapilprasad Mkt Rd.	0	23	19	0	0	0	0	0	0	0	42
706	E1001 A	Nr. BSNL Tower, Sundarpada Village	0	22	1	0	0	0	0	0	0	0	23
707	E1002 A	Beside Plot No.-HIG 1/90, Kapilprasad, BDA Colony	0	24	3	0	0	0	0	0	0	0	27
708	E1003 A	Nr. VIM 833, Opp. PHD Water Tank, Sailshree Vihar	0	29	8	0	0	0	0	0	0	0	37
709	E1004 A	DTC Nr. Pantallons & HDFC Bank Patiya	0	3	5	0	0	0	0	0	0	0	8
710	E1005 A	Opp. SBI KIIT Campus Nr. Mickey's Guest House Sai Vihar	0	5	0	0	0	0	0	0	0	0	5
711	E1006 A	Opp. Baramunda Municipal High School, Baramunda Village	0	36	41	0	0	0	0	0	0	0	77
712	E1007 A	Opp. Pl.No. 367/2576 Mahima Mishra Lane Baramunda Village	0	20	40	0	3	0	0	0	0	0	63
713	E1008 A	Opp. Baramunda Village, UP School, Nr. Nilkanteswar Temple	0	42	18	0	0	0	0	0	0	0	60
714	E1009 A	Nr. Pl.No. 185/514 Paik Nagar Baramunda	0	24	7	0	0	0	0	0	0	0	31
715	E1010 A	Opp. Pl.No. 32/191 Paik Nagar Baramunda	0	22	6	0	0	0	0	0	0	0	28
716	E1011 A	Nr. Pl.No. 417 Delta Traffic Chhak, Paik Nagar Baramunda	0	34	17	0	0	0	0	0	0	0	51
717	E1012 A	Pole No. 00610321005 Nr. Koathia UP School Kolathia HB Colony	0	25	12	0	0	0	0	0	0	0	37
718	E1013 A	Nr. Durga Puja Mandap Ghatikia	0	41	10	0	0	0	0	0	0	0	51
719	E1014 A	Pole No. 00630862030 Kamarsahi Ghatikia	0	3	11	0	0	0	0	0	0	0	14
720	E1015 A	Beherasahi Ghatikia Village	0	7	0	0	0	0	0	0	0	0	7
721	E1016 A	Opp. K8, Pl.No. 1261 Kalinga Nagar K-8	0	18	0	0	0	0	0	0	0	0	18
		TOTAL No. OF TYPEWISE LED FITTING C/F	152	7742	4882	20	58	118	113	3	30	0	13118
		TOTAL No. OF TYPEWISE LED FITTING B/F	152	7742	4882	20	58	118	113	3	30	0	13118
722	E1017 A	Nr. Sidheswar Yuva Parishad Jagamra Chhak	0	0	28	0	0	0	0	0	0	0	28
723	E1018 A	DTC Beside C.S.Pur Kalyan Mandap, Arvind Nagar	0	24	0	0	0	0	0	0	0	0	24
724	E1019 A	Opp. Pl.No. 4619/17 Pokharan Village. Multiple 25kVA	0	24	0	0	0	0	0	0	0	0	24
725	E1020 A	DTC Nr. Kelucharan Park Subhash Enclave, Radhakrishna Nagar	0	14	0	0	0	0	0	0	0	0	14
726	E1021 A	DTC At Barsha Villa	0	22	1	0	0	0	0	0	0	0	23
727	E1022 A	DTC At Chandra Vihar Behind OMFED Factory C.S.Pur	0	11	0	0	0	0	0	0	0	0	11
728	E1023 A	Opp.Pl.No. 787, Lane No. 3 Beside IDBI Jaydeo Vihar	0	20	1	0	0	0	0	0	0	0	21
729	E1024 A	Nr. SBI, e Corner, Jaydeo Vihar	3	38	1	0	0	0	0	0	0	0	42
730	E1025 A	Nr. Darshan Academy Behind liquor Shop Jaydeo Vihar	0	15	9	0	0	0	0	0	0	0	24
731	E1026 A	Nr. IFFCO Management Division BMC Health Centre Road Acharya Vihar	0	9	21	0	0	0	0	0	0	0	30

732	E1027 A	For Bishnupriya Appt., Nr. Gugnani Tyres Biju Patnaik College to Ekamra Park Rd.	0	24	0	0	0	0	0	0	0	0	24
733	E1028 A	Opp. Plot No.-1036(P), Prakruti Vihar, Siripur	0	22	2	0	0	0	0	0	0	0	24
734	E1029 A	Opp. Plot No.-1048/987, Prakruti Vihar, Siripur	0	15	3	0	0	0	0	0	0	0	18
735	E1030 A	Pl.No. 137 Jagamra Dumduma A Jena House To Jharpokhari	0	12	5	0	0	3	0	0	0	0	20
736	E1031 A	Opp. Xavier Management School (Salia Sahi, Fortune Tower)	0	20	0	0	0	0	0	0	0	0	20
737	E1032 A	Nr. Jayguru Asram Science Park Basti Acharya Vihar	0	17	7	0	0	0	0	0	0	0	24
738	E1033 A	Opp. Bhubaneswari Temple Acharya Vihar	0	7	17	0	0	0	0	0	0	0	24
739	E1034 A	Nr. Sai Temple Acharya Vihar	0	6	2	0	0	0	0	0	0	0	8
740	E1035 A	Nr. Pl.No. L3/118 & RCB Acadamy Acharya Vihar	0	25	14	0	0	0	0	0	0	0	39
741	E1036 A	Nr. Jaganath Palace Acharya Vihar	0	10	4	0	0	0	0	0	0	0	14
742	E1037 A	Opp. Qtr. No. L 1 Police Colony Acharyavihar	0	13	4	0	0	0	0	0	0	0	17
743	E1038 A	Opp. Welfare Association Community Centre Ph-5 HB Dumduma	0	38	10	0	0	0	0	0	0	0	48
744	E1039 A	Opp. Pl.No. L1372 Bulbul Medicine Store Dumduma Nagar Chhak	0	46	21	0	0	0	0	0	0	0	67
745	E1040 A	Pole No. 00720203001 Opp. Pl.No. LIV 350, Ph-4 Dumduma HB	0	78	4	0	0	0	0	0	0	0	82
TOTAL No. OF TYPEWISE LED FITTING C/F			155	8252	5036	20	58	121	113	3	30	0	13788
TOTAL No. OF TYPEWISE LED FITTING B/F			155	8252	5036	20	58	121	113	3	30	0	13788
746	E1041 A	Nr.Post Office Tangisahi Jadupur Village	0	30	27	0	0	0	0	0	0	0	57
747	E1042 A	Opp. Aiginia Sani Temple	0	30	1	0	0	0	0	0	0	0	31
748	E1043 A	Opp. Malati Chowdhari Balika Siksha Sadhana Kendra, Rajiv Nagar	0	2	3	0	0	0	0	0	0	0	5
749	E1044 A	Opp. Trinath Temple, Shantipali Basti, Satya Nagar	0	36	14	0	0	0	0	0	0	0	50
750	E1045 A	Opp. Neelkanteswar Temple & Pl. No. 693 Nayapalli	4	32	11	0	0	0	0	0	0	0	47
751	E1046 A	Opp. Main 'LAND CHINA' NH-5 Nayapalli	0	0	17	0	0	0	0	0	0	0	17
752	E1047 A	Opp. Pl.No. A/83 Nayapalli	0	0	9	0	0	0	0	0	0	0	9
753	E1048 A	Opp. Pl.No. 126 Nayapalli	0	13	9	0	0	0	0	0	0	0	22
754	E1049 A	Opp. Pl.No. 2763, Nr.SBI Behera Sahi Rd. Nayapalli	0	19	9	0	0	0	0	0	0	0	28
755	E1050 A	Opp. Pl.No. 1288, Beside Career Height Coaching Nayapalli	0	10	16	0	0	0	0	0	0	0	26
756	E1051 A	Opp. Gopubandhu Hostel Utkal University	0	9	0	0	0	0	0	0	0	0	9
757	E1052 A	Opp. SBI Utkal University Branch	0	27	0	0	0	0	0	0	0	0	27
758	E1053 A	DTC Opp. Madhusudan Hostel Utkal University	0	13	0	0	0	0	0	0	0	0	13
759	E1054 A	DTC Opp. Utkal University Health Centre	0	10	0	0	0	0	0	0	0	0	10
760	E1055 A	Opp. Department Of Pharmatecular Utkal University	0	11	0	0	0	0	0	0	0	0	11
761	E1056 A	DTC Opp. Qtr. No. E52 Utkal University Area	0	24	0	0	0	0	0	0	0	0	24
762	E1057 A	Inside CESU Sub-Station Utkal University Campus	0	54	0	0	0	0	0	0	0	0	54
763	E1058 A	Nr. Pl.No. 2148 Chintamnesawr Main Rd.	0	3	0	0	0	0	0	0	0	0	3
764	E1059 A	Nr. Qtr. No. IVM 4 Unit 7, Behind Banadurga High Mast	0	5	1	0	0	0	0	0	0	0	6
765	E1060 A	Opp. Revenue Office BBSR-1 PWD Colony Unit-7	0	4	5	0	0	0	0	0	0	0	9
766	E1061 A	DTC Nr. Banadurga Temple Ganga Nagar	0	7	4	0	0	0	0	0	0	0	11

767	E1062 A	Nr. Qtr. No. 2R PF 6 Ruchika School to Banadurga	0	0	12	0	0	0	0	0	0	0	12
768	E1063 A	Nr. UNESCO Office Pl. No. A44 Unit-7, Surya Nagar	0	1	23	0	0	0	0	0	0	0	24
769	E1064 A	Nr. Sarswati Sisumandir Dharamvihar Barabari	0	20	4	0	0	0	0	0	0	0	24
TOTAL No. OF TYPEWISE LED FITTING C/F			159	8612	5201	20	58	121	113	3	30	0	14317
TOTAL No. OF TYPEWISE LED FITTING B/F			159	8612	5201	20	58	121	113	3	30	0	14317
770	E1065 A	Opp. Trupti Hotel Delta Square	0	5	12	0	0	0	0	0	0	0	17
771	E1066 A	7 th Battalion IG No.U Gate	0	35	14	0	0	0	0	0	0	0	49
772	E1067 A	7 th Battalion Samantvihar Side Gate	0	24	7	0	0	0	0	0	0	0	31
773	E1068 A	Opp. Plot No. A25 Deorai College Rd. Balitota Basti Navapalli	0	1	15	0	0	0	0	0	0	0	16
774	E1069 A	Nr. Passport Office CRP Rd. Navapalli	0	2	6	0	0	0	0	0	0	0	8
775	E1070 A	Beside Trinath Temple, Madhusudan Nagar, Unit-4	0	1	36	0	0	0	0	0	0	0	37
776	E1071 A	Beside Mangala Temple, Madhusudan Nagar, Unit-4	0	2	32	0	0	0	0	0	0	0	34
777	E1072 A	Opp. Pl.No. M43 Bhimtangi HB Colony Phase 2	2	15	6	0	0	0	0	0	0	0	23
778	E1073 A	Nr. JaganAth Vihar, Lane No.-1 ,Baramunda	0	6	19	0	0	0	0	0	0	0	25
779	E1074 A	Opp. Plot No.-124, Jaganath Vihar, Lane No.-4	0	3	5	0	0	0	0	0	0	0	8
780	E1075 A	Nr. Plot No. - L/407, Baramunda HB Colony	0	8	4	0	0	0	0	0	0	0	12
781	E1076 A	Beside Plot No.- L/43, Baramunda HB Colony	0	20	0	0	0	0	0	0	0	0	20
782	E1077 A	DTC Opp. Pl.No. A24, Nr. Community Centre HIG Colony Baramunda	0	4	7	0	0	0	0	0	0	0	11
783	E1078 A	DTC 100 kVA Opp. Pl.No. C69 Baramunda Forest Park HB Colony	0	2	1	0	0	0	0	0	0	0	3
784	E1079 A	DTC 250kVA Opp. Pl.No. C69 Baramunda Forest Park HB Colony Barmunda	0	11	12	0	0	0	0	0	0	0	23
785	E1080 A	DTC 100kVA Nr. Pl.No. 135 Jaganth Vihar Lane No. 5 Baramunda	0	11	2	0	0	0	0	0	0	0	13
786	E1081 A	Opp. Pl.No. C80 DTC Nr. HIG Pump House Baramunda	4	10	4	0	0	0	0	0	0	0	18
787	E1082 A	Nr. Pl.No. M50 Baramunda HB Colony	0	11	18	0	0	0	0	0	0	0	29
788	E1083 A	Opp. Pl.No. L122 Baramunda HB Colony, Nr. UP School	0	7	8	0	0	0	0	0	0	0	15
789	E1084 A	Nr. Pl.No. L425 Baramunda HB Colony	0	2	9	0	0	0	0	0	0	0	11
790	E1085 A	Nr. Pl.No. M147 Barmunda HB Colony	0	9	4	0	0	0	0	0	0	0	13
791	E1086 A	Pl.No. CE134 DTC 100kVA Nr. Mangala Temple Baramunda HB Colony	0	3	1	0	0	0	0	0	0	0	4
792	E1087 A	DTC 250kVA Opp. Durga Medicine, Lane No. 12 Baramunda HB Colony	0	14	2	0	0	0	0	0	0	0	16
793	E1088 A	DTC 250kVA Nr. Hanuman Temple Hanspal Baliana Canal	0	11	5	0	0	0	0	0	0	0	16
TOTAL No. OF TYPEWISE LED FITTING C/F			165	8829	5430	20	58	121	113	3	30	0	14769
TOTAL No. OF TYPEWISE LED FITTING B/F			165	8829	5430	20	58	121	113	3	30	0	14769
794	E1089 A	DTC 100kVA Nr. Ananadvihar Hanspal Baliana Canal	0	5	4	0	0	0	0	0	0	0	9
795	E1090 A	DTC Nr. Odisha Contractor Asson Office College Rd. Naharkanta	0	11	1	0	0	0	0	0	0	0	12
796	E1091 A	DTC Nr. Samalsahi Naharkanta	0	12	9	0	0	0	0	0	0	0	21
797	E1092 A	DTC 25kVA Bhoisahi Naharkanta	0	4	1	0	0	0	0	0	0	0	5

798	E1093 A	DTC Opp. Jaydeo College, Jatrpadia Naharkanta	0	3	13	0	0	0	0	0	0	0	16
799	E1094 A	DTC 250kVA Basundhara Colony Hanspal	0	16	14	0	0	0	0	0	0	0	30
800	E1095 A	LP 650, DTC 43 250kVA Pole No. 00260431003 Prasanti Vihar	0	42	1	0	0	0	0	0	0	0	43
801	E1096 A	Opp. Pl.No. 1068/46 Lane No.3, Satabdi Nagar	3	26	3	0	0	0	0	0	0	0	32
802	E1097 A	Opp. Pl.No.1058/20449 Lane No. 4 B, Satabdi Nagar	0	19	5	0	0	0	0	0	0	0	24
803	E1098 A	Opp. Pl.No. 1101/3366 Lane No.10, Satabdi Nagar	0	10	4	0	0	0	0	0	0	0	14
804	E1099 A	Nr. Kedar Gouri Apartment Gate Garage Chhak	0	10	3	0	0	0	0	0	0	0	13
805	E1100 A	Drop Nr. Kusum Bhavan Damana Village	0	46	12	0	0	0	0	0	0	0	58
806	E1101 A	DTC At 6 th Avenue Srivihar	1	4	1	0	0	0	0	0	0	0	6
807	E1102 A	DTC At Srivihar Lane No. 1	3	9	0	0	0	0	0	0	0	0	12
808	E1103 A	Nr. Security Gate Mahavinayak Puram Patiya	0	19	0	0	0	0	0	0	0	0	19
809	E1104 A	Nr. Jaydeo Shiksha Kendra Kanan Vihar Ph 2 Patiya	0	7	5	0	0	0	0	0	0	0	12
810	E1105 A	Omm Vihar Patiya Off Patiya Station Road	0	0	8	0	0	0	0	0	0	0	8
811	E1106 A	Opp. Pl.No. 17/7629 Oscar City, Laxmisagar Canal	0	18	2	0	0	0	0	0	0	0	20
812	E1107 A	Nr. Plot No. 223 Oscar City, Laxmisagar Canal	0	17	3	0	0	0	0	0	0	0	20
813	E1108 A	Nr. Pl.No. 519 Oscar City Laxmisagar Canal	0	13	1	0	0	0	0	0	0	0	14
814	E1109 A	Nr. Jagannath Temple Patrasahi Chhak	13	1	0	0	0	0	0	0	0	0	14
815	E1110 A	Nr. Mahila Durgabahini Sangha Dhirkutbasti	0	18	3	0	0	0	0	0	0	0	21
816	E1111 A	Behind Falcon House Sarala Nagar	0	7	0	0	0	0	0	0	0	0	7
817	E1112 A	Pl.No. 3739 MahaveerNagar Mahaveer Vihar Khandagiri Bari	0	15	1	0	0	0	0	0	0	0	16
TOTAL No. OF TYPEWISE LED FITTING C/F			185	9161	5524	20	58	121	113	3	30	0	15215
TOTAL No. OF TYPEWISE LED FITTING B/F			185	9161	5524	20	58	121	113	3	30	0	15215
818	E1113 A	Pl.No. 1076/1525 Khandagiri Bari	0	24	0	0	0	0	0	0	0	0	24
819	E1114 A	Nr Capital Law College, Paik Nagar, Mundasahi	0	11	44	0	0	0	0	0	0	0	55
820	E1115 A	Tati Basti, Nr. Adivasi Padia Unit-1	0	7	6	0	0	0	0	0	0	0	13
821	E1116 A	Behind Qtr No. IIR/5/1 Unit-1	0	0	18	0	0	0	0	0	0	0	18
822	E1117 A	Opp. Bungalow B-4 Air India Office Rd. Unit-1	0	0	28	0	0	0	0	0	0	0	28
823	E1118 A	Pole No. 00750182002 Opp. Pl. No. LBAL-115A Phase 5 Dumduma HB	0	7	3	0	0	0	0	0	0	0	10
824	E1119 A	Pole No. 00750171001 Plot No. A-57 Phase 5 Dumduma HB	1	13	10	0	0	0	0	0	0	0	24
825	E1120 A	Nr. Sree Jewellers & Hotel Sutrupti Unit-4 Nr. Venkateswar School	0	2	53	0	0	0	0	0	0	0	55
826	E1121 A	Opp. Swagat Hotel Unit- 4 Nr. Masjid Cesu Section Rd.	0	0	8	0	0	0	0	0	0	0	8
827	E1122 A	Opp. Megheswar Temple Tankapani Rd.	0	25	15	0	0	0	0	0	0	0	40
828	E1123 A	DTC Opp. EA 121 , EA Colony Badgad	0	8	22	0	0	0	0	0	0	0	30
829	E1124 A	DTC 25kVA Lane No. 5 Gauri Nagar	0	4	0	0	0	0	0	0	0	0	4
830	E1125 A	Opp. Bank Of India ATM Brit Colony Rd. Badgad	0	13	1	0	0	0	0	0	0	0	14
831	E1126 A	Nr. Jadupur Masjid	0	14	6	0	0	0	0	0	0	0	20
832	E1127 A	Nr. Jadupur Kabrastan	0	9	16	0	0	0	0	0	0	0	25
833	E1128 A	Nr. Pl. No. 1373 Lane No. 2, Sai Vihar GGP	0	14	15	0	0	0	0	0	0	0	29
834	E1129 A	Nr. Pl.No. 1353 Lane No. 2 , Sai Vihar GGP	0	11	10	0	0	0	0	0	0	0	21

835	E1130 A	Nr. Pl.No. 138 Lumbini Vihar	0	0	11	0	0	0	0	0	0	0	11
836	E1131 A	Nr. Pl.No. HIG 22 Lumbini Vihar	0	0	2	0	0	0	0	0	0	0	2
837	E1132 A	Nr. Pl.No. GA 56 Neeadri Vihar Behind KV 4 School	0	18	1	0	0	0	0	0	0	0	19
838	E1133 A	Nr. Pl.No. GA 223 Neeladri vihar Park View Appt.	0	2	0	0	0	0	0	0	0	0	2
839	E1134 A	Mangala Basti, Nr. Lumbini Vihar	0	5	0	0	0	0	0	0	0	0	5
840	E1135 A	Beside Pl.No. 83 Lumbini Vihar	0	0	9	0	0	0	0	0	0	0	9
841	E1136 A	Nr. Pl.No. 48 Lumbini Vihar	0	0	16	0	0	0	0	0	0	0	16
TOTAL No. OF TYPEWISE LED FITTING C/F			186	9348	5818	20	58	121	113	3	30	0	15697
TOTAL No. OF TYPEWISE LED FITTING B/F			186	9348	5818	20	58	121	113	3	30	0	15697
842	E1137 A	Opp. Pl.No. 113 Lumbini Vihar	0	0	2	0	0	0	0	0	0	0	2
843	E1138 A	Nr. Pl.No. 8 Lumbini Vihar	0	0	6	0	0	0	0	0	0	0	6
844	E1139 A	Nr. Laxmi Mandap Bhotpada	0	23	6	0	0	0	0	0	0	0	29
845	E1140 A	Nr. Mancheswar Railway Station Bhotpada Side	0	7	0	0	0	0	0	0	0	0	7
846	E1141 A	DTC At Rajdhani Engg College Road Bhotpada	0	3	1	0	0	0	0	0	0	0	4
847	E1142 A	Nr. Pandeswar Temple Purushottam Basti Mancheswar	0	18	1	0	0	0	0	0	0	0	19
848	E1143 A	Nr. Community Centre Brahmeswar Bag Tankapani Rd.	0	1	3	0	0	0	0	0	0	0	4
849	E1144 A	Nr. Pl.No. A/3 IRC N-4	0	24	13	0	0	0	0	0	0	0	37
850	E1145 A	Nr. SBI Travancore IRC N-1	0	0	5	0	0	0	0	0	0	0	5
851	E1146 A	High Mast At Keutsahi Chhak	0	0	0	0	2	0	4	0	0	0	6
852	E1147 A	High Mast Teenmundia Chhak	0	0	0	0	3	0	3	0	0	0	6
853	E1148 A	High Mast Badhaibanga Chhak	0	0	0	0	3	0	3	0	0	0	6
854	E1149 A	High Mast At Dakbangala Chhak	0	0	0	0	3	0	3	0	0	0	6
855	E1150 A	High Mast At Bhimkunda Bhimeswar Temple Bhimtangi	0	0	0	0	6	0	0	0	0	0	6
856	E1151 A	Opp. Pl.No. 1250 Raghunath Nagar	0	18	4	0	0	0	0	0	0	0	22
857	E1152 A	Nr. Raghunath Nagar UP School	0	17	5	0	0	0	0	0	0	0	22
858	E1153 A	Nr. Satsanga Community Hall Dumduma Phase 2	0	41	24	0	0	0	0	0	0	0	65
859	E1154 A	Pole No. 00610311002 Opp. Prakruti Enclave Appt. Kolathia	0	7	0	0	0	0	0	0	0	0	7
860	E1155 A	Opp. Pl.No. 1214/1400 Khandagiri Bari	0	7	0	0	0	0	0	0	0	0	7
861	E1156 A	Opp. Bungalow B2 Unit-1 Qtrs. Air India Lane	0	0	24	0	0	0	0	0	0	0	24
862	E1157 A	Opp. Qtr. No. IV10/5 Kamala Nehru College Rd. Unit-1	0	0	11	0	0	0	0	0	0	0	11
863	E1158 A	CRP Market Complex Unit-8	0	0	20	0	0	0	0	0	0	0	20
864	E1159 A	Opp. Pl.No. 482 N-6 IRC Village	0	14	0	0	0	0	0	0	0	0	14
865	E1160 A	Opp. Pl.No. 437 IRC N-6	0	8	4	0	0	0	0	0	0	0	12
TOTAL No. OF TYPEWISE LED FITTING C/F			186	9536	5947	20	75	121	126	3	30	0	16044
TOTAL No. OF TYPEWISE LED FITTING B/F			186	9536	5947	20	75	121	126	3	30	0	16044
866	E1161 A	Opp. FAME Plus 2 Science College, Saptasati Vihar	0	17	10	0	0	0	0	0	0	0	27
867	E1162 A	Sri Sai Academy Of Computer Education, Jagamra Village	0	10	33	0	8	3	0	0	0	0	54
868	E1163 A	Nr. Jagamra Durga Yuva Shakti Sansad, Jagamra Village	0	14	51	0	0	0	0	0	0	0	65
869	E1164 A	Opp. Mahima Ashram Khandagiri Square	3	7	3	0	0	0	0	0	0	0	13
870	E1165 A	Opp. Corporator House Nr. IDC Colony Unit-9	0	17	6	0	0	0	0	0	0	0	23
871	E1166 A	Opp. Srushti Tower Suka Vihar Nr Maharaja Cinema Unit-9	0	2	18	0	0	0	0	0	0	0	20
872	E1167 A	Gridco Colony Post Office Lane Unit-9	0	8	6	0	0	0	0	0	0	0	14
873	E1168 A	Opp. Qtr. No. 2RA 49 Unit-9 Flat	0	6	9	0	0	0	0	0	0	0	15

874	E1169 A	Opp. Qtr. No. 2RA 17 F Unit-9, Nr. Giridurga Temple	0	3	8	0	0	0	0	0	0	0	11
875	E1170 A	Nr. OPTCL Office Gridco Colony Unit-9	0	0	6	0	0	0	0	0	0	0	6
876	E1171 A	Nr. Chicken Centre CESU Section Office Unit-9	0	0	7	0	0	0	0	0	0	0	7
877	E1172 A	Opp. Srimanz Apartment Mayfare Colony	0	35	12	0	0	0	0	0	0	0	47
878	E1173 A	Nr. Guru Kelucharan Odissi Nr. Atya Kendra Saliasahi	0	14	4	0	0	0	0	0	0	0	18
879	E1174 A	Opp. Neelchakra Nagar, UP School Saliasahi	0	11	0	0	0	0	0	0	0	0	11
880	E1175 A	Kalinga Hospital To Nalco Nagar	0	0	22	0	0	0	0	0	0	0	22
881	E1176 A	Opp. Urban Dispensary Health Centre Sunderpada	0	10	10	0	0	0	0	0	0	0	20
882	E1177 A	Nr. Taj Complex, Azad Nagar, Sunderpada	0	15	6	0	0	0	0	0	0	0	21
883	E1178 A	Nr. Indian Oil Petrol Pump Sunderpada Jatni Rd.	0	0	12	0	0	0	0	0	0	0	12
884	E1179 A	Behind Tarini Temple, Tarini Basti, Sunderpada	0	14	19	0	0	0	0	0	0	0	33
885	E1180 A	Opp. Azad Nagar Masjid Sunderpada	0	17	1	0	0	0	0	0	0	0	18
886	E1181 A	Nr. Sukuteswar Temple Kotiteertha Rd.	0	6	2	0	0	0	0	0	0	0	8
887	E1182 A	Nr. Apollo Pharmacy Indradhanu Mkt. IRC N-6	0	3	15	0	0	0	0	0	0	0	18
888	E1183 A	Opp. The Regent Restaurant Nr. The World Mall	0	13	0	0	0	0	0	0	0	0	13
889	E1184 A	Opp. Sai Apartment Navapalli	0	3	5	0	0	0	0	0	0	0	8
TOTAL No. OF			189	9761	6212	20	83	124	126	3	30	0	16548
TOTAL No. OF			189	9761	6212	20	83	124	126	3	30	0	16548
890	E1185 A	Opp. Amrita Shopping Complex CRP Mkt., Navapalli	0	7	16	0	0	0	0	0	0	0	23
891	E1186 A	DTC 100kVA Nr. Indrapuri Amrapali Sailshree Vihar	0	4	0	0	0	0	0	0	0	0	4
892	E1187 A	Pl.No. 13/23 Saswat Vihar, Sailshree Vihar	0	7	1	0	0	0	0	0	0	0	8
893	E1188 A	Nr. F35 D.S. Infotech Chandaka Indl Estate C.S. Pur	0	7	0	0	0	0	0	0	0	0	7
894	E1189 A	Nr. Sadhana Clinic & Laboratory BDA Colony C.S. Pur	0	21	10	0	0	0	0	0	0	0	31
895	E1190 A	Nr. Gopubandhu Nagar UP School, Unit-9 Road No. 4	0	3	9	0	0	0	0	0	0	0	12
896	E1191 A	Opp. Netaji English Medium School Fishery Lane	0	12	0	0	0	0	0	0	0	0	12
897	E1192 A	Opp. Police Staff Quarters Laxmisagar High School	0	14	2	0	0	0	0	0	0	0	16
898	E1193 A	Opp. Bachpan Play School, Road No. 5, Jaganath Nagar	0	2	3	0	0	0	0	0	0	0	5
899	E1194 A	Nr. Sridhar Apartment Mahadeo Nagar Main Rd. Jharpada	0	3	1	0	0	0	0	0	0	0	4
900	E1195 A	Pole No. 02111011002 Opp. Pl.No. L235 GGP HB Colony	0	18	21	0	0	0	0	0	0	0	39
901	E1196 A	Behind Tarini Temple Baliapeta Basti Rasulgarh	1	36	2	0	0	0	0	0	0	0	39
902	E1197 A	Opp. MA 14 Nr. IDBI Staff Quarters GGP Colony	0	15	3	0	0	0	0	0	0	0	18
903	E1198 A	Opp. Pl.No. 286 GGP Canal Road For Netaji Nagar	0	14	5	0	0	0	0	0	0	0	19
904	E1199 A	DTC Nr. Saraswati Sishu Mandir Barabari Tapovan, Jagamra	0	4	44	0	0	1	0	0	0	0	49
905	E1200 A	DTC 250kVA Nr. Football Padia Adibasi Gaon	0	35	1	0	0	0	0	0	0	0	36
906	E1201 A	Laxmi Nagar Salia Sahii	0	16	6	0	0	0	0	0	0	0	22
907	E1202 A	Nr. SBM School Hatiasuni Road Saliasahi	0	16	3	0	0	0	0	0	0	0	19
908	E1203 A	Nr. Ekamra Vihar Anganbadi Saliasahi	0	24	14	0	0	0	0	0	0	0	38
909	E1204 A	Nr. Pl.No. 23 Ekamra Vihar Handia Hat Saliasahi	0	28	0	0	0	0	0	0	0	0	28
910	E1205 A	Nr. Alian Royal Plaza GIET College Rd. Saliasahi	0	27	2	0	0	0	0	0	0	0	29

911	E1206 A	Opp. Traders Association, Siripur	0	7	5	0	0	0	0	0	0	12
912	E1207 A	Opp. Pl.No. 1380 Siripur	0	16	7	0	0	0	0	0	0	23
913	E1208 A	Nr. Pl.No. 253/583 Bank Colony Paik Nagar	0	9	2	0	0	0	0	0	0	11
		TOTAL No. OF	190	10106	6369	20	83	125	126	3	30	17052
		TOTAL No. OF	190	10106	6369	20	83	125	126	3	30	17052
914	E1209 A	Opp. Jupiter Plus Two Science Womens College, N5 IRC	0	18	3	0	0	0	0	0	0	21
915	E1210 A	Inside Jala Bhavan Unit-5	0	2	6	0	0	0	0	0	0	8
916	E1211 A	Opp. Civil Defence Orgn. Unit-5	0	3	7	0	0	0	0	0	0	10
917	E1212 A	Opp. Khalasahi Unit-5	0	0	0	0	0	0	0	0	0	0
918	E1213 A	Opp. Qtr. No. F8/2 MLA Colony	0	0	14	0	0	0	0	0	0	14
919	E1214 A	Behind Eureka Club Nayapalli	0	0	13	0	0	0	0	0	0	13
920	E1215 A	Opp. Pl.No. 398P Haldiapadia Laxmisagar	0	9	0	0	0	0	0	0	0	9
921	E1216 A	Nr. Ganesh Mandap Chhak, Jail Road, Jharpada	0	8	2	0	0	0	0	0	0	10
922	E1217 A	Inside BED Rasulgarh	0	4	0	0	0	0	0	0	0	4
923	E1218 A	Pl. No. 704/1 Pole No. 01830231005 Bariksahi Rameswar Patna	0	15	7	0	0	0	0	0	0	22
924	E1219 A	Opp. Sanjeevani Hospital Samantrapur	0	4	0	0	0	0	0	0	0	4
925	E1220 A	Opp. Plot No. AM 25 Near BOI VSS Nagar	0	6	6	0	0	0	0	0	0	12
926	E1221 A	Inside Ayakar Bhavan Beside NH	0	3	0	0	0	0	0	0	0	3
927	E1222 A	Nr. Gadakana Tala Sabersahi	0	5	0	0	0	0	0	0	0	5
928	E1223 A	Nr. Gadakana Upersahi Opp Subhash Enclave	0	12	0	0	0	0	0	0	0	12
929	E1224 A	Nr. Somnathi Basti Railway Stadium	0	4	0	0	0	0	0	0	0	4
930	E1225 A	DTC 100kVA Opp. Meera Beauty Parlor, Nr. Siva Temple Kanan Vihar Ph-2	0	7	7	0	0	0	0	0	0	14
931	E1226 A	Opp. Pl.No. 14/4911 Old Station Bazar	0	16	3	0	0	0	0	0	0	19
932	E1227 A	Pole No. 01830241006 Opp. Pl.No. 20 Kokila Garden Ph-1, Pokhariput	0	0	7	0	0	0	0	0	0	7
933	E1228 A	Pole No. 01810141001 Opp. Trinath Temple, Pokhariput Village	0	9	9	0	0	0	0	0	0	18
934	E1229 A	Opp. State Museum Puri Rd.	0	0	2	0	0	0	0	0	0	2
935	E1230 A	Opp. Pl. No. LC132 DTC 06 Sailshree Vihar	0	3	9	0	0	0	0	0	0	12
936	E1231 A	Nr. Pl.No. L317 Baramunda HB Colony	0	10	1	0	0	0	0	0	0	11
937	E1232 A	Opp. Pl.No. E 41 Baramunda, HB Colony	0	16	6	0	0	0	0	0	0	22
		TOTAL No. OF TYPEWISE LED FITTING C/F	190	10260	6471	20	83	125	126	3	30	17308
		TOTAL No. OF TYPEWISE LED FITTING B/F	190	10260	6471	20	83	125	126	3	30	17308
938	E1233 A	Beside Pl.No. L355 Baramunda HB Colony	0	2	4	0	0	0	0	0	0	6
939	E1234 A	Lane No. 2 Jaganath Vihar Baramunda HB Colony	0	4	0	0	0	0	0	0	0	4
940	E1235 A	Nr. Power Hospital Unit-09 Flat	0	4	4	0	0	0	0	0	0	8
941	E1236 A	Opp. Qtr. No. 4R/4 Nr. OPTCL GM Office, Unit-09	0	9	9	0	0	0	0	0	0	18
942	E1237 A	Nr. Qtr. No. 2RB 89 Unit-09 Flat	0	0	6	0	0	0	0	0	0	6
943	E1238 A	Nr. Banadurga Engg. Works Nr. Pragati Vihar, Damana Chhak	0	4	0	0	0	0	0	0	0	4
944	E1239 A	Nr. Pl.No. 265 Shastri Nagar	0	14	0	0	0	0	0	0	0	14
945	E1240 A	Opp. Badhai Thakurani Temple Prachi Vihar Palasuni	0	9	26	0	0	0	0	0	0	35
946	E1241 A	Opp. Pl.No. 14 GGP Enclave	0	16	3	0	0	0	0	0	0	19
947	E1242 A	Opp. Sriabhiram Santi Anandasram Tapovan Road	2	30	4	0	0	0	0	0	0	36
948	E1243 A	Nr. Tapovan Highschool Tapovan Road	0	4	0	0	0	0	0	0	0	4

949	E1244 A	Opp. Pl.No. 1081 Khandagiribari	0	15	0	0	0	0	0	0	0	0	15
950	E1245 A	Nr. Pl.No. 380 Maruti Village, Nakagate	0	8	5	0	0	0	0	0	0	0	13
951	E1246 A	Opp. Pl.No. 628 Saheed Nagar	3	10	2	0	0	0	0	0	0	0	15
952	E1247 A	Nr. Acharyavihar Sub Post office Police Colony	0	7	7	0	0	0	0	0	0	0	14
953	E1248 A	Beside Tanishq Jewellers C.S.Pur	0	5	0	0	0	0	0	0	0	0	5
954	E1249 A	Nr. Statutory Community Hall C.S. Pur	0	4	3	0	0	0	0	0	0	0	7
955	E1250 A	Opp. Bank of India ATM The World Mall	3	10	9	0	0	0	0	0	0	0	22
956	E1251 A	Nr. Govt Ashram School For SC&ST Nayapalli	0	6	23	0	0	0	0	22	0	0	51
957	E1252 A	I/F Duryalok Public School	2	13	0	0	0	0	0	0	0	0	15
958	E1253 A	Nr. Royal Garden Patiya Village	2	0	2	0	0	0	0	0	0	0	4
959	E1254 A	Near OUAT International Hostel Ganga Nagar to Siripur Main Rd.	0	2	3	0	0	0	0	0	0	0	5
960	E1255 A	Nr. Plot No. K7 Ocean World Aquarium Shop Ruchika Mkt	0	5	0	0	0	0	0	0	0	0	5
961	E1256 A	Cosmopolis Opp. Om Auto Electricals	0	54	1	0	0	0	0	0	0	0	55
TOTAL No. OF TYPEWISE LED FITTING C/F			202	10495	6582	20	83	125	126	25	30	0	17688
TOTAL No. OF TYPEWISE LED FITTING B/F			202	10495	6582	20	83	125	126	25	30	0	17688
962	E1257 A	Plot No. 11031/2983 Neelkanteswar Colony Siripur	0	5	0	0	0	0	0	0	0	0	5
963	E1258 A	Nr. Pl.No. 955/4033 Prakurti Vihar	0	6	0	0	0	0	0	0	0	0	6
964	E1259 A	Opp. Utkal Dental Care Ganga Nagar Unit-6 For Bhimpur	0	8	11	0	0	0	0	0	0	0	19
965	E1260 A	Opp. Directorate of Extension Education OUAT Colony	0	4	0	0	0	0	0	0	0	0	4
966	E1261 A	Nr. Palaspalli Flyover Kelabasti	0	26	16	0	0	0	0	0	0	0	42
967	E1262 A	Nr. Reliance Fresh Master Canteen	0	0	10	0	0	0	0	0	0	0	10
968	E1263 A	Opp. Crematorium Satya Nagar	0	0	3	0	0	0	0	0	0	0	3
969	E1264 A	Opp. Pl.No. 817/1687 Malay Vihar	0	16	1	0	0	0	0	0	0	0	17
970	E1265 A	Pole No. 01810181008 Opp. Plot No. 2 Indraprastha Phase 2 Pokhariput	12	23	0	0	0	0	0	0	0	0	35
971	E1266 A	Pole No. 01810191006 Opp. Pl.No. 82 Indraprastha Ph-2 Pokhariput	21	11	0	0	0	0	0	0	0	0	32
972	E1267 A	Pole No. 01810191006 Opp. Pl.No. 82 Indraprastha Ph-2 Pokhariput	0	6	0	0	0	0	0	0	0	0	6
973	E1268 A	Behind Jaganath Temple Adimata Colony	0	7	0	0	0	0	0	0	0	0	7
974	E1269 A	Vipul Gaarden K-7 Ghatikia	0	3	1	0	0	0	0	0	0	0	4
975	E1270 A	Rajmahal Flyover	0	90	20	0	0	0	0	0	0	0	110
976	E1271 A	K-5 Kalinga Nagar	0	0	0	0	0	0	0	0	0	0	0
977	E1272 A	Inside 7 th Battalion Colony Prasar Bharati Staff Qtrs	0	10	8	0	0	0	0	0	0	0	18
978	E1273 A	Gagan Awas Apartment Gajapati Nagar	0	3	0	0	0	0	0	0	0	0	3
TOTAL No. OF TYPEWISE LED FITTING C/F			235	10713	6652	20	83	125	126	25	30	0	18009
TOTAL No. OF TYPEWISE LED FITTING B/F			235	10713	6652	20	83	125	126	25	30	0	18009
979	E1274 B	Opp. Plot No. 44 /752 Vijay vihar Lane 2 WARD- 59 Vijay vihar	0	5	4	0	0	0	0	0	0	0	9
980	E1275 B	Nr. Plot No. 61 Vijay vihar Lane 2 WARD-59 Vijay vihar	1	9	5	0	0	0	0	0	0	0	15
981	E1276 B	Behinde Yong Phonix School Rudra Vihar WARD- 59 RUDRA vihar	0	9	0	0	0	0	0	0	0	0	9
982	E1277 B	Maruti Nagar Nr. Gangua Canel WARD-59 MARUTI NAGAR	0	6	27	0	0	0	0	0	0	0	33
983	E1278 B	Apsana Garden Nr. Gangua Canel WARD-59 Apsana Garden	0	4	4	0	0	0	0	0	0	0	8
984	E1279 B	Vishal City Nr. Gangua Canel WARD-59 Vishal City	0	10	15	0	0	0	0	0	0	0	25

985	E1280 B	Mahadev Nagar Nr. Jharpada WARD-32 MAHADEV NAGAR, JHARPADA	0	9	13	0	0	0	0	0	0	0	22
986	E1281 B	Nr. Vivekanand School Jaghanath Nagar Road 1 WARD-32 JAGANATH NAGAR ROAD-1	0	13	2	0	0	0	0	0	0	0	15
987	E1282 B	Telgu Vasti Saheed Nagar WARD-30 SAHEED NAGAR	0	5	0	0	0	0	0	0	0	0	5
988	E1283 B	Nr. Xavier Int. School, LAXMISAGAR WARD-43 LAXMISAGAR	0	7	7	0	0	0	0	0	0	0	14
989	E1284 B	Plot No. 1529 Laxmi Sagar Canal Road WARD-43 LAXMISAGAR	0	0	9	0	0	0	0	0	0	0	9
990	E1285 B	Nr. Sneha Complex Jaghanath Nagar Rd. 8 WARD- 32 JAGANATH NAGAR ROAD-8	0	4	2	0	0	0	0	0	0	0	6
991	E1286 B	Nr. Plot No. 60/1446 Jaghnath Nagar Road 8 WARD-32 JAGANATH NAGAR ROAD-8	1	9	14	0	0	0	0	0	0	0	24
992	E1287 B	Ashirwad Vihar Nr Jharpada Mahadev Nagar WARD-32 MAHADEV NAGAR, JHARPADA	0	14	8	0	0	0	0	0	0	0	22
993	E1288 B	Plot No. 222/1298 Jagannath Nagar Rd 4 Jharpada WARD- 32 JAGANATH NAGAR ROAD-4	0	30	2	0	0	0	0	0	0	0	32
994	E1289 B	Inside Jail Colony Laxmi Sagar WARD-33 LAXMISAGAR	0	13	4	0	0	0	0	0	0	0	17
995	E1290 B	Inside Laxmi Sagar Police Station WARD-33 LAXMISAGAR	0	4	5	0	0	0	0	0	0	0	9
996	E1291 B	BHOTAPADA NEW COLONY WARD-10 BHOTAPADA	0	10	10	0	0	0	0	0	0	0	20
997	E1292 B	MANCHESWAR TRUCK ASSOCIATION WARD-10 MANCHESWAR	0	4	3	0	0	0	0	0	0	0	7
998	E1293 B	OCC COLONY WARD-10 BHOTAPADA	0	1	3	0	0	0	0	0	0	0	4
999	E1294 B	BHOTAPADA POKHARI WARD- 10 BHOTAPADA	0	11	0	0	0	0	0	0	0	0	11
1000	E1295 B	BHOTAPADA CRICKET FIELD WARD-10 BHOTAPADA	0	10	2	0	0	0	0	0	0	0	12
		TOTAL No. OF	237	10900	6791	20	83	125	126	25	30	0	18337
		TOTAL No. OF	237	10900	6791	20	83	125	126	25	30	0	18337
1001	E1296 B	PALASUNI NEW COLONY WARD-05 PALASUNI	0	6	0	0	0	0	0	0	0	0	6
1002	E1297 B	NR GYANA BHARATI COLONY WARD-05 MANCHESWA VILLAGE	0	5	1	0	0	0	0	0	0	0	6
1003	E1298 B	SAPTASATI NAGAR WARD-05 PALASUNI	0	30	8	0	0	0	0	0	0	0	38
1004	E1299 B	KISSAN NAGAR WARD-05 KISAN NAGAR	0	10	2	0	0	0	0	0	0	0	12
1005	E1300 B	BOMIKHAL SWOSTI DHAM COLONY,NR CANAL RD WARD- 31 BOMIKHAL	0	4	9	0	0	0	0	0	0	0	13
1006	E1301 B	VALSHNO MONARCH CONY, NR ESPLANDE MALL WARD-31 BOMIKHAL	0	5	3	0	0	0	0	0	0	0	8
1007	E1302 B	RASULGAD KOCHILAI HATT BACK SIDE WARD-31 BOMIKHAL	0	8	4	0	0	0	0	0	0	0	12
1008	E1303 B	NIGAMANANDA NAGAR LANE - 1, BOMIKHAL WARD-31 NIGAMANANDA NAGAR	0	19	0	0	0	0	0	0	0	0	19
1009	E1304 B	ARADHANA NAGAR WARD-67 ARADHANA NAGAR	0	0	19	0	0	0	0	0	0	0	19
1010	E1305 B	ROYAL VILLAGE WARD-67 ROYAL VILLAGE	0	4	2	0	0	0	0	0	0	0	6
1011	E1306 B	GANGA NAGAR YUBA PARISAD WARD-46 GANGA NAGAR	0	3	10	0	0	0	0	0	0	0	13
1012	E1307 B	BHIMPUR I/F VIBEKANANDA SCHOOL WARD-52 BHIMPUR	0	5	7	0	0	0	0	0	0	0	12
1013	E1308 B	I/F MODERN HEALTH CARE WARD-52 BHIMPUR	0	20	24	0	0	0	0	0	0	0	44

1014	E1309 B	KAIBALYA VIHAR,PHASE- 4,DUMDUMA,NR GANDHI SEVA NIKETAN WARD-64 DUMDUMA	0	8	2	0	0	0	0	0	0	0	10
1015	E1310 B	I/F GANDHISEVA NIKETAN,PH- 4,DUMDUMA WARD-64 DUMDUMA	0	24	2	0	0	0	0	0	0	0	26
1016	E1311 B	PANCHASAKHA NAGAR NEAR PH.ED PUMP HOUSE WARD-64 DUMDUMA	0	50	11	0	0	0	0	0	0	0	61
1017	E1312 B	PLOT-L1/22,PACHASAKHA NAGAR WARD-64 PANCHASAKHA NAGAR	1	29	12	0	0	0	0	0	0	0	42
1018	E1313 B	PLOT-M3/9, PANCHASAKHA NAGAR WARD-64 PANCHASAKHA NAGAR	0	13	1	0	0	0	0	0	0	0	14
1019	E1314 B	PLOT-AE/15,ARADHANA NAGAR PANCHASAKHA NAGAR WARD-64 PANCHASAKHA pN ₁ A ₀ G _T AR	0	3	2	0	0	0	0	0	0	0	5
1020	E1315 B	351/5678,PANCJHASAKHA NAGAR WARD-64 PANCHASAKHA NAGAR	0	11	7	0	0	0	0	0	0	0	18
1021	E1316 B	PLOT-1023/3395, GREEN PARK,JAGMOHAN NAGAR WARD-64 JAGMOHAN NAGAR	0	13	7	0	0	0	0	0	0	0	20
1022	E1317 B	PLOT-D/2,D/3, GREEN PARK JAGMOHAN NGAR WARD-64 JAGMOHAN NAGAR	0	7	29	0	0	0	0	0	0	0	36
1023	E1318 B	PLOT-43, JAGMOHAN NAGAR WARD-64 JAGMOHAN NAGAR	0	20	1	0	0	0	0	0	0	0	21
1024	E1319 B	PLOT-1138/2294, JAGMOHAN NAGRA WARD-64 JAGMOHAN NAGAR	0	8	0	0	0	0	0	0	0	0	8
TOTAL No. OF			238	11205	6954	20	83	125	126	25	30	0	18806
TOTAL No. OF			238	11205	6954	20	83	125	126	25	30	0	18806
1025	E1320 B	PLOT-43, JAGMOHAN NAGAR WARD-64 JAGMOHAN NAGAR	0	20	1	0	0	0	0	0	0	0	21
1026	E1321 B	NR DUMDUMA VILLAGE PALAMANDAP WARD-64 DUMDUMA VILLAGE	0	27	23	0	0	0	0	0	0	0	50
1027	E1322 B	PLOT-855/4273,DUMDUMA VILLAGE BACK SIDE WARD-64 DUMDUMA VILLAGE	0	9	0	0	0	0	0	0	0	0	9
1028	E1323 B	PLOT-2 BASERA COMPLEX DUMDUMA WARD-64 DUMDUMA	0	6	1	0	0	0	0	0	0	0	7
1029	E1324 B	BHAGBAT GHAR BACK SIDE DUMDUMA BHOI SAHI WARD- 64 DUMDUMA	0	6	2	0	0	0	0	0	0	0	8
1030	E1325 B	DUMDUMA, PHASE-3 NEAR WATER TANK WARD-66 DUMDUMA	0	35	14	0	0	0	0	0	0	0	49
1031	E1326 B	DUMDUMA ,SATYA NAGAR WARD-66 DUMDUMA	0	1	15	0	0	0	0	0	0	0	16
1032	E1327 B	DUMDUMA NEAR SANI TEMPLE WARD-66 DUMDUMA	0	40	9	0	0	0	0	0	0	0	49
1033	E1328 B	DUMDUMA NEAR HANUMAN TEMPLE, HI-MAST WARD-66 DUMDUMA	0	0	0	0	0	6	0	0	0	0	6
1034	E1329 B	DUMDUMA,PHASE-1,PLOT- L/289 WARD-65 DUMDUMA	0	8	4	0	0	0	0	0	0	0	12
1035	E1330 B	DUMDUMA SUBASH NAGAR BASTHI,PHASE-1 WARD-65 DUMDUMA	0	39	4	0	0	0	0	0	0	0	43
1036	E1331 B	MILLENIUM CITY WARD-4 PAHAL	0	15	6	0	0	0	0	0	0	0	21
1037	E1332 B	RUDRA VIHAR WARD-4 HANSPAL	4	16	0	0	0	0	0	0	0	0	20
1038	E1333 B	SWAGAT VIHAR WARD-4 SAWGAT VIHAR	2	13	4	0	0	0	0	0	0	0	19
1039	E1334 B	BHARAT VILLA WARD-4 HANSPAL	0	25	4	0	0	0	0	0	0	0	29
1040	E1335 B	BACK SIDE OF PAHAL JAGANNATH TEMPLE WARD-4 PAHAL	0	3	7	0	0	0	0	0	0	0	10
1041	E1336 B	KUNDITARAPATANA SAHI WARD-4 PAHAL	0	6	4	0	0	0	0	0	0	0	10
1042	E1337 B	KHARVEL COLONY, NR NAKHARA PANEL WARD-4 NAKHARA	0	9	5	0	0	0	0	0	0	0	14
1043	E1338 B	NAKHARA VILLAGE WARD-4 NAKHARA	1	25	23	0	0	0	0	0	0	0	49

1044	E1339 B	NUAPATANA VILLAGE WARD-4 NUAPATNA	2	22	21	0	0	0	0	0	0	0	45
1045	E1340 B	SAHABAZ VILLAGE WARD-4 BANGUARI	3	8	10	0	0	0	0	0	0	0	21
1046	E1341 B	BANGUARI VILLAGE WARD-4 BANGUARI	5	9	13	0	0	0	0	0	0	0	27
1047	E1342 B	AKABIRAM SAHI & MUSLIM SAHI WARD-4 NAKHARA	5	17	9	0	0	0	0	0	0	0	31
1048	E1343 B	NAHARKANTA HARIJAN SAHI WARD-4 NAHARKANTA	3	8	7	0	0	0	0	0	0	0	18
TOTAL No. OF			263	11572	7140	20	83	131	126	25	30	0	19390
TOTAL No. OF			263	11572	7140	20	83	131	126	25	30	0	19390
1049	E1344 B	HARIDASWPUR VILLAGE WARD-4 NAHARKANTA	5	23	12	0	0	0	0	0	0	0	40
1050	E1345 B	NAHARKANTA DHALIA GADA & BEHERA SAHI WARD-4 NAHARKANTA	6	18	22	0	0	0	0	0	0	0	46
1051	E1346 B	HARIDASPUR NEAR MASANI ROAD WARD-4 NAHARKANTA	2	8	6	0	0	0	0	0	0	0	16
1052	E1347 B	RUDRAPUR & BANIA SAHI WARD-4 NAHARKANTA	1	14	6	0	0	0	0	0	0	0	21
1053	E1348 B	INSIDE LAKESWAR TEMPLE WARD-4 NAKHARA	0	6	6	0	0	0	0	0	0	0	12
1054	E1349 B	SIBA SHAKTI NAGAR WARD-4 HANSPAL	0	15	4	0	0	0	0	0	0	0	19
1055	E1350 B	JAYPURE MOHANTY SAHI & BRAHMIN SAHI WARD-4 PAHAL	2	15	6	0	0	0	0	0	0	0	23
1056	E1351 B	JOHAL BHOI SAHI,SADANGI SAHI WARD-4 PAHAL	9	21	12	0	0	0	0	0	0	0	42
1057	E1352 B	JOHAL PARAGAON CITY WARD- 4 PAHAL	2	6	4	0	0	0	0	0	0	0	12
1058	E1353 B	PLOT NO- 1236, BHIMPUR WARD- BHIMPUR	0	11	18	0	0	0	0	0	0	0	29
1059	E1354 B	SIRIPUR ,RANGANI SAHI WARD-51 SIRIPUR	0	7	1	0	0	0	0	0	0	0	8
1060	E1355 B	SIRIPUR,FARM GATE BASTHI WARD-51 SIRIPUR	0	5	9	0	0	0	0	0	0	0	14
1061	E1356 B	PAIKA NAGAR NEAR WEL FARE ASSOCIATION WARD-51 SIRIPUR	0	5	5	0	0	0	0	0	0	0	10
1062	E1357 B	PAIKA NAGAR WEST SIDE WARD-51 SIRIPUR	0	10	11	0	0	0	0	0	0	0	21
1063	E1358 B	BARMUNDA VILLAGE NR HANUMAN TEMPLE WARD-50 BARAMUNDA VILLAGE	0	13	12	0	0	0	0	0	0	0	25
1064	E1359 B	AERODROME AREA NR KUKUTESWAR TEMPLE WARD- 53 AERODROME	0	3	3	0	0	0	0	0	0	0	6
1065	E1360 B	OMKAR VILLA WARD-62 POKHARIPUT	0	8	4	0	0	0	0	0	0	0	12
1066	E1361 B	POKHARIPUT KARGIL BASTHI WARD-62 POKHARIPUT	0	9	3	0	0	0	0	0	0	0	12
1067	E1362 B	POKHARIPUT KARGIL BASTHI	0	0	11	0	0	0	0	0	0	0	11
1068	E1363 B	IDCO PADIA TO PRADHAN SAHI,SALIA SAHI WARD-20 SALIASAHI	0	0	6	0	0	0	0	0	0	0	6
1069	E1364 B	HIMAST AT LINGARAJ HAT WARD-60 LINGARAJ TEMPLE AREA	0	0	0	0	0	0	10	0	0	0	10
1070	E1365 B	Nr.Durga Puja Field Unit 4 Old AG Colony WARD-36 AG COLONY AREA	0	12	12	0	0	0	0	0	0	0	24
1071	E1366 B	Nr.Durga Puja Field Unit 4 Old AG Colony WARD-36 AG COLONY AREA	0	0	9	0	0	0	0	0	0	0	9
1072	E1367 B	Nr Qtr No. H/213, Unit 4, Old AG Colony WARD-36 AG COLONY AREA	0	4	14	0	0	0	0	0	0	0	18
TOTAL No. OF			290	11785	7336	20	83	131	136	25	30	0	19836
TOTAL No. OF			290	11785	7336	20	83	131	136	25	30	0	19836
1073	E1368 B	Nr. Muton Market Unit 4 WARD- 36 UNIT-4	0	8	13	0	0	0	0	0	0	0	21
1074	E1369 B	Nr. Tarini Jewellery Workshop Unit 4 hat WARD-36 UNIT-4	0	6	14	0	0	0	0	0	0	0	20
1075	E1370 B	Type 3 QTR.NO-103 WARD-36 AG COLONY AREA	0	7	21	0	0	0	0	0	0	0	28
1076	E1371 B	Type 3 25 to 32 Nr. Water Tank to AG Colony WARD-36 AG COLONY AREA	0	5	5	0	0	0	0	0	0	0	10

1077	E1372 B	Qtr No. Type 2 /18 AG Colony Meter No. 267070 WARD-36 AG COLONY AREA	0	6	11	0	0	0	0	0	0	0	17
1078	E1373 B	UNIT-4 HAT INSIDE WARD-36 UNIT-4	0	0	32	0	0	0	0	0	0	0	32
1079	E1374 B	BHOI NAGAR BEHERA BASTI, UNIT-9 WARD-29 BHOINAGAR	0	10	9	0	0	0	0	0	0	0	19
1080	E1375 B	Nr. Hillside Nursing Home Gate Khandigiri NH WARD-63 JAGAMARA	0	3	1	0	0	0	0	0	0	0	4
1081	E1376 B	Backside of LS Kalyan Mandap Jagamara Chhak WARD-63 JAGAMARA	0	10	14	0	0	0	0	0	0	0	24
1082	E1377 B	Nr. Ghandhi Public School Jagmara Village WARD-63 JAGAMARA	0	10	2	0	0	0	0	0	0	0	12
1083	E1378 B	Nr. Subhadra Villa Jagmara Village WARD-63 JAGAMARA	1	17	5	0	0	0	0	0	0	0	23
1084	E1379 B	Govt. Highschool Dharmavihar Barabari Main Rd. WARD-63 JAGAMARA	0	11	33	0	0	0	0	0	0	0	44
1085	E1380 B	Sidhi vihar main road,plot-A/1 WARD-63 JAGAMARA	0	19	22	0	0	0	0	0	0	0	41
1086	E1381 B	Plot No. B/39 Sidhi Vihar WARD-63 JAGAMARA	0	10	20	0	0	0	0	0	0	0	30
1087	E1382 B	Nr. Main Gate of Krishna Garden Phase I,plot-A/14 WARD-63 JAGAMARA	0	13	14	0	0	0	0	0	0	0	27
1088	E1383 B	PLOT-103/2590,TULASI VIHAR, JAGMOHAN NAGAR WARD-63 JAGMOHAN NAGAR	0	3	3	0	0	0	0	0	0	0	6
1089	E1384 B	PLOT-15,NARENDRA GARDEN,JAGMOHAN NAGAR WARD-63 JAGMOHAN NAGAR	0	6	2	0	0	0	0	0	0	0	8
1090	E1385 B	PLOT-265,RAMESWAR TEMPLE,BARABARI WARD-63 BARABAR	0	14	7	0	0	0	0	0	0	0	21
1091	E1386 B	PLOT-1808/2751,BARBARI AREA WARD-63 BARABAR	0	8	13	0	0	0	0	0	0	0	21
1092	E1387 B	BEHIND KHANDAGIRI POLICE STATION STAFF QTR WARD- 63 KHANDAGIRI	0	6	10	0	0	0	0	0	0	0	16
1093	E1388 B	plot-m 9/15 panchasakha nagar WARD-64 PANCHASAKHA NAGAR	0	6	1	0	0	0	0	0	0	0	7
1094	E1389 B	NR MAHALAXMI NAGAR,GADAMAHAVEER NAGAR WARD-58 GADMAHAVEER NAGAR	0	0	12	0	0	0	0	0	0	0	12
1095	E1390 B	RATNA NIWAS, BRAHMESWAR WARD-58 BRAHEMESWAR	0	10	4	0	0	0	0	0	0	0	14
		TOTAL No. OF TYPEWISE LED FITTING C/F	291	11973	7604	20	83	131	136	25	30	0	20293
		TOTAL No. OF TYPEWISE LED FITTING B/F	291	11973	7604	20	83	131	136	25	30	0	20293
		TOTAL No. OF TYPEWISE LED FITTING IMPLEMENTED /INSTALLED	291	11973	7604	20	83	131	136	25	30	0	20293

Total Light Quantity Installed By NEEV in BMC Ward 01-67 (Till -31.08.2025)

Sl No.	Ward	Qty
1	W1	163
2	W2	1078
3	W3	473
4	W4	1589
5	W5	918
6	W6	280
7	W7	371
8	W8	305
9	W9	183
10	W10	341
11	W11	91
12	W12	263
13	W13	192
14	W14	134
15	W15	96
16	W16	116
17	W17	46
18	W18	279
19	W19	191
20	W20	94
21	W21	63
22	W22	2771
23	W23	5187
24	W24	115
25	W25	109
26	W26	109
27	W27	158
28	W28	179
29	W29	90
30	W30	56
31	W31	76
32	W32	49
33	W33	56
34	W34	57

Sl No.	Ward	Qty
35	W35	130
36	W36	68
37	W37	120
38	W38	55
39	W39	48
40	W40	72
41	W41	65
42	W42	61
43	W43	118
44	W44	58
45	W45	93
46	W46	115
47	W47	87
48	W48	118
49	W49	1546
50	W50	82
51	W51	80
52	W52	60
53	W53	108
54	W54	68
55	W55	83
56	W56	76
57	W57	115
58	W58	87
59	W59	103
60	W60	64
61	W61	87
62	W62	84
63	W63	90
64	W64	161
65	W65	2219
66	W66	84
67	W67	167
Total Light		16278

ULB	NAME	SUBSTATION NO.	ward_number	Light	Panel
BMC GF	KIIT University Campus to Tarini Mandir Road	92	1	21	1
BMC GF	KIIMS Hospital front to Falcon Fresh	88	1	9	1
BMC GF	Bhalei Chowk to Subha Laxmi Enclave	90	2	60	1
BMC GF	Kalaharanga station to Bhalei Chowk Lebel crossing station	91	2	70	3
BMC GF	Bhalei Chowk Lebel crossing to Ragedi Basti	94	2	33	1
BMC GF	TPCODL office to Ananda Bihar	96	2	16	1
BMC GF	Ragedi Basti to Patia college front road	97	2	36	2
BMC GF	Nandan Bihar NH to TPCODL office, Via Rainbow school	98	2	45	2
BMC GF	OMM Enclave front to feeling dove school	99	2	20	1
BMC GF	Patia Kalarahanga Hanuman Temple to Kalarahanga Lebel crossing.	105	2	71	3
BMC GF	Patia Petrol pump To Patia Primery School	31	3	40	1
BMC GF	Shree Vihar to Jagannath temple	32	3	19	1
BMC GF	Kanan Vihar ph-2 to Patia Bhool sahi	33	3	27	1
BMC GF	Damana To Gadakana Road	34	3	22	1
BMC GF	Damana durgapuja patia to dukhishyam house, near tara medicine store	70	3	15	1
BMC GF	Patia chhak to muka badur school	71	3	24	1
BMC GF	Patia college canteen to patia college gate via Regal dove in front of sanischar temple road	72	3	107	4
BMC GF	Maruti Suzuki true value office to Patia Sai Temple	95	3	13	1
BMC GF	Patia Railway station to Mancheswar Station Canal road	106	3	50	2
BMC GF	Nh-5 to Naharkanta Village	18	4	79	3
BMC GF	Nh-5 to Banguary Canel Via Lakheswar Temple	38	4	91	3
BMC GF	(Nh -5 to Rudrapur, Rudrapur to Banguary Canel upto Nuapatna Village Puri Main Vanal Embark	39	4	103	1
BMC GF	Banguary To Nuapatna Village	40	4	51	1
BMC GF	Kukhai Main Front Road And Puri Main Canel Road	43	4	78	2
BMC GF	Bibekanand Bhoi House to Water tank and Bhim Pur	45	4	38	1
BMC GF	NH 5 to Shivshakti Nagar Puri Main Canal Embankment	46	4	35	1
BMC GF	Hanuman temple to Balianta bridge	65	4	40	1
BMC GF	Shiv skati nagar sai temple to Balianta bridge	66	4	8	1
BMC GF	Tarini Temple to Balianta Bazar W-4	67	4	23	1
BMC GF	muslaman Basti to Banguary Bridge W-4	68	4	64	1
BMC GF	NuaPtana Bhai Sahi to Nuaptana Village	69	4	22	0
BMC GF	NH 16 Pahala - Iconic building to Jaypur Maa khetrapal Temple & Sub Road	118	4	149	4
BMC GF	Haridash pur gaon to ARUS pvt Ltd(Naharkanta canal Road)	124	4	72	3
BMC GF	NH 5 to Pshyphone Mancheswar Village	1	5	81	3
BMC GF	Satya Vihar To Lingipur Via Krishna Nagar	44	5	59	1
BMC GF	samei gadia gangai canal to masumi mahanty house	75	5	13	1
BMC GF	kisan nagar to mancheswar village	76	5	37	1
BMC GF	Samei Gadia Sai Temple to Sriram Nagar	77	5	63	5
BMC GF	samei gadia sumantha temple to ganga bridge via hadabhai temple w-5	78	5	19	1
BMC GF	sameigadia sai temple to mancheswar village	79	5	75	4
BMC GF	Psyphone to Baliytara Padia	84	5	97	3
BMC GF	Kurl-on factory KIIT Campus-15 to Swasti HP Fuel Centre	86	6	16	1
BMC GF	Lingaraj biscuit factory to KIIMS Hospital front	87	6	20	1
BMC GF	Sai mandir to Trident institute (Median)	89	6	26	1
BMC GF	LV Prasad eye Institute to Kiit international school	93	6	36	1
BMC GF	a Ganguram sweets Main Road to Jagannath Mandir(IDCO area near hotel 7 saat back side & sai viha	122	6	22	1
BMC GF	Kailash vihar to Jagnannath temple	30	7	30	1
BMC GF	Niladri Vihar 200ft road	57	7	2	0
BMC GF	Niladri Vihar 200ft road	58	7	142	0
BMC GF	Chandrasekharpur petrol pump	13	8	55	1
BMC GF	Damana Square To CS Pur Dav school	29	8	33	1
BMC GF	Mangala mandir to cspur ATM chhak himax	73	8	28	1
BMC GF	care hospital to chetan in restrurant via budha park median + single side median	74	8	101	2
BMC GF	Govt. Hospital Back side road	120	8	17	1
BMC GF	Railway colony type to backside to Arabinda Nagar	100	9	28	2
BMC GF	Kelucharana Park to omm sai vihar	101	9	11	1
BMC GF	Sahoo residency to railway station	102	9	12	1
BMC GF	Blue Wheel hospital to Silpanchal school and Tata motors Ltd	113	10	44	2
BMC GF	Hero work shop to RCM collage road	114	10	15	1
BMC GF	Nuetel grafil to CV Raman ITI collage road	115	10	24	1
BMC GF	OPTCL Office to HDFC Bank CIPET road	116	10	23	1
BMC GF	State bank to akhandala mani basti	117	10	42	3
BMC GF	SEPTAGE Tank Facility Back Gate Via REC College to Canel Bridge	125	11	33	1
BMC GF	APOLLO HOSPITAL TO XAVIER SCHOOL VIA 7TH BATTALION	2	12	50	3
BMC GF	Shyamsundar Dham to Dooradarshan office.	3	12	33	0

BMC GF	Swosti Plaza to Samantrapur Basti Via Nilakanth Library	4	12	25	0
BMC GF	RD OFFICE TO IIT College CYSD	5	12	20	0
BMC GF	Mancheshwar To Sainik school	21	12	56	2
BMC GF	Isaneswar Temple	20	14	14	1
BMC GF	Ishaneswar temple to Jalabayu tower road backside road	119	14	19	1
BMC GF	Budha Park to Ishaneswar Temple	121	14	18	1
BMC GF	Rental To CRP	16	15	30	0
BMC GF	Hi-tech Hospital to Hi-tech Engineering college Pandra	123	18	18	1
BMC GF	Lata Medicine store to Sai mandir Bharatpur	103	22	18	1
BMC GF	Bharatpur institute of Mathmatics	6	23	134	3
BMC GF	K-4 TO NH VIA KALINGA NAGAR CESU Office	7	23	20	0
BMC GF	Nh-5 to kalinga nagar K-4 Nilakantheswar temple	8	23	23	0
BMC GF	SUMAN MEDICINE TO JAGARNATH TAMPLE	9	23	42	3
BMC GF	NH-5 TO SUMAN MEDICINE STORE	10	23	43	1
BMC GF	Trident Chhak to BDA flat	11	23	17	0
BMC GF	Kalinga studio chak to SOS Village	22	23	18	1
BMC GF	Sum hospital To Nuagaon Chhak	23	23	66	3
BMC GF	Nuagaon Chhak to Bda Kalyan Mandap	24	23	62	0
BMC GF	Ghatkia Chhak To Basanta Chhak	25	23	48	1
BMC GF	Dav School To BDA Kalyan mandap K-2	26	23	36	3
BMC GF	Nua gaon to kalinga nagar dav school	27	23	31	0
BMC GF	Kalinga Heritez To Vipul Garden	28	23	17	1
BMC GF	Bharat Pur To Shri ram Vihar	35	23	26	1
BMC GF	Basanta Sahuck-27 chhak to DAV school	58	23	30	1
BMC GF	Studio Chak To Naka gate	36	23	104	4
BMC GF	Infront of Sum ultimate to k8 omfed	59	23	31	1
BMC GF	Sum Hospital to SoS village median covid hopital with right side single road	60	23	46	2
BMC GF	K-8 & K-3 B junction in front plot no in front Saraswati vidya mandir road	64	23	12	1
BMC GF	Baga park front to nursery side	80	23	22	1
BMC GF	K-8 Nursery to UGKC multi medical back side	81	23	49	3
BMC GF	Handibandu Panigrahi plot no-1545 to Anterjami Jena plot no-1664, Khandagiribari	83	23	119	7
BMC GF	Ekamra Prk to Bijupatnayak College	15	28	88	1
BMC GF	Housing Board to Ram Mandir	85	35	35	2
BMC GF	Govener House To Ruchika School	19	46	24	1
BMC GF	Bhubaneswar Club To Unit VI Hospital	37	46	28	1
BMC GF	Secretariat backside to power house via petrol pump	14	47	31	2
BMC GF	Stwart School Chhak To Delta Chhak	41	48	67	1
BMC GF	Nayapalli Thana Indradhanu Market To Cesu Office	42	49	41	1
BMC GF	Hotel Samrat NH 5 to Bulunath Apartment	47	49	22	1
BMC GF	Tapobana High School Chhak To NH-5	51	49	23	1
BMC GF	Srikhetra Residency Chaak To Balaji Marbal NH-5 Via Alugodam(Iginia majani)	54	49	20	1
BMC GF	Indradhanu Market Relince Fresh Chhaka to Hotel Crown	55	49	27	1
BMC GF	Bermunda Service Road Both Side	56	49	58	2
BMC GF	Badagada Kalyan Mandap to Mahishkhal Brigge 2 Nos Parallol Road	49	57	52	2
BMC GF	DUMDUMA TO JAGAMARA	12	65	17	1
BMC GF	NH-5To Balunkeswar Temple P-I	17	65	52	3
BMC GF	Police Acadmey Chhak To Krishna Vihar	48	65	10	1
BMC GF	Bhaganpur Road Main Road Single Side	50	65	32	2
BMC GF	NH-5 To Udayagini Vihar	52	65	25	1
BMC GF	Balunkeswar Mandir To Aims Hospital	53	65	69	2
BMC GF	Aims hospital gate2 to aims Road via Water tank Road	61	65	76	3
BMC GF	NH 5 TO udayagiri bihar to Krishna Bihar main road	62	65	39	2
BMC GF	NH-16 patasani dhaba to BP Industry with k-9A median road, near DN Regalia	63	65	95	4
BMC GF	BB Samantaray House (Plot No. 111) to Back Side of MO BUS Terminal, Bhagabanpur	108	65	9	1
BMC GF	K9b road to janaki industry	109	65	10	1
BMC GF	Phase-7 Housing to Phase-1 Hata, Raghunnath Nagar Public Toilet	107	66	24	2
TOTAL				5026	183

E-Smart Street Lights Installed through different Contractor in different area of BMC

(Part A)

Sl. No.	File No	Ward	45 W	60 W	70 W	90 W	100 W	110 W	120W	Total
1	156/2018	1	35							35
2	143/2018	1 & 2	4				12			16
3	7/21	2	62		23			15		100
4	110/2017	2	60		9					69
5	111/2017	3	125							125
6	118/2018	4				12				12
7	16/2018	5	100			24				124
8	46/21	7	3		30			14		47
9	155/2017	7	44		15	6				65
10	47/21	8	99		15			12		126
11	156/2017	8	35				24			59
12	124/2017	10	80		50					130
13	50/21	11	17		34					51
14	51/21	12	15		15			18		48
15	52/21	13	23							23
16	84/2017	13	35							35
17	170/2018	14	75							75
18	151/2018	14	13				6			19
19	148/2018	14	43							43
20	153/2018	14	15		9					24
21	159/2018	14	15		9					24
22	149/2018	14	28		9					37
23	155/2018	14	4				12			16
24	150/2018	14	28		9					37
25	152/2018	14	38		3					41
26	149/2017	16	10						24	34
27	55/21	16	59		24					83
28	173/2018	16				80				80
29	174/2018	16				80				80
30	154/2018	17	35		2					37
31	158/2018	17	35		3					38
32	157/2018	17	13				6			19
33	24/2017	17				6			6	12
34	86/2017	17	35						6	41
35	85/2017	18	67				6			73
36	131/2017	18			40				12	52
37	100/2017	19	160					6		166
38	59/21	20	56		24					80
39	60/21	21	20		15			15		50
40	18/2018	21	45							45
41	142/2018	22			9		6			15
42	104/2017	22	13			6				19
43	119/2017	23	20							20
44	85/2020	23				30				30
45	16/2017	25	50				12			62
46	64/21	26	29							29
47	28/21	27	61							61
48	52/2017	29	15			15				30
49	67/21	29	78							78
50	68/21	30	84							84
51	69/21	31	124							124

52	193/2018	31	6						6
53	32/2018	32	5						5
54	71/21	33	68						68
55	56/2017	33		20					20
56	72/21	34	78				21		99
57	73/21	35	87						87
58	74/21	36	63				9		72
59	192/2018	36		12					12
60	135/2020	37			28				28
61	54/2017	37	8					18	26
62	57/2017	38	25					18	43
63	30/21	39	27				10		37
64	203/2018	40		32					32
65	6/2018	40	40	12					52
66	78/21	41	52						52
67	79/21	42	56						56
68	53/2017	42	30						30
69	82/2017	43	45		3				48
70	80/21	43	164						164
71	160/2018	43						6	6
72	81/21	44	54						54
73	82/21	45	71						71
74	138/2017	45	20	26					46
75	31/21	46	98						98
76	32/21	47	72						72
77	33/21	48	84				20		104
78	36/21	51	65						65
79	37/21	52	79						79
80	92/21	55	46			6			52
81	81/2017	55	20					6	26
82	93/21	56	76						76
83	134/2018	56	20						20
84	135/2018	57	25						25
85	94/21	57	52				15		67
86	95/21	58	77						77
87	44/2017	58	20						20
88	20/21	59	87						87
89	112/2017	59				30		24	54
90	97/21	60	74						74
91	98/21	61	64						64
92	38/21	62	140		3				143
93	205/2018	63	50						50
94	80/2017	63	52	9					61
95	55/2017	64	25					12	37
96	41/21	65	68				27		95
97	140/2018	65	10						10
98	5/21	66	72		9				81
99	63/2017	66		15					15
100	139/2018	67				12			12
101	15/2018	67				32			32
102	191/2018	67						6	6
103	166/2018	Amrut Park	30						30
104	147/2018	Basti	35	2					37
105	144/2018	Innati Project	35	2					37
Total (Part A)=									5643

Main Road Street Lights				
Sl. No.	Name of the Main Road Streets	Ward	Wattage	No. of Lights
1	Kelucharan Park	1	45	44
2	Suryansh Hotel to Railway colony	8	110	74
3	Xavier School road	8	110	88
4	7th Battalion Pond	12	45	15
5	Hitech Road	18	45	94
6	Gurukula Chhaka to K2	22	110	47
7	K2 Chhaka to K4	22	110	124
8	Studio Chhaka to Andharua Road	23	110	100
9	Badagada Canal Road	45	45	70
10	Kalpana Film Hall to Baragada Hata	45	110	92
11	Fire Station to Delta	50	110	40
12	Delta to City Womens	50	110	55
13	Rajdhani college road	50	110	21
14	City Womens to Siripur	51	110	55
15	Siripur Chhaka to Ganga Nagar	52	110	64
16	Ganga Nagar to Airport Chhaka	52	110	69
17	Airport Chhaka to Nirmal Plaza	52	110	74
18	Nirmal Plaza to Sisu Bhabana Chhaka	52	110	44
19	Fire Station(Kalpana) to Court	55	110	29
20	Lingipur to Hitech	59	110	788
21	Samantarapur to Nuagaon(Petrol Pump)	59	110	36
22	Nuagaon to Lingipur	59	110	79
23	Palasapalli Square to kargil basti	62	110	11
24	Kargil basti Road	62	110	25
25	Ward -64(SBI chhak to Jadupur)	64	110	32
26	Jadupur High school	64	110	32
27	11 nos 16 Mtr. High Mast in different area		110	132
28	32 nos 12 mtr. High Mast		110	180
Total (Part B)=				2514
G.Total (Part A +Part B)=				8157

M/s Eastern Engineering

Sl. No.	Ward No.	Area Name	60 Watt	90 Watt	120 Watt
1	15	BMC office Backside	1	0	
2		Mahavir Gym Block-D	1	0	
3		Ward office	1	0	
4		Ganesh Mandap	1	0	
5		VIP Road	6	0	
6		Mahavir Basti	4	0	
7		Laxmananda Basti	2	0	
8		Ganesh Puja Ground	33	3	
9	22	Khandal Basti to Ball Residency	16	0	
10		Samasan Road	4	0	
11		Mishra Babu front	2	0	
12		Sampur Village	4	0	
13		Panda kudia	4	0	
14		Paikarpur village	2	0	
15		GA Plot area, Bharatpur Sampur Village Paikara Village	45	8	
16	23	Khandagiri Bari	10	0	
17		Ghatikia Village	15	0	
18		Kalinga Nagar	5	0	
19		Sijipur	10	0	
20		Naragada Village	10	0	
21		Ward office front	10	0	
22		K-7 Kalinga Nagar	10	0	
23		K-4 Kalinga Vihar	10	0	
24		Kalinga Vihar	15	0	
25		Valia Chhaka	5	0	
26		Ghatikia Village Khandagiri Bari Sankarpur K-1, K-8 Area Kalinga Nagar Area	39	20	
27		L-42 Housing Board Colony	1	0	
28		E-145 Housing Board Colony	1	0	
29		L-300 Housing Board Colony	1	0	
30		L-37 Housing Board Colony	1	0	
31		M-61 Housing Board Colony	1	0	
32		L-186 Housing Board Colony	1	0	
33		L-83 Housing Board Colony	1	0	

34	24	L-91 Housing Board Colony	1	0	
35		L-45 Housing Board Colony	1	0	
36		L-337 Housing Board Colony	1	0	
37		L-49 Housing Board Colony	2	0	
38		L-257 Housing Board Colony	2	0	
39		High-122 Park Road	2	0	
40		C-113 Jagannath Vihar	1	0	
41		Jagannath Vihar	3	0	
42		Plot-18/60 Gayatri Vihar	1	0	
43		46 Jagannath Vihar	1	0	
44		52 Jagannath Vihar	1	0	
45		Plot- 361 Lane-7	1	0	
46		Plot- 390 Lane-1	1	0	
47		Plot-59 Housing Board	1	0	
48		Plot-55 Jagannath Vihar	2	0	
49		Hig-260	1	0	
50		Mig-120	1	0	
51		Baramunda HB Colony RBI Colony Jagannath Vihar	45	3	
52	25	N-147 Nayapali	1	0	
53		N-1-A/9 IRC Village	1	0	
54		N-1-A/5 IRC Village	2	0	
55		N-1-A/4 IRC Village	12	0	
56		N-1-208 IRC Village	1	0	
57		N-1-180 1RC Village	1	0	
58		N-1-A/20 IRC Village	1	0	
59		N-1-209 IRC Village	1	0	
60		N-1-M-1/212 IRC Village	1	0	
61		N-4-134 IRC Village	1	0	
62		N-4-38 IRC Village	1	0	
63		N-3-126 1IRC Village	1	0	
64		N-3-124 Subhashree Nilayam Apartme	1	0	
65		N-3-126 IRC Village	3	0	
66		N-3-128 IRC Village	1	0	
67		N-1-269 IRC Village	1	0	
68		N-1-47 IRC Village	1	0	
69		N-1-A/9 1RC Village	1	0	
70		N-1-A/5 IRC Village	1	0	
71		N-1-A/7 RC Village	1	0	
72		N-3-125 IRC Village	1	0	
73		N-3-112 IRC Village	1	0	
74		N-3-114 IRC Village	1	0	
75		N-3-97 IRC Village	1	0	

76	25	N-1-266 IRC Village	1	0	
77		N-2-20 IRC Village	1	0	
78		N-2-96 IRC Village	1	0	
79		N-2-2 IRC Village	1	0	
80		N-4-159 IRC Village	1	0	
81		N-3-110 RC Village	1	0	
82		N-3-90 IRC Village	1	0	
83		N-3-63 IRC Village N-3-3/359 IRC V	1	0	
84		N-3-3 IRC Village	1	0	
85		N-4-20 IRC Village	1	0	
86		N-1-237 IRC Village	1	0	
87		N-1-305 IRC Village	1	0	
88		N-2-108 IRC Village	1	0	
89		N-2-107 IRC Village	1	0	
90		N-4-32 IRC Village	1	0	
91		N-4-27 IRC Village	1	0	
92		N-4-28 IRC Village	1	0	
93		F-47	1	0	
94		N-4-F-10	1	0	
95		IRC Village N-1,N-3,N-4 RBI Colony Isckon Area	35	6	
96	26	Laxmi Narayan Sahi	4	0	
97		Corporate house side	3	0	
98		Nayagarh Sahi	3	0	
99		Nilachakra Nagar, Tarini Nagar , Saranapalli, Dasarathi Apartment, Bishnu Priya Apartment	25	7	
100	27	N-5 Plot-71	1	0	
101		N-S Plot-235	1	0	
102		N-5 Plot-125	1	0	
103		N-5 Plot-128	1	0	
104		N-5 Plot-382	1	0	
105		N-5 Plot-394	1	0	
106		N-5 Plot-185	1	0	
107		N-6 Plot-370	1	0	
108		N6 Govt. School site	3	0	
109		Old Ward office Backside	2	0	

110		IRC Village Jayadev Vihar Nayapalli PS Area Indradhanu market BijupatNIK COLLEGE	45	7	
111	28	Sunadei Mandir Road	2	0	
112		Acharya Vihar	1	0	
113		Reserve Police Bank	2	0	
114		Acharya Vihar Sevashram Area, Sceince Park Slum, Reserve Police, Regional College Raea.	32	8	
115	29	Electric Office front	1	0	
116		Ward Office	5	0	
117		Saheed Nagar police station backside	1	0	
118		Boys High school	1	0	
119		BSNL Office Backside park	1	0	
120		Maharaja Road	1	0	
121		Radhakrushna Mandir	1	0	
122		Nicco Park Chhaka	1	0	
123		Sai Mandir	1	0	
124		Maharaja Cinema Hall back side Pvt. Plots, SP Office back side Pvt. Plots, RD College, Irrigaiton Colony, GRIDCO Colony, Unit-9 Flat, Radhakrushna Temple area.	31	13	
125	30	Telegu Basti	2	0	
126		Vani Vihar Station front	2	0	
127		Cricket Playground	2	0	
128		Sai Mandir	2	0	
129		Plot A-54	1	0	
130		Plot A-19	1	0	
131		Ward Office Backside	2	0	
132		Vision care Backside	2	0	
133		Imfa Park	1	0	
134		Sahid Nagara area, Maharshi College & Private area	35	7	
135		Plot-303 Bomikhal	1	0	
136		Plot-21 Bomikhal	1	0	

137	31	Palasuni canal road	1	0	
138		Plot-1237 Bomikhal	1	0	
139		Durga Mandap Backside	1	0	
140		Kochilakhai Hata	1	0	
141		Mahima Asram Gali	1	0	
142		Bomikhal Village	6	6	
		Total =	669	88	0