INDIAN INSTITUTE OF TECHNOLOGY
KHARAGPUR 721 302
ESTATE (E&M) WORKS SECTION

TENDER NOTICE

No. : IIT/E/E&M/T/40/2016-17
Dt. : 14.03.2017

The Executive Engineer (Electrical Works), IIT Kharagpur invites sealed item rate tenders in **Two Bid System containing Part-I (Technical Bid) & Part-II (Financial Bid)** from the registered and eligible contractors of the Indian Institute of Technology, Kharagpur/CPWD/WBPWD/MES/Railways (SER)/Kharagpur Municipality/PSUs and other bonafied agencies meeting the minimum qualification criteria for the following Work :

Sl. No.	Name of Work	Estimated Amount (₹)	Earnest Money (, ₹)	Cost of Tender Document (₹)	Completion Time
1	Electrical Maintenance Work for Academic area, Main Institute Building, New Academic Complex, NCRC and also IIT Kharagpur "STEP" Gopali Unit	4,99,053.00	9,981.00 (To be submitted in a separate envelope)	1,000.00 (non-refundable)	12 Months

TENDER DOCUMENTS can be downloaded from the Institute website www.iitkgp.ac.in. Requisite Tender fee (non-refundable) to be paid by demand draft in favour of "IIT Kharagpur" on any nationalized Bank of India payable at Kharagpur Branch as stated above at the time of submission of Bid.

TECHNICAL BID : Technical Bid must accompany the following documents with self attestation for Technical evaluation:

A.
i) VAT
ii) PAN
iii) Completion Certificates of works justifying eligibility criteria.
iv) Updated Contractor's Electrical Licence
v) Updated Trade Licence

Kindly note the following information as per the Table below:

Date of Submission of Technical Bid, Price Bid	22nd March 2017 upto 3:30 P.M.
Date of opening of Technical Bid	22nd March 2017 at 4:30 P.M.
Date of opening of Price Bid	29th March 2017 at 4:30 P.M.
Tender Paper Cost (Non-refundable) & Earnest Money Deposit	To be paid by demand draft in favour of "IIT Kharagpur" on any nationalized Bank of India payable at Kharagpur Branch in two separate envelopes. Earnest Money will be converted to

	Security Deposit of successful tenderer.
The bidders must submit the bid in 3 (Three) nos. separate envelops each containing a) Technical Bid, b) Price Bid & c) Earnest Money Deposit & Tender Paper cost. The Technical bid must have a forwarding application along with all relevant documents as required in the Technical Bid.	

B. Eligibility criteria :

Contractors who fulfill the following requirement shall be eligible to apply :

Three works each costing not less than 40% of estimated cost or two works each costing not less than 60% of estimated cost or one work costing not less than 80% of estimated cost executed under Central /State Government/Central Autonomous Body/PSUs.

C. Make list of the major items /equipment to be supplied.

FINANCIAL BID : Financial Bid must accompany the Price bid duly filled.

(S. Ghosh)
Executive Engineer (Electrical)

Copy to :

1. Registrar, IIT Kharagpur
2. Prof.-In-Charge (Electrical Works)
3. Prof.-In-Charge, IIC--- with a request to upload the tender notice in the Institute Website
4. Superintending Engineer (Civil)
5. Dy. Registrar (F&A)
6. Notice Board, EPDS
7. Notice Board, Estate (E&M) Head Office

Indian Institute of Technology, Kharagpur
Estate (E&M) Works Section

Tender Document

For

Name of the Work : **Electrical Maintenance Work for Academic area, Main Institute Building, New Academic Complex, NCRC and also IIT Kharagpur "STEP" Gopali Unit.**

1. The site for the work is available/or the site for the work shall be made available in the parts as specified below.
2. The time allowed for carrying out the work will be 12 (Twelve) Months from the day after the date of written orders to commence the work.
3. The contractor should quote the figures as well as in words the rate and amount tendered by them. The amount for each item should be worked out and the requisite totals given.
4. When a contractor signs a tender in an Indian Language the total amount tendered should also be written in the same language.
5. Earnest Money, amounting to Rs.9,981.00(Rupees Nine thousand nine hundred eighty one only) in Demand Draft in favour of " IIT Kharagpur" on SBI, Kharagpur must accompany each tender and each tender is to be in a sealed cover superscribed with , **"Electrical Maintenance Work for Academic area, Main Institute Building, New Academic Complex, NCRC and also IIT Kharagpur "STEP" Gopali Unit.".**
6. Earnest Money of the successful bidder is to be converted into security deposit, further sum amounting 10% or as applicable will be deducted from your running bill(s)/final bill.
7. The acceptance of a tender, will rest with the authority who does not bind himself to accept the lowest tender, and reserves to himself the authority to reject any or all the tenders received without the assignment of a reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.
8. Canvassing in connections with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
9. All rates shall be quoted on the proper form of the tender alone.
10. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated to the Engineer-in-Charge.
11. Special care should be taken to write the rates in figures as well as in words, and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written

both in figures and in words. In case of figures, the word “Rs.” should be written before the figure of rupees and words “P” after the decimal figures, “e.g., Rs.2.15P” and incase of words “Rupees” should precede and the word “Paise” should be written at the end. Unless the rate is in whole rupees and followed by the words “only” it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the work “only” should be written closely following the amount and it should not be written in the next line.

12. The Institute does not bind himself to accept the lowest or any tender and reserve to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
13. Sales-tax, purchase tax, turnover tax, service tax, VAT, Octroi, labour cess insurance or any other tax on materials, machinery and T&P, labour or any other item/service in respect of this contract shall be payable by the contractor and Institute will not entertain any claim whatsoever in respect of the same.
14. The contractor shall not be permitted to tender for works in the Institute in which his near relative is posted as Divisional Accountant or as an Officer in any capacity between the grades of Superintending Engineer and Engineer (Both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in the Institute. Any broach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Institute.
15. The contractor shall give a list of Institute employees related to him.
16. No Engineer of Officer rank or other employees employed in Engineering or Administrative duties in an Engineering Department of the Govt. of India Institute is allowed to work as a contractor for a period of two years of the retirement from Govt. service Institute, without the previous permission of the Govt. of India Institute. This contractor is liable to be cancelled if either the contractor or any of this employees is found at any time to be such a person who had not obtained the permission of the Govt. of India Institute as aforesaid before submission of the tender or engagement in the contractor’ service.
17. The tender for the work shall remain open for acceptance for period of 120 days from the date of opening of the tender. If any tenderer withdraws his tender before the said period or makes any modifications in terms & conditions which are not acceptable to the Engineer-in-charge then Institute shall without prejudice to day other right or remedy be a liberty to forfeit the said earnest money.

18. The contractors exempted from payment of earnest money/security deposit in individual cases should attach with the tender an attested copy of the Institute’s letter exempting them from the payment of earnest money and security deposit and should produce the original whenever called upon to do so.
19. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to summery rejection.

20. The Contractor shall submit list of works which are in hand (Progress) in the

following form :

Name of Work	Name and particulars of Division where work is being executed.	Amount of work	Position of works in progress	Remarks

21.Rates quoted by the contractors in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures, and in word. However, if a discrepancy is found the rates which correspond with the amount worked out by the contractor shall be taken as correct.

22.If the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figures or in words that the rate quote by the contractor in words should be taken as correct.

23.Where the rate quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rate quoted by the contractor will be taken as correct, not the amount.

Electrical Maintenance Work for Academic area, Main Institute Building, New Academic Complex, NCRC and also IIT Kharagpur "STEP" Gopali Unit

Sl. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
1	Wiring for light point / fan point /call bell point / exhaust fan point with 1.5 sq mm FRLS PVCinsulated copper conductor single core cable in surface / recessed medium class PVC conduit,with modular switch, modular plate, suitable size GI box and earthing the point with 1.5 sq mm FRLS PVCinsulated copper conductor single core cable etc as required .				
a)	Upto 6 metres.	Point	40		
b)	Above 6 metres .	Point	10		
2	Wiring for circuit / submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor , single core cable in surface / recessed medium class PVC conduit as required .				
a)	2 X1.5 sq mm +1X1.5 sq mm for E.C.C	Mtr.	40		
b)	2 X2.5 sq mm +1X2.5 sq mm for E.C.C	Mtr.	400		
c)	2 X4 sq mm +1X4 sq mm for E.C.C	Mtr.	400		
d)	2 X6 sq mm +1X6 sq mm for E.C.C	Mtr.	40		
e)	2 X10 sq mm +1X10 sq mm for E.C.C	Mtr.	40		
f)	2 X16 sq mm +1X16 sq mm for E.C.C	Mtr.	30		
g)	4 X4 sq mm +2X4 sq mm for E.C.C	Mtr.	40		
h)	4 X6 sq mm +2X6 sq mm for E.C.C	Mtr.	40		
i)	4 X10 sq mm +2X10 sq mm for E.C.C	Mtr.	40		
j)	4 X16 sq mm +2X16 sq mm for E.C.C	Mtr.	40		
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface / recess including cutting the wall and making good the same in case of recessed conduit as required.				
a)	20 mm	Mtr.	30		
b)	25 mm	Mtr.	30		
c)	40 mm	Mtr.	30		
4	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface /recessed steel / PVC conduit as required.				

a)	2 X1.5 sq mm +1X1.5 sq mm for E.C.C	Mtr.	30		
b)	2 X2.5 sq mm +1X2.5 sq mm for E.C.C	Mtr.	30		
c)	2 X4 sq mm +1X4 sq mm for E.C.C	Mtr.	30		
d)	2 X6 sq mm +1X6 sq mm for E.C.C	Mtr.	30		
5	Supplying and fixing metal box of following sizes on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.				
a)	75 mm X 75 mm X 60 mm deep	Each	5		
b)	100 mm X 100 mm X 60 mm deep	Each	5		
c)	150 mm X 75 mm X 60 mm deep	Each	5		
d)	150 mm X 150 mm X 60 mm deep	Each	5		
6	Supplying and fixing following sizes / modules ,GI box along with modular base & cover plate for modular switches in recess etc as required .				
a)	1 or 2 Module	Each	20		
b)	3 Module	Each	30		
c)	4 Module	Each	5		
d)	6 Module	Each	50		
e)	8 Module	Each	5		
f)	12 Module	Each	30		
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc as required .				
a)	5 /6 amps switch	Each	100		
b)	15 /16 amps switch	Each	60		
c)	3 pin 5 /6 amps socket outlet	Each	100		
d)	6 pin 15 / 16 amps socket outlet	Each	60		
e)	Bell push	Each	5		
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	30		
9	Supplying and fixing call bell/ buzzer suitable for single phase,230 volts, complete as required.	Each	5		
10	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	Each	5		
11	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required	Each	20		

12	Supplying and fixing of modular plate type 11-18 A motor starter unit complete with 25 A DP MCB and 20 A plug & socket flushed in wall with earthing attachment for Split / Window Airconditioner equiv. to Northwest (Complete unit).	Each	10		
13	Installation , testing and commissioning of pre-wired, fluorescent fitting /compact fluorescent fitting/LED fittings of all types complete with all accessories and tube etc. directly on false ceiling / wall including connection with 3 X1.5 sq mm FRLS PVC insulated copper conductor single core cable and earthing etc as required.	Each	40		
14	Installation , testing -do- -do- including supplying and fixing ball and socket arrangement, 2 no down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length painting and wiring the down rods and connection -do-.	Each	20		
15	Fixing only outdoor / street light type fluorescent light fitting complete with all accessories to be fixed/projected from the wall of the building incl. making holes to building, S&F 40 mm dia. GI pipe(ISI-Medium) 1.50 mts. average length, with GI socket at one end and thread at the other end & suitable bend to house the fitting & making necy. connections with S&F necy. length of 3 X1.5 sq mm FRLS PVC insulated single core copper wire and making connections as required and mending good damages to wall & painting.	Each	5		
16	Installation , testing and commissioning of ceiling fan including wiring the down rods of standard length (upto 30 cm) with 3 X1.5 sq mm FRLS PVC insulated copper conductor single core cable etc as required.	Each	40		
17	Supply and fixing of extra conduit down rod of 20 mm dia (heavy gauge), 2x10 cm length, wiring with 3X1.5 sq mm single core FRLS PVC cu cable including cutting, threading and painting etc as required.(Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored.)	Each	30		
18	Installation of exhaust fan in the existing opening including of all hardwares & making good the damage connection, testing, commissioning etc. complete as required.				
a	Upto 450 mm sweep	Each	10		
b	510 mm sweep	Each	5		

19	Extra for fixing the louvers / shutters complete with frame for a exhaust fan of all sizes.	Each	5		
20	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kv grade of following size on wall surface as required incl. S+F of 1X10 SWG GI wire for E.C.C making holes and manding good the damages to original finish incl painting.(Cable Dept supply)				
a)	Upto 35 sq mm (clamped with 1 mm thick saddle)	Mtr.	100		
b)	Above 35 sq mm and upto 95 sq mm (clamped with 25X3 mm MS flat clamp)	Mtr.	100		
21	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray along with S+F of 10 SWG GI wire as earth wire as required.				
a)	Upto 35 sq. mm (clamped with 1mm thick saddle @ 3 sets per metre.)	Mtr.	20		
b)	Above 35 sq. mm and upto 95 sq. mm (clamped with 25X3mm MS flat clamp @ 3 sets per metre.)	Mtr.	20		
22	Laying of cable as below after cutting floor/pavement/wall/ and making holes incl embedding the cable at an average depth as below and mending good the damages to original finish incl S+F of 1X10 SWG wire for ECC (Cable Dept Supply)				
a)	From 2.5 sq mm to 35 sq mm at an average depth of 75 mm in floor/ pavement/wall etc.	Mtr.	20		
b)	Above 35 sq mm to 95 sq mm at an average depth of 100 mm in floor/ pavement/wall etc.	Mtr.	20		
23	Laying of one number PVC insulated and PVC sheathed / XLPEpower cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering @ 8 bricks per metre on each cable and refilling the trench etc. as required.				
a)	Upto 35 sq. mm	Mtr.	20		
b)	Above 35 sq. mm and upto 95 sq. mm	Mtr.	20		
24	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kv grade of following size in the existing masonry open duct incl mending good the damages to original finish. (Cable Dept Supply). This includes S+F 10 SWG GI earth wire for cables.				
a)	Upto 35 sq mm .	Mtr.	20		
b)	Above 35 sq. mm and upto 95 sq. mm	Mtr.	20		

25	Supplying and making end termination with brass compression gland and lugs for following size of PVC insulated and PVC sheathed/XLPE aluminium conductor cable of 1.1 KV grade as required.				
a)	2 X 6 sq mm	Each	4		
b)	2 X 10 sq mm	Each	4		
c)	2 X 16 sq mm	Each	4		
d)	4 X 10 sq mm	Each	4		
e)	4 X 16 sq mm	Each	4		
f)	3.5 X 25 sq mm	Each	4		
g)	3.5 X 35 sq mm	Each	4		
h)	3.5 X 50 sq mm	Each	4		
i)	3.5 X 70sq mm	Each	2		
j)	3.5 X 95 sq mm	Each	2		
26	Earthing with GI earth pipe 4.5 mtr long, 40 mm dia including accesssories and proving masonary enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/coke and salt as required.	Each	2		
27	Earthing with copper earth plate 600 mm*600 mm*3 mm thick including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc with charcoal / coke and salt as required.	Each	2		
28	Providing and fixing earth bus of 50mm X5mm copper strip on surface for connection etc. as required.	Mtr.	2		
29	Providing and fixing 6 SWG dia GI wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required for GI pipe earthing.	Mtr.	50		
30	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required for copper plate earthing.	Mtr.	50		
31	Providing and fixing 25X5 mm copper strip on surface or in recess for connections etc. as required.	Mtr.	20		
32	Providing and fixing 25X5 mm G.I. strip on surface or in recess for connections etc. as required.	Mtr.	20		
33	Supply and Fixing medium gauge Gi pipe(ISI-Medium) protection for cable entry including bending the pipe to the required shape complete as				

	required with laying of wire/cable through pipe.				
a)	25 mm	Mtr.	10		
b)	40 mm	Mtr.	10		
34	Fixing of followings directly on surface / recessed /on flat iron legs on wall including necessary connection as required. (DBs/ switch fuse unit : Department supply).				
a	SPN MCB DB (4 to 16 way)	Each	10		
b	TPN MCB DB (4 to 12 way)	Each	5		
c	TPN Switch fuse units(32 A to 400 A)	Each	2		
35	Fixing only 240V SPN/415V TPN Sheet Steel Main Switch or DP/TP/FP sheet steel enclosure or SP/TP Industrial Plug,socket directly on surface / recessed /on flat iron legs on wall along with required DP/TP/FP MCB including necessary connection, testing as required. (Enclosure/Main switch / Industrial Socket : Department supply).	Each	10		
36	Numbering of ceiling fan / Exhaust fan / Fluorescent fittings including cleaning of surface wuth detergent etc. as required.	Each	40		
Rupees in words					

Make :-

FRLS Wire, 1.1 KV :- Finolex/Havells/Gloster/Rajnigandha**. PVC pipe (MMS) :-** Presto plast/ Precision .
Switch/Socket/Regulator :- Legrand (Myrius range)/Crabtree Thames Platinum range/ Wipro(Nowa).
3 Pole Ceilling Rose/ Holder :- Anchor / SSK,
G.I pipe :- TATA (Medium) / Bansal (Medium) or Equivalent

N.B:1) All materials to be used after prior approval of Engineer in charge.

2) The Contractor is liable to work at STEP,Gopali site also.
3) All eletrical work includes dismantling of old items in respective area and depositing them to the store .

GENERAL SPECIFICATION AND CONDITIONS

1. The work shall be carried out as per National Code or P.W.D. specifications for works at West Bengal or other wise as specified in the Schedule of Quantities for the works.

2. The rates on percentage quoted by the contractors shall be for all leads, lifts, depth etc. unless otherwise specified in the schedule of quantities attached to agreement.

3. The work will be carried out as per instructions given by the Engineer-in-Charge and as per layout plan and the contractor shall be bound to carry out the work in accordance with the revised instruction and /OR modified drawing.

4. The brick shall be second class and / or first class bricks or a specified in the schedule of quantities and shall be of local best available size. To use first class brick only for construction of feeder pillar foundation.

5. All the materials such as stone chips. Sand pipes and other materials to be used in the work shall have to be approved by the Engineer-in-Charge not below the rank of Assistant Engineer.

6. No pipe line shall be covered until the same has been approved by the Engineer-in-Charge.

7. All charges for the Municipal fees and other taxes that may be payable as per local Municipal rules be paid by the contractors and his rates for such items shall be inclusive of all such charges. Nothing extra will be paid on this account by the department.

8. The contractor shall construct suitable go-down at the site of work for storing the materials safe against damage by Sun, Rain, dampness, fire, theft, etc. at his own cost. He shall also employ necessary watch and ward establishment for tools and plant and other materials issued to him at his own cost. No extra payment shall be made on this account.

9. After laying of cable in underground the trench must be strictly mended and duly rammed with a rammer or rolled with a roller.

10. The fences damaged while digging the trench in individual quarters must be mended using barbed wire and bamboo or concrete pillars.

11. All G.I. items mentioned in the entire tender should be or hot dipped galvanization.

12. All light brackets are to be made first as specified in the tender and then hot dipped galvanizations are to perform. No cracks are acceptable on brackets.

13. Empty cable drums are to be deposited to the Section or Store as desired by Site-in-Charge.

14. Any item used while execution of the work, should be duly approved by the department.

15. Prior to commencement of the work Registration from labour enforcement office has to be taken. Also it may be noted that minimum wages as per minimum wages Act must be paid to the contract labours. Currently the minimum wage as per G.O.I norms is Rs.283/- which must be followed.

16. The Site Supervisors should possess supervisory competency certificate and the Electricians should have proper work permits.

17. Safety of materials issued by the Department to the Contractor is the contractors' responsibility.

18. Safety of engaged manpower of Contractor is the Contractor's responsibility. The successful tenderer shall at all times indemnify the Institute, consequent on this work contract. The successful Tenderer shall be liable, in accordance with Indian law & Regulations for any accident occurring due to any cause and the Institute shall not be responsible for any accident and damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipment under the supervision of the successful bidder in so far as the latter is responsible. The successful Tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful Tenderer due to above.