

# WEST BENGAL MEDICAL SERVICES CORPORATION LTD.

(Wholly Owned by the Government of West Bengal)

CIN: U85110WB2008SGC126373

Regd. Off. : Swasthya Sathi, GN-29, Sector-V, Salt Lake, Kolkata-700091

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Memo No.: WBMSC/AAES- 743/4205

Date: 24/11/2017

## ORDER

Administrative Approval & Expenditure Sanction is hereby accorded for 'Electrical work relating to Construction of new plant cum manifold room for Medical Gas Pipe Line System (MGPS) at Arambagh SDH, district Hooghly' at an estimated cost of Rs. 2,95,020.00 (Rupees Two Lakh ninety Five Thousand and Twenty) only against fund allotment No: 1518(Sanction)/HF/P/P&B/MS/W-55/2017 Dated 23/11/2017

The details are as follows:

SI No	Schemes	Amount (Rs)
1	Electrical work relating to Construction of new plant cum manifold room for Medical Gas Pipe Line System(MGPS) at Arambagh SDH, district Hooghly	2,87,824.00
2	Contingency @ 2.5%	7,196.00
	<b>Total</b>	<b>2,95,020.00</b>

The work will be executed by the Executive Engineer, P.W.D, Hooghly Electrical Division & Ex-Officio Executive Engineer, West Bengal Medical Services Corporation Limited, as per norms stated in the order of the Health & Family Welfare Dept. M.S. Branch, vide No. HF/O/MS/384/W-39-12 dt. 01.06.2012 read with Notification No. 86-W(C)-1M-106/11 dt. 06.02.2012 and Memorandum no 37-W(C)-1M-106/11 dated 17.01.2012 of Public Works Department, Government of West Bengal.



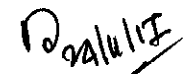
Managing Director

Date: 24/11/2017

Memo No: WBMSC/AAES-743/4205/1(10)

Copy forwarded for information and necessary action to:

1. Joint Secretary, M.S. Branch, Dept. of Health & Family Welfare
2. CMOH, Hooghly
3. Superintendent, Arambagh SDH
4. Superintending Engineer, PWD, Western Electrical Circle & Ex-Officio Superintending Engineer, West Bengal Medical Services Corporation Limited
5. Manager (Accounts), West Bengal Medical Services Corporation Limited.
6. Executive Engineer, P.W.D, Hooghly Electrical Division & Ex-Officio Executive Engineer, West Bengal Medical Services Corporation Limited
7. Consultant Project Engineer (Civil), West Bengal Medical Services Corporation Limited
8. Consultant Mechanical Engineer, West Bengal Medical Services Corporation Limited
9. Consultant Electrical Engineer, West Bengal Medical Services Corporation Limited
10. Office Copy.



Managing Director

ESTIMATE

Estimate No.-- 18/ARM of 2017-18

**Name of work :** Construction of a new Plant cum Manifold Room for Medical gas pipe line systems at Arambagh S.D. H, Hooghly--- E. I. Work

**Ref :** Memo No- WBMSC/PROC/1887/17/1872 dtd. 12/06/2017 of the M. D. & Secretary, H & FW Deptt. and Memo no-1196 dtd. 14/06/2017 of the Superintendent, SDII, Arambagh.

**Report:** This estimate has been framed to meet the probable cost of expenditure likely to be incurred for the above work. A new plant cum manifold room for medical gas pipe line system would be constructed at Arambagh SDH. The power requirement of the said set up is about (30+3) KW excluding light & fan load as communicated vide Memo No- WBMSC/PROC/1887/17/1872 dtd. 12/06/2017 of the M. D. & Secretary, H & FW Deptt. The arrangement for light, fan, exhaust fan has been kept as per the said guide line.

However, for single phase loading at Gas manifold room, 3 nos (1 no15A & 1no 6A) plug socket board alongwith 2 nos industrial socket out let with 20A SPMCB have been considered. The wire size for the plug boards of the manifold room has been considered with 2x2.5+1x1.5 sqmm & 2x4+1x2.5 sqmm copper wire.

For plant room, 4 nos 3 phase Industrial socket out let with 40A TPN MCB has been considered. The considered wire size of the industrial socket out lets would be 4x10+2x6sqmm copper wire.

For distributing power to 1phase, 3 phase requirements & incorporating provision for DG backup, one no 8 way VTPNDB, 1no SPN DB, 1 no 100A MS, 1 no 125A Chage over switch with 1no 200A BBC and necessary cable have been incorporated in this estimate.

However, the total electrical load requiremnt of the proposed gas manifold cum plant room is about 44KVA. This quantum of expected load could not be meet up by any of the existing LT connections of the Hospital as they are all loaded to their full extent. So, as this hospital does not have any Electrical Sub-station, the proposed load requirement would have to be meet up by another new service connection from WBSEDCL. Hence the WBSEDCL will be required to augment their existing pole mounted sub-station to meet up the new load. This estimate also incorporates seperately the costing of augmentation of Sub-station of WBSEDCL with necessary charges for cables, meter, SD money etc. as opined verbally by the WBSEDCL authority.

Hence incorporating all necessary items as stated above, this estimate has been prepared & forwarded for necessary action please.

Sl.No	DESCRIPTION OF WORKS	QTY	UNIT	RATE	AMOUNT
<b>SUB-HEAD 1--DISTRIBUTION WIRING</b>					
1	Distn. wiring in 3X22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire in 19 mm bore, 3 mm thick polythen pipe with all accessories embedded in wall to light/fan/call bell points as per GS with following Average run 10 Mtr. [ 2(a)(v) / E-9 ]	22	Pt	1259.00	27698.00
2	Distn. wiring in 3 X 22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire in 19 mm bore, 3 mm thick polythen pipe complete with all accessories embedded in wall to 240 V 5A 3 pin plug point as per GS.On Board [ 4 (a)(i) / E- 10 ]	4	Pt	78.00	312.00
3	Cutting Channel of required size on masonry wall by Electric operated cutting machine incl. supplying & fixing of heavy gauge Polythene pipe of following diameter as per GS.				
3.1	19 mm dia 3 mm thick [ 3 (a) / E- 2 ]	90	Mtr	93.00	8370.00
3.2	25mm dia 3 mm thick [ 4 (a) / E- 2 ]	80	Mtr	119.00	9520.00
4	Supplying and Drawing 1.1 KV single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire of the following sizes in the prelaidd polythene pipe as per GS.				
4.1	2x(2.5 sqmm)+1x(1.5 sqmm) [ 1(s) / E-9 ]	40	Mtr	78.00	3120.00
4.2	2x(4 sqmm)+1x (2.5 sqmm) [ 1(v) / E- 9 ]	45	Mtr	113.00	5085.00
4.3	2x (6 sqmm) + 1x (4 sqmm) [ 1 (y) / E- 9 ]	15	Mtr	166.00	2490.00
4.4	4x(10sqmm)+2x(6sqmm) [ 1(d1) / E- 9 ]	80	Mtr	592.00	47360.00
5	Supplying & Fixing sheet metal inspection box (16 SWG) of the following sizes(in mm ) flushed in wall as per GS incl S & F Perspex/bakelite 3mm thk cover				
5.1	100 x 100 x 65 [11(a)+13(a)/E-4]	10	No	153.00	1530.00
5.2	150 x 100 x 65 [11(b)+13(b)/E-4]	10	No	204.00	2040.00
<b>SUB-HEAD 2--MS, BDB,PDB,VTPN ETC</b>					
6	Supplying and fixing 415V, TPN SFU with sheet steel enclosure on angle iron frame on wall as per GS.( Make -L & T ).100A [4(a)/D-3]	1	No	7575.00	7575.00
7	Supplying and fixing 415V, TPN ON LOAD front operated change over switch with sheet steel enclosure on angle iron frame on wall as per GS.( Make -L & T ),125A [3(a)/D-2]	1	No	10281.00	10281.00
8	Supplying and fixing sheet steel (16SWG) cable end box on TPN SFU enclosure as per GS 63/125A [5/D-5]	4	No	610.00	2440.00
9	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required - (As per Drawing no. 470 of PWD Specification Book - May 1991) 415 V, 200 A, 4 nos Copper Bar size of 20x5mm dimension 500x500x150mm [ 19(b)/D13 ]	1	No	2178.00	2178.00

Sl.No	DESCRIPTION OF WORKS	QTY	UNIT	RATE	AMOUNT
10	Supplying and fixing double-door SPN MCB Distribution Board with IP-42/43 protection, concealed in wall as per GS. 2+12 Way [ Legrand ] [ 13 / D- 9 ]	1	Set	2098.00	2098.00
11	Supplying and fixing double door Vertical TPN MCB Distribution board for MCCB incomer with IP-42/43 protection, on angle iron frame on wall as per GS( Make - Legrand )	1	Set	12764.00	12764.00
11.1	a) 8Way ( Up to 160 A ) (607914) [15 / D- 11 ]				
12	Supplying and fixing 240/415 V MCB Isolator on din rail of existing DBs and necessary connection as per GS [Make-Legrand ]	1	No	419.00	419.00
12.1	40 A DP [ 6 / D- 5 ]				
13	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connections per GS [ Make -Legrand ]	21	No	228.00	4788.00
13.1	6-32 SP [ 7 / D- 6 ]	5	No	1724.00	8620.00
13.2	63/40 TP [ 8 / D- 7 ]				
14	Supplying and fixing 415 V Four Pole MCCB of Breaking capacity 25kA/35kA in existing Vertical DBs including necessary connection as per GS [ Make - Legrand ], 100 A FP [ 10 / D- 8 ]	1	No	8600.00	8600.00
15	Supplying and fixing double door sheet steel (16SWG), powder coated cable end box for TPN DB vertical enclosure with IP-42/43 as per GS 4/6 / 8 / 12Way [16/D-12]	1	No	1211.00	1211.00
<b>SUB-HEAD 3-- SUPPLY &amp; LAYING OF CABLES</b>					
16	Supply of 4 Core XLPE Insulated & Sheathed Armoured Aluminium Conductor cables for Working Voltage up to 1100 Volts of following sizes [ Make Nicco / Fort Gloster]	35	Mtr	449.00	15715.00
16.1	4Core 50 Sq. mm [ NS ]				
17	Laying of cable after cutting floor/pavement/wall as per GS for the following Sizes.	10	No	165.00	1650.00
17.1	35 to 95 Sq. mm [ 5(ii) / F- 3 ]				
18	Laying of cable above 35 and upto 185sqmm in underground trench as per GS for the following numbers of Cables. 1 No Cable [1(b)/F-2 ]	25	Mtr	184.00	4600.00
19	Supplying and fixing compression type gland and finishing those for following XLPE / PVC armoured cable (2/4 / 3.5)Core as per GS.				
19.1	4Core 50 Sq. mm [7(d)/F4 & 8(b) /F5]	8	No	442.00	3536.00
20	Supplying & fixing medium gauge GI Pipe ( ISI-Medium) Protection with necessary fittings as per GS 50mm dia [11(d)/F-6]	10	Mtr	391.00	3910.00
<b>SUB-HEAD 4-- PLUGS &amp; SOCKETS</b>					
21	Supply & Fixing 240 V, 1 no 20A & 1 no 6A plug socket with separate 1 no 20A & 1 no 6A Piano key type switch on 200x150x65 mm sheet metal switch board embedded in wall as per GS [ 10(c) / E-3 + {14(a) + 14(b) + 15(a) + 15(b)} / E-5 ]	3	No	563	1689.00
22	S & F Industrial Plug Socket Board with 415V 40A TPN MCB & Earth Metal Industrial Plug & Socket & 63 A Industrial Top as per GS [NS]	4	No	5915.00	23660.00
23	S & F Industrial Plug Socket Board with 240 V, 20A, SPN & Earth Metal Industrial Plug socket & 20A Industrial top incl. S&F 20 A SP MCB breaking capacity 10kA (C- Curve) in SS enclosure fixed on wall and necessary connection [17/D-12]	2	Mtr	1073.00	2146.00
<b>SUB-HEAD 5 - FIXING OF LIGHT FITTINGS</b>					
24	Fixing only single/twin fluorescent light fitting in the ceiling fixed with "L" type MS clamp as per GS [ 17/C-2 ]	8	No	220.00	1760.00
25	Extra for suspension exceeding 25 cm with S&F additional 2 no. 20 mm dia EI conduit as per GS [16/C-2 ]	3	Mtr	186.00	558.00
26	Supplying & Fixing Out door type CFL luminaire (Bajaj make- 524020 / 020168) with epoxy powder coated sheet aluminium housing, aluminium reflector & clear acrylic cover and accessories incl. for 11/18 watts CFL S/L type lamp incl. S&F 15mm dia GI pipe bracket, clamp, nut & bolts etc.. [27/D-13]	4	No	1420.00	5680.00
27	Supplying & Fixing bulk head light fitting (Havells make) with die cast aluminium housing & frosted glass on wall/ceiling incl. S&F 8watt CFL / 100 watts GLS lamp complete set [23/D-13]	2	No	687.00	1374.00
<b>SUB-HEAD 6 - SUPPLY OF LIGHT FITTINGS</b>					
28	Supply of 4 Ft. single LED light fitting for indoor application, complete with all accessories & Master LED Tube-20W840/865 T8 I Make -Philips) a. TMC 501P 1xT-LED 22W P3242 [NS]	8	Set	2420.00	19360.00
<b>SUB-HEAD 7 -- FIXING OF FANS</b>					
29	Supply & Fixing Socket type fan regulator (Step type)(Brand approved by EIC) on existing sheet metal switch board as per GS [ 18 (a) / E-6 ]	4	No	277.00	1108.00
30	Fixing only ceiling fan complete with blades, canopy, fork, rubber bush etc as per GS [ 21 (a) / C-3 ]	4	No	69.00	276.00
31	Fixing only exhaust fan after making holes in wall as per GS				
31.1	(12") [ 28(b)/C-4 ]	4	No	352.00	1408.00
32	Supply & Fixing louver shutter ( Aluminum) on wall with necy. bolts & nuts (6 mm dia x 62 mm long) as per GS				

Sl.No	DESCRIPTION OF WORKS	QTY	UNIT	RATE	AMOUNT
32.1	(12") [ 32(a)/D-14 ]	4	No	219.00	876.00
<b>SUB-HEAD 8 -- SUPPLY OF FANS</b>					
33	Supply of ceiling fans complete with all accessories having the following Model / Cat No. ( Make -Orient Summer King XL, white ) 1400 mm Sweep [NS]	4	No	2000.00	8000.00
34	Supply of Exhaust fans complete with all accessories having the following Model / Cat No. ( Make -EPC ) [ NS ]	4	No	2896.00	11584.00
34.1	12" (300mm) Speed 920 RPM	4	No	2896.00	11584.00
<b>SUB-HEAD 9 --Miscellaneous</b>					
35	Finishing of the PVC insulated wire ends by socketting with pin/ ring type copper sockets and insulated tapes etc., including supplying sockets, tapes. 9/F-5				
35.1	2x(2.5 sqmm)+1x(1.5 sqmm)	6	No	12.00	72.00
35.2	2x(4 sqmm)+1x(2.5 sqmm)	8	No	20.00	160.00
35.3	2x(6 sqmm) + 1x(4 sqmm)	4	No	26.00	104.00
35.4	4x(10sqmm)+2x(6sqmm)	10	No	63.00	630.00
<b>SUB-HEAD 10 -- Earthing</b>					
36	Earthing with 50 mm dia GI pipe 3.64 mm thick x 3.04 Mts. long and 1 x 4 SWG GI (Hot Dip) wire (4 Mts. long), 13 mm dia x 80 mm long GI bolts, double nuts, double washers incl. S & F 15 mm dia GI pipe protection (1 Mts. long) to be filled with bitumen partly under the ground level and partly above ground level driven to an average depth of 3.65 Mts. below the ground level as below: (a) By ISI-Medium GI pipe [2(a)/G1]	2	No	1530.00	3060.00
37	Excavation of soil for installation of Earth lectrode and filling & ramming.(a) For Soft Soil [1(a)/G1]	2	Cum	219.00	438.00
38	Extra for providing masonry 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 mortar (inside) CI hinged inspection cover of size 36.56 cm x 35.56 cm with locking arrangement, GI reducer including drilling of 46 nos. 12 mm dia holes on the GI pipe [3a/G2]	2	No	1050.00	2100.00
39	4. (a) Supplying & fixing earth busbar 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 GI bolts, nuts, washers, spacing insulators etc. as required [4a/G2]	1	Mtr	173.00	173.00
40	Connecting the equipments to earth busbar including S & F GI (Hot Dip) wire of size as below 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 (a) Solid GI wire No. 10 SWG [5(a)(iv)/G2]	20	Mtr	6.00	120.00
41	S & F 3 nos 415V 100A Porcelain Fuse base bridge (Havells) & 1 no 100A Brass Neutral connector on 10mm thk Hylam sheet (approx size-450x200mm) on flat iron frame on wall as per direction of EIC. [NS]	1	Item	4000.00	4000.00

288246.00  
Add : 1% ccss (+) 2882.00  
291128.00  
Add : Contingency @3% (+) 8734.00  
Total Rs. 299862.00

*M. K. Pradhan*  
**Executive Engineer, PWD**  
**Hooghly Electrical Division**  
**Govt. of West Bengal &**  
**Ex-Officio Executive Engineer, WBMSCL**

Adding ccss 1% R 2,882.00  
Adding Administation Charges of WBMSCL 2850.00  
@ 3% R 2,87,824.00  
R 2,99,862.00  
R 2,99,337.00

*S. K. Pradhan*  
18/7/17  
Consultant Eng. (Elect.)  
West Bengal Medical Services Corporation Ltd.