

Tender Inviting Authority: JOINT MANAGER [ELECTRICAL DIVISION] , THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD,					
Name of work :- Supply, Installation, Testing & Commissioning of Fire Fighting work with Fire Alarm System at Bolangir Bus Stand in the district of Bolangir.					
BID REF NO - 43/JM/ ELECT/OPHWC/2020-21					
Bidder Name					
<b>SCHEDULE OF WORKS</b>					
Sl. No.	Description of work	Qty.	Unit	Estimated Rate	AMOUNT Rs.
A	<b>FIRE FIGHTING WORK</b>				
1	<b>ELECTRIC PUMP</b>  Supply, erection, testing & commissioning of electrical motor driven main pump of horizontal centrifugal and suction backpull out typr with gland packing and capable to deliver 2280LPM at 50 MWC. The pump shall be coupled to TEFC motor of suitable HP with speed of 2900 RPM and complete set shall mounted on common base frame. The quoted rate shall includes providing & fixing of coupling, coupling guard, etc. <b>Make-Kirloskar / Crompton greaves.</b>				
	Total rate for (Unit Supply & Unit Installation)	SET	1.00	289,696.00	289,696.00
2	<b>DIESEL ENGINE DRIVEN FIRE PUMP</b>  Supply installation, testing & commissioning of diesel Engine driven common stand by pump, horizontal centrifugal end suction backpull out type with gland packing and capable io deliver 2280LPM at 50 MWC. The pump shall coupled to suitable HP of Diesel engine radiator water cooled type with speed of 1800RPM and complete set shall be mounted on common base frame, Batteries & battery leads with stand, Fuel tank ( for 6 Hrs. operation ) with stand & gauge glass, Fuel piping with valves. The quoted rate shall includes radiator water cooling piping (if required ) coupling gaurd and other stanadrd accessories. <b>Make-Kirloskar/Crompton Greaves/KSB</b>				
	Total rate for (Unit Supply & Unit Installation)	SET	1.00	596,822.00	596,822.00
3	<b>JOCKEY PUMP</b>  Supply, erection, testing & commissioning of electrical motor driven Jockey pump of horizontal centrifugal end suction back pull out type with gland packing and capable to deliver 180LPM at 50MWC. The pump shall be coupled to TEFC motor of suitableHpwith speed of 2900RPM and complete set shall mounted on common base frame The quoted rate shall includes providing & fixing of coupling, coupling guard etc. <b>Make-Kirloskar / Crompton Greaves</b>				
	Hydrant System				
	Flow: 180 LPM @ 50 Mtr Head	SET	1.00	98,911.00	98,911.00
4	<b>TERRACE PUMP</b>				

	Supply, erection, testing & commissioning of electrical motor driven terrace pump of horizontal centrifugal end suction back pull out type with mechanical seal and capable to deliver 450 LpM at 30 MWC. The pump shall be coupled to TEFC motor of suitable HP with speed of 2900RPM and complete set shall mounted on common base frame . The quoted rate shall includes providing & fixing of coupling, coupling guard etc . <b>Make- Kirloskar/Crompton Greaves/mather and plate</b>				
	Hydrant System				
	Flow: 450 LPM @ 30 Mtr Head	SET	1.00	48,911.00	48,911.00
5	<b>WET RISER SYSTEM</b>				
	Supplying, installing testing and commissioning of M .S pipes conforming to IS 1239 Pt - I Heavy grade with painting, suitable type of supports ( Shall be fabricated by M S Channel / Angle / Flat for above 50 mm dia), anchorfasteners, bolts nuts, clamps "U,, bolte, malleable specials such as Reducers ,Tees, elbows, flanges Including cutting , Welding, fixing in / on walls , ceiling by using suitable supports etc , as per drawings . The quoted rate shall also include for chasing / chipping walls , making bore holes in walls I floor and making them good with filler material and finished in cement mortar etc. complete. <b>Make :Tata/Jindal</b>				
a	150mm Dia (For Pump suc)	RM	15.00	2,767.25	41,508.75
b	100mm Dia (For terrace supply)	RM	28.00	1,825.60	51,116.80
c	25mm Dia (For Hose reel)	RM	28.00	500.90	14,025.20
6	Supplying, fixing and testing <b>CI double valves</b> conforming to IS 780 including making of necessary screwed joint / flanged Joint and also including cost of Jointing materials etc. Complete as required as per PN 1.6 tested upto 24 kg / cm2 pressure ( <b>make : kalpana zoloto, Kirtiosker</b> )				-
	100mm dia	Nos	6.00	3,760.00	22,560.00
7	Supplying fixing and testing <b>CI double flanged non return valves</b> conforming to IS :5312 (part-1) including making necessary flanged joint etc. complete ( <b>make. kalpana zoloto, kirtiosker</b> )				-
A	100mm Dia	RM	6.00	3,794.90	22,769.40
8	Supplying tasing , jointing and testing of <b>MS pipe heavy duty</b> of 'C' class conforming to IS 1239 and necessary fittings , like bends, tees, elbow, flanges, reducers, expanders, gaskets, with nuts, bolts and washers conforming to IS flanged/weldied joints providing ,1,' angle support for resting of pipes and providing MS clamps including painting red colour with over one coat of zinc oxide etc complete ( <b>TATA, JINDAL</b> )				-
A	100mm Dia	RM	262.00	1,212.60	317,701.20
B	50mm Dia	RM		642.50	-
C	25mm Dia	RM		268.80	-
9	Providing and firing <b>100mm dia black flanges</b> as per "E" with asbestos gasket, nut, bolts, washers complete.	Nos	2.00	1,241.00	2,482.00

10	Supplying , fixing and testing <b>single headed gun metal hydrant valve</b> oblique type with 100 NB flanged inlet and 63mm female oblique outlet with blank cap and chain as per IS 5290 with IS mark etc complete ( <b>MAKE: GE, DELIGHT EVERSAE</b> )	Nos	6.00	7,200.00	43,200.00
11	Supplying and erectioning <b>hose boxes</b> made of 1B gauge, MS sheet of size <b>800x600x250</b> mm with glaze front door painted red colour outside and white inside etc, complete.	Nos	5.00	3,200.00	16,000.00
12	Providing and fixing <b>two way fire service inlet</b> to the 100mm dia GI 'C' class pipe wet riser to be hose in MS bolt with glass cover for front side etc, complete ( <b>MAKE: GE, DELIGHT, EVERSAE</b> )	Nos	6.00	8,500.00	51,000.00
13	Providing and fixing <b>dual type pressure switch</b> suitable for 1-16kg/m2 including electrical connection setting of cut in and cut off pressure complete in all respects etc. complete. (MR)	Nos	5.00	3,400.00	17,000.00
14	Providing and fixing <b>dual type pressure gauge</b> with isolation cock and chrome plated copper pipe etc . complete. 100mm dia calibration 0-10kg/m2.	Nos	5.00	1,250.00	6,250.00
15	Providing and fixing <b>brass hydrant nozzles 25 mm dia</b> , with necessary fittings etc, complete	Nos	3.00	2,100.00	6,300.00
16	Supplying and erection of <b>4 x 2.5 sqmm copper</b> armoured power cabling and control cabling including earthing from MMC /panel to pumps and instruments with all accessories etc ,complete.( <b>make glostar/finolex</b> )	RM	260.00	220.00	57,200.00
17	Supplying and erection of <b>2 x 1.5 sqmm copper</b> armoured power cabling and control cabling including earthing from MMC /panel to pumps and instruments with all accessories etc .complete ( <b>make glostar/finolex</b> )	RM	470.00	158.00	74,260.00
18	Providing installation testing and commissioning <b>hooter cum speaker box</b> fabricated from 16 SWA CRCA sheet with good quality speaker filled with Line matching transformer suitable to deliver speeches and siren complete as per standard design ( <b>MAKE: ASES, RAVEL, GST</b> )	Nos	3.00	1,250.00	3,750.00
19	Providing installation testing and commissioning of <b>FIRE ALARM CONTROL PANEL</b> with 12 zone from 16SWA CRCA sheet with good quality with line matching transformer suitable to deliver speeches and siren complete as per standard design, ( <b>MAKE: ASES, RAVEL, GST</b> )	Nos	3.00	16,500.00	49,500.00
20	Supplying and fixing manual call point with hammer, break glass, chain, gloves and glass ( <b>MAKE: ASES, RAVEL, GST</b> )	Nos	3.00	2,000.00	6,000.00
21	Providing fixing and testing of 25mm dia air release valve with suitable fitting etc. complete.	Nos	3.00	1,750.00	5,250.00

22	Supplying and erection of fire hose of reinforced rubber lined (RRL) with 63m diameter type fire hose to IS: 8423, with female and male in stainless gunmetal coupling on either ends etc. complete 15mm in length (MAKE: GE, DELIGHT, EVERSAGE)	Nos	12.00	4,250.00	51,000.00
23	Supplying and erection of hose reel units with 25mm dia high pressure double braided rubber hosed 30m long with 19mm dia sheet of Jetspray nozzle to IS 903 & hose reel to IS 884 complete with wall mounting brackets hanging 360 degree rotating and 160 degree swinging action. with 20mm dia heavy grade MS galvanized screwed union & GMSE 25MM dia gate valve etc as per specifications, (MAKE GE DELIGHT EVERSAGE)	Nos	3.00	9,700.00	29,100.00
24	Providing & fixing of 100mm dia CI body non return valve of Kirlosker make with high tensile brass rising stem suitable for the system pressure as per IS 780	Nos	4.00	3,794.90	15,179.60
25	Providing & fixing of 100mm dia CI body with SS Spindle butterfly valve of Kirlosker make with high tensile brass rising stem suitable for the system pressure as per the engineer incharge	Nos	6.00	5,794.90	34,769.40
26	Providing & fixing of 32 mm dia CI ball valve as per IS 789	Nos	12.00	3,700.00	44,400.00
27	ABC stored pressure type dry chemical powder (mono-ammonium phosphate) fire extinguisher with fixing hangers, hose, brackets, screws to required size etc, complete as per IS '15683 (MAKE: GE, DELIGHT, EVERSAGE)	Nos	5.00	2,400.00	12,000.00
28	providing and fixing 100mm dia CI 'Y' strainer with bronze perforated sheet basket including rubber gasket, flanges, nuts, bolts, and washers, complete as required.	Nos	2.00	10,000.00	20,000.00
29	Providing and fixing fire bucket with stand (four buckets / stand) with hanging arrangement including painting red colour with over one coat of red oxide etc complete(MAKE: GE, DELIGHT, EVERSAGE).	Nos	12.00	2,000.00	24,000.00
30	Supplying all materials, labour, T&P. fitting & fixing of 50mm dia brass / GM Full way Valve of approved make including supply of all necessary jointing materials such as red lead paint, yarns etc including cost, conveyance & taxes of all materials T&P etc. all complete as per P.H. specification and direction of the Engineer in-charge.	Nos	6.00	1,936.80	11,620.80
31	Supplying all materials, labour, T&P for cutting of MS pipe etc as per direction of Engineer-in-charge.	RM	262.00	654.00	171,348.00
32	Supplying all materials, labour, T&P for welding of MS pipe etc as per direction of Engineer-in-charge.	RM	262.00	689.00	180,518.00

33	Supplying all materials, labour, T&P and fitting and fixing of CI foot valve of 150mm Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion , nuts & bolts including cost of all materials , taxes, and duties. transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.	Nos	1.00	4,794.90	4,794.90
34	<b>Sprinkler System</b>				
	Supplying, installing, testing and commissioning of M S. Pipes confirming to IS 1239 Pt - I Heavy grade \ with painting, suitable type of supports ( for above 50 mm dia , shall be fabricated by M S. Channel / Angle / Flats etc), anchor fasteners, bolts nuts , clamps. "U" bolts, malleable specials such as Reducers .Tees, elbows, flanges. including cutting , Welding, fixing in / on walls , ceiling by using suitable supports etc , as per drawings . The quoted rate shall also include for chasing / chipping walls, making bore holes in walls / floor and making them good with filler material and finished in cement mortar etc. complete ( <b>Make: Tata, Jindal</b> )				-
a	100mm nominal dia	RM	156.00	1,825.60	284,793.60
b	50mm nominal dia	RM	54.00	642.50	34,695.00
c	32mm nominal dia	RM	216.00	614.80	132,796.80
d	25mm nominal dia	RM	242.00	500.90	121,217.80
35	Supplying, installing, testing and commissioning conventional Sprinkler quartzoid bulb type with 15mm screwed end connection of 6B deg. C. temperature rating,K B0 and orifice shall not be less than 6mm.Sprinklers shall be UL Listed / FM approved with Chrome finished. (MAKE: Viking / HD / Minimax)				-
a	Pendent sprinkler	Nos	120.00	311.60	37,392.00
b	Side wall sprinkler (Extended Type-6.25mt Distance)	Nos	10.00	612.30	6,123.00
36	Providing and fixing Co2 type fire extinguisher as per IS 2878 with discharge time of 10 sec to 18 sec and gas storage pressure of 85 kgf / sq cm with Internal charge.				-
	Capacity 4.5 kg. (Wall Mounted)	Nos	6.00	6,241.40	37,448.40
37	Providing and fixing Co2 type fire extinguisher as per IS 2878 with discharge time of 10 sec to 18 sec and gas storage pressure of 85 kgf/sq cm with internal charge.				-
	Capacity 9 kg (Wall Mounted)	Nos	4.00	9,241.40	36,965.60
38	Supplying all materials , labour. T&P and fittings and fixing of <b>5000 Itr capacity Poly Propylene white double layer water storage Tank</b> of approved make confirming to IS 12701-1996 including cutting holes through the tank and fixing mild steel tubes and fittings and providing extra sockets and jam nuts , fixing ball valve etc. including hoisting upto terrace level and placing the tank to the required position etc all complete as per PH specification and direction of Engineer -in-charge. (To provided with brick masonry guard walls which will be paid separately)	Nos	1.00	54,528.50	54,528.50
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<b>B</b>	<b>FIRE ALARM SYSTEM</b>				

1	Supply, installation, testing & commissioning of UL Listed automatic 1 loop FPA-1000 master control fire alarm panel complete with LCD display, battery back up with SMF batteries for 30 minutes of back up operation with 24 Volt battery supply with inbuilt system for monitoring of cable short circuit, battery voltage, audio visual alarm, testing module etc.(Make:- BOSCH/ EDWARD/L&T.)	1.0	NOS	82942.00	82942.00
2	Supply, installation, testing & commissioning of <b>fault isolator</b> module for monitoring of line circuit. (Make:- BOSCH/ EDWARD/L&T)	2.0	NOS	5000.00	10000.00
3	Supply, installing connecting up, testing and commissioning of the following fire alarm equipment :				
i	Smoke detector ('optical' type)	26.0	NOS	2600.00	67600.00
ii	Heat Detector	3.0	NOS	2600.00	7800.00
iii	Manual break glass call point	6.0	NOS	4000.00	24000.00
iv	Electronic Hooters with Strobe (5 watt)	8.0	NOS	5200.00	41600.00
4	Supplying and laying of 3c x 1.5 sqmm PVC insulated , Multistranded armoured copper cable and overall PVC sheathed cable , laid on wall / ceiling using GI clamps and spacers as per the route decided at site , by looping all smoke detectors as required including final termination on fire panel.	500.0	MTR	85.00	42500.00
	Total Estimated Cost in Figures.				<b>3463346.75</b>
	CESS @1%				<b>34633.47</b>
	TOTAL RS.				<b>3497980.22</b>
	SAY RS.				<b>3497980.00</b>
EXCESS	<input type="checkbox"/>	LESS	<input type="checkbox"/>	(Please Tick)	_____ %
Quoted Amount in Figures.					
Quoted Amount in words					

**N.B-The Estimate Cost is Inclusive of G.S.T i.e. @ 12%**

Signature of Tenderer with seal

Sd/-  
Asst. Project Manager (Elect.)

Sd/-  
Asst. Project Manager Elect.(Hqr)

Sd/-  
Joint Manager (Elect.)