# कोलकाता पत्तन न्यास/ KOLKATA PORT TRUST यांत्रिक व विद्युत अभियंत्रण विभाग /Mechanical & Electrical Engineering Department 8, गार्डेन रीच रोड, कोलकाता-700043/8, Garden Reach Road, Kolkata-700043

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पत्रांक: मेक/एस. ई.-II/25/226/2911 Letter no. Mech/SE -II / 25/226/2911 दिनाक: 08.11.2018 Date: 08.11.2018

Dear Sirs,

# Sub: Enquiry for Quotation for the work "Re-Wiring and Modification of existing electrical system of Qtrs. No. 6/2 & 4/1 at Dumaynue Avenue, Kolkata Port Trust".

Quotation is sought for the subject work in sealed cover superscribing the subject work and Enquiry Letter No. as per enclosed terms & conditions and Bill of Quantities (BOQ). Documentary evidences for PAN No., GST No., Trade license, Electrical contractor's license are to be submitted along with the quotation.

Site inspection will be held at 11.30 hrs on 12.11.2018.

Sealed offers, in duplicate, should reach this office on or before 14.30 hrs. on 15.11.2018. Quotations will be opened at 15.00 hrs. on the same date in presence of the representatives of the quotationer.

Thanking you.

Encl.: Terms & Conditions and Bill of Quantities

Yours faithfully,

(R. Kumar) Superintending Engineer (Elect.)-II For Chief Mechanical Engineer

- 1. **Price:** The quoted price should be exclusive of GST. GST, if applicable, will be paid extra as applicable on actual.
- 2. Taxes & Duties: GST or any other taxes and duties, if leviable, shall be clearly mentioned in the quotation. If not mentioned otherwise, the quotation will be considered to be inclusive of all taxes and duties.
- **3. Payment Terms:** 100% payment against installation, commissioning, testing and handing over of the entire work after satisfactory completion subject to Security Deposit clause.
- 4. Validity: The quotation must be valid for 30 days from the date of opening of the quotation.
- 5. Completion time: The work is to be completed within 6 weeks from the date of receipt of order letter.
- 6. Liquidated Damage: In case the work is not completed within the stipulated completion period, liquidated damage (@  $\frac{1}{2}$  % per week or part thereof subject to a maximum of 10% of the ordered value will be deducted from the bill.
- 7. Earnest Money: The quotationer shall submit Earnest Money of Rs. 5650.00 either in cash or through Banker's Cheque/Pay Order/Demand Draft along with their offer/quotation. Banker's Cheque/Pay Order/Demand Draft should be drawn in favour of "Kolkata Port Trust" on any Nationalized/Scheduled Bank having branch in Kolkata.
- 8. Security Deposit: 10% of the quoted value will be deducted from the bill of the successful quotationer towards Security Deposit which will be refunded without interest after successful completion of the guarantee period of one year.
- 9. You shall enclose certified copies of **Trade Licence**, **GST Certificate**, **PAN Certificate**, **and Electrical Contractor's Licence**. The certificates in original shall have to be submitted when so demanded for inspection.
- 10. Guarantee: The contractor shall make good at his own expenses all defects, due to faulty design, materials and workmanship, which may develop under proper use during a period of 12 months from the date of installation and successful commissioning of the work. Should any difference of opinion arise on any of the provisions of this clause, the decision of the Engineer shall be final and binding. In default, the Trustees will be at liberty to get the repairs done by other agencies and reimbursed themselves so far as costs therefore are concerned out of the amounts lying with them as Security Deposit so far as that is practicable. If the costs of such repairs exceed the amount of Security Deposit, the Contractor shall pay the balance to the Trustees forthwith on demand.
- 11. Quotation: The quotation is to be submitted in a sealed cover super scribing the name of the work and enquiry letter no. and to be submitted by 14.30 hrs of 15.11.2018. Quotations will be opened on 15.00 hrs on 15.11.2018. Price is to be inserted against the columns, 'Rate' and 'Amount' of the Bill of Quantities. Price shall include all manner of labour, material, plant /tools and all other matters necessary for the execution of the work.
- **12.** The price quoted in the quotation shall hold good and shall be binding on the quotation notwithstanding any increase in the prices of materials and labour or in the freights or levy or other charges whatsoever, the quotationer shall not be entitled to claim any increase over the rates quoted by them.
- **13.** Evaluation will be made on the basis of total Value of quotation.
- 14. Acceptance or otherwise of all terms & conditions, herein stated above should be clearly mentioned on this page itself and is to be enclosed with the quotation.
- **15.** The Trustees are not bound to accept the lowest or any tender without assigning any reason thereof.

## 16. Scope of work:

- (a) The Scope of Work for "Re-Wiring and modification of existing electrical system of Qtrs. No. 6/2 & 4/1 at Dumaynue Avenue, Kolkata Port Trust" covers the following:
  - > Supply, Delivery, Installation, Testing and Commissioning of MCB Enclosure with MCB.
  - Supply, Delivery, Installation, Termination, Testing & Commissioning of LT Cables.
  - Supply, Delivery, Installation, Testing and Commissioning of MCBDB.
  - Circuit Wiring through PVC Casing-Capping.

- > Point Wiring through PVC Casing-Capping.
- Supply, Delivery, Installation, Testing and Commissioning of 5A/16A/20A flush type Uni Socket Outlet with piano key type switches.
- Supply, Delivery, Installation, Testing and Commissioning of Ceiling Fans along with electronic regulators.
- Arrangement of Earth Pits, Earth Bus Bar connected with Earth Pits, Earthing all electrical equipment with Earth Pits.
- All dismantling materials are to be returned to Executive Engineer (Elect.) KPD Office, if any.
- Mending good of all damages including restoration to original condition without any extra cost to KoPT.
- > Any other item required for completion of the work in all respect but not included above.
- (b) Unless otherwise specified, the work to be executed by the contractor shall include but not be limited to the following:
  - Provide all materials, supervision, services, scaffolding and temporary lighting as required for work purposes etc.
  - The contractor shall carry out the work in phased manner as per availability of the site so that normal day to day activities are not affected for which no such extra payment will be entertained.
- (c) Any work, considered required by the contractor and not mentioned hereunder, for successful completion of the work, is to be included in the relevant item of Bill of Quantities suitably, which should be finalized in the Pre-bid meeting.
- (d) The work shall be carried out as per Indian Electricity Act, 2003, Central Electricity Authority (Measures relating to safety & electricity supply) Regulations, 2010 with latest revised IS code of Practice and relevant portion of National Building Code particularly with respect to safety requirements as per IS 16103 (Part I) : 2012 and also code of practice for fire safety of buildings (general): Electrical Installations, IS:1646: 1997.

#### **17. Technical Specification:**

#### (a) <u>Ceiling Fans</u>

#### Item details: Details are given in BOQ items.

**Installation:** The ceiling fans complete with blades, canopy, fork, rubber and electronic step regulator are to be installed in the ceiling hook. Down rods are to be provided wherever necessary. Cost of ceiling rose/down rod should be included in the installation wherever required.

(b) **Distribution Wiring, Point wiring:** Details are given in BOQ items.

(c) Other Items specifically not mentioned in the T.S. shall be as per BOQ. Any other item required for Installation but specifically not mentioned either in the BOQ or the T.S. like requisite length of MS Pipes, clamps and accessories shall be deemed to be included in the rates for installation of the items for which these items are intended. Tenderers are advised to build up the installation prices accordingly. Any claim in this regard on the plea that the item is not specifically mentioned shall not be entertained.

#### (d) **Dismantling & shifting of old materials**:

On completion of works, the contractor shall reinstate and make good at his own expense any property or land which might have been disturbed and/or damaged by his works. The items to be removed include all wiring, fittings, switch fuse units & accessories etc. Contractor should also clean the site as required during execution and fully clear the site after completion of all the works. Any holes/drillings/openings/damages made on the wall/roof for drawing of cables/installation of equipments shall be made good by the contractor at his own cost.

All useable spares viz. lamps, holders, are to be returned to the office of the Executive Engineer (Elect.) – KPD.

#### (e) List of Approved Makes:

Item	Make				
PVC Copper wire of FRLS type for					
internal wiring	National/Polycab/any other reputed make				
Piano type switches/ Socket/Ceiling	Havells/Anchor/ Ellora/ Precision/ Rider/				
Rose	Pritam/Sleek/any other reputed make.				
Ceiling Fan	Havells/Usha/Orient/Crompton Greaves/				
-	Bajaj/Polar				

Any other reputed make will only be considered if none of the approved make as mentioned in the above list is not available for some reason or the other which is to be acceptable to CME.

#### (f) Inspection and Testing:

Inspection and testing will be carried out by KoPT Engineer. Inspection will be carried out as applicable as per relevant Standard/ Technical Specification/Approved Drawing etc.

Insulation Resistance, Earth Continuity and Earth Resistance tests etc. as applicable prior to commissioning are to be carried out for electrical installation including LT cable (if any). All pre commissioning tests shall be carried out by the authorized representative of the firm having valid Supervisor's Certificate of Competency.

Date:

Signature of the quotationer with Rubber stamp.

#### **Bill of Quantities (BOQ)**

## Re-Wiring and Modification of existing electrical system of Qtrs. No. 6/2 & 4/1 at Dumaynue Avenue, Kolkata Port Trust

Item No.	Description	Qty.	Unit	Rate	Amount
1.	Supply and delivery of 2C x 16 sq. mm. Cable with following specification, Conductor : Stranded Aluminium conforming to IS 7908(Part 1) 1988, Colour coded,	100	Mtr.		
	Voltage Grade : 1.1KV, Insulation : XLPE , Inner Sheath : PVC, Armour : Galvanized Steel Strips, Outer Sheath : Extruded PVC				
1(a).	Laying of above cable on wall/surface including S&F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	100	RM		
1(b).	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture proof entry of XLPE armoured cable, size of 2C x 16 sq. mm. Cable, 1.1KV Grade.	04	Nos.		
1(c).	Finishing the end of above mentioned XLPE/PVC armoured cable by crimping method inclusive of supplying and fixing solder less socket (Dowels make), tapes, anticorrosive paste & jointing materials.	04	Nos.		
2	Distribution wiring in 1.1 KV single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in 20mm size PVC rigid conduit 'FR' (Precision make) incl. necy. fittings as required 2 x 84/0.3 (6 sqmm) + 1 x 56/0.3 (4 sqmm) ECC	30	RM		
3	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection 63A DP	02	No.		
4	Supplying and fixing MCB SS enclosure with IP-20/30 protection, powder coated provision for two/four pole MCB, concealed in wall after cutting the wall & mending good the damages to original finish incl. painting, connection & provision for earthing attachment 4 Way	02	No.		
5	Supplying and fixing double-door SPN MCB Distribution Board with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment, 2+16 way Enclosure	02	No.		
6	Supplying and fixing 240/415 V MCB Isolator on din rail of existing DBs and necessary connection 63A DP	02	No.		
7	Supplying and fixing 240 V 6-32A SP MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection	32	No.		
8	Wiring in 1.1 KV grade single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) of 2 x $36/0.3$ (2.5 sqmm) + 1 x $22/0.3$ (1.5 sqmm)in 25mm PVC casing-capping (Precision make) incl. necy. PVC clips, fittings etc.	500	RM		

Item	Description	Qty.	Unit	Rate	Amount
No.	Description	~9.		1.000	1 mount
9	Wiring in 1.1 KV grade single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) of 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) in 25mm PVC casing-capping (Precision make) incl. necy. PVC clips, fittings etc.	400	RM		
10	Distribution wiring in 1.1 KV grade 2x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in suitable size PVC casing-capping(Precision make) with 1x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, incl. necy. PVC clips, fittings etc. to light/fan/call bell point with piano key type switch (Anchor make) fixed on sheet steel fabricated switch board with Perspex/bakelite top cover on wall incl. necy. connections and making earthing attachment and mending good damages to building works with average run of 6 metre [PVC casing-capping and Switch board both on surface]	100	Point		
11	Distribution Wiring in 1.1 KV grade 2x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in suitable size PVC casing-capping (Precision make) with 1x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, incl. necy. PVC clips, fittings etc. to 5A 3 pin flush type plug socket with piano key type switch (Anchor make) fixed on sheet steel fabricated CRC MS switch board with bakelite/perspex (wall matching color) top cover of 3 mm thick flushed in wall by housing the board after cutting brick wall incl. necy. connection making earthing attachment, painting and mending good damages to building works [PVC casing-capping and plug box both on surface] on board	25	Point		
12	Distribution Wiring in 1.1 KV grade 2x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in suitable size PVC casing-capping (Precision make) with 1x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, incl. necy. PVC clips, fittings etc. to 5A 3 pin flush type plug socket with piano key type switch (Anchor make) fixed on sheet steel fabricated CRC MS switch board with bakelite/perspex (wall matching color) top cover of 3 mm thick flushed in wall by housing the board after cutting brick wall incl. necy. connection making earthing attachment, painting and mending good damages to building works of average run 6 meter [PVC casing-capping and plug box both on surface]	12	point		
13.	Supply & Fixing 240 V, 16/20A, plug socket with separate 20 A Piano key type switch (Brand approved by EIC) on sheet metal switch board embedded in wall incl. S & F 150x100x65mm MS (16SWG) switch board and bakelite/perspex top cover of 3mm thick by Brass screws after making housing for switch by cutting bakelite/perspex cover and making necessary connections as required.	12	Each		
14	Supply & Fixing Socket type fan regulator (Step type) (Brand approved by EIC) on existing sheet metal switch board with bakelite/perspex top cover by screw after making housing for regulator knob by cutting bakelite/perspex top cover incl. making necy. connections etc.	10	Each		
15	Supply and delivery of 1200 mm ceiling fan complete with blade, canopy similar to that of HAVELLS Make Pacer Model.	10	Nos.		

Item No.	Description	Qty.	Unit	Rate	Amount
<u>16</u>	Fixing only ceiling fan complete with blades, canopy, fork, rubber bush etc. incl. S&F connecting wire for down rod upto 30 cm incl. painting the rod with approved paint and making necessary connection as required by 2x1.5 sqmm flexible copper wire	10	Each		
17	Multitune call Bell (make anchor )	02	Nos.		
18	Supplying & fixing earth bus bar of galvanized (Hot Dip) MS flat 25 mm x 6 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with G. I. Bolts, nuts, washers, spacing insulators etc. as required (For MCBDBs).	01	Mtr.		
19	Connecting the earth bus bar to earth electrode inclusive S&F 25 mm. X 6 mm. Galvanized (Hot Dip) MS flat under the ground level / on wall/floor with GI saddle as required with inclusive drilling holes, bolts, nuts, washers etc. and mending good the damages as required.	100	Mtr.		
20	Earthing with 65 mm. Dia GI Pipe (TATA - Medium) x 3.0 Mtrs. Long and 1 no. 50 mm. X 6 mm. Galvanized (Hot Dip) steel strip (4 Mtrs. Long), 20 mm dia x 125 mm long galvanized bolt, double nuts, double washers including finishing both ends by making holes etc. and S & F 65 mm dia GI Pipe (ISI - Medium) protection (3 Mts. Long) to be filled with bitumen under the ground level to an average depth of 3.65 Mts Providing masonary enclosure on the top of the earth electrode of overall size 86.36 cm x 86.36 cm x 46 cm deep (below ground level) complete with cemented brick work (1 : 6) of 25 cm width duly plastered with cement morter (inside). CI hinged inspection cover of size 36.56 cm x 36.56 cm with locking arrangement, GI reducer including drilling of 46 nos. 12 mm dia holes on the GI pipe. With treatment of soil by using salt & charcoal or coke for pipe electrode. Earthing work is to be carried out as per relevant IS.	04	Nos.		
21	Connecting the equipments body to earth bus bar including S&F GI (Hot Dip) wire of size 8 SWG on wall/floor with staples buried inside wall/floor as required and making connection to equipments with bolts, nuts, washers, cable lugs etc. as required and mending good damages.	50	Mtr.		
22	Dismantling of unserviceable old material from site & depositing the same to section office / mm store as per direction of EIC	01	Item.		
	Total				

Total in words (Rupees .....

.....)

Note: The above price is exclusive of GST, which shall be paid extra as applicable on actual.

(Office Rubber Stamp of the Quotationer Firm)

Signature of the Quotationer

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Dated, the \_\_\_\_\_