



MAHATMA GANDHI MISSION
SPORTS CLUB AND STADIUM

Fire & Safety Dept.

N-6, CIDCO Sambhaji Nagar (Aurangabad)

Email: - hodfas@mgmcha.org ,Telephone: 0240 6482000 (ext. - 2222)

SITE : PAVILLION BUILDING

SR. NO.	ITEM DESCRIPTION	UNIT	QTY	SUPPLY + INSTALLATION	
				RATE	AMOUNT
A	FIRE PUMP ROOM				
1.0	Supplying, installation, testing and commissioning of Main Fire Pump (MEP/EP) suitable for water discharge of 2280 LPM at 105 to 70 m head driven by the electric motor 415 volts, 3 phase 50 Hz, AC supply of 22kw or of suitable kw a) Horizontal type, single stage, centrifugal/split casing pump of cast iron body & bronze impeller with stainless steel shaft (SS410 grade), mechanical seal conforming to IS 1520. b) Squirrel cage induction motor, TEFC, synchronous speed 3000 rpm, SUITABLE FOR OPERATION WITH IP 55 protection for enclosure, horizontal foot mounted type with class-F insulation, confirming to IS-325. c) M. S. fabricated common base plate, coupling, coupling guard, concrete, foundation bolts, as required. d) Erected on provided suitable size cement, concrete, foundation duly plastered with anti-vibration pads with perfect aligning, proper levelling complete pump set with accessories painted with 2 coats of synthetic enamel paint of fire red colour over a coat of primer (ISC Code-3536, as per IS-2932 of 2003) complete, as per specification no. FF-MEP/SSC/EP	Each	1		
2.0	Supplying, installation, testing and commissioning of Main Fire Pump (MEP/EP) suitable for water discharge of 2280 LPM at 105 to 70 m head driven by the electric motor 415 volts, 3 phase 50 Hz, AC supply of 22kw or of suitable kw a) Horizontal type, single stage, centrifugal/split casing pump of cast iron body & bronze impeller with stainless steel shaft (SS410 grade), mechanical seal conforming to IS 1520. b) Squirrel cage induction motor, TEFC, synchronous speed 3000 rpm, SUITABLE FOR OPERATION WITH IP 55 protection for enclosure, horizontal foot mounted type with class-F insulation, confirming to IS-325. c) M. S. fabricated common base plate, coupling, coupling guard, foundation bolts, as required. d) Erected on provided suitable size cement, concrete, foundation duly plastered with anti-vibration pads with perfect aligning, proper levelling complete pump set with	Each	1		
3.0	For addition of standby main diesel engine driven fire pump (1 Standby) The control for diesel engine comprises of automatic/ manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode indicating lamp for high/ low lub oil pressure, high water temp and engine on indication battery charger suitable for 12V/ 24 V DC with boost and trickle selector switch, 0-30 V DC voltmeter and 0-20 A DC ammeter with all standard relays and accessories required for automatic operation of diesel engine with interlocking for operation of main fire pumps.	Each	1		

4.0	<p>Supplying, installation, testing and commissioning of Jockey Fire Pump (JP) suitable for water discharge of 180 to 240 LPM at 90 to 70 m head driven by the electric motor 415 volts, 3 phase 50 Hz, AC supply of 10 kw or of suitable kw capacity for manual/automatic operation of consisting of following :</p> <p>a) Horizontal/vertical type, Multi stage, centrifugal casing pump of cast iron body and bronze impeller with stainless steel shaft (SS410 grade), mechanical seal conforming to IS-1520.</p> <p>b) Squirrel Cage induction motor, TEFC, synchronous speed 3000 rpm, suitable for operation with IP 55 protection for enclosure, horizontal foot mounted with Class-F insulation, conforming to IS-325</p> <p>c) M. S. fabricated common base plate, coupling, coupling guard, foundation bolts etc. as required.</p> <p>d) Erected on provided suitable size cement concrete foundation duly plastered with anti vibration pads perfect aligning, proper levelling complete pump set with</p>	Each	2		
5.0	<p>Control Panel for Fire Pumps.</p> <p>Supplying, erecting, testing & commissioning of fire pump control panel (FCP) of cubical construction, floor mounted type, fabricated from minimum 2 mm thick CRCA sheet, compartmentalised with hinged lockable doors, with enclosure protection class IP54, duly powder coated or painted with accessories duly painted with two coats of synthetic enamel paint of fire red colour over a coat of primer (ASC Code 536 as per IS 2932 of 2003), cable alley, interconnections with suitable size solid copper busbar strips of adequate size for all power connections having switchgears and accessories, mountings and internal wiring with adequate size copper conductor cable, earth terminals, numbering etc. complete in all respect, suitable for satisfactory operation of main fire pump and jockey pumps with necessary accessories, wiring & cabling along with allied accessories with following incoming and outgoing, suitable for automatic & manual operations on 415V, 3 phase, 50 Hz ac supply as per specifications the capacity of electric motor driven pump are as follows:</p> <p>a. Main fire pump (MEP) having capacity of 22 kW 1 no (1 working) Pump (IP) capacity of suitable capacity 2 nos (1 working + 1 standby, alternate run per start in auto mode) comprises of following features & switchgears:</p> <p>1. Main incomer FP SFU having rotary handle with HRC fuses of suitable rating 2. Electrolytic grade copper strips for busbar of suitable sizes for main incomer and branches to motor SFU's, starters & outgoing terminals with necessary accessories like stainless steel nut bolts with spring washers for connections, mounted on required no of epoxy or porcelain support insulators ratings, etc. 3. Individual pump TPN SFU having rotary handle with HRC fuses of suitable rating. 4. Digital Voltmeter & ammeter & RYB indicating, lamps & push buttons & SPP, O/L & Phase reversal protection with emergency stop switch 5. TPN SPD 100 kA Type 1 +2 tested. 6. Required pressure transducer with pressure indication on panel with cabling required for monitoring & automatic operation of fire pumps. 7. System controller to control operation of main electric fire pump, jockey pumps in sequence with interlocking for operation of pumps as per specifications with automatic/manual operation with selector switch and alternate run of standby pumps consisting of relays, timers, sensors, annunciators window for fault indication, complete as per specifications.</p>	Each	1		
	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3 core 10 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL.				
6.1	3.5 C x 95 sq.mm (Alu. Armoured)	Rmt	QR		
6.2	3.5 C x 50 sq. mm (Alu. Armoured)	Rmt	50		
6.3	3 C x 6 sq. mm jockey pump (Alu.)	Rmt	40		
6.4	2 C x 1.5 sq. mm for instrumentation (Copper)	Rmt	20		
6.5	12 C x 1.5 sq. mm for Diesel Engine Panel (Copper)	Rmt	20		
7.0	Supplying and erecting G.I. pipe "C" class ERW 200 mm dia with necessary fittings duly painted with two coats of synthetic enamel paint of fire red colour over a coat of primer (ISC code 536 as per IS 2932 of 2003) complete as per specification no. FF-PP				
7.1	200mm nominal dia	Rmt	QR		
8.0	Supply, installation, testing and commissioning of above ground G.I. Pipe "C" class ERW with necessary fittings as per specification no. FF-PP				
8.1	80NB	Rmt	18		
8.2	100NB	Rmt	QR		
8.3	150NB	Rmt	24		
9.0	Supplying and erecting cast iron double flanged sluice valve complete with PN16 pressure rating as per specification no. FF-VL/SV				
9.1	80 mm dia	Each	2		
9.2	150 mm dia	Each	5		
10.0	Supplying and erecting cast iron double flanged NRV complete with PN16 pressure rating as per specification no. FF-VL/ NRV				
10.1	80 mm dia	Each	2		
10.2	150 mm dia	Each	3		
10.3	200 mm dia	Each	QR		
11.0	Supplying and erecting cast iron double flanged Butterfly Valve complete with PN16 pressure rating, as per specification no. FF-VL/ BFV				
11.1	80 mm dia	Each	QR		
11.2	150 mm dia	Each	QR		

12.0	Supplying and erecting cast iron end line strainer of Y-type flanged end pattern. PN16 pressure rating, SS screen, end connection with Flanged/ Screwed/ Socket Weld/ Butt Weld End etc with standard OAR (open area Ratio) for positive suction complete as per specification no. FF-VL/ ELS (OR FOOT VALVES)			
12.1	80 mm dia	Each	2	
12.2	150 mm dia	Each	3	
13.0	Supplying and erecting 300 mm dia 1.5m in height air vessel / tank fabricated from min 5mm thick M.S sheet complete as per specification no. FF-FFA / ACT	Each	1	
14.0	Supplying and erecting 20/25mm dia gun metal air release cock, with necessary G.I. coupling to be fitted on top of air vessel or on wet riser complete as per specification no. FF-FFA/ARV	Each	2	
16.0	supplying and erecting Ball Valve complete with PN16 pressure rating as per specification no. FF-VL/BV			
16.1	25mm	Each	2	
19.0	Supplying and erecting 100 mm dia, pressure gauge , 0-300 PSI or 0-14 kg per cm square fitted with 12/15 mm dia. pad cock valve, erected with provided G.I. pipe, elbow etc. complete as per specification no. FF-FFA/PG	Each	7	
20.0	Supplying and erecting 12/15 mm dia pressure switch with provided isolation valve, G.I. nipple, elbow, etc complete as per specification no. FF-FFA/PS	Each	5	
TOTAL (FIRE PUMP ROOM)				
B FIRE HYDRANT SYSTEM (External Hydrant)				
1	Supply, installation, testing and commissioning of above ground G.I. pipe "C" class ERW with necessary fittings as per specification no. FF-PP			
1.1	25NB	Mtrs.	QR	
1.2	80NB	Mtrs.	18	
1.3	100NB	Mtrs.	QR	
1.4	150NB	Mtrs.	251	
2.0	Supplying and erecting cast iron double flanged Butterfly Valve complete with PN16 pressure rating, as per specification no. FF-VL/ BFV			
2.1	80 mm	Each	QR	
2.2	100mm	Each	QR	
2.3	150mm	Each	3	
3.0	Supplying and erecting gun metal single outlet hydrant valve fitted with necessary accessories complete as per specification no. FF-VL/ HV	Each	7	
4.0	Supplying and erecting 63 mm dia, reinforced rubber lined (R. R. L) hose pipe , 15 m in length, fitted with necessary accessories complete as per specification no FF-FFA/ RRL	Each	14	
5.0	Short Branch Pipe	Each	7	
6.0	Supplying and erecting brass orifice plate having 6 mm. thickness, 140 mm outer dia with required diameter of inner hole at every single outlet hydrant valve as per specification no. FF-FFA/OP	Each	2	
7.0	Supplying and erecting M.S./CRCA cabinet for housing hose pipe box of size (600 x 600 x 200)mm made from min. 1.5 mm thick CRCA sheet with angle iron work of min. of size (25 x 25 x 4) mm having front doors with viewing glass of size (200x150) mm and locking arrangement with necessary fixing material such as rubber bidding etc. duly painted in post box red colour(Code 538 of IS 5)	Each	7	
8.0	supplying and erecting fire brigade header (Siamase Connection) of 150mm dia. For supplying water in fire tank complete as per specification no FF-FA/FMC	Each	2	
11.0	Supply, installation, testing and commissioning of M.S. Angle Support(MARKET RATE)	Kg	500	
TOTAL (EXTERNAL FIRE HYDRANT SYSTEM)				

C	INTERNAL HYDRANT (WET RISER SYSTEM)						
1	Supply, installation, testing and commissioning of above ground G.I. Pipe "C" class ERW with necessary fittings as per specification no. FF-PP						
1.1	25NB	Mtrs.	6				
1.2	80NB	Mtrs.	6				
1.3	100NB	Mtrs.	60				
1.4	150NB	Mtrs.	QR				
3.0	Supplying and erecting gun metal single outlet hydrant valve fitted with necessary accessories complete as per specification no. FF-VL/ HV	Each	14				
5.0	Supplying and erecting 63 mm dia, reinforced rubber lined (R. R. L) hose pipe , 15 m in length, fitted with necessary accessories complete as per specification no FF-FFA/RRL	Set	28				
6.0	ss short branch pipe	Each	14				
7.0	Supplying and erecting M.S./CRCA cabinet for housing hose pipe box of size (600 x 600 x 200)mm made from min. 1.5 mm thick CRCA sheet with angle iron work of min. of size (25 x 25 x 4) mm having front doors with viewing glass of size (200x150) mm and locking arrangement with necessary fixing material such as rubber bidding etc. duly painted in post box red colour(Code 538 of IS 5)	Each	14				
8.0	Supplying and installing wall mounting swinging hose reel drum fitted with 19 mm dia. 30 m long high pressure polypropylene (polyhouse) along with necessary accessories complete as per specification no. FF-FFA/HV	Each	14				
9.0	Supplying and erecting 20/25mm dia gun metal air release valve , with necessary G.I. coupling to be fitted on top of air vessel or on wet riser complete as per specification no. FF-FFA/ARV	Each	2				
10	supplying and erecting Ball Valve complete with PN16 pressure rating as per specification no. FF-VL/HV						
10.1	20 / 25mm	Each	14				
TOTAL (INTERNAL FIRE HYDRANT - WET RISER SYSTEM)							
D	FIRE SPRINKLER SYSTEM						
1.0	Supply, installation, testing and commissioning of above ground G.I. Pipe "C" class ERW with necessary fittings as per specification no. FF-PP						
1.1	25NB	Mtrs.	959				
1.2	40NB	Mtrs.	64				
1.3	50NB	Mtrs.	66				
1.4	65NB	Mtrs.	144				
1.5	80NB	Mtrs.	176				
1.6	100NB	Mtrs.	147				
1.7	150NB	Mtrs.	33				
2.0	Supplying and erecting cast iron double flanged Butterfly Valve complete with PN16 pressure rating, as per specification no. FF-VL/ BFV						
2.1	80 mm dia	Each	QR				
2.2	100 mm dia	Each	7				
2.3	150 mm dia	Each	QR				
3.0	Conventional Pendent type sprinkler Supplying ,installing, testing and commissioning of 15mm inlet, following type sprinkler heads including required reducer and 15mm dia. quartzoid bulb type G.M pendent sprinkler head set to operate at 68 Deg.C,as per IS: 9972.						
3.1	Pendent type@ 68 Deg.C	Each	409				
4.0	Supplying, erecting, testing and commissioning of vane type water flow detector with 1) Visual switch activation 2) Rugged switch assembly 3) Heavy duty aluminium pipe saddles 4)Durable metal enclosure 5) Steel U bolts for secure mounting 6) Two SPDT (Single pole double track) synchronised switches 7) serviceable without draining pipes.						

4.1	65 mm	Each	7		
5.0	Supply, installation, testing and commissioning of Rosette plates for sprinklers below false ceiling area.(MARKET RATE)	Each	409		
6.0	supplying erecting testing and commissioning of sprinkler flexible pipe of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center brackets, stockbar (UL Listed) complete as required as per specification no FF-SPR/FHP				
6.3	1200 mm long	Each	409		
6.4	1500 mm long	Each	QR		
7.0	Supply, installation, testing and commissioning of Test & Drain Valve of 25 mm dia with all necessary unions and fittings along with pressure gauge of H Guru Make (Glycerine type) which provide readings from 0 to 21 Kgs with a dia Size of 65mm SS Body.(MARKET RATE)	Each	7		
8.0	supplying and erecting, testing and commissioning installation control valve (Alarm Valve) of cast iron body, brass/bronze working parts comprising of water motor alarm,bronze seat clapper, clapper and arm and hydraulically driven mechanical gong bell to sound continuous alarm when the wet riser/sprinkler system activates, pressure gauges, emergency releases, stainer pressure switch, cock valve complete with drain valve and bypass, test control box , ball valves, MS pipes of required size, flanges, orifice plate, gasket etc. complete as per specification no. FF-VL/ICV				
8.1	150mm	Each	1		
9.0	Supply, installation, testing and commissioning of M.S. Angle Support	Kg	500		
10.0	Supplying and erecting 100 mm dia, pressure gauge , 0-300 PSI or 0-14 kg per cm square fitted with 12/15 mm dia. pad cock valve, erected with provided G.1. pipe, elbow etc. complete as per specification no. FF-FFA/PG	Each	QR		
TOTAL (FIRE SPRINKLER SYSTEM)					
E FIRE EXTINGUISHER					
1.0	Supplying & erecting Carbon Dioxide (CO2) fire extinguisher of 4.5 kg capacity cartridge type conform to IS 2878 /15683 complete erected with necessary clamp made from 50 x 6 mm. M. S. flat with nut & bolts routed in wall complete.	Each	7		
2.0	Supply, installation, testing and commissioning of Dry chemical powder (ABC) type fire extinguisher 6kg , with initial filling in brand new seamless cylinder with powder coated finish, fitted with gun metal union, discharge hose, wall mounting bracket etc. conforming to IS:15683 .	Each	21		
4.0	Supply, installation, testing and commissioning of Fire buckets round bottom type, enamel painted, white inside & red out side and Letter "FIRE" in black out side and handle with mounting bracket.	Each	8		
5.0	Supply, installation, testing and commissioning of stand for keeping 4 Nos. of FIRE buckets 1500mm in length, 900mm in height frame made out of 30x30x4 mm angle iron with cross supports for legs, welded with 4 hooks and duly painted with one coat of red lead and two coats of silver paint complete.	Each	2		
TOTAL (FIRE EXTINGUISHER)					

F FIRE DETECTION SYSTEM- ADDRESSABLE					
1.0	supplying, installing, testing and commissioning of micro processor based intelligent addressable main fire alarm panel , central processing unit with the 2 loop capacity and capable of supporting not less than 250 device and detectors per loop, with on board LCD alphanumeric backlit display suitable for minimum 80characters, operating at 230V 50Hz AC with inbuilt Battery Backup of a minimum 24 hours in normal condition and 30 minutes in alarm condition, The panel shall have suitable provision for network connectivity & compatible for third party integration (Open Protocol to communicate) via a MODBUS/BACN interface etc. conforming to IS 15908:2021, IS 2189:2008, NFPA-72, EN 54 /VdS/FM & UL 864(10th edition) with 3 years replacement warranty and inclusive of lifetime software license validity, as per specification no FF-AFAS/CP.	Each	1		
2.0	Supplying, installing, testing and commissioning FR, XLPE armoured cable 2 core 1.5 sq.mm. copper conductor complete erected on wall/ ceiling complete as per specification no. CB-LT/CU	Each	1500		
3.0	Supplying , installing, testing and commissioning of Addressable Multisensor/ Multicriteria Photo Thermal (Smoke + Heat) Detector . The detector shall have twin bi-colour LED for 360 degree viewing. The intelligent multi criteria detection device shall include the ability to combine the signal of the thermal sensor with the signal of the photoelectric signal in an effort to react hastily in the event of a fire situation. it shall also include the inherent ability to distinguish between a fire condition and a false alarm condition by examining the characteristics of the thermal and smoke sensing chambers and comparing them to a database of actual fire and deceptive phenomenon. This item is refer for non - conditioning area conforming to EN 54/ VdS / UL & FM approved with 3 years equipment replacement warranty , Designed to meet UL268, 7th edition.	Each	214		
4.0	supplying, installing,testing and commissioning of addressable fire monitor module for flow switches, panic Bars & other Third Party Inputs. The monitor module shall monitor potential free contacts. The device shall have an LED which shall blink in normal state & get steady on activation to monitor the health status of the device complete as required. module Shall conforming ti IS 5051 Part 2 (Sec 1 to 3): 1982 Read relays, EN 54/VdS/ UL & FM approved with 3 years equipment replacement warranty , as per specification no FF-ASFS/MM	Each	21		
4.0	supplying, installing, testing and commissioning of addressable manual call points (break glass type/pull station type). Made of addressable break glass plastic square in shape surface/flush mounted with "Break Glass" message embedded on the glass, complete erected with mounting base and required accessories, Module shall confirm to EN 54/VdS / UL & FM approved with 3 years equipment replacement warranty, as per specification no FF-AFAS/MCP	Each	21		
5.0	Supplying, installing, testing and commissioning of addressable horn cum strobe sound/ hooter , output frequency 500 to 1000 Hz with dB as per Chart given in IS 15908:2021, with flashing at 1 Hz over the strobe's entire operating voltage range EN 54, conforming to IS 2189: 2008, IS 15908-2021 standards with 3 years equipment replacement warranty FF-AFAS/SSH	Each	21		
7.0	supplying, installing, testing and commissioning remote response indicator suitable to operate on 5-28 V dc supply aving FR Polymer ABS Housing complete as per specification no CB-LT/CU	Each	QR		
TOTAL (FIRE DETECTION SYSTEM - CONVENTIONAL)					
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G EMERGENCY SINAGES ,LABELLING &TAGGING					
1.0	Supply, installation, testing and commissioning of fire & accessories autoglow sinages .				
1.1	Emergency Fire Exit (Size 125 mm x 300 mm)	Each	21		
1.2	Fire Hose Cabinet (FHC) (Size 200mm x 200 mm)	Each	14		
1.3	Fire Extinguisher (Size 200mm x 400 mm)	Each	28		
1.4	Manual Call Point (Size 150mm x 150 mm)	Each	21		
1.5	Lift use (Size 300mm x 300 mm)	Each	7		
1.6	Assembly Point	Each	2		
TOTAL (EMERGENCY SINAGES , LABELLING & TAGGING)					
-					
		TOTAL		-	
		18% GST		-	
		GRAND TOTAL		-	
Signature and Seal Of Contractor					