

No: AAI/ER/DBR/SM (E-E)/FIRE HYDRANT/2023/WO-07

Date: 12.06.2023

To,

The M/s Diza Enterprises Private limited,

H.No. 127, Vednagar, Rukanpura,

Bailey Road, Patna Bihar-800014,

Name of Work: "Provision of Fire Hydrant and Sprinkler System at Darbhanga Airport.

Ref: (i) AAI Tender Id No: - 2023_AAI_151925_1

(ii) Your e-Bid opened on 06.06.2023

Dear Sir,

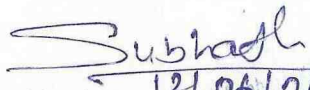
1. Your tender for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India, at the item rates quoted by you totalling to Rs. 1,09,04,634.00 (without GST) (Rs. One Crore nine lakh four thousand Six hundred and thirty-Four) which is 22 % below from the justified Cost put to tender of Rs. 1,39,81,167.00 (Without GST).
2. Senior Manager (E-E), AAI Civil Enclave Airport, Darbhanga-846005 shall be the Engineer-in-charge of the work. You are requested to attend the office of Senior Manager(E-E) AAI, Civil Enclave Airport, Darbhanga-846005 by 03.07.2023 to sign and compete the contract agreement. The contract agreement shall be executed on a non-judicial Stamp Paper of Value of Rs. 1000 (Rupees One thousand only) and the cost of the stamp pater shall be borne by you.
3. Please deposit Rs. 10,90,463. (Ten Lakh ninety-thousand four hundred and sixty-three) towards Security Deposit within 10 days from the date of issue of this letter failing which, the same will be Deducted as per **Clause No. 1(A)** of General condition of Contract document (Clauses of Contract).
4. You are requested to comply with the provision of contract Labour (Regulation & Abolition) Act of 1970 and contact Labour (Regulation & Abolition) Central Rules 1971 and Minimum Wages Act & Rules there of Central & State Governments.
5. You are also directed to contact Senior Manager (Engg Elect.), AAI Civil Enclave Airport, Darbhanga-84605 immediately who will arrange to hand over the site to you.
6. Please note that the time allowed for carrying out the work shall be 05 Months and same shall be reckoned from **23.06.2023**.
7. Any further correspondence in connection with the contract should normally be addressed to the **Senior Manager (E-E) AAI Civil Enclave Airport, Darbhanga-846005**.
8. Please note that the defect liability period is 1 Year after the date of completion of work.

9. 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.

Copy for information: -

1. DGM (Engg-E) Patna Airport
2. Jt. GM (Finance), AAI Patna Airport
3. Office Copy

Your Faithfully,


Subhash Kumar Paswan
SM (E-E)
AAI Darbhanga Airport, Darbhanga.

12/06/2023
Subhash Kumar Paswan
SM (E-E)
AAI Darbhanga Airport-846005

AIRPORTS AUTHORITY OF INDIA

DARBHANGA AIRPORT

Schedule of Work

Name of Work:-Provision of Fire Hydrant and Sprinkler system at Darbhanga Airport.

SN	DESCRIPTION	QTY	UNIT	Rate (Rs)(Without GST)	Amount in (Rs)(Without GST)
1	SITC of UL / FM approved Extinguishing agent: (FK-5-1-12) Clean agent filled in a PESO approved filling station and agent filled in stored pressure type cylinder with DLP Valve Assembly, Push in Connector For Tube, Safety Burst Disc at 28 Bar and Mounting Bracket. Container as per IS 15683: 2018: Stored Pressure type fitted with Pressure gauge, UV Resistance, Operating Pressure 15 bar, Hydraulic Pressure Tested to 35 bars, Burst Pressure 90 bar, Red Powder coated. Certified by National Test House, Dept of Consumer Affairs, Govt. of India -08 nos UL Certified Linear pneumatic Heat Detection Tube for automatic fire detection & suppression system made by special modified polyamide (PA), colour red RAL300, burst temperature 1000C to 1400C, inner diameter 4mm, outer diameter 6mm. Pressurised with dry nitrogen at 15 bar pressure with all necessary fittings & supports. Certified by National Test House, Dept of Consumer Affairs, Govt. of India -131 m SITC of End of line adapter with pressure gauge for automatic fire suppression tube used for fitting at the end of tube for pressurizing & re pressurizing tube, pressure gauge & fitting to connect to sensor tubing. Tube connection 6mm. -08 nos SITC of End of Line Plug for automatic fire suppression tube used for fitting at tube end to terminate the point. Fitting made by brass nickel plated material. 05 nos SITC of "T Connection" brass nickel plated for 4x6mm. Sensor tube, quick & easy disassembly using special tool, external diameter tube 6mm. -05 nos SITC of CE Approved Pressure Switch to monitor pressure drop in the tube, Switch Point at 8 bars. -08nos SITC of Master Control Unit with audio visual alarm Control Panel (IP54 third party rating), 2 NO/NC potential free relay contact for Main Fire Alarm/BMS/SCADA Integration. Gas discharge led indicator, battery led indicator, system status Led-08 nos indicator, AC power ON Led indicator. MAKE :K.I/CEASFIRE/KANEX/	1	job	828750	828750.00
2	Construction of Pump Room above underground water tank having 3X3X6 mtrs and inclusive of Excavation, P.C.C.1:4:8, Masonry, RCC Slab, Plaster with m/s pumps foundations, man hole for pump suction.	1	Job	1203999	1203999.42
3	Providing, fixing & testing black mild steel heavy duty (class 'C') pipes (IS:1239 Part-I) and fittings like flanges, tees, elbows, bends junctions, reducers etc, clamps structural steel supports as required/ directed at site including cutting & making good the walls, floors, RCC work etc cutting chases & filling the same with cement concrete 1:3:6 (1 cement :3 coarse sand :6 graded stone aggregate 20 mm nominal size) or cement mortar 1:4 (1 cement :4 coarse sand) as required including painting the exposed pipes with desired shade of two or more coats of synthetic enamel paint over a one or two coats red oxide primer including painting of legends with direction arrows as instructed by engineering incharge. as given in specification..(Plant room and inside the building). Make: TATA/JINDAL				
a	25 mm dia	150	RM	436.8	65520
b	40 mm dia	36	RM	632.58	22772.88
c	50 mm dia	42	RM	887.64	37280.88
d	80 mm dia	84	RM	1471.08	123570.72

e	100 mm dia	48	RM	2058.42	98804.16
f	150 mm dia	500	RM	3045.12	1522560
g	200 mm dia	36	RM	6112.86	220062.96
4	Providing on pipe including fittings protection for underground pipes from corrosion by applying PYPKOTE primer or equivalent make material @ (100gm/sqmr) of pipe surface there after wrapping tape of 4mm thick PYPKOTE or equivalent make material protection coating by thermo fusion process. The material shall be overlap minimum by 20mm, strictly according to manufacturer's specifications MAKE :WPL/PYPKOTE/ AS PER AAI APPROVED MAKE				
a	150 mm dia	300	RM	686.03	205809
b	80 mm dia	12	RM	335.39	4024.68
5	Excavation for pipe lines in trenches and pits in open areas where disposal of surplus earth is done along the alignment, including trimming and dressing sides, leveling of beds of trenches to correct grades, cutting joint holes, refilling consolidation and dewatering of refill in 15 cm layers and restoration of unmettalled or unpaved surface to its original condition. The rate including the cost of necessary timbering dewatering of rain water, diversion of traffic, night signals, fixing caution boards, watching fencing etc.				
a	Upto 1.5 m depth in all classes of soil except rocky.	50	RM	487.5	24375
b	From 1.5 m depth to 2.25 m depth all classes of soil	50	RM	975	48750
6	Providing, fixing & testing on "STAND PIPE" 63 mm dia oblique female instantaneous pattern landing valves with suitable size bolts, nuts, washers and gaskets. Landing valves shall be of IS: 5290 specification, MAKE :ASHOKA/KANEX/MINIMAX AS PER AAI MAKE	8	Nos	13298.22	106385.76
7	Providing and fixing fire hose cabinet to house stand post fire hydrant, including all other related accessories fabricated from 16 gauge M.S. sheet of fully welded construction having front door with locking arrangement, partially glazed with 4 mm thick glass. Cabinet shall be painted with post office red colour of size 900 x 600 x 450.MAKE :ASHOKA/KANEX/MINIMAX AS PER AAI MAKE	8	Nos	11904.36	95234.88
8	Providing & fixing 63 mm dia 15 mtr. long Reinforced rubber lined hose pipe including SS male & female instantaneous type coupling machine wound with G.I. Wire complete in all respects. Hose shall permaline hose and coupling to IS:903-1975 with ISI certification (two hose per Hydrant) Make:MAKE :ASHOKA/KANEX/MINIMAX AS PER AAI MAKE	16	Nos	9115.86	145853.76
9	Supply & Installation of drum type wall mounting hose reels, swiveling 180o consisting of 25 mm dia. x 30 meters long armored rubber hose pipe with 15 mm dia. bronze shut off type jet nozzle & cut-off valve on the inlet including making connection to the wet riser, by drilling welding, fixing the hose reel to the wall by providing necessary anchor fasteners/ expansion bolts, grouting the same with cement mortar, painting all complete as per drawings, specifications. Make: Newage.MAKE :ASHOKA/KANEX/MINIMAX AS PER AAI MAKE	8	Nos	13941.72	111533.76
10	Providing & fixing Stainless steel 63mm dia. Short branch pipes with 20 mm dia. Nozzles, ISI Marked (IS:903) as per approved MAKE :ASHOKA/KANEX/MINIMAX AS PER AAI MAKE	8	Nos	3109.86	24878.88
11	Providing and fixing Stainless steel fire brigade inlet connection to fire tank consisting of 4 nos., 63 mm dia instantaneous type male couplings with 150 mm dia flanged outlet complete with bolts, nuts and rubber insertions as required and as per IS:904-1983, MAKE :ASHOKA/KANEX/MINIMAX AS PER AAI MAKE	2	Nos	8579.22	17158.44
12	Designing, providing and fixing Orifice plate made out of stainless steel plate (with 6 mm thickness) for following size of pipe to reduce pressure upto 3.5 Kg/sqcm complete in all respects., MAKE :ASHOKA/KANEX/MINIMAX AS PER AAI MAKE 80 mm dia	8	Job	3109.86	24878.88

13	Providing and fixing 15mm dia, quick response quartzoid bulb type G.M. Sprinkler Head (Pendent / Upright / Conventional, as required) (UL / FM / LPC / listed / set to operate at 68°C Approved chrome plated complete with decorating plate (Rossette). Make: TYCO/HD AS PER AAI MAKE				0
a	Upright Type at 68°C	70	Nos	385.32	26972.4
b	Pendent Type at 68°C	70	Nos	385.32	26972.4
c	Side sprinkler type at 68°C	12	Nos	407.16	4885.92
14	Providing, fixing, testing and commissioning UL Listed S.S. Braided Flexible pipe for sprinkler drop complete with flare nuts on both end with washer and supporting rods and clamps 25mm dia upto 1.5 Mtr. Long. MAKE :HD/KANEX/MINIMAX AS PER AAI MAKE	70	Nos	2045.16	143161.2
15	Supplying, installing, testing and commissioning of electrical driven pump for hydrant system as per figure no. 11 of NBC part - 4 2016 suitable for automatic/ manual operation consisting of the following as under: (Location: Fire Pump Room at basement -2 Near under ground water storage tanks). Fig 12 as per NBC -2016. Horizontal Split casing mounted centrifugal type fire pump with bronze impeller with C.I. body should be of grade F.G. 200 to IS:210 casing shall be designed for 1.5 time of working pressure, capable of delivering 2280 LPM against a total head of 88 meters while running at 2900 r.p.m. to ensure a minimum pressure of 3.0 Kg per Sq.cm at the farthest outlet complete having tail pieces for proper connection to suction and delivery line, having a name plate indicating suction, delivery, head, discharge, stages, r.p.m. and direction of rotation. Squirrel cage, TEFC induction motor suitable for 415 + 10% 3-phase 50 Hz A.C. supply and of approximate suitable 60 H.P. (approx) for the above pump running at 2900 r.p.m. confirming to IS : 325-1978. Common bed plate of requisite strength manufactured out of M.S. channels of suitable size of ISMC including with suitable nos. of cushy foot mounting below ISMC channel and with suitable C.C. foundation etc. complete as required. Suitable mechanical seal with mounting arrangement. coupling and coupling guard for direct coupling of pump and motor. Drain pipe with valve (25 mm dia.). MAKE: KBL/KOEL/WILO/KSB AS PER AAI MAKE	1	Set	471885	471885

16	Supplying, installing, testing & commissioning of Diesel Engine driven fire pump suitable for automatic/manual operations consisting of the following, complete as required and as per specifications: (Location: Fire Pump Room under ground water storage tanks).Horizontal Split Casing centrifugal type fire pump with bronze impeller with C.I. body should be of grade F.G. 200 to IS:210 casing shall be designed for 1.5 time of working pressure , capable for delivery of 2280 LPM against a total head of 88 meters while running at 1500/1800 r.p.m. complete having tail pieces for proper connection to suction & delivery line, having a name plate indicating suction, delivery, head, discharge stages, r.p.m. & direction of rotation (as per specifications).Diesel engine suitable for the above pump complete with standard accessories & suitable water cooling system.Common base plate of requisite strength manufactured out of M.S. channels of suitable size of ISMC including with suitable no. of cushy foot mounting below ISMC channel.Suitable mechanical seal with mounting arrangement.1 No. pressure gauge (0-15 Kg./Sqcm) on the delivery line with isolation cock. oupling & coupling guard for direct coupling of engine & pump.1 No. 200 Lits capacity day fuel / diesel storage tank fabricated from 4 mm thick M.S. plates. Tank shall be provided with inlet, outlet, overflow, vent drain connections, manhole cover (300 mm I.D.) & level indicator. Tank shall be mounted on 2 m high steel structural supports with access ladder (Painted with 2 coats of red oxide paint). Tank shall be provided with epoxy coat from inside out-side with one coat of red oxide & two or more coats of synthetic enamel paint of approved colour.Drain pipe with valve (25 mm dia.) 24 volts 180 AH lead acid battery (12 volts - 2 Nos) with boost/Trickle charger for starting the engine automatically complete as required. MAKE: KBL/KOEL/WILO/KSB AS PER AAI MAKE	1	Set	787736.82	787736.82
17	Supplying, installing, testing & commissioning of electrically driven Jockey pump (as per specifications) suitable for automatic /manual operation consisting of the following: (Location: Fire Pump Room under ground water storage tanks).End suction horizontally mounted centrifugal pump running at 2900 r.p.m. capable of delivering 180 LPM against a total head of 88 meters complete with tail pieces for proper connection to suction and delivery line.Squirrel cage, SPDP induction motor suitable for 415 + 10% 3 phase 50 Hz A.C. supply & of 7.5 H.P.(Approx.) for the above pump running at 2900 r.p.m. (as per specifications).Bed plate of requisite strength manufactured out of M.S. channel of suitable size of ISMC including with suitable no. of cushy foot mounting below ISMC channel with suitable C.C. foundation.Suitable mechanical seal & 1 No. pressure gauge on the pump delivery line with isolation cock. coupling and coupling guard for direct coupling of motor and pump.Drain pipe with valve (25 mm dia.).MAKE: KBL/KOEL/WILO/KSB AS PER AAI MAKE	1	Set	188753.76	188753.76
18	Supplying, installing, testing and commissioning of Electrical driven Priming water fire pump suitable for automatic/ manual operation 250 lpm #15 m head monoblock type , ss shaft and mechanical seal , foot valve 100 mm -,NRV 100- MM,BFV 100 MM- Inclusive of all above as per site or type of installation.MAKE: KBL/KOEL/WILO/KSB AS PER AAI MAKE	1	Set	117971	117971
19	Fire Brigade Suction Hose coupling (Draw out connection) with Nut for female coupling as per IS:902-1974 complete with 100mm dia MS Suction pipe and 100mm dia foot valve if required(to be connected to Static Tank).	1	Set	39680.94	39680.94
20	Supply, laying, testing and commissioning of 1100 Volt grade XLPE aluminium conductor armoured cables including the cost of providing required gap between adjacent cables (minimum one cable dia.) and including the cost of providing identification tags saddle etc. complete as per specification, as required				

a	3.5C x 95 Sq.mm cable	30	Nos	1388	41640
b	3C x 10 Sq.mm cable	30	Nos	374	11220
c	3C x 4 Sq.mm cable	90	Nos	468	42120
d	12C x 1.5 Sq.mm cable	20	Nos	468	9360
21	CABLE TERMINATION-Supplying of all materials and making terminations of 1.1 KV grade copper/aluminium multicore cables of the following sizes. The work includes cable glanding using brass plated single compression glands, sizing the core leads, removing insulation, fixing suitable crimping type copper/aluminum lugs/thimbles by using hydraulic crimping tools with correct size of the dies, shaping the leads and neatly connecting the same to the equipment terminals, Make: Polycab.				0
a	3.5C x 95 Sq.mm cable	12	Nos	1443	17316
b	3C x 10 Sq.mm cable	6	Nos	296	1776
c	2C x 4 Sq.mm cable	30	Nos	234	7020
22	Providing, fixing and testing cast iron water type Foot valve complete with nitrile / EPDM lining seat, stainless steel Disc., Carbon Steel shaft and stainless steel stem complete with flange, nuts, bolts, washer and gesket tested to 16 KGs / sqcm complete in all respect. MAKE : SANT/KVPL/ZOLOTO AS PER AAI APPROVED MAKE 200 mm	3	Nos	18231	54693
23	Providing and fixing cast iron Y-strainer suitable to pipes of following dia (including flanges), rubber gasket, nuts, bolts complete in all respect.MAKE : SANT/KVPL/ZOLOTO AS PER AAI APPROVED MAKE				
a	100 mm dia	2	Nos	3432	6864
b	200 mm dia	2	Nos	12935	25870
24	Providing & fixing double flanged flexicon rubber expansion joint (suitable for system test pressure) of standard length as per specs including rubber gaskets, flanges, nuts, bolts and washers complete as required as per specifications. MAKE: CORI RUBBER/KANWAL/AZAD AS PER AAI APPROVED MAKE				0
a	200 mm dia	2	Nos	37289	74578
b	150 mm dia	2	Nos	27358	54716
c	100 mm dia	1	Nos	18649	18649
d	80 mm dia	1	Nos	15539	15539
25	Providing, installation, testing and commissioning of dual plate non return valve, PN 16, of following sizeMAKE : SANT/KVPL/ZOLOTO AS PER AAI APPROVED MAKE				
a	150 mm dia	2	Nos	24119	48238
b	100 mm dia	1	Nos	13930	13930
26	Fabricating, Supplying, Installation, Testing and Commissioning of 450 mm dia, 2 Metre high Air Vessel of continuous welded construction with flanged discharge header in pump house fabricated out of 10 mm thick dished ends and 8 mm thick MS sheet, Air Release Valve, complete with drain arrangement with 25 mm dia gun metal wheel valve complete with all accessories etc.	1	Nos	43434	43434
27	Providing and laying 150 mm MS Wrap Coat Pipe lines of 150 mm dia MS (C class) pipe MS by open cut method and 165 (od) MS C class grade by hdd method	80	RM	21449	1715920
28	Supply, Installation, testing and commissioning of pressure switches in MS pipe for Hydrant / Diesel Engine Driven Pump / Jockey Pumps, diaphragm type, adjustable range from 0-10 kg/sq.cm and a regulation range of 0.1 - 1.5 kg/sq.cm direct mounted SNAP acting type made from die cast aluminium with epoxy powder coated finish and SS316 diaphragm and other wetted parts, including necessary wiring upto control panel & other materials as required as per specifications.	3	Nos	11796	35388

29	Providing & 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 as required as per specifications. MAKE : H GURU/WIKA/MAHAVEER AS PER AAI APPROVED MAKE	12	Nos	3967	47604
30	Providing, fixing, testing & commissioning electrically operated water flow switch(Vane type) the system should complete with tamper switch and accessories, with tap off socket arrangement as required, with potential free contact with 2 nos. NONC. MAKE : HONEYWELL/SYSTEM SENSOR 100MM Dia	3	Nos	4825	14475
31	Providing, fixing, testing and commissioning of annunciator Panel _10_ zones complete to indicate location of fire in a particular zone through speration of flow switch as given in specification.	1	Nos	53622	53622
32	Supplying, receiving, storing, laying, effecting proper connections, testing and commissioning of the following sizes PVC insulated and sheathed copper conductor armoured stranded control cable complete with saddles, clamps etc. as required and as per specifications. 2C x 1.5 Sqmm PVC Cable	120	RM	138	16560
33	Providing and fixing 150mm dia, Installation control valve assembly comprising of vertical wet alarm valve, 150mm dia, C.I sluice valve, hydraulic alarm motor & gong, 15mm dia, test valve, 50mm dia, drain valve and all necessary trimming connection including 2 Nos. pressure gauge as per manufacturer's catalogue (UL/FM/LPC/listed/ approved), MAKE : HD/TYCO/NEWAGE	1	Nos	82579	82579
34	Design, manufacturer, supply, installation, testing and commissioning of following MV switchgear panels suitable for 415V, 3 phase, 4 wire, 50 Hz power distribution system. The panel should be indoor, free standing, floor mounting, sheet metal clad, cubicle, dead front, dust and vermin proof conforming to IP-55 enclosure, compartmentalized design, fabricated out of 14 SWG sheet steel complete with AC busbars, seperate earth bus bar to be provided through out the length of the panel. The incoming and outgoing feeders shall be accommodated in a modular multitier arrangement, adequate size cable alley, powder coating, earthing numbering, damper plate etc. as required as per specifications and drawings. The panel shall withstand a fault level of 35 MVA.General NotesMCCBs shall be used with Thermal Magnetic Based releases :- Upto 250A - Thermal Magnetic based Above 250A - Microprocessor based All MCCB shall be provided with overload & short circuit releases. Incoming MCCB shall be provided with earth fault release also . Breaking capacity mentioned is ICs value.All meters shall be digital type.All current transformer shall be cast resin type & shall be provided with shorting links.All indicating lamps shall be LED type.All internal control wiring shall be heat resistant type.All TP feeders shall be provided with Isolable neutral link.Bus bar chamber & cable entry both shall be provided at top only.All feeders shall be provided with door interlocked with door defeat, pad lock facility.Live parts shall not be accessible after opening the door, Transparent acrylic sheet to be provided to cover the same.All incoming/outgoing cables shall be terminated on links/terminals.All switchgear used in starter shall be type-2 coordinated. Vendor to furnish the type-2 coordination chart for the make selected. Following provisions to be made in the fire panel & cost of the same shall be included in quoted rates.Audio visual alarm & indications having disconnect/reset facility with a range of ½ km. The indication shall come on when electrical driven pump set fails to start on pressure drop or when there is power failure during pressure drop.Facility for mode selection ie auto or manual.Protection failure & control cabling. Panel shall be without protection like undervoltage, overload single phasing etc.Danger Plate.Shock Treatment ChartRubber Mat in front of panel.Vendor should quote for the installation of pump only. Complete tool box which required for above	1	Nos	525508	525508

	subject.Incoming Section:1 No. 630A TP MCCB (35 KA) + NL Set of 4 strip 415 V aluminium bus bars of 500 A capacity and suitable length. Busbar calculation should be submit for approval.3 Nos. current transformer (630/5A).1 No. ammeter 0-630 Amps with selector switch.1 No. 0-500 V voltmeter with selector switch protected with 2A, SP MCBs. (10KA)1 Set (3 Nos) of phase indication lamps protected with 2A, SP MCBs. (10KA) OutgoingThree (3) No. 250 Amps TP MCCB (35 KA) Two(2) No. Automatic Soft starter complete (without over load relay and single phasing preventor feature). ON/OFF TRIP, indication lamps, Start / Stop push buttons, contactors etc. suitable for 90 HP motor (For Sprinkler pump & Hydrant Pump).Each shall be provided with the followings:- 3 Nos current transformers (250/5 A).3 Nos current transformers (250/5 A).Ammeter 0-250 A with selector switch Pressure Switches - Lot Wiring from pressure switch to starter. Two(2) Nos. 160 Amps TP MCCB (35 KA), Motor Duty.One(1) No. Automatic soft starter complete (without over load relay and single phasing preventor feature). ON/OFF TRIP, indication lamps, Start / Stop push buttons, contactors etc. suitable for 45 HP motor (For Water Curtain Pump).3 Nos current transformers (160/5 A).Ammeter 0-160 A with selector switch Pressure Switches - Lot Provision for starting the diesel engine fire pump. The diesel engine driven fire pump shall start automatically in the event of pressure drop beyond preset limit on mains failure or failure of electrical driven pumps to start and logic necessary for automatic start of diesel engine along with battery charger for the diesel engine batteries. Window type fault annunciator with alarm for diesel engine faults like LLOP, HWT etc. as per manufacturer requirement. Two (2) No. Star Delta starter (with over load and single phase preventor feature). ON/OFF & TRIP, indication lamps, Start / Stop push buttons, contactors etc. suitable for 7.5 KW motor (1 No. for Jockey Pump).3 Nos. 63 A TP MCCB (25 KA) +NLSet of control system to make the system automatic as per functional requirements. Make: BCH/BSPL/ADLEC AS PER AAI MAKE				
35	Supply & Installation of Cast iron sluice valve as per IS:14846 including making necessary flanged joints by providing necessary nuts, bolts, gaskets, etc. all complete as per specification.				0
a	200 NB	2	Nos	17831	35662
b	150 NB	11	Nos	11215	123365
c	80 NB	1	Nos	5881	5881
d	65 NB	1	Nos	5005	5005
e	50 NB	4	Nos	3664	14656
36	Supply & installation, Testing and commissioning of Post Indicator Valve consists of cast iron telescopic barrel, cast iron base flanges, the sing shall be alluminium with minimum 0.080" high and letter shall be minimum 1" high black letteringwith white background and as per specification. MAKE : TYCO/WEFLO/VICTAULIC 150 NB, 250 PSI.	6	Nos	117460	704760
37	Providing & installation of Ball valve having screwed ends.				
a	50 NB	8	Nos	1989	15912
b	25 NB	4	Nos	429	1716
38	Supply and installation of 150mm dia Electro Magnetic flow meter able to measure 175 % of the pump rating. It shall be FM approved. MAKE : KRANTI OR AS PER AAI MAKE	1	Nos	42900	42900
39	Supplying, fabricating, structural steel supports such as MS channels, angles, flats, with two coats of Zinc rich primer of approved make and 2 coats of paints for inside pump room supports.(to be considered as secondary supports (pump rooms pipe supports, steel platform, production area supports in utility grids and supports from steel columns).	3000	Kg	31.2	93600
40	Supply & installation of 5 Nos Differential Pressure switch with 1No 150dia dial pressure gauge in Bronze check valve with 2mm Orifice, Stainless Steel presssure sensing piping 15mm dia required length as shown in drawing & NFPA 20.	1	Set	27300	27300

41	Providing, fixing and testing cast iron wafer type butterfly valve complete with nitrile / EPDM lining seat, stainless steel Disc., Carbon Steel shaft and stainless steel stem complete with flange, nuts, bolts, washer and gesket tested to 16 Kg /sqcm complete in all respect. MAKE : KVPL/SANT/ZOLOTO				
a	80 mm dia	9	Nos	4219	37971
b	100 mm dia	2	Nos	5254	10508
c	150 mm dia	5	Nos	6408	32040
d	200 mm dia	5	Nos	6903	34515
Total amount (Exclusive GST)					10904634.00
Add GST @18% on Rs. 10904634.00					1962834.12
Total amount (Inclusive GST)					12867468.12

Subhash
SMLE-E)
 12/06/2023
 सुभाष कुमार शर्मा (SMLE-E)
 वरिष्ठ प्रबंधक (सं.)
 भारतीय विमानपत्तन प्राधिकरण
 परगना हवाई अड्डा-846005, Darbhanga Airport-846005

