

भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

No. AAM/ENGG (E)/AMED-V/Addl. pump/2023-24/A-01/197 Date: 31.07.2023

To

M/s. Centre-Tap Engineering,
No.30, Kameshwar Twins, 100 Ft. Road,
Shreyas Tekra,
Ahmedabad - 380 015.

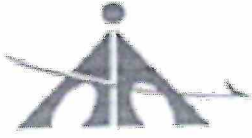
Sub: Provision of Additional Pumps for Fire Fighting System in Utility Building at Chennai Airport.

Ref: Tender ID: 2023_AAI_155604_1

Dear Sir (s),

1. Your E-tender for the above mentioned work is hereby accepted on behalf of the Chairman, Airports Authority of India, at the item rates quoted by you totaling to **Rs.38,78,800.00** (Rupees Thirty-Eight Lakhs Seventy-Eight Thousand and Eight Hundred Only) which is 7.88 % below the Estimated Cost of Rs.42,10,922.00 (Rupees Forty-Two Lakhs Ten Thousand Nine Hundred and Twenty-Two Only) which is inclusive of all the taxes, duties, levies and octroi etc., Except GST which will be paid extra as applicable.
2. Dy. General Manager (Engg-Elect)-I, AMED, Operational Office, Airports Authority of India, Chennai Airport, Chennai – 600 027 shall be the Engineer-In-Charge of the work. You are requested to attend to the Office of Dy. General Manager (Engg-Elect)-I, AMED, AAI, Chennai Airport by 10.08.2023 to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs.100/- (Rupees One Hundred only) and the cost of the stamp paper shall be borne by you.
3. You are requested to deposit an amount of Rs. 3,87,880.00 (Rupees Three Lakhs Eighty-Seven Thousand Eight Hundred and Eighty Only) towards Security Deposit within 10 days from the date of issue of this letter, failing which, the same will be deducted as per Clause 1A of General Conditions of Contract.
4. You are also directed to contact the Dy. General Manager (Engg-Elect)-I, Airport Maintenance Electrical Division, Operational Office, Airports Authority of India, Chennai Airport or his Authorized representative immediately for the execution of the above work.

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AIRPORTS AUTHORITY OF INDIA

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5. You are requested to comply with the provision of Contract Labour Regulation and Abolition) Act 1970 and Contract Labour (Regulation and Abolition) Central Rules 1971 and Minimum Wages Act and Rules Thereof Central and State Governments.
6. Please note that the time allowed for carrying out the work shall be **04 (Four) Months** which shall be reckoned from 10.08.2023.
7. Any further correspondence in connection with the contract should normally be addressed to the Engineer-In-Charge.
8. Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to the undersigned as a token of acceptance.

Encl: Schedule of Quantity (Page no. 1 to 4).

Yours faithfully

(J. Vetrivelvi)

Asst. General Manager (Engg - Elect)-V,
For and on behalf of the Chairman,
Airports Authority of India.

Name of Work: Provision of Additional Pumps for Fire Fighting System in Utility Building at Chennai Airport.

SCHEDULE OF WORK

BoQ Item No.	Description of Work	Qty	Units	Rate	Amount
1	Supply, installation, testing and commissioning of Electric driven main fire pump suitable for automatic operation and consisting of following: complete in all respect as required as per enclosed specifications. Horizontal type, multistage, centrifugal, split casing pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm.at highest and farthest outlet at specified flow of 2850 lpm at minimum 110 M head conforming to IS 1520. 100 HP squirrel cage induction motor, TEFC, IE3,speed 1500 RPM, suitable for operation on 415 volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS- 325. M.S. fabricated Common base Frame Consisting of 100 x 50 x6 mm C channel, coupling with guard, foundation bolts etc. duly painted as required.Suitable cement concrete foundation duly plastered with anti vibration pads etc complete as required.	2.00	Job	500000.00	10,00,000.00
2	Supply, Installation, testing and commissioning of electric driven pressurisation(Jockey) pump suitable for automatic operation and consisting o following: complete in all respect as required as per specifications. Horizontal type, multistage, centrifugal pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal and flow of 180 lpm at minimum 110 m head conforming to IS : 1520. 10 HP Squirrel cage induction motor TEFC type, IE3 suitable for operation on 415 volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS : 325. M.S. fabricated Common base Frame consisting of 100 x 50 x6 mm C channel, coupling with guard, foundation bolts etc. duly painted as required. Suitable cement concrete foundation duly plastered with anti vibration pads etc complete as required.	2.00	Job	150000.00	3,00,000.00
3	Supplying, installation, testing, & commissioning of pressure switches for Electric driven Main and Jockey Pumps, including Control valve, necessary wiring upto control panel & other materials etc complete as required as per specifications	4.00	Job	3000.00	12,000.00
4	Supply & fixing dial type (100 mm) pressure gauge with isolation ball valve suitable for working pressure of 250 PSI, short pieces, nipples, elbows, stainless steel 'U' tube & ball valve, etc complete as required as per specifications.	6.00	Job	1500.00	9,000.00
5	Supply, laying, testing and comissioning of 'C' Class heavy duty MS Pipe conforming to IS:1239 / 3589 including fittings like tees, elbows, flanges, tapers, compressed asbestos gaskets, nuts and bolts, etc. Fixing the pipe on wall / ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade etc complete as required.				
5.01	25 mm dia	10.00	Mtrs.	800.00	8,000.00
5.02	50 mm dia	30.00	Mtrs.	1200.00	36,000.00
5.03	65 mm dia	20.00	Mtrs.	1400.00	28,000.00
5.04	150 mm dia(6.35mm thick)	30.00	Mtrs.	3500.00	1,05,000.00
5.05	200 mm dia (6.35mm thick)	20.00	Mtrs.	4500.00	90,000.00
5.06	300mm nominal dia (6.35mm thick)	30.00	Mtrs.	5500.00	1,65,000.00
6.00	Supply, installation, testing & commissioning of Y type CI strainer fabricated out of 1.6 mm thick stainless steel sheet with 3 mm dia holes with stainless steel flange etc complete as required.				

BoQ Item No.	Description of Work	Qty	Units	Rate	Amount
6.01	200mm dia	2.00	Nos.	50000.00	1,00,000.00
6.02	65mm dia	2.00	Nos.	30000.00	60,000.00
7.00	Supply, installation, testing & commissioning of Butterfly Valve, Wafer Type with Micro Switch & Position Indicator, 300 PSI Rating, UL Listed & FM Approved, complete with matching flanges, gaskets, galvanised fasteners. Valves shall be fitted with lockable steel strapping (pad lock) arrangement.				
7.01	150 mm dia	5.00	Nos.	10000.00	50,000.00
7.02	200 mm dia	1.00	Nos.	15000.00	15,000.00
8.00	Supply, installation, testing & commissioning of Swing Check Valve, Ductile iron body, 300PSI, Flanged ends ANSI, UL Listed and FM Approved with required matching flanges, rubber seated, nuts, bolts & gaskets etc complete as required as per technical specification.				
8.01	200 mm nominal dia	1.00	Nos.	20000.00	20,000.00
8.02	150 mm nominal dia	2.00	Nos.	15000.00	30,000.00
8.03	50 mm nominal dia	2.00	Nos.	80000.00	1,60,000.00
9.00	Supply, installation, testing & commissioning of Ductile iron Gate Valve, Rising Spindle OS & Y Type, Flanged BS5163,300 PSI,UL Listed & FM Approved etc complete as required.				
9.01	300 mm dia	1.00	No.	80000.00	80,000.00
9.02	200mm nominal dia	2.00	Nos.	45000.00	90,000.00
9.03	150mm dia	2.00	Nos.	35000.00	70,000.00
9.04	65mm dia	2.00	Nos.	15000.00	30,000.00
9.05	50 mm dia	2.00	Nos.	10000.00	20,000.00
10.00	Supply installation testing and commissioning of Expansion bellows (suitable size and thick suitable for system test pressure) at pump delivery side with high tensile nylon/polyester cord body, high tensile nylon flanges with positive sealing, NEOPRENE rubber outer Cover & with Leak proof Abrasion resistant seamless lining of Rubber, Metal Retaining Rings embedded in body including all necessary accessories like nuts, bolts etc. complete of approved make as required as per site requirement.				
10.01	200mm nominal dia	2.00	Nos.	20000.00	40,000.00
10.02	150mm dia	2.00	Nos.	15000.00	30,000.00
10.03	65mm dia	2.00	Nos.	13000.00	26,000.00
10.04	50mm nominal dia	2.00	Nos.	10000.00	20,000.00
11.00	Supply and fixing of Air vessel tank of 250mm dia, 8mm thick MS sheet, 1200mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25mm dia gun metal wheel valve with required accessories like pressure gauge etc. i/c painting with synthetic enamel paint of approved shade etc complete as required as per specifications.	2.00	Set	80000.00	1,60,000.00
12.00	Supply and fixing of spring loaded release valve suitable for pressure of 16 Kg / sqcm including flanges nuts, bolt and washer etc complete as required as per site requirement. 25 mm dia	2.00	Set	3000.00	6,000.00

BoQ Item No.	Description of Work	Qty	Units	Rate	Amount
13.00	Supply, Installation, Testing and Commissioning of cubicle type Main Distribution Panel, IP55, suitable for 415V+/-10%, 3 Phase, 4 wire, 50 Hz AC supply system fabricated in compartmentalized modular design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN Aluminium alloy bus bars for high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 25 KA for 1 sec, bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of size 25 mm x 5 mm at the rear with 2 Nos. earth stud, solid / flexible connections from main bus bar to switchgears and from switchgear output to cable termination in cable alley with required size of Aluminium conductors / bus bars and control wiring with 2.5 sqmm PVC insulated copper conductor cable (FRLS), cable alleys, cable gland plates in two half, i/c providing following switchgears / accessories as per specifications. INCOMER 2 Nos.400 Amps, four pole MCCB, (Ics = Icu = 25 KA), microprocessor release with adjustable setting for O/C, S/C & E/F protection as per specification and with following accessories. digital meter to read V, A, Hz etc with communication facility (RS485 port) and LED display with required Nos CTs, 400/5, 5VA class 1.0 and control circuit wiring with 2 Amp MCB for controlling. 1 set of Indication Lamps, LED type, R, Y, B, phase indicating lamp with 2 Amp MCB for controlling BUSCOUPLER 1 No. 400 Amp, four pole Moulded Case Circuit Breaker (Ics = Icu = 25 KA) microprocessor release unit with adjustable setting with O/L, S/C and inbuilt E/F protection as per specification BUSBARS TPN aluminium bus bars of minimum 800 Amps capacity with heat shrinkable coloured sleeves and i/c, SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc. for withstanding fault level of 25 KA for 1 sec. OUTGOING 250 Amps MCCB, TP, (Ics = Icu = 25 KA), microprocessor release with adjustable setting for O/C, S/C & E/F protection, 100 HP pump with Star Delta starter for Hydrant, Sprinkler & 0-250 Amps Ammeter with 3 nos. 250/5A CTs, Class I accuracy and 5 VA burden with RS 485 communication port, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, Auto/Manual selector switch and indication lamp with 2 Amps MCBs for ON/OFF status of motor - 2 sets. 40 Amps MCCB, TP, (Ics = Icu = 25 KA), with built in thermal magnetic release with fixed setting for O/C & S/C protection, 10 HP pump with DOL starter for Jockey pumps motor, 0-40 Amps Ammeter with 3 nos. 40/5A CTs, Class I accuracy and 5 VA burden with RS 485 communication port, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, Auto/Manual selector switch and indication lamp with 2 Amps MCBs for ON/OFF status of motor - 2 sets. 40 Amps MCCB, TP, (Ics = Icu = 25 KA), with built in thermal magnetic release with fixed setting for O/C & S/C protection, 10 HP pump with DOL starter for Jockey pumps motor, 0-40 Amps Ammeter with 3 nos. 40/5A CTs, Class I accuracy and 5 VA burden with RS 485 communication port, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, Auto/Manual selector switch and indication lamp with 2 Amps MCBs for ON/OFF status of motor - 2 sets. System Controller Designing, supplying, installation, testing and commissioning of System controller to control operation of main electric fire pump, pressurisation pump in sequence as per specification consisting of relays, timers, sensors, annunciation window for fault indication, complete as per specification. Note: All incomer & buscoupler MCCB shall be mechanical interlocked with suitable accessories. Separate neutral link shall be provided in all 3 Pole feeders. All breakers breaking capacities shall be Icu=Ics	1	Set	5,00,000.00	5,00,000.00

BoQ Item No.	Description of Work	Qty	Units	Rate	Amount
14.00	Supply and Installing following size of perforated Hot dip G.I cable tray including horizontal and vertical bends, reducers, tees, cross members and other accessories as required and duly suspended from the ceiling with MS suspenders and including painting etc complete as required as per technical specification.				
14.01	300 mm width x 60mm depth x 1.6 mm thickness.	30.00	Mtrs.	5000.00	1,50,000.00
14.02	150 mm width x 60mm depth x 1.6 mm thickness.	30.00	Mtrs.	2500.00	75,000.00
15.00	Supply, Laying, Fixing, Testing and Commissioning of following sizes of XLPE insulated PVC sheathed armoured Copper / aluminium conductor cable of 1.1 KV grade on existing cable tray / surface as required.				
15.01	2C x 1.5 Sq mm copper conductor armoured control cable.	60.00	Mtrs.	100.00	6,000.00
15.02	3 x 10 Sq.mm. Aluminium Armoured	50.00	Mtrs.	200.00	10,000.00
15.03	3 x 120 Sq.mm. Aluminium Armoured	100.00	Mtrs.	500.00	50,000.00
15.04	3 1/2 x 300 Sq.mm. Aluminium Armoured	50.00	Mtrs.	1000.00	50,000.00
16.00	Supply and making end termination with brass compression gland and copper/ aluminium lugs for following size of XLPE insulated and PVC sheathed aluminium conductor cable of 1.1 KV grade as required.				
16.01	2core x 1.5 Sq mm copper conductor armoured control cable.	8.00	Nos.	200.00	1,600.00
16.02	3 x 10 Sq.mm. Aluminium Armoured	4.00	Nos.	300.00	1,200.00
16.03	3 x 120 Sq.mm. Aluminium Armoured	8.00	Nos.	500.00	4,000.00
16.04	3.5 core x 300 Sq.mm. Aluminium Armoured	4.00	Nos.	1000.00	4,000.00
17.00	Supply and fixing of following size of GI strips/ GI wire etc. on surface or in recess for connections, including GI clamps etc. as required.				
17.01	25 mm x 5 mm GI strip	30.00	Mtrs.	1000.00	30,000.00
17.02	6 SWG dia G.I. wire	30.00	Mtrs.	200.00	6,000.00
18.00	Supply and fixing of Shock treatment chart both in Regional, Hindi & English and framed with 5mm thick glass as required.	2.00	Nos.	1000.00	2,000.00
19.00	Supply & fixing LT danger notice plate of 250 mm x 200mm, made of mild steel sheet of at least 2mm thick & vitreous enamelled white on both sides and with inscription in signal red colour on front side as required.	2.00	Nos.	500.00	1,000.00
20.00	Supply of synthetic Insulation mat of 1 meter wide & 2.0mm thick to withstand 2.5kV dielectric strength as per IS 15652-2006	4.00	Mtrs.	2000.00	8,000.00
21.00	Supply of Single Line Diagram pasted on 5mm thick Aluminium sheet in A1 Size, duly laminated.	2.00	Nos.	5000.00	10,000.00
22.00	Supplying and making straight through joint of size 3.5 X 300 sq mm with heat Shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required	2.00	Nos.	5000.00	10,000.00
23.00	Supply, Installation, Testing and Commissioning of loop in /loop out cubicle type Main Distribution Panel, IP55, suitable for 415V+/-10%, 3 Phase, 4 wire 50 Hz AC supply system fabricated in modular design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland, plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN Aluminium alloy bus bars for high conductivity, DMC/SMC bus bar supports, with short circuit withstand capacity of 25 KA for 1 sec, fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of suitable size at the rear with 2 Nos. earth stud, solid / flexible connections from main bus bar of 630 Amps capacity to outgoing busbars. Panel shall have provision to accommodate single incomer cable & outgoing cable of 02 Nos of 3.5 C X 300 Sqmm Al armoured cable etc. complete as required.	2.00	Nos.	100000.00	2,00,000.00
(Rupees Thirty Eight Lakhs Seventy Eight Thousand Eight Hundred only) (Ex.GST)					₹ 38,78,800.00


(J. VETRISSEVI)
AGM (Engg-Elect)-V