

SHORT TENDER NOTICE

NOTICE TENDER -UPGRADATION OF EXISTING FIRE FIGHTING SYSTEMS

NOTICE INVITING TENDER/QUOTATION FOR UPGRADATION OF EXISTING FIRE FIGHTING SYSTEMS AT DDCA ARUN JAITLEY STADIUM FERROZ SHAH KOTLA GROUND, DDCA.

Quotations are invited for **Up gradation of existing firefighting systems at DDCA** (details whereof are set out in Annexure A to this notice) herein after referred to as “the Work” at Ferozeshah Kotla Ground of the Delhi & District Cricket Association (DDCA) from reputed firms/agencies/companies having valid licenses, sanctions (if applicable) and having minimum experience of 3 (three) years in the field of above mentioned work. The Quotation shall be subject to terms and conditions as mentioned in Annexure B and such other terms and conditions as DDCA may specify in the work order or otherwise for timely execution of Work and for maintenance of requisite quality standards.

Sealed quotations duly filled form/details alongwith earnest money 10 % of the bid amount in the form of DD in favour of DDCA payable at Delhi may be submitted by 5.00 P.M on and before 7th April 2022 in an envelope containing quotations SUPERSCRIPED with the name of item is to be addressed to Tender & Purchase Committee, Delhi & District Cricket Association, Ferozshah Kotla Grounds New Delhi-110002 should be dropped in a box kept at the reception of DDCA during office hours 10A.M TO 05 P.M before 7th April 2022 and the Quotations received shall be opened on 07th April 2022 at 06:00 PM .

DDCA reserves the right to accept or reject any/all quotations without assigning any reason whatsoever.

TENDER & PURCHASE COMMITTEE

DDCA

Date: 30-03-2022

Particulars of Party Submitting Quotation

-	Required Information	
-	Name of the Company/Firm and complete registered Address	
-	Legal Status ((Individual / proprietor, partnership firm, limited company, corporation, cooperative society, etc)	
-	Name of the contact person, Designation, Telephone No., Fax No., E-mail id	
-	Registration number issued by Regulatory authority, if any (attach photocopies)	
-	Year of commencement of Business	
-	Statutory Details(photocopy duly signed to be attached -Registration No. of the Firm - PAN -EPF- Registration No. - ESI Registration No. and other labor related license - VAT/CST,GST Registration No. - Name & address of Bankers along with current Account Details	
-	Has your company/firm ever changed its name in the past ? If so, when& the earlier name and the reason therefore?	

DECLARATION

1) The particulars furnished above are true to the best of my/our knowledge and belief & no material fact has been concealed therein and I/We understand that concealment of material facts shall entitle the DDCA to take penal action including blacklisting/debarring the applicant from submitting any tender, quotation, bid to the DDCA for a period extending upto 5 years.

2) I /We shall not withdraw the rates quoted by me/us for the work for 12 months from the date of furnishing this quotation. I understand that the rates finally settled between me and DDCA shall be firm and shall not be subject to change. In the event of Work being awarded to me/us and in case of failure to execute the Work, the DDCA shall be entitled to forfeit the earnest money deposited by me/us. & DDCA shall also be entitled to get the Work done from any other Quotationer at my/own risk & cost.

(Signature of Quotationer)

Name (In full) & Legal status i.e.
whether Proprietorship, Partnership,
Company, Registered Society, HUF

(Affix rubber stamp in case of Firm, Company and Society)

ANNEXURE 'A'

PROJECT:- DDCA AT FERROZESHAK KOTLA GROUNDS DELHI					
<u>SCHEDULE OF QUANTITIES FOR FIRE FIGHTING WORKS</u>					
Civil Work For Extension of Pump Room					
S. No.	Description	Unit	Qty.	Rate	Amount
1	Dismantling of Brick work in Cement mortar manually by machanical including all.	CUM	12		
2	Brick work with common burnt clay F.P.S (non modular) brick of class designation 7.5 in super structure above plinth level up to floor V level in all shapes and sizes in cement mortar 1:6 (1 cement:6 coarse sand).	CUM	20		
3	RCC COLUMN , BEAM & SLAB WORK				
A	Centering and shuttering including strutting, propping etc. and removal of form for all heights:Floor Roof ,Column,Lintels, beams, plinth beams, girders, bressumers and cantilevers.	SQM	60		
B	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete below & above plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	KG	1550		
C	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).All works above plinth level upto floor V level.	CUM	6.5		
4	T 10MM & 12MM Steel Rebaring including all material use in this work will be provide.	NOS	230		
5	Providing and applying 12 mm cement plaster of mix1:6 (1 cement: 6 coarse sand).	SQM	150		

6	Finishing wall with textured plane interior paint of required shade new work (two or more coats applied @3.28ltr/10 sqm) over and including priming cost of exterior primer applied @2.20 /10 sqm.	SQM	80		
7	Finishing wall with textured bouble exterior paint of required shade new work (two or more coats applied @3.28ltr/10 sqm) over and including priming cost of exterior primer applied @2.20 /10 sqm.	SQM	80		
8	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing, polishing and giving mirror finish complete with base of cement mortar 1:4 (1 cement : 4 coarse sand).	SQM	50		
9	Providing & Fixing Of MS Door including All Materials. (2.1mx2.1m).	SQM	4.5		
10	Providing & Fixing Of Aluminium Window including All Materials. (1.8mx1.8m).	SQM	7		
11	Removing all Wastege materials from site to outside the door.	PER TROLLY	5		
12	Some Miscellaneous Expenceses for work & material as per required.	LUM P SUM			
	SUB HEAD - I (PUMPS AND EQUIPMENT)				
1	SITC of diesel engine driven fire pump				
	Supplying, installing, testing & commissioning of fire authority approved Diesel Engine driven fire pump suitable for automatic/manual operations consisting of the following:				
1.1	Single Stage Horizontal centrifugal pumping set capable for delivery of 2280 LPM against a total head of 75 meters while running approx 1800-2900 R.P.M. (HP as per actuals) 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. Pump shall be Horizontal End Suction type with size 125x100m. Pump Casing CI, Impeller Bronze, CS Shaft, SS Sleeve, and AVM pad 6 nos,Pump casing CI body coated with 1 coat Epoxy Ceramic and 1 Coat Epoxy Glass Flake for protection against corrosion and erosion.				

1.2	Diesel engine suitable for the above complete with standard accessories & suitable cooling system (air cool radiator).				
1.3	Common base plate of requisite strength manufactured out of M.S.Channels or of cast iron type.				
1.4	Suitable mechanical seal with mounting arrangement.				
1.5	1no pressure gauge on the delivery line with isolation cock.				
1.6	Coupling & coupling guard for direct coupling of engine & pump.				
1.7	1no 200litres capacity day oil storage tank fabricated from 4mm thick M.S.plates. Tank shall be provided with inlet, outlet, overflow, vent drain connections, manhole cover (300mm I.D) level indicator including necessary piping work connecting tank & engine. Tank shall be mounted on steel structural supports with access ladder (Painted with 2coats of red oxide paint). Tank shall be provided with epoxy coat from inside outside with one coat of red oxide & two or more coats of synthetic enamel paint of approved colour.				
1.8	Drain pipe with valve (25mm dia)				
1.9	24volts lead acid battery (12volts - 2nos) with boost/trickle charger for starting the engine automatically complete as per requirement.				
1.10	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.	Set	1		
2	Single stage monoblock type jockey pump capable of delivering 180 LPM against a total head of 70 meters while running at 2900 r.p.m (HP as per actual) with S.S.(316) Shaft & S.S.(304) Impeller, base & head of pump in Cast Iron with CED coated, 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. Mechseal,M.Shavy duty base frame and AVM pad 4 nos.	Set	1		

3	Providing, fixing, testing and commissioning of air-cushion tank air vessel (450mm dia. & 2000mm high) for pressurization of hydrant / sprinklers system complete with adequate pressure, switches with valve to operate as per operating sequence including 25mm dia. drain valve, air release valve with stop cock on the top 25mm inlet with isolating valve duly tainted from inside and outside complete as required, shall be installed at the plant room .	Nos.	3		
4	Adding 2 pumps (diesel engine & jockey pump) and making necessary provisions to the existing fire panel required for the new pumps so that the panel can function autonomously. The Power rating should be provided by the vendor.	Job	1		
	Note:				
i.	Separate neutral link to be provided wherever TP MCCB are used.				
ii.	All MCCB shall have breaking capacity of 35 KA.				
iii.	Following provisions to be made in the fire panel:				
a.	Audio visual alarm & indications having disconnect/reset facility with a range of 1/2 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.				
b.	Facility for mode selection ie auto or manual test & local/remote.				
c.	Protection failure & control cabling.				
d.	Remote indication of ON/OFF/ TRIP shall be provided through potential free contact.				
e.	Provision of remote starting/ stopping (manual) of the engine shall be made.				
	NOTE:				
	The panel shall be complete in all respect including all items/accessories whether or not mentioned specially but required to complete the job.				

5	Providing and fixing Exhaust for diesel engine driven pump consisting of M.S. Pipe 150mm dia including all fittings like flanges, bends, tees reducers etc, clamps/structural steel supports. The pipe shall be provided with 75mm thick fibreglass insulation & covering the insulation with 500g polythene sheet giving proper overlaps & sealing the joints with suitable adhesive compound. The pipe shall be provided with 21 gauge aluminium sheet cladding.	RM	20		
6	Providing and fixing resilient rubber lined neoprene single arch vibration eliminators with unit control suitable for fire pump upto 45deg C. Temperature working pressure 20kg per sq. cm				
a.	80mm dia	Each	4		
b.	150mm dia	Each	6		
7	SITC of pressure switches				
	Supplying, Installation, Testing and Commissioning of pressure switches suitable for operating with fire hydrant systems for working pressure of 5.6 Kg/cm ² including electrical control wiring with suitable copper conductor PVC insulated and sheathed control cable upto control panel, connections etc. complete as required.	Each	5		
	TOTAL CARRIED OVER TO SUMMARY				
	SUB HEAD - II (PIPING AND ACCESSORIES)				
1	SLFTC of MS pipes on surface				
	Supplying, laying, fixing, testing and commissioning of following sizes (NB) of ISI marked heavy class M.S. pipes including cutting, threading, welding etc. and providing all fittings e.g. elbows, reducers, clamps, hangers, flanges, gaskets, nuts, bolts and washers etc. including painting of pipes and fittings with red paint over a coat of ready mixed primer, both of approved quality and shade including cutting holes and chases in brick or RCC walls/slabs and making good the same etc. complete in all respect as required.				
1.1	250mm dia.	Metre	15		

1.2	200mm dia.	Metre	15		
1.3	150mm dia.	Metre	50		
1.4	100mm dia.	Metre	200		
1.5	80mm dia.	Metre	250		
1.6	65mm dia.	Metre	150		
1.7	50mm dia.	Metre	240		
1.8	40mm dia.	Metre	250		
1.9	32mm dia.	Metre	160		
1.10	25mm dia.	Metre	1500		
2	SLTC of MS pipes in ground				
	Supplying, Laying, Testing and Commissioning of following sizes (NB) ISI marked heavy class M.S. pipes including cutting, screwing, welding etc. and providing all fittings such as elbows, reducers, flanges, gaskets, nuts, bolts and washers etc. including applying with one coat of ready-mix primer, wrapping the pipe with 4 mm thick wrapping tape of IWL/Kotak makes, laying the pipe so that the top of the pipe is at a depth of one meter below ground level including excavating trenches and then refilling the soil in layers not exceeding 20 cms. in depth, consolidating each deposited layer by ramming, watering etc. complete as required.				
2.1	150mm dia.	Metre	1900		
2.2	100mm dia	Metre	150		
2.3	80mm dia.	Metre	50		

3	SITC of butterfly valves				
	Supplying, Installation, Testing and Commissioning of butterfly valves of PN 1.6 rating of following sizes with nitrile seat and stainless steel stem with lever/gear operation and cast iron body in powder coated finish for fire fighting application complete in all respects as required.				
3.1	250mm dia	Each	0		
3.2	200mm dia	Each	1		
3.3	150mm dia	Each	17		
3.4	100mm dia	Each	12		
3.5	80mm dia	Each	6		
3.6	65mm dia	Each	3		
3.7	50mm dia	Each	12		
4	SITC of Sluice Valve Chamber				
4.1	Constructing masonry Chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep(inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse : 4 graded stone aggregate 20mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design:				
4.2	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	3		
5	SITC of cast iron flanged Non return valves				
	Supplying, Installation, Testing and Commissioning of cast iron flanged Non return valves of PN 1.6 rating of following sizes conforming to relevant IS specifications and providing and fixing nuts, bolts, washers, gaskets etc. complete as required.				
4.1	200mm dia.	Each	1		

4.2	150mm dia.	Each	6		
4.3	100mm dia.	Each	0		
4.4	80mm dia.	Each	2		
6	SITC of Brass Ball Valves				
	Supply, installation, testing and commissioning of forged brass ball valves with brass body nickel coated, brass ball, hard chrome plated, suitable for fire fighting complete in all respects.				
5.1	50mm dia.	Each	11		
5.2	25mm dia.	Each	12		
7	SITC of Cast iron flanged Y strainer				
	Supplying, Installation, Testing and Commissioning of CI body flanged (both ends) type Y strainer with (stainless steel / brass mesh) conforming to relevant IS specifications amended upto date complete including providing and fixing nuts, bolts, washers, gaskets etc. complete as required.				
6.1	150 mm dia.	Each	2		
8	SITC of Pressure gauge				
	Supply, installation, testing & commissioning of 100 mm dia Bourden type, Stainless Steel dial type pressure gauge including brass isolation valve and pipe having calibration of 0-16 Kg/cm ² .	Each	6		
9	SITC of SS orifice plate				
	Supplying, Installation, Testing and Commissioning of Stainless steel orifice plates having 6 mm nominal thickness, upto 200mm outer dia. and internal dia. suitable to reduce pressure to between 3.2 to 3.5 Kg/sq.mm., complete as required.	Each	6		
10	Providing and fixing single acting air-cushion tank of 250mm and 1000mm high with 25mm gun metal stop valve, air-release valve complete as required.	Nos.	3		

11	Providing and fixing flexible connectors consisting of flexible core 1.5 mtr. in length of corrugated stainless steel tubing under the braid, (Braiding to be SS-304, tubing to be SS-304) for minimum working pressure rating of 200 PSI to be installed at connections from branch pipes to pendant sprinklers blow false ceiling as per specification of the manufacturers.	Each	100		
TOTAL CARRIED OVER TO SUMMARY					
SUB HEAD - III (HYDRANT AND HOSES)					
1	SITC Four way fire brigade inlet				
	Supply, Installation, Testing and Commissioning of instantaneous fire brigade inlet / withdrawl connection conforming to relevant IS ammended upto date for tank / ring main consisting of 63 mm Gun metal Quadra plate, male inlet coupling with plug & cap chain bends and other accessories etc. complete as reqd.				
a)	Four way inlet connection.	Each	0		
b)	Two way withdrawl connection.	Each	0		
2	SITC Fire hose				
	Supply, Installation, Testing and Commissioning 100% synthetic RRL FIRE hose (Type A), I.S.I marked 63mm dia x 15m long with stainless steel male & female couplings (ISI marked) bound & riveted to hose pipes with copper rivets and copper wire as required.	Each	10		
3	SITC Short branch pipe				
	Supply, Installation, Testing and Commissioning gun metal 63mm dia. Short Branch Pipe (ISI marked) with 20mm dia nozzle as required.	Each	10		
4	SITC Landing Valve				
	Supply, installation, testing and commissioning of single headed gun metal ISI marked oblique pattern landing valve Type 'A' with a flanged inlet & two 63mm dia instantaneous type female outlets complete with A.B.S. plastic cap and chain, twist release type lug and all accessories complete as required.	Each	5		
5	SITC First-Aid-fire Hose reel				

	Supply, installation, testing and commissioning of First-Aid-fire Hose reel wall mounting swinging type complete with drum, bracket, 20mm dia. 30M long high pressure hose reel tubing with gunmetal shutoff nozzle conforming to IS: 8090 - 1976. The hose reel shall be as per IS:884-1985.	Each	5		
6	SITC of Fire Man's axe				
	Supplying, Installation, Testing and Commissioning of standard Fire Man's axe with heavy insulated rubber conforming to IS : 926.	Nos.	5		
7	SITC of 15mm dia. Quartzoid bulb type sprinkler				
	Supplying, Installation, Testing and Commissioning of 15mm dia. Quartzoid bulb type sprinkler with temperature rating at 68°/79°C made out of forged brass and in powder coated finish.				
7.1	Pendent / Upright chrome plated	Each	835		
7.2	Side wall 68° C, Chrome Plated	Each	0		
8	SITC weather proof M.S cabinet size 1200 x 2100 x 600mm				
	Supplying, installation, testing and commissioning of weather proof M.S cabinet size 900mm x 2100 mm x 600 mm deep fabricated from 1.6 mm thick M.S. sheets and M.S angle 40 mm x 40 mm x 6 mm complete with glass, locking arrangements to accommodate the following: -				
a)	Gunmetal Single Headed Hydrant valve - 1 No.				
b)	Fire Hoses 63mm, 15 M long with accessories - 2 Nos.				
c)	Short branch - 1 No.				
d)	First Aid hose Reel - 1 No.				
e)	Fire Extinguisher - 2 Nos.				
f)	Fireman's Axe - 1 No.				
g)	Pressure Gauge - 1 No.				
	The cabinet shall be painted with one coat of primer and 2 coats of synthetic enamel paint of approved shade.	Nos.	0		
9	Supplying and fixing vane type water flow switch suitable for installation on 50 mm to 150 mm dia line for a service pressure upto 20 kg/sq. cm. of Potter / System sensor /Angus	Nos.	10		

10	Providing and fixing 25 mm dia inspection & testing assembly with Ball valve gun metal sight glass, by pass valve & connected to drain pipe.	Nos.	10		
11	Providing and Fixing double flanged flexicon rubber expansion joint (suitable for system pressure) of standard length as per manufacturer specifications including rubber gaskets, flanges, nuts, bolts and washers complete as required.				
11.1	150mm dia	Each	0		
12	Weather proof standard fire hose cabinet (900 mm x 600 mm x 450 mm deep) for yard hydrants made of 16 SWG powder coated M.S. sheet having single or double opening glazed (4.0 mm thick glass) shutter including necessary locking arrangement by allan key, stove enamelled Fire red finish (as per IS : 5, shade no. 536) with " Fire Hose" marked on front, suitable for housing 2 nos. Hose pipe, 1 No. branch pipe & nozzle spanner. Cost shall inclusive of break glass box containing key for the cabinet along with axe hammer.	Each	5		
13	Supply,erection, testing and commissioning of hydraulically operated sprinkler alarm unit connected to sprinkler system (150 mm dia) comprising of alarm valve, water motor with alarm gong, pressure gauge, drain cock, check valve and pressure reducing valve. The quoted rate shall also including the necessary accessories.	Each	1		
TOTAL CARRIED OVER TO SUMMARY					
SUB HEAD - IV (FIRE EXTINGUISHERS & MISC)					
1	Providing and fixing with bracket/supports etc. wall mounted fire extinguishers as per detail below:				
1.1	Providing and fixing water based CO2 type extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge vave 30 cms long high pressure discharge hose, discharge nozzle,suspensionbraket, ISI marked as per IS:940 finished externally with red enamel paint and fixed to wall with brackets complete with internal charge.				
a)	capacity 5 litres	Each	20		

1.2	Providing and fixing stored pressure type dry chemical powder (DCP) of fire extinguisher suitable for A,B,C class of fires complete with pressureindicating gauge, cylinder hose, discharge open nozzle, suspension bracket, and externally finished with red enamel paint and fixed to wall with brackets to wall with brackets				
a)	Capacity 9 Kg.	Each	20		
	TOTAL CARRIED OVER TO SUMMARY				

TECHNICAL SPECIFICATION FOR FIRE FIGHTING

SECTION – 1: FIRE PROTECTION SYSTEM

1. SCOPE

The scope of this section consists of but is not necessarily limited to supply, installation, testing and commissioning of the fire protection system. The philosophy of the system is as follows:

Fire Hydrant System (Pressurized) the internal landing valves and the hose reels at landings.

Sprinkler System (Wet Type)

The Hydrant System and the Sprinkler System, under normal conditions,

The starting and stopping of the pump shall be automatic based on the pressure switches at preset low and high pressure.

Contractor shall ensure Hydro Testing for the complete system.

The Contractor shall obtain the necessary approval of the drawings and the schemes from the local authority / TAC as called for. The Contractor shall also take care of any other requirement so that insurance cover can be obtained, if required at minimum premium at a later date.

The Contractor shall design and after approval of Project Manager display near each staircase landing at floor levels, a glass covered framed floor plan clearly showing the locations of all landing valves, hose reels, hand appliances, as well as the DO's and DON'Ts for the personnel and the exit direction in case of an emergency. The dimensions so the floor plan, its scale, lettering size, color scheme etc. shall be as directed by the Project Manager.

2. PIPE WORK

All pipes shall be MS of following types are to be used:

The size of pipe will vary from 25 mm to 250 mm. Pipes are clamps and supports shall be fabricated from MS steel sections and shall be factory galvanized before use at site. Welding of galvanized clamps and supports shall not be permitted.

Pipes shall be hung by means of expandable anchor fastener of approved make and design. The hangers and clamps shall be fastened by means of galvanized nuts and bolts. The size/diameter of the anchor fastener and the clamps shall be suitable to carry the weight of water filled pipe and dead load normally encountered.

Hangers and supports shall be thoroughly galvanized after fabrication. The

selection and design of the hanger & support shall be capable of carrying the sum of all concurrently acting loads. They shall be designed to provide the required supporting effects and allow pipeline movements as necessary. All guides, anchor braces, dampener, expansion joint and structural steel to be attached to the building/structure

trenches etc. shall be provided. Hangers and components for all piping shall be approved by the Consultants.

The piping system shall be tested for leakages at 2 times the operating pressure or 1.8 time shut-off pressure, whichever is highest including testing for water hammer effects.

Piping Installation & Support

Piping shall be properly supported on, or suspended from, on stands, clamps, hangers as specified and as required. The Contractor shall adequately design all the brackets, saddles, anchor, clamps and hangers, and be responsible for their structural stability.

Pipe work and fittings shall be supported by hangers or brackets so as to permit free expansion and contraction. Riser's shall be supported at each floor with Galvanized steel clamps. To permit free movement of common piping support shall be from a common hanger bar fabricated from Galvanized steel sections.

Pipe hangers shall be provided at the following maximum spacings:

Pipe Dia (mm)	Hanger Rod Dia (mm)	Spacing between Supports (m)
Up to 25	6	2
32 to 80	10	2.7
80 to 100	12	2.7
128 to 180	16	3.6
200 to 300	19	8.3

The end of the steel rods shall be threaded and not welded to the threaded bolt.

All pipe work shall be carried out in a proper workman like manner, causing minimum disturbance to the existing services, buildings, roads and structure. The entire piping work shall be organized in consultation with other agencies work, so that area can be carried out in one stretch.

Cut-outs in the floor slab for installing the various pipes area are indicated in the drawings. Contractor shall carefully examine the cut-outs provided and clearly point out wherever the cut-outs shown in the drawings, do not meet with the requirements.

Pipes sleeves, larger diameter than pipes, shall be provided wherever pipes pass through walls and slab and annular space filled with fiberglass and finished with retainerrings.

The Contractor shall make sure that the clamps, brackets, saddles and hangers provided for pipe supports are adequate or as specified/approved by Consultants. Piping layout shall take due care for expansion and contraction in pipes and include expansion joints where required.

All pipes shall be accurately cut to the required sizes in accordance with relevant BIS codes and burrs removed before laying. Open ends of the piping shall be closed as the pipe is installed to avoid entrance of foreign matter. Where reducers are to be made in horizontal runs, eccentric reduces shall be used for the piping to drain freely. In other locations, concentric reduces may be used.

Automatic air valves shall be provided at all high points in the piping system for venting. All valves shall be of 18mm pipe size and shall be associated with an equal size gatevalves.

Discharge from the air valves shall be piped through a pipe to the nearest drain or sump. All pipes shall be pitched towards drain points.

Pressure gauges shall be provided as shown on the approved drawings. Care shall be taken protect pressure gauges during pressure testing.

Pipe Fittings

Pipe fittings mean tees, elbows, couplings, unions, flanges, reducers etc and all such connecting devices that are needed to complete the piping work in its totality.

Forged steel fittings of approved type with "V" groove for welded joints. Forged steel fittings shall be screwed type only and shall be used for pipes of 80 mm dia& below.

Fabricated fittings shall be used for pipes diameters greater than 80 mm.

When fabricated fittings are used, they shall be fabricated, welded in workshops. They shall be inspected by Project Manager before dispatch from the workshop. The welding procedures of the workshop should have been approved by the rules for sprinkler system and applicable to hydrant and sprinkler system. For "T" connection, pipes shall be drilled and reamed. Cutting by gas or electrical welding shall not be permitted.

JOINTING

Welded Joints:

Joint between MS pipes and fittings shall be made with the pipes and fittings having "V" groove and welded with electrical resistance welding in an approved manner. But welding without "V" groove shall not be permitted.

All joints in the pipe line with screwed fittings shall be seal welded after testing and the weld plus the adjoining portion shall be given two coats of zinc rich primer.

Flanged joints (65 mm dia and above)

Flanged joints with flanges conforming to IS: 6392 shall be provided on

Straight runs at intervals not exceeding 28-30 m on pipe lines of 80 mm dia and above and as directed by the Project Manager.

For jointing all types of valves, appurtenances, pumps, connections with other type of pipes, to water tanks and other places necessary and as required for good engineering practice and as shown/noted on the drawings.

Flanges shall be with GI bolts and nuts and 3mm insertion gasket of natural rubber conforming to IS: 11149.

Unions (upto 80 mm dia)

Approved type of dismantable unions shall be provided on pipe line of 40 mm dia and smaller dia, in locations similar to those specified for flanges.

3. AIR CUSHION TANK

Every wet riser shall be provided with an air cushion tank at its top most point. The air cushion shall be provided with an automatic air release cock, 20 mm dia drain valve and shut off valve

4. FIRE BRIGADE CONNECTION

The underground storage tank is exiting with a 150 mm fire brigade pumping connection to discharge at least 2250 LPM into it. This connection shall not be taken directly into the side of the storage tank, but arranged to discharge not less than 180 mm above the top edge of the tank such that the water flow can be seen. The connection shall be fitted with stop valve in a position approved by the Project Manager. An overflow connection discharging to a drain point shall be provided from the storagetank.

The fire brigade connection shall be fitted with four numbers of 63 mm instantaneous inlets in a glass fronted wall box at a suitable position at street level, so located as to make the inlets accessible from the outside of the building. The size of the wall box shall be adequate to allow hose to be connected to the inlets, even if the door cannot be opened and the glass has to be broken. Each box shall have fall of 28 mm towards the front at its base and shall be glassed with wired glass with "FIRE BRIGADE INLET" painted on the inner face of the glass in 80 mm size block letter. Each such box shall be provided with a steel hammer with chain

for breaking the glass.

In addition to the emergency fire brigade connection to the storage tank, a 180 mm common connection shall be taken from the four 63 mm instantaneous inlets direct to hydrant main so that the fire brigade may pump to the hydrants in the event of the hydrant pumps being out of commission. The connection shall be fitted with a sluice valve and reflux valve. Location of this valve shall be as per the approval of the Project Manager.

Two way collecting head with two numbers 63 mm instantaneous type inlets shall be connected to the sprinkler header. All other details shall be as described above.

5. SYSTEM DRAINAGE

The system shall be provided with suitable drainage arrangement with drain valves complete with all accessories.

6 VALVE

Butterfly Valve

The butterfly valve shall be suitable for waterworks and rated for 300 PSI

The body shall be of cast iron to IS: 210 in circular shape and of high strength to take the water pressure. The disc shall be heavy duty cast iron with anti corrosive epoxy or nickel coating.

The valve seat shall be of high grade elastomer or nitrile rubber. The valve in closed position shall have complete contact between the seat and the disc throughout the perimeter. The elastomer rubber shall have a long life and shall not give away on continuous applied water pressure. The shaft shall be EN 8 grade carbon steel.

The valve shall be fitted between two flanges on either side of pipe flanges. The valve edge rubber shall be projected outside such that they are wedged within the pipe flanges to prevent leakages.

Ball Valve

The ball valve shall be made forged brass and suitable for test pressure of pipeline. The valve shall be internally threaded to receive pipe connections.

The ball shall be made from brass and machined to perfect round shape and subsequently chrome plated. The seat of the valve body-bonnet gasket and gland packing shall be of Teflon.

The handle shall be provided with PVC jacket. The handle shall also indicate the direction of 'open' and 'closed' situations. The gap between the ball and the Teflon packing shall be sealed to prevent water seeping. The handle shall also be provided with a lug to keep the movement of the ball valve within 90°. The lever shall be operated smoothly and without application of any unnecessary force.

Gun Metal Valves

Gun metal Valves shall be used for smaller dia pipes, and for threaded connections. The Valves shall bear certification as per IS: 778.

The body and bonnet shall be of gun metal to IS: 318. The stem gland and gland nut shall be of forged brass to IS: 6912. The hand wheel shall be of cast iron to IS: 210.

The Hand wheel shall be of high quality finish to avoid hand abrasions. Movement shall also be easy. The spindle shall be non rising type.

Non-Return Valve

Non-Return valves shall be cast iron double flanged with cast iron body and gunmetal internal parts conforming to IS: 8312.

7. PRESSURE SWITCH

The pressure switches shall be employed for starting and shutting down operation of pumps automatically, dictated by line pressure. The Pressure Switch shall be diaphragm type. The housing shall be die cast aluminum, with SS 316 movement, pressure element and socket. The set pressure shall be adjustable.

The Switch shall be suitable for consistent and repeated operations without change in values. It shall be provided with IP:88 water and environment protection.

8. PRESSURE GAUGE

Pressure gauge shall be provided near all individual connections of the hydrant system with isolation valves and near each flow switch assembly of the sprinkler system. Pressure gauge shall be 80 mm dia gunmetal bourdon type with gunmetal isolation ball valve, tapping and connecting pipe and nipple. The gauge shall be installed at appropriate height for easy readability.

PAINTING

All Hydrant and Sprinkler pipes shall be painted with post office red color paint. All M.S pipes shall first be cleaned thoroughly before application of primer coat. After application of primer coat two coats of enamel paint shall be applied. Each coat shall be given minimum 24 hours drying time. No thinners shall be used. Wherever required all pipe headers shall be worded indicating the direction of the pipe and its purpose such as "TO RISER NO. 1" etc.

Painting shall be expertly applied; the paint shall not over run on surfaces not requiring painting such as walls, surfaces etc. Nuts and bolts shall be painted black, while valves shall be painted blue.

9. FIREHYDRANT

Internal Hydrants

Contractor shall provide on each landing and other locations as shown on the drawings double headed gunmetal landing valve with 100 mm dia inlet as per IS:8290, with shut off valves having cast iron wheels as shown on the drawings. Landing valve shall have flanged inlet and instantaneous type outlets as shown on the drawings.

Instantaneous outlets for fire hydrants shall be standard pattern and suitable for fire hoses.

Contractor shall provide for each internal fire hydrant station two numbers of 63 mm dia. 18 m long rubberized fabric lined hose pipes with gunmetal male and female instantaneous type coupling machine would with GI wire (hose to IS: 636 type 2 and couplings to IS: 903 with IS certification), fire hose reel, gunmetal branch pipe with nozzle to IS: 903. This shall be measured and paid for separately.

Contractor shall provide standard fire hose reels of 20 mm dia high pressure Dunlop rubber hose 36.5 m long with gunmetal nozzle, all mounted on a circular hose reel of heavy duty mild steel construction having cast iron brackets. Hose reel shall conform to IS: 884 and shall be mounted vertically. This shall be measured and paid for separately.

Each internal hydrant hose cabinet shall be provided with a drain in the bottom plate. The drain point shall be lead away to the nearest general drain.

Each hose cabinet shall be conspicuously painted with the letters "FIRE HOSE".

HoseReel

Hose reel shall conform to IS : 884, heavy duty, 20 mm dia length shall be 36.5metre long fitted with gun metal chromium plated nozzle, mild steel pressed reel drum which can swing up to 170 degree with wall brackets of cast iron finished with red and black enamel complete.

FireHose

All hose pipes shall be of 63 mm diameter RRL/CP as required, conforming to IS: 636 or IS: 8423. The hose shall be provided with copper alloy delivery coupling. The hose shall be capable of withstanding a bursting pressure of 38.7 Kg/Sq.cm without undue leakage or sweating. Hose shall be provided with instantaneous spring-lock, type couplings.

Branch Pipe, Nozzle

Branch pipes shall be of gun metal with loaded tin bronze ring at the discharge and to receive the nozzle and provided at the other with a leaded tin bronze ring to fit into the instantaneous coupling. Nozzle shall be of spray type of diameter of not less than 16 mm and not more than 25 mm. Nozzle shall be of loaded tin bronze branch pipe and nozzle shall be of instantaneous pattern conforming to India Standard – 903.

HoseCabinet

Hose cabinet shall be provided for all internal and external fire hydrants. Hose cabinets shall be fabricated from 16 gauge MS powder coated sheet of fully welded construction with hinged double front door partially glazed (3 mm glass panel) with locking arrangement, stove enameled fire red paint (shade No. 836 of IS:8) with "FIRE HOSE" written on it prominently (size as given in the schedule of quantities). Cabinet surfaces in contact with the walls shall not be powder coated but instead given two coat of anti- corrosive bitumastic paint.

Internal HoseCabinet

Hose cabinet shall be of glass fronted with hinged door & lock. The cabinet shall be made of 16 gauge thick MS sheet and spray painted to shade No. 836 of IS:8. The hose cabinet shall be of size to accommodate the following:

Landing Valves (Single/double

headed) Hose pipe

Hose reel (36.5 meters.)

Branch pipes, nozzles

(1piece)

Fire man's axe and hand appliances

10. SPRINKLERSYSTEM

General Specification

The scope of work shall include supply, commissioning, testing of the system as a whole. The sprinkler head are to be fixed into heavy quality black steel pipes, conform to IS: 1239 or any other approved specification. The size of pipe will vary from 25 mm to 180 mm to suit the hydraulics of the system. The System shall conform to CFO Rules for the installation of sprinkler systems in general for 'Ordinary Hazard' category- in respect of design, density and spacing of sprinklerheads.

Reduction in pipe size shall not be made by use of bushings. All piping shall be done by means of welding, screwed & flanged jointing as per codes.

Due care shall be taken that sprinklers are not applied with paint at the time of applying paint to piping and fittings.

All control, drain, test and alarm valves shall be provided with signs to identify their purposes, functions direction of flow the satisfaction of the Consultants.

Quartzoid: Bulb Automatic Sprinkler

Sprinklers heads shall be made of brass/quartzoid bulb sufficiently strong, in compression to withstand any pressure, surge or hammer likely to occur in the system.

The yoke & body shall be made of high quality gun metal brass with arms streamline to ensure minimum interference with the spread of water. The deflector of suitable design shall be fitted to give even distribution of water over the area commanded by the sprinkler.

The bulb shall contain a liquid having a freezing point below any natural climatic figure and a high coefficient of expansion. The temperature rating of the sprinkler shall be stamped on the deflector & the color of the liquid filled in the bulb shall be according to the temperature rating as per HFWA standard. The sprinkler heads shall be of type & quality approved by the local fire brigade authority. The inlet shall be screwed.

The sprinklers shall have 18mm nominal size of the orifice for ordinary hazard. The orifice size shall be marked on the body or the deflector of the sprinkler.

Metal guards for protection of sprinkler against accidental or mechanical damage shall be provided as desired by the Project Manger.

Contractor shall submit detailed submittal and discharge spray pattern for the Sprinkler for the approval of consultant.

Operating Temperature

The Opening temperature at which the quartzoid bulb of the sprinkler head shall actuate shall be 68 degree C or as specifically mentioned.

Sprinkler Installation

Sprinkler heads shall be located in positions shown on the drawings. While slight relocation may result from building construction features or interference from other services, maximum spacing between sprinkler heads and coverage area shall not exceed those stipulated in the TAC regulations and the NFPA 13-1994 Rules.

Allowance shall be made for such relocations within a radius of 1800 mm of the indicated positions without additional cost. The Fire Protection Services Trade shall co- ordinate with the ceiling Trade to set out the sprinkler locations to suit the site location of the unit grid. In general, all sprinklers shall be located at the centre of the ceiling unit and a provision of about 10% more sprinklers and pipe work than required in TAC and NFPA Rules shall be included in this sub-contract. Chrome plated wire mesh guards shall be used to protect the sprinkler heads which are liable to accidental or mechanical (**at no extra cost**) damage.

Flow Requirements

The flow requirement for sprinkler heads shall be specifically approved for the

designated area of installation.

Orifice Plates

For restricting pressure at lower levels in the sprinkler system, orifice plates of appropriate sizes shall be fitted at different floor levels, at the branching points from Riser Main.

The Diameter of such orifice shall not be less than 80% of the dia of pipe into which it is to be fitted, which shall not be less than 80 mm dia. these orifice plates must be of stainless steel with plain central hole without burrs, and the thickness shall be 3mm for pipe size upto 80 mm, 6 mm for pipes from 80 to 128 mm dia and 9 mm for pipes greater than 128 mm dia. such orifice plate must have a projecting identification tag. The orifice plate shall be fitted not less than two pipe internal diameters downstream of the outlet from any elbow or bend.

Contractor shall submit the design and identify location on drawing before installation.

System Design

The entire sprinkler installation shall be designed to make it a hydraulically balanced system. The pressure requirement at typical floors shall be designed between 2.8 bar and 3.8 bar.

11. HAND HELD FIRE EXTINGUISHERS

HAND Appliances

Scope

Work under this section shall consist of furnishing all labour, materials, appliances and equipment required to install fire extinguishing hand appliances as per relevant specification of various authorities.

Without restricting to the generality of the foregoing, the work shall consist of the following:

Installation of fully charged and tested fire extinguishing hand appliances of ABC powder type as required and specified in the drawings and schedule of rates.

General Requirements

Hand appliance shall be installed in easily accessible locations with the brackets fixed to the wall by suitable anchor fasteners.

Each appliance shall be provided with an inspection card indicating the date of inspection, testing, change of charge and other relevant data.

All appliances shall be fixed in true workmanlike manner truly vertical and at correct locations.

Distribution. / installation of fire extinguisher to be in accordance to IS:2190.

Measurement

Fire extinguishers shall be counted in numbers and include installation of all necessary items required as given in the specifications.

ABC Type Dry Powder Extinguisher

The Extinguisher shall be filled with ABC grade 40, Mono Ammonium Phosphate 40% from any approved manufacturer.

The capacity of the extinguisher when filled with Dry Chemical Powder (First filling) as per IS 4308, Part II, shall be 8 Kg +/-2% or 10 Kg +/-3%.

The distribution of fire extinguishers to be as per IS 2190 – 1992.

It shall be operated upright, with a squeeze grip valve to control discharge. The plunger neck shall have a safety clip, fitted with a pin, to prevent accidental discharge. It shall be pressurized with Dry Nitrogen, as expellant. The Nitrogen to be charged at a pressure of 16 Kg/cm².

Body shall be of mild steel conforming to relevant IS Standards. The neck ring shall be also mild steel and welded to the body. The discharge valve body shall be forged brass or leaded bronze, while the spindle, spring and siphon tube shall be of brass. The nozzle shall be of brass, while the hose shall be braided nylon. The body shall be cylindrical in shape, with the dish and dome welded to it. Sufficient space for Nitrogen gas shall be provided inside the body, above the powder filling.

The Neck Ring shall be externally threaded – the threading portion being 1.6 cm. The filler opening in the neck ring shall not less than 80 mm. Discharge nozzle shall be screwed to the hose. The design of the nozzle shall meet the performance requirement, so as to discharge at least 88% of contents upto a throw of 4 mtrs, continuously, at least for 18 seconds. The hose, forming part of discharge nozzle, shall be 800 mm long, with 10 mm dia internally for 8 Kg capacity and 12 mm for 10 Kg capacity. It shall have a pressure gauge fitted to the valve assembly or the cylinder to indicate pressure available inside. The extinguisher shall be treated with anti-corrosive paint, and it shall be labelled with works ABC 2.8 cm long, within a triangle of 8 cm on each face. The extinguisher body and valve assembly shall withstand internal pressure of 30 Kg/cm² for a minimum period of 2 minutes. The pressure gauge shall be imported and suited for the purpose.

Carbon Dioxide Extinguisher

The Carbon Dioxide Extinguisher shall be as per IS: 2878

The body shall be constructed of seamless tube conforming to IS:7288 and having a convex dome and flat base. Its dia shall be maximum 140 mm, and the overall height shall not exceed 720 mm.

The discharge mechanism shall be through a control valve conforming to IS: 3224. The internal siphon tube shall be of copper aluminum conforming to relevant specifications.

Hose Pipe shall be high pressure braided Rubber hose with a minimum burst pressure of 140 Kg/cm^2 and shall be approximately 1.0 meter in length having internal dia of 10 mm. The discharge horn shall be of high quality unbreakable plastic with gradually expanding shape, to convert liquid carbon dioxide into gas form. The handgrip of Discharge horn shall be insulated with Rubber of appropriate thickness.

The gas shall be conforming to IS: 307 and shall be stored at about 88 Kg/cm^2 . The expansion ratio between stored liquid carbon dioxide to expanded gas shall be 1:9 times and the total discharge time (effective) shall be minimum 10 secs and maximum 28 secs.

The extinguisher shall fulfill the following test pressures:

Cylinder: 236 Kg/cm^2

Control Valve: 128

Kg/cm^2

Burst Pressure of Hose: 140 Kg/cm^2 minimum

It shall be an Upright type. The cylinder, including the control valve and high pressure Discharge Hose must comply with relevant Statutory Regulations, and be approved by Chief Controller of Explosives, Nagpur and also bear IS marking.

The Extinguisher including components shall be IS marked.

12. FIRE PUMPS AND ALLIED EQUIPMENTS

Scope

Work under this section shall consist of furnishing all labour, materials, equipment and appliances necessary and required to completely install electrically operated driven required by drawings and specified here in after or given in the schedule of rates.

Electrically operated pumps with motors, common base plates, coupling, coupling guard and accessories.

Automatic starting system with all accessories, wiring and connections and pressure switches.

Motor control centre.

Annunciation system with all accessories wiring and connections.

Pressure gauge with isolation valves and piping, bleed and block valves. Leak-off drain shall be led to the nearest floor drain.

General Requirements

Pumps and motors shall be truly aligned by suitably instruments. Record of such alignment shall be furnished to the Project Manager.

The pump connections shall be standard flanged type with number of bolts as per relevant standard requirement for the working pressure. Companion flanges shall be provided with the pumps.

Manufacturer's instructions regarding installation, connections and commissioning shall be strictly followed.

Contractor shall provide necessary test certificates, performance curves and NPSH curves of the pumps from the manufacturer when called for. The Contractor shall provide facilities to the Project Manager and Consultant for inspection of equipment during manufacturing and also to witness various tests at the manufacturer's works without any cost to the Project Manager or Consultant.

Seismic isolation and clamping for each pump and flexible connection on the suction as well as the discharge side shall be provided.

The Contractor shall submit with this tender a list of recommended spare parts for three years of normal operation and quote the prices for the same as separate

Motor

The Motor shall be squirrel cage AC induction type suitable for operation on 420 volts 3 phases 80 Hz System. The motor shall be totally enclosed fan cooled type conforming to protection class IP 88. The class of insulation shall be F. The synchronous speed shall be 2900 RPM as specified. The motor shall be rated for continuous duty and shall have a horse power rating necessary to drive the pump at 180 percent of its rated discharge with at least 68 per cent rated head. The motor shall conform to IS:328- 1978.

Motor Starter

The motor starter shall be as per detail in MCC. The unit shall include suitable current transformer and ammeter of suitable range on one line to indicate the current. The starter shall not incorporate under voltage, no voltage trip overload or SPP.

The starter assembly shall be suitably integrated in the power and control panel for the Lub. Oil temperature gauge.

Water pressure gauge.

Water temperature

gauge. Tachometer.

Hour meter.

The instrumentation panel shall be suitably resident mounted on the

engine. High lub.oil temperature.

Over speed shut down.

Battery Charger - Necessary float and boost charger shall be incorporated in the control section of the power and control panel, to keep the battery in trim condition. Voltmeter to indicate the state of charge of the batteries shall be provided.

Pump Sets Assembly

On the main fire headers near pump sets an s150 mm dia and able to read 200% of the rated pump capacity. The delivery shall be connected to the fire terracetank.

The pump set assembly shall be provided with suction valve, discharge valve and 150 mm dia Bourdon type pressure gauge with isolation valve.

NOTE:- (1) Before start of the work please visit the site as per requirement.

(Signature of Quotationer)

Name (In full) & Legal status
i.e. whether Proprietorship,
Partnership, Company, Registered
Society, HUF

(Affix rubber stamp in case of Firm, Company and Society)

Annexure -B

Terms and Conditions

- The party submitting the quotation in reference to the notice inviting quotation whether it be a Proprietor / Individual, Partnership firm, Company, Society shall be, hereinafter referred as “the Quotationer/ Vendor/ Service provider” and the Delhi & District Cricket Association shall be known as “DDCA”.
- Incomplete Documents will be rejected.
- Quotationers should be registered with Sales Tax, GST Deptt. And /or Service tax department, as the case may be.
- Unless specified otherwise the price quoted should include all transportation, loading/unloading cost and all levies, taxes and duties including, but not limited to, applicable Service Tax, VAT,GST etc. The price quoted and agreed in the Work Order for the successful Quotationer shall remain firm for the Work. Any escalation of whatsoever nature will not be payable by DDCA during the Work. No amount whatsoever over and above the amount for which the work order is issued to the successful Quotationer will be paid.
- The Quotationer will submit requisite earnest money i.e. 10 % of the bid amount along with Quotation. The earnest Money to the unsuccessful Quotationer shall be refunded within a month from the date of issue of Work order to the successful Quotationer.
- The Quotationer shall submit security deposit @10% of the contracted value of the Work through RTGS/Bank Guarantee/ DD in favor of DDCA within 3 days of receipt of work order. After the award of the Work, in the event that successful Quotationer does not deposit the security amount within 3 days of receipt of work order, then the work order shall stand cancelled.
- The Quotationer must visit/examine the site by prior appointment for the proper assessment of Work before submitting the quotation. No claim later on any account shall be entertained.

- The Quotationer shall not assign the Contract or sublet any portion of the contract. In case of breach of this condition, DDCA shall issue a notice in writing to the Quotationer rescinding the contract where upon the security deposit shall stand forfeited by DDCA without prejudice to the other remedies of DDCA against the Quotationer. The determination by DDCA that the contract has been sublet shall be final and will not be called in question
- TDS and other applicable taxes will be deducted from the bill of the Quotationer at the prevailing rate as per applicable Statutory Provisions and the Rules framed thereunder.
- The Work shall be completed as mutually decided in the committee.
- The DDCA will impose a penalty @ 1% of contracted value for each day's delay, if the Work is delayed beyond the stipulated period. However, the successful Quotationer may request for extension of time if the reasons are genuine. Such extension of time may be granted by DDCA at its sole discretion.
- Security deposit shall be released to the Quotationer after defect liability period of 12(Twelve) months from the date of completion of Work.
- The successful Quotationer shall take all precautions and safety measures for all Workers/labourers etc. which are to be engaged by it for execution of said Work. The successful Quotationer shall be solely responsible for any liability towards workmen or any person that may arise on account of the performance of the Work by the successful Quotationer at site.
- The Work shall be executed with high degree of workmanship & conform to the approved norms, standards and specifications for the materials and Workmanship.
- The successful Quotationer shall indemnify and keep DDCA indemnified against all losses and/or claims for loss of property, loss of life and/or injury to any person, that may be occasioned by any act of omission and / or commission on the part of the successful Quotationer or its servants, agents, employees, representatives etc. qua the Work whether during the execution of the Work or subsequent to the execution of the Work.
- The goods/ services provided by the successful Quotationer shall be of the best quality. In case of any defect / deficiency in goods/ services constituting the Work or in case of the Work is not of quality acceptable to DDCA, then without prejudice to

any other right of DDCA, the amount payable to the successful Quotationer shall be appropriately-deducted.

- It will be the responsibility of the successful Quotationer to obtain work completion reports from officer/unit/section concerned in DDCA. In the absence of the delivery report, no payment will be released.
- The successful Quotationer shall be responsible for safe delivery of items at the FirozShahKotla Ground.
- The successful Quotationer shall be responsible for all charges and expenses including, but not limited to, Installation charges. No charges shall be paid over and above the amount that may be mentioned in the Work Order.
- The successful Quotationer shall be responsible for the payment of wages/ settlement of dues, all statutory payments in respect of the workers engaged by the successful Quotationer. DDCA will not be party of any dispute between successful Quotationer and its workers
- The payment will be made to successful Quotationer after [30] thirty days from the submission of bill(s). Bill shall be accepted along with the report of the authorized person of DDCA that the work has been completed to his satisfaction.
- The rates of items of Work shall be applicable for all heights and depths unless otherwise specified in the item, wherever applicable.
- The successful Quotationer shall obtain and keep in force throughout the term of the agreement, necessary / valid license from the concerned Licensing authorities as per applicable statutes and the rules framed there under and furnish the same to DDCA before commencement of the Work.
- The Successful Quotationer to whom work order is issued shall abide by the instructions as may be issued to it by the Department-in-Charge from time to time.
- DDCA has right to increase/decrease the Work quantity by 20%.
- Force Majeure shall mean and be limited to the followings:
 - a) Any war or hostilities,
 - b) Any riot or civil commotion,
 - c) Strikes lasting for more than 10 days.
 - d) Any earthquake, flood, tempest, lightening or other natural physical disaster, impossibility of the use of any Railway, Airport, shipping Services or other means of transport.

During the period of Force Majeure the respective rights and obligation of the parties shall remain suspended. DDCA shall have the sole and exclusive right to

determine whether force majeure event has occurred and the period of continuance thereof.

- The successful Quotationer shall not employ for execution of work any person below the age of 21 years.
- If at any time, any question, dispute or difference arises between the DDCA and the successful Quotationer under/or in connection with the contract, either party shall as soon as reasonably practicable give to the other notice in writing of the existence of such question/dispute or difference specifying its nature and the point of issue and the same shall be referred for arbitration of sole arbitrator to be appointed by DDCA and the decision of such arbitrator shall be binding on both the parties i.e. DDCA and the successful Quotationer.

Execution/Performance of the Work shall continue during the arbitration and any subsequent proceedings. Arbitration proceedings are not required to be resorted to for termination of the Quotation.

- The venue of arbitration shall be Delhi.
- The Language of arbitration proceedings shall be English.
- The Law governing rights and obligations of the parties shall be the Indian Law of Contract.
- DDCA reserves the right to cancel or reject any or all the quotations without assigning any reason whatsoever.
- The Prospective Quotationer shall furnish its quotation in the format as set out in Annexure – A.
- Termination of Contract - During the currency of the agreement between DDCA and the successful Quotationer, the DDCA shall have the right to terminate the agreement if it is not satisfied with the performance of the Quotationer by giving it minimum 3 days' notice in writing. For this purpose, the DDCA shall be the sole Judge to decide whether the performance of the Quotationer is satisfactory or not and such decision of the DDCA shall be final, conclusive and binding on the Quotationer and the Quotationer shall not be entitled to any compensation in that regard. Furthermore, on account of termination of the agreement, the Quotationer has to remove its employees from DDCA site, & it shall be the responsibility of the Quotationer to pay the legal dues to its employees. In the event of noncompliance of legal requirements by the Quotationer, it shall be solely liable for all the costs and consequences arising from such non-performance. The termination of the contract by DDCA shall be without prejudice to any its rights under the law.

- DDCA can change/ modify the scope of work, terms/conditions of contract etc at any time at its discretion & the same will be binding on the Quotationer& same will not be challenged byQuotationer.
- The Applicant should not be member of DDCA.

(Signature of Quotationer)

Name (In full) & Legal status
i.e. whether Proprietorship,
Partnership, Company, Registered
Society, HUF

(Affix rubber stamp in case of Firm, Company and Society)

S. NO.	Details of materials / Equipment	Manufacture's Name
1.	Electric motor driven fire pump	KIRLOSKAR/ JONSON/ EBARA/GROUND FOS
2.	Pressure Switches	INDFOS / SWITZER
3.	G. I. and M.S. Pipe	TATA / JINDAL HISAR/ JINDAL STAR
4.	Butterfly Valves	AUDCO / ZOLOTO/CASTLE/SANT
5.	C. I. Double flanged sluice / ball valve / non return valve	KIRLOSKAR / SANT / ZOLOTO/ CASTLE
6.	Pressure Gauge	H. GURU / FIEBIG/ EMERALD
7.	Fire Hose Pipe / R R. L Hose Pipe	NEWAGE / SAFE GUARD /EXFLAME
8.	Branch Pipe / Nozzles (Gun Metal / Brass / Cooper & Brass / Aluminum)	SAFE GUARD /EXFLAME /NEWAGE /
9.	First Aid Hose Reel with bracket, drum and nozzle	SAFE GUARD /EXFLAME / TIGER /
10.	Quartzoid Bulb Sprinkler	TYCO / GINNE
11.	Fire Extinguishers	NEWTECH/SAFEGUARD / NEWAGE
12.	Flow Switch	SWITZER/RAPID CONTROL / SYSTEM SENSOR
13.	Vibration Eliminator Connectors	RESISTIFLEX / KHANWAL
14.	Pipe Hangers	CHILLY / EUROCLAMP/SUPREME KK
15.	Paint Enamels of Pipes etc.	EMERALD/ASIANA /NERLAC / ERGER
16.	Fabricated Fire Hose Cabinet	STEELAGE / NEWAGE / G. TECH
17.	Fire Brigade Connection	MINIMAX / NEWAGE
18.	Welding Electrodes	ADVANI / ESAB/ D&H

19.	Cables	HAVELLS / GLOSTER / KEI/NICCO
20.	Main Control Panel	ADLEC / SHIVALIK/LSP
21.	Electrical Switchgear & Starters	SIEMENS / L & T / SCHNEIDER
22.	MCB, DB	L& T /LEGRAND / SCHNEIDER

