

TENDER

FOR

**RENOVATION OF OLD OPD & CASUALTY BLOCK AT MEDICAL COLLEGE
TRIVANDRUM -PHASE II/ELECTRICAL WORKS**

**PART-III
PRICE BID**

TENDER NO. HLL/ID/13 /70

SEPTEMBER 2013

**HLL LIFECARE LIMITED
INFRASTRUCTURE DEVELOPMENT DIVISION**

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1 COMMERCIAL CONDITIONS

1.0.1 The tendered rate shall inter alia be deemed to include for the provision of all materials, process, operation and special requirements detailed in the particular specification irrespective of whether these are mentioned in the description of equipment schedule and Bill of quantities or not. It is an express condition of the contract that the tendered rates for various items in the Bill of Quantities shall be deemed to include for the full, entire and final condition of the contractor respective items of the works in accordance with the provision of the contract.

1.0.2 The tendered rate shall include for all taxes, duties, etc. as applicable and shall be quoted on the works contract basis for contractors for the work of Renovation of old OPD & Casualty block at Medical College Trivandrum – Phase II /Electrical works.

1.0.3 The tendered rate shall remain firm and free from variation due to rise in the cost of materials/equipment, labour or any other reasons whatsoever during the contract period and valid extension on the case may be.

1.0.4 The quantum of excise duty included in the tendered price, the rate at which they were assumed etc. shall be indicated in the tender.

1.1 UNIT RATES

1.1.2 Only approved work will be measured on completion and priced as per rates quoted against the respective items.

1.2 BRIEF DESCRIPTION OF PRICING

1.2.1. Unforeseen difficulties for which provision has not been made in the tender will in no way relieve the successful tenderer from the full execution of the work.

1.2.2 The price quoted shall be the final amount for this finished work.

1.2.3 The quoted price shall be inclusive of all taxes and duties whether payable by the contractor or to be deducted at source. This shall include those applicable among VAT, Sales Tax, Income Tax,

Customs Duty, Excise Duty, Turnover Tax, Service Tax, Work Contract Tax, Octroi, Labour Welfare Cess or any other Taxes and Duties prevailing in respect of this contract. **ANY BID STATING THAT TAXES ARE EXTRA WILL BE SUMMARILY REJECTED.**

1.3 INCOME TAX

Any payment to the contractor as per contract will be made after deducting income tax as per the rules and regulations.

1.4 SUBMISSION OF BILL

1.4.1. The contractor shall from time to time prepare and submit interim bills of the work executed and on completion of the contract, he shall prepare and submit the final bill. The measurements sheets in support of the interim and final bills shall be prepared by the contractor on the basis of measurements taken by him jointly with the project engineer and the said measurement sheets shall be submitted by him with the relevant bill.

1.4.2. Within the above frame work of the terms of payment the contract's interim bills - As per clause 7 in GCC

1.4 TERMS OF PAYMENT

The rate of payment for the contract value under this contract shall be regulated and detailed below:

- a. Running account bills shall be submitted by the contractor for the work executed on the basis of recorded measurement. The contractor shall not be entitled to be paid any interim payments if the gross work done since the last payment is less than one lakhs
- b. The interim payment shall be made for any site after successful Installation, Commissioning and testing of equipment by the contractor at site
- c. Interim payment shall not be made against delivery of material
- d. SD mounts will be deducted @5% from running bill till the sum deducted plus the EMD retained will amount to 5% of the contract value as per Sl.No.11 in GCC

1.5 EXTRA ITEMS

The contractor is bound to carry out any items of work necessary for the completion of the job even though such items may not have been included in the schedule of probable quantities or rates,

such items being necessary or essential for completing the job. Variation order in respect of such additional items and their quantities will be issued in writing by the employer.

- 1.5.1 All shavings, cuttings and other rubbish as it accumulates from time to time during the progress of work and on completion including that of the sub-contractors and special tradesman and all materials condemned by the project engineer shall be cleared and removed from the site by the contractor without any extra charge.
- 1.5.2 All measuring steel taps, scaffolding, ladders instruments and tools that may be required for taking measurements shall be supplied by the contractor.

1.6. OVER TIME WORK

If the contractor is required to work night or on holidays in order to maintain the time schedule he shall take prior approval from the Engineer-in-charge. He should also provide and maintain at his own cost sufficient lights as may be necessary to enable the work to proceed satisfactorily during the night.

- 1.6.1. The contractor shall give full facilities to all other contractors working on site. He shall also arrange his programme of work so as not hinder the progress of other trades. The decision of the Engineer-in-charge on any point of dispute between the various parties shall be final and binding.
- 1.6.2. It is specifically pointed out that the contractor shall not be entitled to any compensation whatsoever on account of delay in procurement or supply of controlled materials and the rates quoted in the contract are fixed till the completion of the contract.
- 1.6.3. The contractor shall co-operate with other agencies appointed by the owners for the work to proceed smoothly with the least possible delay and to the satisfaction of the owners, architects and the consultants.
- 1.6.4. The owners shall provide a source for power supply at one convenient point at site. The contractor shall at his own cost install a separate meter at the said source and lay additional cables from the said source also at his own cost. For the electricity consumed by the contractor he shall pay the owner the actual cost at the rate charged by the local authority for power for constructional purposes. The contractor shall also obtain the necessary permit for utilizing power for constructional purposes.

2. SPECIAL CONDITIONS

2.1. EXECUTION WORK

2.1.1. The whole of the work as described in the contract (including bills of materials, specification and all drawings pertaining thereto) and as advised by the Engineer-in-charge from time is to be carried out and completed in all parts to the entire satisfaction of the Employer. Any minor details of construction which are obviously and fairly intended, or which may not have been definitely referred to in this contract, but which are usual construction practice and essential to the work, shall be included in this contract.

2.2. CERTIFICATE OF COMPLETION

2.2.1 The contractor shall intimate to the Engineer-in-charge in writing as and when the works are completed and put into beneficial use in order to enable the consultants to check certify to the owners to take over the plants.

2.2.2 The work shall not be considered as completed and put into beneficial use until the consultants have certified in writing that the same has been completed and put into beneficial use.

2.2.3 The defects liability period shall commence from date of such completion or any specific date mentioned therein.

BILL OF QUANTITIES

ABSTRACT

SEC.	DESCRIPTION OF ITEM	AMOUNT (Rs.)
1	Total	

BILL OF QUANTITIES

Renovation of Old OPD & Casualty Block of Medical College Trivandrum- Phase II Works					
S.No	Description of item	Quantity	Unit	Rate	Amount
	Part A (Agreement items)				
1	Point wiring in PVC conduit, with Modular type switch: Wiring for light point/exhaust fan point/ call bell point with 1.5 sq:mm FR PVC insulated copper conductor single core cable cable in surface/ recessed PVC conduit, with modular switch, modular plate, suitable size G.I. box and earthing the point with 1.5 sq:mm FR PVC insulated copper conductor single core cable etc as required.	85	Point		
	Group C				
2	Circuit Sub main wiring in PVC Conduit: Wiring for circuit sub main wiring alongwith earthwire with the following sizes of PVC insulated copper conductor, single core cable in surface/ recessed PVC conduit as required.				
2.1	2x1.5 sq mm +1x1.5 sq. mm earth wire	964.75	Meter		
2.2		2016.2	Meter		

	2x2.5 sq mm +1x 2.5 sq.mm earth wire				
2.3	4x 10 sq mm +2x 10 sq.mm earth wire	80	Meter		
2.4	4x 16 sq mm +2x 16 sq.mm earth wire	40	Meter		
	RE- WIRING IN STEEL/PVC CONDUIT				
3	Wiring in existing conduit; Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface recessed steel/ PVC conduit as required.	21.3	Meter		
3.1	3x1.5 sq mm				
4	Telephone wiring in existing conduit : Supplying and drawing following pair 0.5 sq.mm FR PVC insulated copper conductor, unarmored telephone cable in the existing surface/recessed PVC conduit as required	330	Meter		
4.1	2 Pair				
	STEEL/PVC CONDUIT, METAL BOXES				
5	S/F PVC conduit: Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
5.1		350	Meter		

	20 mm				
5.2	25 mm	60	Meter		
6	S/F light plug point modular type accessories: Supplying and fixing suitable size G. I box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required, (For light plugs to be used in non residential buildings }.	98	Each		
7	S/F Power plug point with modular type switch: Supplying and fixing suitable size G. I box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16& 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	38	Each		
8	S/F Ceiling rose: Supplying and fixing 3 pin , 5 amps ceiling rose on the existing junction box / wooden block including connection etc as required.	75	Each		
9	ITC Flurosent fitting directly on surface: Installation testing and commissioning of pre-wired, flurosent fitting/compact flurosent fitting of all types, complete with all accessories and tube etc. directly on ceiling/wall, including connection with 1.5 sq	121	Each		

	mm FR PVC insulated, copper conductor, single core cable and earthing etc as required.				
10	ITC Ceiling fan: Installation ,testing and commissioning of ceiling fan, including wiring the down rods of standard length { Up to 30 Cm } with 1.5 sq mm FR PVC insulated, copper conductor, single core cable as required.	34	Each		
11	Extra down rod 15 mm dia: Supplying and fixing extra down rod of 10 Cm length G. I pipe, 15 mm dia, heavy guage including 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)	40	Each		
12	ITC Exhaust fan up to 450 mm sweep: Installation of exhaust fan up to 450 mm sweep in the existing opening, including, making the hole to suit the size of the above fan, making good the damage, connection, testing , commissioning etc as required.	10	Each		
13	Painting of ceiling fan: Painting of ceiling fan in installed position with one or more coats of spray painting with synthetic enamel paint of approved brand and manufacture to give an even shade, including cleaning of surface with detergent etc as required.	16	Each		
	MCB DISTRIBUTION BOARDS				

14	<p>S/F Vertical type TPN MCB DB with 100 amps MCCB as incomer: Supplying, installation, testing and commissioning of surface/recess, mounting, vertical type, 415 Volts, TPN MCB distribution board of sheet steel, dust protected, duly phosphatized and powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, detachable gland/ knock out plate, and with 100 amps, 10 KA MCCB as incomer interconnection between incomer MCCB and busbars of the following ways (but without MCB's) as required.</p>				
14.1	8 Way with 100 amps MCCB as incomer	1	Each		
15	<p>S/F TP MCB DB: supplying and fixing following way, three pole and neutral, prewired, sheet steel, MCB distribution board, 415 volts, on surface/recess, complete with loose wire box, terminal blocks, duly prewired with suitable size FR PVC insulated copper conductor upto terminal blocks, tinned copper bus bar, neutral bus bar, earth bar din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc as required. (but without MCB/RCCB/Isolator)</p>				

15.1	4 way (4+12), Double Door	6	Each		
15.2	8 way (4+24), Double Door	2	Each		
	MCB's				
16	S/F 'B' series, MCB: Supplying and fixing 5 amps to 32 amps rating, 240 Volts ' B ' series, miniature circuit breaker suitable for lighting and other loads of the following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.	65	Each		
16.1	Single pole				
17	S/F 'C' series, MCB: Supplying and fixing 5 amps to 32 amps rating, 240 Volts ' C ' series, miniature circuit breaker suitable for inductive load of the following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.	200	Each		
17.1	Single pole				
18	S/f SP MCB blanking plate: Supplying and fixing single pole blanking plate in the existing MCB DB complete etc as required.	20	Each		

19	S/F TP MCB isolator Supply and fixing following rating, four pole, 415 Volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.		Each		
19.1	40 Amps	4	Each		
19.2	63 Amps	6	Each		
19.3	100 Amps	1	Each		
20	S/F FP RCCB: Supplying and fixing following rating, four pole, {Three phase and neutral}, 415 volts, residual current circuit breaker { RCCB }, having a sensitivity current up to 300 milli amps in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
20.1	40 Amps	7	Each		
20.2	63 Amps	5	Each		
21	S/F 20A SPN MCB industrial socket outlet: Supplying and fixing 20 amps, 240 Volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps 'C' series, SP, MCB, in sheet steel	17	Each		

	enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.				
22	S/F PVC holder: Supplying and fixing PVC batten / angle holder including connection etc as required.	10	Each		
23	S/F Aluminium reflector: Supply and fixing Polished Alluminium reflector on the PVC straight / angle batten holder etc complete as required.	2	Each		
24	S/M LV/MV cable end termination: Supplying and making end termination with brass compression gland and alumunium lugs for following size of PVC sheathed /XLPE aluminium conductor cable of 1.1KV grade as required.				
24.1	4 x10Sq.mm	10	Each		
	Total A1				
	Part A 2				
1	Supply of ceiling fan 1200 mm sweep, double ball bearing, approved colour and quality with original down rod,suspension shackle,canopy etc without regulator (Crompton, Bajaj, Havells)	20	Each		

2	Supply of exhaust fan 300 mm sweep, Metal blades of approved colour and quality (Crompton, Bajaj, Havells, Almonard)	8	Each		
3	Supply and fixing CFL bulb 15 Watts: Supply and fixing Compact Fluorescent Lamp(CFL) Bulb 15 watts of approved make of Bajaj, Wipro, crompton or GE	8	Each		
4	Computer Point Providing and fixing computer outlet (RJ-45) in MS flush box complete with all accessories, connection etc. complete as required as per specification and drawing.	3	Each		
5	Providing and fixing wiring for LAN cable coaxial copper conductor cable (CAT -5 (E)) in existing conduit complete with all accessories, connection, etc. as required.	100	Mtrs		
6	Supply, laying, termination, testing of telephone annealed tinned copper conductor (0.60 mm Dia) cable armoured / unarmoured, PVC insulated and sheathed of the following sizes including termination of both ends for the following:				
6.1	20 pair, 0.60 mm dia telephone cable	20	Mtrs.		

7	Supply, fixing, testing and commissioning of telephone tag block enclosed in 1.6mm thick MS, painted enclosure including clamp/bracket for installation on wall including cutting/chasing, fixing and making good complete as required.				
7.1	10 pair	2	No		
8	Supply of following sizes of 1.1KV grade XLPE aluminium conductor armoured power cables complete as required as per specification				
8.1	4C x 10 Sq.mm	205	Mtrs		
9	Supply of 2xPL-L36W recess mounted front openable clean room luminaire light fixtures complete with electronic ballast,lamp,lamp holder, starter, starter holder and condenser to improve power factor duly wired up for use on 240V single phase 50 Hz AC supply, similar to Philips FCS 650 2x PL - L36W EBP FOP GT or approved equivalent.	6	Each		
10	Supply of 2x18W recessed mounted CFL light fixtures complete with electronic ballast, lamp, lamp holder, starter, starter holder and condenser to improve power factor duly wired up for use on 240V single phase 50 Hz AC supply, similar to Wipro WCP 63218 or approved equivalent.	30	Each		

	Total A2				
	Part B1				
1	Supplying and fixing following way prewired vertical type TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, terminal connectors for all incoming and outgoing circuits, duly prewired with adequate size of FR PVC insulated copper conductor upto the terminal connector/ neutral link, earthing etc as required (But without MCB/ RCCB/ Isolator). (Note : Prewired vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
1.1	4 way Double door	3	nos		
2	Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted				

	including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
2.1	12 way (4 + 36), Double door	3	nos		
3	Wiring for twin control light point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.	3	point		
4	Wiring for circuit/submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/recessed PVC conduit as required.				
4.1	2 x 4 sqmm + 1 x 4 sqmm earth wire	100	m		
5	Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
5.1	Telephone socket outlet	5	Each		
6	Supplying & fixing stepped type electronic fan regulator on the existing modular plate switch box including connection but excluding modular plate etc as required.	63	Each		
7	Supply & fixing call bell / buzzer suitable for single phase, 230 volts, complete as required.	2	Each		

8	Supplying & fixing TP sheet steel enclosure on surface / recess along with 16 /25/32 amps 415volt, "C" curve TP MCB complete with connections, testing and commissioning etc as required.	4	Each		
9	Providing and fixing following capacity TP&N dis connector fuse switch unit inside the existing cubicle pannel board with ISI marked HRC fuses including drilling holes in cubicle pannel, making connections,etc, as required.				
9.1	125 Amp TP&N	1	Each		
10	Supply & fixing 6 SWG dia GI wie on surface or in recess for loop earthing as required.	600	m		
11	Laying and fixing one mo. PVC insulated PVC sheathed / XLPE power cable of 1.1 kV grade of following size on wall surface as required.				
11.1	Upto 35 sqmm (clamped with 1mm thick saddle)	150	m		
12.0	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	2	set		

13	Supply and making end termination with brass compression gland and aluminium lugs for following sizes of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1kV grade as required.				
13.1	4C x 6 sqmm	4	Each		
13.2	3.5C x 35 sqmm	2	Each		
	Total B1				
Part B 2 Extra Items					
14	Supply of following sizes of 1.1KV grade XLPE aluminium conductor armoured power cables complete as required as per specification				
14.1	3.5 Cx 35 SQMM	80	metre		
15	Supply of following size 1.1 KV grade XLPE insulated, PVC sheathed, armoured Aluminium conductor power cable conforming to IS 7098 (Part 1) amended upto date.				
15.1	4C x 6 sqmm	60	m		

16	Supply of 1x28W, indoor surface mountable fluorescent CRCA sheet steel power coated body light fixture, 28W T5 lamp, electronic HPF ballast, lamp holder, prewired complete with all necessary accessories suitable for operation on 230V, 50Hz AC supply as required (Wipro WIF 20128 SG or Philips TMS122 M 1xTL5-28W EBT or Bajaj BTIR 128).	40	nos		
17	Supply and fixing of 1x9W Bulk head luminaire with glass cover, powder coated MS wire guard, die-cast aluminium housing, etc complete with all accessories like 9W CFL lamp etc as required. (Philips FXC101 / GE GECPLI).	13	nos		
18	Supply & installation of 2x36 recess mounted fluorescent light fixture with CRCA housing, mirror optics, 36 W lamps, prewired complete with all necessary accessories like chain hook etc for installation suitable for operation on 230V, 50Hz AC supply as required.(LHCC22236127 havells make or equivalent)	92	nos		
19	Supplying and fixing following rating, 415 volts, C curve MCB in the existing DB, enclosure complete with connections, testing and commissioning etc. as				

	required.				
19.1	40A TP MCB	6	Nos		
19.2	63 A TP MCB	6	Nos		
19.3	100 A FP MCB	1	Nos		
20	Supply & fixing straight / Angle batten holder with ISI marking including connection etc complete with all accessories as required.	8	Each		
21	Supply and fixing ISI marked Compact Fluorescent Lamp (CFL), 11 watts of approved quality.	8	Each		
22	Supply & installation of 10 pair Telephone Terminal box with 1 no. 10 pair krone IDC module and SS BMF.	2	Nos		
23	Supply, Installation, Testing & Commissioning of utility panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders				

etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
INCOMER				
1Nos. 160A, TPN, 25kA, MCCB with Thermal Magnetic release, Ics=Icu, having adjustable over load & short circuit protection.				
BUSBARS				
1 Set of 200 Amp TPN busbars of high conductivity electrolytic quality Aluminium alloy.				
INSTRUMENTS				
1 No 3 phase Digital Multi function meter to read V, A, F with Acc class 1.				
1 No 3 phase 4 wire CT operated energy meter, 5-10A, Acc. Class 1.				
1 Set of phase indicating lamps, LED type, RYB.				
1 Set of 2A 10kA C curve SP control MCB				
1 Set of 160/5A, Class 1.0, 10VA, Cast Resin CT for metering.				
OUTGOING				
2 Nos. 100A, TPN, C curve, MCB				
2 Nos. 63A, TPN, C curve, MCB	1	Job		
Total B2				

