MUNICIPAL CORPORATION OF GREATER MUMBAI

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS
On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla - 400072

SUMMARY - ELV SYSTEM

Sr. No.	Description	Amount	
1	Hospital ELV System	₹	11,98,06,197
2	Residential ELV System	₹	1,29,27,787
Grand Total		**₹**	**13,27,33,984**

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS
On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla - 400072

BILL OF QUANTITIES - ELV SYSTEM HOSPITAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		BILL OF QUANTITIES FIRE ALAM SYSTEM				
1	BAH-FAS-FA-01	S/I/T/C of Microprocessor based networkable addressable type fire alarm control panel with display. The panel should be equipped with 8 installed loops each loop having a capacity of connecting a minimum of 125 addressable detectors and 125 addressable modules or a mix of up to 250 detectors and devices in any combination in any single loop, the panel shall be networkable, with each loop having a capacity of connecting a minimum of 125 addressable detectors and 125 addressable modules or a mix of up to 250 detectors and devices in any combination in any single loop, operating at 240 volts AC power supply, and equipped with automatic battery charger, 24 volts sealed lead acid batteries sufficient for 24 hours normal working. The panel shall be supplied with all accessories, control modules and power supplies in the required quantities as per site requirements for all types of field devices to make the system fully operational. The panel shall be UL / VDS/ EN Approved. Interconnecting of multiple panels shall be possible via hardware interfaces and software. A copper supporting interface shall be supplied by default. 10 Loop Fire Alarm Panel. inclunding fire fighting telephone compartment	1.00	Nos	₹ 10,97,400	10,97,400.00
2	BAH-FAS-FA-02	S/I/T/C of UL Listed Fire Command Station including Graphical User Interface Software. The GUI based main network software shall be capable of graphically representing each node being monitored with floor plans and icons depicting the actual locations of the various systems; and / or sensors' locations. The GUI software shall be located in control room and shall monitor all the blocks panel connected with each other. The Graphic workstation (Core i7, 8GB RAM, 1 TB HDD and 4GB Graphics Card) shall act as an independent node communicating on the peer to peer true peer to peer network and shall not be dependent on the Fire Panel CPU for operation (failure of any CPU shall not result in failure of Graphic Workstation). Graphical workstation will be with 42" professional display.	1.00	Nos	₹ 9,50,000	9,50,000.00
3	BAH-FAS-FA-03	S/I/T/C of Network / RS-485 Card for Netwroking of multiple panels /Repeater panels.	4.00	Nos	₹ 34,256	1,37,024.00
4	BAH-FAS-FA-04	S/I/T/C of UL Listed and FM Approved Network Repeater Panel with 600 character LCD shall display and all events / detectors, devices status of complete systems in the network.	3.00	Nos	₹ 2,34,570	7,03,710.00
5	BAH-FAS-FA-05	S/I/T/C of UL Listed and FM Approved Addressable Rate of Rise Cum Fixed Temperature detector with mounting base, LED. Should be having Built-in Isolator to meet UL268, 7th Edition	80.00	Nos	₹ 3,215	2,57,200.00
6	BAH-FAS-FA-06	S/I/T/C of UL Listed and FM Approved Addressable photo+thermal Multi-Sensing Type Detector (heat+smoke) with mounting base, LED, inclusive of detector base and complete with all accessories as required.for Below Ceilling. Should be having Built-in Isolator to meet UL268, 7th Edition	1,850.00	Nos	₹ 3,457	63,95,450.00
7	BAH-FAS-FA-07	S/I/T/C of UL Listed and FM Approved Addressable photo+thermal Multi-Sensing Type Detector (heat+smoke) with mounting base, LED, inclusive of detector base and complete with all accessories as required. For Above Ceilling Should be having Built-in Isolator to meet UL268, 7th Edition	75.00	Nos	₹ 3,457	2,59,275.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
8	BAH-FAS-FA-08	S/I/T/C of UL Listed Addressable Beam Detector (transmiter & reciver) housing, and all other accessories, complete with Cable lugs at Ends, cable compressionglands, cable tags and Ferruling. Conventional beam detector with monitor modules are not acceptable.	2.00	Nos	₹ 42,358	84,716.00
9	BAH-FAS-FA-09	S/I/T/C of Power Supply with built in battery charger, 24 VDC, 2A (excluding Battery)	4.00	Nos	₹ 5,862	23,448.00
10	BAH-FAS-FA-10	S/I/T/C of UL Listed and FM Approved Addressable type isolator modules for isolating shorted, dewired and loose circuits between two successive fault isolators with automatic resetting arrangement.	120.00	Nos	₹ 3,155	3,78,600.00
11	BAH-FAS-FA-11	S/I/T/C of UL Listed and FM Approved Addressable Manual Pull Station with required accessories. Should have built in isolator.	64.00	Nos	₹ 5,246	3,35,744.00
12	BAH-FAS-FA-12	S/I/T/C of UL Listed and FM Approved integrated sounder+strobe with 110 cd, inclusive of control modules with Built in isolator (if not having quote Separate Isolator module of equal Qty.) The strobes shall be capable of being synchronized for better evacuation.	64.00	Nos	₹ 11,248	7,19,872.00
13	BAH-FAS-FA-13	S/I/T/C of UL Listed and FM Approved Addressable Monitor Module with Built in isolator for hardware integration with 3rd party devices.	114.00	Nos	₹ 5,179	5,90,406.00
14	BAH-FAS-FA-14	S/I/T/C of UL Listed and FM Approved Addressable Control Module with Built in isolator for hardware integration with 3rd party devices.	114.00	Nos	₹ 5,179	5,90,406.00
15	BAH-FAS-FA-15	S/I/T/C of UL Listed Addressable Fire Fighters Telephone Jack with telephone module as per all requirements of contracts works.	64.00	Nos	₹ 9,259	5,92,576.00
16	BAH-FAS-FA-16	S/I/T/C of UL Listed Fire Fighters Telephone Receiver as per all requirements of contracts works.	5.00	Nos	₹ 10,992	54,960.00
17	BAH-FAS-FA-17	S/I/T/C of of EN Listed / VDS Approved Single Channel Advanced dual Wavelength optical detection (Blue & Infra-red) based Aspiration Detection Unit with area coverage of 8600 Sq. Feet with sensitivity ranging from 0.05 - 20% obs/m along with programmable Purge functionality The front panel display includes an easy to read smoke density and airflow level bar graph alarm fault status and dust indicator Detector ambient shall be -20 to 60 C along with 4 relay output.	2.00	Nos	₹ 3,85,125	7,70,250.00
18	BAH-FAS-FA-18	S/I/T/C of Flush Capillary Sampling Point (Union and adaptor, 1.5m Capillary Tube & Sampling Point)	60.00	Nos	₹ 1,346	80,760.00
19	BAH-FAS-FA-19	S/I/T/C of End Cap for large bore pipes, 25 mm	8.00	Nos	₹ 1,346	10,768.00
20	BAH-FAS-FA-20	S/I/T/C of 25mm sch-40 UPVC Pipe for Aspiration system.	120.00	Mtr	₹ 135	16,200.00
21	BAH-FAS-FA-21	S/I/T/C of Conventional Sounder Cum strobe low profile 95 db	10.00	Nos	₹ 3,500	35,000.00
22	BAH-FAS-FA-22	S/I/T/C of Response indicator.	750.00	Nos	₹ 183	1,37,250.00
23	BAH-FAS-FA-23	S/I/T/C 2 Core 1.5Sq mm FRLSZH type Multistraded Red Armoured cable for fire alarm system	32,535.00	Mtr	₹ 175	56,93,625.00
24	R2-ME-12-8-a	SUPPLY & LAYING OF PVC CONDUITS 25 mm.- Only PVC Conduits	5,000.00	Mtr	₹ 35	1,75,000.00
25	R2-ME-2-13-i	Readymade 2500mm standard length, prefabricated, perforated cable tray from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. Galvanisation thickness shall be minimum 86 Micron. 200 x 50mm (W x H) - (16 SWG - 1.6mm) with cover	350.00	Mtr	₹ 2,214	7,74,900.00
26	R2-ME-2-13-j	Readymade 2500mm standard length, prefabricated, perforated cable tray from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. Galvanisation thickness shall be minimum 86 Micron. 300 x 50mm (W x H) - (16 SWG - 1.6mm) with cover	500.00	Mtr	₹ 3,272	16,36,000.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		TOTAL AMOUNT FIRE ALARM SYSTEM (In Rs.)				**2,25,00,540.00**

BILL OF QUANTITIES PUBLIC ADDRESS SYSTEM

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
27	BAH-PAS-FA-24	S/I/T/C of Network Controller for Public Address System consisting of Central Digital Signal Processor module, 2 x 16-character LCD Display, 8 **zone** Supervised Control Inputs and 4 Audio Inputs, Web server and Ethernet Interface for Configuration and Diagnostics & Logging functions, Digital message storage capable of storing at least up to last 200 faults messages, RS232 Interface for logging, OFC Network Inteface capability and PC Interface and an optional interface for Fire Alarm signal. It will support essential capabilities such as - pre-programmed emergency messages, background music & configurable multiple zones as per EN60849 or equivalent internationally accepted standards as per tender specifications. Important availability features will include loudspeaker line monitoring and loudspeaker monitoring without requiring any additional cabling for every loudspeaker installed. (For Indoor Speaker with considering of Room)	5.00	Nos	₹ 3,88,902	19,44,510.00
28	BAH-PAS-FA-25	S/I/T/C of Class D Power Amplifier - 500 watts for the amplification of audio signals for speakers. The amplifier shall support only 2 zones each of 250 watts. It shall be possible to select output voltages of 100 V, 70 V or 50 V, The power amplifier will have a 2 x 16-character display for status display and must be usable free-standing (tabletop) or in a 19" rack mounting arrangement.	12.00	Nos	₹ 2,21,309	26,55,708.00
29	BAH-PAS-FA-26	S/I/T/C of digital paging microphone capable of supporting upto 6 zones, inclusive of provision to announce over background music and a press-to-talk key, It should have an Analog-to-digital audio conversion circuit within the call station and a digital signal processor, which can be used for audio processing.	1.00	Nos	₹ 99,980	99,980.00
30	BAH-PAS-FA-27	S/I/T/C of Ceiling Mounted Loud Speaker: Rated Power – 6 Watts, Rated Voltage: 100 volts,Effective frequency range :(80 Hz to 16000 Hz).(For Indoor Speaker with considering of Room)	525.00	Nos	₹ 1,280	6,72,000.00
31	BAH-PAS-FA-28	S/I/T/C of Ceiling Mounted Loud Speaker: Rated Power – 6 Watts, Rated Voltage: 100 volts,Effective frequency range :(80 Hz to 16000 Hz). (For Indoor Passage Speaker)	225.00	Nos	₹ 1,280	2,88,000.00
32	BAH-PAS-FA-29	S/I/T/C of Wall Mounted Loud Speaker: Rated Power – 12 Watts, Rated Voltage: 100 volts,Effective frequency range :(80 Hz to 16000 Hz).	20.00	Nos	₹ 2,105	42,100.00
33	BAH-PAS-FA-30	S/I/T/C of Horn type Loud Speakers(20 watt water proof), covering wide range of frequences in outdoor harsh enviroments. Effective frequency range: (70 Hz to 16500 Hz).	4.00	Nos	₹ 13,718	54,872.00
34	BAH-PAS-FA-31	S/I/T/C of External background music source & accessories- DVD/Tuner/MP3	1.00	Nos	₹ 8,688	8,688.00
35	BAH-PAS-FA-32	S/I/T/C of Network cables assembly and any applicable interfaces/cards/supervision modules for main controller, amplifier & paging microphone and any other devices as applicable.	1.00	SET	₹ 45,000	45,000.00
36	BAH-PAS-FA-33	S/I/T/C of Web based Software Application for System Configuration, Management & Diagnostics Including Latest version Server Deskstop and required Accessories	1.00	Nos	₹ 2,25,000	2,25,000.00
37	BAH-PAS-FA-34	S/I/T/C of Flexible PVC insulated multistrand multicore 1.1 kv grade ISI marked copper wires of following size to be erected as directed. FRLSZH 1.50 Sq.mm 2 core round Multistranded Armoured Cable.	7,000.00	Rmt	₹ 130	9,10,000.00
38	BAH-PAS-FA-35	S/I/T/C of 19-inch Equipment Rack: 42 U For PA equipment and accessories, floor mounted, lockable doors etc. being essential features with cooling fans and complete with necessary mounting hardware & accessories.	2.00	Nos	₹ 65,844	1,31,688.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
39	BAH-PAS-FA-36	S/I/T/C of Emergency Manual Override 25 Watt Volume Control with conesealed Backbox and accessories etc.	90.00	Nos	₹ 4,500	4,05,000.00
		TOTAL AMOUNT PUBLIC ADDRESS SYSTEM (In RS)				**74,82,546.00**

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		BILL OF QUANTITIES CCTV SYSTEM				
40	BAH-CCTV-FA-37	S/I/T/C of 4MP IP IR Dome Cameras, 1/3 CMOS sensor, Motorized Vari Focal 2.8 to 12 mm lens at frame rates 20fps or better, H.264 High Profile/JPEG, True Day/Night, ONVIF profile S compliant, Power on Ethernet (PoE) based.	57.00	Nos	₹ 45,000	25,65,000.00
41	BAH-CCTV-FA-38	S/I/T/C of 4MP IP IR Bullet Camera 1/3 CMOS sensor, Motorized Vari Focal 2.8 to 12 mm lens at frame rates 20-30 fps or better, H.264 High Profile/JPEG, True Day/Night, ONVIF profile S compliant, Power on Ethernet (PoE) based, IK10 Vandal Proof and IP 66 Ingrass Protection Level	4.00	Nos	₹ 55,000	2,20,000.00
42	BAH-CCTV-FA-39	S/I/T/C of 2MP IP IR Cameras, Outdoor PTZ, 1/1.9 CMOS sensor with 30x optical zoom or better, minimum resolution 2MP (1920X1080) or better, high speed dome, 350 degrees full rotation, complete with IK10/Equivalent rated vandal resistant weatherproof housing IP66, PoE+ Input Voltage or optional AC/DC supply, supporting True Day/Night operation, ONVIF Profile S compliant, supporting H.264 High Profile feature with pole mounted stand as per technical specification etc. as required.	4.00	Nos	₹ 2,25,000	9,00,000.00
43	BAH-CCTV-FA-40	S/I/T/C of Video Management Software Camera License with ONVIF Profile S compliant.	65.00	Nos	₹ 7,499	4,87,435.00
44	BAH-CCTV-FA-41	S/I/T/C of Server(s) required for the VMS - Industry standard Intel based platform, rack mounted, redundancy architecture for critical hardware components, licensed Microsoft Server Operating system and requisite user licenses, licensed application suites, Quad Core Intel® Xeon® 5150 processors, 2.66 GHz with Latest Generation, 4 MB Cache, 1333 MHz FSB or better, 8 GB of RAM, 2 x 500 GB of SSDs, minimum 4 additional hard disk drive bays for expansion, 1360 * 768 video resolution, 2 * 10/100/1000 Ethernet Network Interface Card, RAID support built-in and pre-installed DVD-R/W Drive and Appropriate Licensed Operating Systems. as per the technical specifications. (For 300 Cameras or Upgradable)	1.00	Nos	₹ 9,34,570	9,34,570.00
45	BAH-CCTV-FA-42	S/I/T/C of Client PC - Industry standard Intel based platform computer system. Intel Core i7 2600 @ 3.4 GHz with Latest Generation, 8 GB of RAM DDR4 ,1 TB SSD for OS and VMS applications, NVidia GTX 570 or DirectX VA 2.0 compatible card with 1 GB of RAM , 1600 x 1200 or higher screen resolution, 1000Mbps Ethernet Network Interface Card ,16x DVD+/- RW Drive alongwith appropriate licenced Operating Systemwith Antivirus, licenced applications suites from OEM and application licences as per the technical specifications.	1.00	Nos	₹ 2,06,677	2,06,677.00
46	BAH-CCTV-FA-43	S/I/T/C of Network RAID 0 TO 10 WITH TCPIP/E-SATA SSD Storage required with a capacity to store the content for up to 300 cameras for 24Hrs x30days at 25-30 fps and 1080p. It should be scalable (should have sufficient expansion bays for HDDs) . Vendor shall submit bandwidth and storage calculator for the proposed camera models as per technical specification etc. as required.	1.00	Nos	₹ 27,43,500	27,43,500.00
47	BAH-CCTV-FA-45	S/I/T/C of **GI pole of 5 mtr** height for Outdoor Cameras for more than one camera.	4.00	Nos	₹ 35,000	1,40,000.00
48	BAH-CCTV-FA-46	S/I/T/C of Armoured CAT - 6 Cable (UTP) for outside cameras including providing and fixing necessary saddles etc as required	1,500.00	Mtr	₹ 120	1,80,000.00
49	BAH-CCTV-FA-47	S/I/T/C of Power Cable 3 X 1.5 sq.mm flexible cable for Cameras / Network Racks and Switches inside MS conduit including providing and fixing necessary saddles etc as required	500.00	Mtr	₹ 105	52,500.00
		TOTAL AMOUNT CCTV SYSTEM (In RS)				**84,29,682.00**

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		BILL OF QUANTITIES ACCESS CONTROL SYSTEM				
50	BAH-ACS-FA-48	S/I/T/C of Application Server Platform with no user restriction; 1000 Users license of Time Attendance cum Acess Contol which can be expandable as per customer requirement, support 25000 users.	1.00	Nos	₹ 1,15,794	1,15,794.00
51	BAH-ACS-FA-49	S/I/T/C of 1000 User Access Control License. Comprehensive Access Control Management. Perpetual Cost for Time, User & Zone Based Access Control, Access Zones, Access Modes & Access Levels. Advanced Access Control features like 2-Person Rule, First-in User Rule, Anti-pass Back, Guard Tour, Duress Detection & More. Various Reports Generation.	1.00	Nos	₹ 34,570	34,570.00
52	BAH-ACS-FA-50	S/I/T/C of 1000 User Time Attendance License. Should support multiple shift, different report like monthly, daily, etc.	1.00	Nos	₹ 59,120	59,120.00
53	BAH-ACS-FA-51	S/I/T/C of Access Control Panel for Multiple Door Controllers, Ethernet, RS-485,USB, Aux Input & Output Port, Shall work as Standalone / Network Mode.	1.00	Nos	₹ 11,448	11,448.00
54	BAH-ACS-FA-52	S/I/T/C of Fingerprint and EM Proximity Card Based Door Controller, IP65 Rating, 50,000 Events and 9,600 Fingerprint Template Storage, Built-in PoE, Built-in Door Lock / Door Sense / Exit Reader / Exit Switch Ports, RS-485 and Ethernet Interfaces. Tri-color LED & Buzzer.	40.00	Nos	₹ 23,777	9,51,080.00
55	BAH-ACS-FA-53	S/I/T/C of Exit Switch with Metal Finish.	40.00	Nos	₹ 1,829	73,160.00
56	BAH-ACS-FA-54	S/I/T/C of EM Magnetic Lock 600 LBS with Door Sense, Mounting Clamp.	40.00	Nos	₹ 3,841	1,53,640.00
57	BAH-ACS-FA-55	S/I/T/C of EM Prox Card without Printing	250.00	Nos	₹ 115	28,750.00
58	BAH-ACS-FA-56	S/I/T/C of Access Control Solution : Supply, Installation, Testing & Commissioning of Access Control Access System Monitoring Hardware Central Work Station Server with i5 10th Gen. Intel processor with minimum 1TB SSD, 8 GB RAM, 21" LED Monitor, DVD Writer, two serial and one parallel ports, multimedia speakers, infrared mouse; Work station shall be preloaded with requisite MS Windows Licensed software with Antivirus compatible with the Access Control platform	1.00	Nos	₹ 1,15,227	1,15,227.00
59	BAH-ACS-FA-57	S/I/T/C Of 8C X 1.0 Sq. mm Sheilded FRLSZH With necessary glands & termination Armoured Cable. (Colour: Gray)	1,500.00	Rmt	₹ 183	2,74,500.00
60	BAH-ACS-FA-58	S/I/T/C Of 4C X 1.0 Sq. mm Sheilded FRLSZH With necessary glands & termination Armoured Cable. (Colour: Gray)	1,200.00	Rmt	₹ 155	1,86,000.00
61	BAH-ACS-FA-59	S/I/T/C Of 2C X 1.0 Sq. mm Sheilded FRLSZH Armoured With necessary glands & termination Cable Atc (Colour: Gray)	2,000.00	Rmt	₹ 126	2,52,000.00
		TOTAL AMOUNT ACCESS CONTROL SYSTEM (In RS)				**22,55,289.00**

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		BILL OF QUANTITIES DATA VOICE NETWORKING SYSTEM				
62	R2-ME-12-4-b	Cat 6 Gigabyte	75,000	Mtr	₹ 32	24,00,000.00
		Note :- Cat6 UTP Cable for Data, Voice, Access Point & CCTV & BMS from each workstation / field location to the Network Distribution				
63	R2-ME-12-8-a	SUPPLY & LAYING OF PVC CONDUITS 25 mm.- Only PVC Conduits	35,000	Mtr	₹ 35	12,25,000.00
64	R2-ME-12-3-b	SITC OF ARMOURED JELLY FILLED TELEPHONE CABLES Armoured Telephone Cable -20 pair	500	Mtr	₹ 169	84,500.00
65	R2-ME-12-3-c	SITC OF ARMOURED JELLY FILLED TELEPHONE CABLES Armoured Telephone Cable -50 pair	500	Mtr	₹ 337	1,68,500.00
66	BAH-DVNET-FA-148	Supply, Fitting and Termination charge of 20 Pair MDF Box.	10	Mtr	₹ 1,700	17,000.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
67	BAH-DVNET-FA-149	Supply, Fitting and Termination charge of 50 Pair MDF Box.	35	Mtr	₹ 2,650	92,750.00
68	BAH-DVNET-FA-150	Supply, Fitting and Termination charge of 1000 Pair MDF Box.	2	Mtr	₹ 42,000	84,000.00
69	BAH-DVNET-FA-151	Supply and Laying of Jumper cable.	2,000	Mtr	₹ 22	44,000.00
70	R2-ME-12-9-m	3 Feet Patch Chord	1,450	Nos	₹ 163	2,36,350.00
		Note CAT6 UTP RJ-45/RJ-45 Patch Cords Solid Conductor 1Mtr				
71	R2-ME-12-9-l	7 Feet Patch Chord	50	Nos	₹ 195	9,750.00
		Note CAT6 UTP RJ-45/RJ-45 Patch Cords Solid Conductor 2Mtr				
72	BAH-DVNET-FA-154	S/I/T/C of Single UTP CAT6 RJ-45 I/O	2,750	Nos	₹ 480	13,20,000.00
73	BAH-DVNET-FA-155	S/I/T/C of Quad Face Plate	350	Nos	₹ 230	80,500.00
74	BAH-DVNET-FA-156	S/I/T/C of Double Face Plate	685	Nos	₹ 130	89,050.00
75	BAH-DVNET-FA-157	S/I/T/C of Single Face Plate	500	Nos	₹ 130	65,000.00
76	BAH-DVNET-FA-158	S/I/T/C of UTP CAT6 Gigabit Loaded Patch Panel of 24 ports for Data, Voice, Access Control & CCTV & DVNET	122	Nos	₹ 4,800	5,85,600.00
77	BAH-DVNET-FA-159	S/I/T/C of Surface Mount Box for Single / Dual Faceplate	2,750	Nos	₹ 219	6,02,250.00
78	BAH-DVNET-FA-160	Identification, Ferruling and Marking of Cat6 UTP Cable	5,000	Nos	₹ 46	2,30,000.00
79	BAH-DVNET-FA-161	Testing and Certification of Cat6 UTP Cable	1,000	Nos	₹ 183	1,83,000.00
80	BAH-DVNET-FA-162	S/I/T/C of Data Networking - Fiber Optic cable and components S/I/T/C of indoor 6 core single mode fiber optic cable for indoor connectivity where ever required in prelaid conduits / RCC hume pipes/HDPE/DWC, whichever maybe available.	500	Mtr	₹ 95	47,500.00
81	BAH-DVNET-FA-163	S/I/T/C of 19" Rack Mounted LIU for optical splicing/termination of 12 core single mode fiber optic cable as per design specifications. It shall be complete with adaptor panels, adaptors, splice trays and Pigtails for using LC type termination. Masking/blanking/dustcover for unused/unmounted adaptor ports, inclusive of all mechanical accessories.	16	Nos	₹ 8,963	1,43,408.00
82	BAH-DVNET-FA-164	S/I/T/C of SC-LC single mode duplex fiber optic patch cord 2Mtr	34	Nos	₹ 1,856	63,104.00
83	BAH-DVNET-FA-165	S/I/T/C of Splicing / Termination of Fiber Optic Fiber Cable Cores using Fusion splicing with pre-terminated LC pigtails, dressing and proper fixing into rolosplice trays.	192	Nos	₹ 366	70,272.00
84	BAH-DVNET-FA-166	S/I/T/C of 15 U, floor standing (800mmW x 800mmD) 19" Networking Enclosure as per specification and complete with all accessories for Each Floor 2 Rack Consider	1	Nos	₹ 14,750	14,750.00
85	BAH-DVNET-FA-167	S/I/T/C of 24/27U CLOSED WALL/ FLOOR MOUNT RACK WITH 1 NOS. HORIZONTAL POWER STRIP & STANDARD ACCESSORIES	8	Nos	₹ 42,500	3,40,000.00
86	BAH-DVNET-FA-168	S/I/T/C of 42 U, floor standing (800mmW x 1000mmD)19" Networking Enclosure as per specification and complete with all accessories for Data,CCTV	5	Nos	₹ 69,780	3,48,900.00
87	BAH-DVNET-FA-169	Supply Installation Commissioning and Testing of Fully Unified Communication EPABX System , Complete Converge with Voice, Data & Video, 01 PRI Card 08 Digital, 08 Trunks/ Co Lines, 64 Channel VOIP/SIP GATEWAY, 650 Analouge extensions,10 IP Extension, 50 IP Soft Client for PC and Mobile, Digital Console Rack Mountable Kit In Built Features: Auto Attendend(Voice Response System) Audio Conference Least Call Routing	2	Nos	₹ 20,75,000	41,50,000.00
88	BAH-DVNET-FA-170	S/I/T/C of PC based soft-console and related software/licences	2	Nos	₹ 13,794	27,588.00
89	BAH-DVNET-FA-171	S/I/T/C of IP Phone with 4 line Display with 32 Expansion Key.	20	Nos	₹ 25,564	5,11,280.00
90	BAH-DVNET-FA-172	S/I/T/C of User Call Control Application for all users/extensions.	2	SET	₹ 1,66,648	3,33,296.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
91	BAH-DVNET-FA-173	S/I/T/C of push button type telephone instrument having speaker phone Caller ID & hands free dialling system & 30 memories with display system (a) Single line	1,278	Nos	₹ 750	9,58,500.00
92	BAH-DVNET-FA-174	S/I/T/C of VoIP Gateway Hardware, inclusive of licences (64 Channel)	1	Nos	₹ 1,45,206	1,45,206.00
93	BAH-DVNET-FA-175	S/I/T/C of Voice Messaging Application, inclusive of licences (64 Channel)	1	Nos	₹ 79,968	79,968.00
94	BAH-DVNET-FA-176	S/I/T/C of Unified Messaging, integration of e-mail system, fax and voice messaging for 50 User.	1	Nos	₹ 1,00,860	1,00,860.00
95	BAH-DVNET-FA-177	S/I/T/C of Redundant CPU / Processor Card for EPBX System	1	Nos	₹ 62,500	62,500.00
96	BAH-DVNET-FA-178	S/I/T/C of Redundant Power Supply Card for EPBX System	1	Nos	₹ 82,340	82,340.00
97	BAH-DVNET-FA-179	S/I/T/C of Switch: 16 SFP+ Port, Stackable L3 Core Managed Enterprise Switch with Redundant and Hot-Swappable Power Supply. 16GB or Higher Flash Memory; 16GB or Higher DRAM, 480Gbps or Higher switching capacity; 360 Gbps or higher Stacking Bandwidth; The switch should support StackPower Technology or Similar, 4K VLAN ID; 360 Mpps or higher forwarding rate; The switch should support various routing protocolos like Static / RIP V1 & V2 / RIPng / EIGRP / OSPF. The switch should support standard proocols: IEEE 802.1D STP, IEEE 802.1p CoS Prioritization; IEEE 802.1ab (LLDP); IEEE 802.3 10Base-T; IEEE802.3U 100Base-Tx, IEEE 802.3ab 1000Base-T; IEEE 802.3ae 10GbE, IEEE 802.3z 1000 Base-X; IEEE 802.3x Full Duplex Mode; SNMP v1, V2c and V3; UL, EN; IEC; EMC; CE, FCC, RoHS. The Switch should be supplied with required Stack Modules, Stack Cables etc. Detailed specifications as per specification sheet.	2	Nos	₹ 17,56,230	35,12,460.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
98	BAH-DVNET-FA-180	S/I/T/C of Distribution Enterprise Network Switch: 24 x 10/100/1000 Mbps, Managed Switch. Virtual Stack Capability; 2GB or Higher DRAM and 4GB or higher Flash, 128Gbps or Higher switching bandwidth; 1024 VLAN ID; 190 Mpps or higher forwarding rate; The switch should support Digital Network Architecture and SD Access. The switch should support routing protocols like static routing, RIPv1, RIPv2, OSPF, EIGRP, IS-ISv4, IPv6 Routing etc from day one. Safety Standards like UL; EN; IEC;EMC; RoHS. Detailed specifications as per Specification Sheet.	1	Nos	₹ 10,42,479	10,42,479.00
99	BAH-DVNET-FA-181	S/I/T/C of Access PoE Network Switch: 24 Port10/100/1000 Base-T PoE with 2 Port 10G SFP+ L2 Managed Enterprise Switch. PoE budget 370W or higher, FlexStack-Plus Capability; 4MB or Higher DRAM,128Gbps full-duplex or Higher switching bandwidth; 4K VLAN ID; 95 Mpps or higher forwarding rate; The switch should support standard proocols: IEEE 802.1D STP, IEEE 802.1p CoS Prioritization; 1000Base-T; IEEE 802.3z 1000 Base-X; IEEE 802.3x Full Duplex on 10/100/1000 Base-T Ports; SNMP v1, V2c and V3; Safety Standards like UL; EN; IEC;EMC; RoHS. Detailed specifications as per Specification Sheet.	60	Nos	₹ 2,75,000	1,65,00,000.00
100	BAH-DVNET-FA-182	S/I/T/C of Access Network Switch: 24 Port10/100/1000 Base-T PoE with 2 Port 10G SFP+ L2 Managed Enterprise Switch. PoE budget 370W or higher, FlexStack-Plus Capability; 4MB or Higher DRAM,128Gbps full-duplex or Higher switching bandwidth; 4K VLAN ID; 95 Mpps or higher forwarding rate; The switch should support standard proocols: IEEE 802.1D STP, IEEE 802.1p CoS Prioritization; 1000Base-T; IEEE 802.3z 1000 Base-X; IEEE 802.3x Full Duplex on 10/100/1000 Base-T Ports; SNMP v1, V2c and V3; Safety Standards like UL; EN; IEC;EMC; RoHS. Detailed specifications as per Specification Sheet.	65	Nos	₹ 2,49,000	1,61,85,000.00
101	BAH-DVNET-FA-183	S/I/T/C of 10G Base SFP+ singlemode Tranceiver for L2/L3 switch, Single mode, LC termination supporting distance upto 2000 Mtrs SFP+ Module should be same make of Switch.	47	Nos	₹ 49,804	23,40,788.00
102	BAH-DVNET-FA-184	S/I/T/C of Wi-Fi access point with 3x3 MIMO, 2 Spatial Streams as per IEEE 802.11a/b/g/n/ac, should support throughput of 300Mbps on 802.11a/b/g/n and upto 1.2 Gbps on 802.11ac and PoE as per IEEE 802.3a/f.	65	Nos	₹ 48,760	31,69,400.00
103	BAH-DVNET-FA-185	S/I/T/C of Wireless Controller System, including Hardware Based Controller, capable of supporting min. 150 access points from Day one, inclusive of licence cost for 150 access points. Controller should have minimum 2 * 1Gbic or 10 Gbic Port;capable of intrusion prevention system, application visibility control and should support High Availability. Should expandable upto 1000 Access Points.	1	Nos	₹ 24,56,000	24,56,000.00
104	BAH-DVNET-FA-186	S/I/T/C of Network Security Appliance for 1000 Concurrent Users Support and with 3 Years support from OEM	1	Nos	₹ 21,67,268	21,67,268.00
105	BAH-DVNET-FA-187	S/I/T/C of Network Unified Threat Management (Firewall with Active – Active HA)	1	Nos	₹ 42,50,000	42,50,000.00
106	BAH-DVNET-FA-188	S/I/T/C OF RG 6 FRLSH ARMOURED CABLE. ATC CONDUCTOR STRANDED, PVC INSULATED TO FORM A CORE, CORES LAID UP, OVERALL SHIELDED WITH ALU-MYLAR TAPE WITH TINNED COPPER DRAIN WIRE OF SIZE 0.5 Sq. MM, PVC INNERSHEATHED G.I. WIRE ARMOURED, PVC SHEATHED CABLE (Colour: BLACK)	500	Mtr	₹ 115	57,500.00
107	BAH-DVNET-FA-189	S/I/T/C OF RG 11 FRLSH ARMOURED CABLE. ATC CONDUCTOR STRANDED, PVC INSULATED TO FORM A CORE, CORES LAID UP, OVERALL SHIELDED WITH ALU-MYLAR TAPE WITH TINNED COPPER DRAIN WIRE OF SIZE 0.5 Sq. MM, PVC INNERSHEATHED G.I. WIRE ARMOURED, PVC SHEATHED CABLE (Colour: BLACK)	500	Mtr	₹ 145	72,500.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
108	BAH-DVNET-FA-190	**Server Room Security and False Flooring Solution** Supply, Installation, Testing & Commissioning False Flooring of appropriate height	1,500	SQFT	₹ 824	12,36,000.00
109	BAH-DVNET-FA-191	S/I/T/C of Server Room Security consists of Sensors like Water Leakage, Temperature, Humidity, Smoke etc with alarm through Message and Mail Alerts to minimum of three persons.	1	Nos	₹ 4,25,243	4,25,243.00
		Readymade 2500mm standard length, prefabricated, GI trunking from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. 50 mm side flanges shall be provided. Galvanisation thickness shall be minimum 86 Micron. cost of trunking shall be included junction box of suitable size, and all other accessories required to complete the work.				
110	R2-ME-2-15-c	100 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	100	Mtr	₹ 690	69,000.00
111	R2-ME-2-15-d	150 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	500	Mtr	₹ 906	4,53,000.00
112	R2-ME-2-15-e	300 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	200	Mtr	₹ 1,498	2,99,600.00
113	R2-ME-2-13-i	Readymade 2500mm standard length, prefabricated, perforated cable tray from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. Galvanisation thickness shall be minimum 86 Micron. 200 x 50mm (W x H) - (16 SWG - 1.6mm) with cover	200	Mtr	₹ 2,214	4,42,800.00
114	R2-ME-2-13-j	Readymade 2500mm standard length, prefabricated, perforated cable tray from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. Galvanisation thickness shall be minimum 86 Micron. 300 x 50mm (W x H) - (16 SWG - 1.6mm) with cover	200	Mtr	₹ 3,272	6,54,400.00
		TOTAL AMOUNT DATA, VOICE NETWORKING SYSTEM (Rs)				**7,03,30,160.00**

		BILL OF QUANTITIES PASSIVE SECURITY SYSTEM				
115	BAH-PSS-FA-60	S/I/T/C of Walk-Through Metal Detector, panel version, complete with dual-beam photocells transit counter, four multi zones display bars programmable as pacing lights , localization zones with left and right indication, Random Alarm capability, low voltage DC power, Chip-Card programming, RS-232 communication, anti-tamper on/off switch and as specified in tender specs	4.00	Nos	₹ 4,50,000	18,00,000.00
116	BAH-PSS-FA-61	S/I/T/C of Digital Hand Held Metal Detector (HHMD), indoor and outdoor use, very long battery life, fully programmable through USB interface, fully programmable optical alarm signaling (continuous or proportional), fully programmable acoustical alarm signaling (continuous or proportional), alarm vibration, complete with: - docking station and external power supply adapter,- 2 rechargeable batteries AA NiMH 1,2V 2500mAh	4.00	Nos	₹ 35,000	1,40,000.00
117	BAH-PSS-FA-62	S/I/T/C of X-ray Baggage Scanner with minimum tunnel dimensions of 1000mm X 650 mm, input-output rollers & frame, Stabilizer with isolation transformer and a 19" CRT monitor & operation key board in a console cabinet with lockable housing. The system should be networkable type supplied with combined test piece as specified in tender specifications etc required for complete functionality of the system	2.00	Nos	₹ 23,69,340	47,38,680.00
118	BAH-PSS-FA-63	S/I/T/C of Network Supervisory workstation along with all necessary softwares including image management software and TIP with monitoring of images as specified in the tender specifications	2.00	Nos	₹ 1,25,000	2,50,000.00
119	BAH-PSS-FA-64	S/I/T/C of Ladies Frisking Booth, Highly durable & Sturdy design with all the material as required (Size - 1200 MM X 900 MM)	2.00	Nos	₹ 45,000	90,000.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
120	BAH-PSS-FA-65	S/I/T/C of Boom Barrier: Automatic Traffic Motorised Vehicle Barrier complete with Control Unit and integrated Two channel Loop Detector along with photocell and Boom of 6 Meters length with 1.3 Sec Opening/ Closing time and with Maximum Power Consumption of 95 Watts, Base frame: Powder-coated stainless steel, Housing design: Powder-coated aluminium, Protection class: IP54, Specified number of cycles: 10 Million	2.00	Nos	₹ 3,90,000	7,80,000.00
121	BAH-PSS-FA-66	S/I/T/C of Boom Barrier: Automatic Traffic Motorised Vehicle Barrier complete with Control Unit and integrated Two channel Loop Detector along with photocell and Boom of 4 Meters length with 1.3 Sec Opening/ Closing time and with Maximum Power Consumption of 95 Watts, Base frame: Powder-coated stainless steel, Housing design: Powder-coated aluminium, Protection class: IP54, Specified number of cycles: 10 Million	2.00	Nos	₹ 3,10,000	6,20,000.00
122	BAH-PSS-FA-67	S/I/T/C of 8c x 0.5 sq.mm FRLSZH armoured With necessary glands & termination cable. (colour: gray)	850.00	Rmt	₹ 183	1,55,550.00
123	BAH-PSS-FA-68	S/I/T/C of 2c x 1.0 sq.mm FRLSZH armoured cable With necessary glands & termination (colour: gray)	850.00	Rmt	₹ 126	1,07,100.00
124	BAH-PSS-FA-69	S/I/T/C of 3c x 1.0 sq.mm FRLSZH armoured cable With necessary glands & termination (colour: gray)	850.00	Rmt	₹ 149	1,26,650.00
		TOTAL AMOUNT PASSIVE SECURITY SYSTEM (In RS)				**88,07,980.00**
		TOTAL AMOUNT ELV SYSTEM FOR HOSPITAL BUILDING (In RS)				**11,98,06,197.00**

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS

On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla - 400072

BILL OF QUANTITIES - ELV SYSTEM RESIDNETIAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		BILL OF QUANTITIES - FIRE ALARM SYSTEM				
	R2-ME-15-32	**Addressable Fire Alarm System (Residential Building)**				
1	R2-ME-15-32-a	Supply, Installation, testing & commissioning of addressable 2 loop main fire alarm electronic control panel, expendable upto 4 loop & having maximum 250 devices (any combination detectors plus devices) per loop & Audio/Visual alarm complete as per IS:2189 specification - modular type front operated with interlocking door arrangement totally enclosed dust and vermin proof for indoor type applications.	1.00	Nos	₹ 1,78,313	1,78,313.00
2	BAH-FAS-FA-23	S/I/T/C 2 Core 1.5Sq mm FRLSZH type Multistraded Red Armoured cable for fire alarm system	4,000.00	Mtr	₹ 175	7,00,000.00
3	R2-ME-15-32-d	Supply, Installation, testing & commissioning of Intelligent Photoelectric Smoke Detector along with mounting box & termination glands.	103.00	Nos	₹ 2,123	2,18,669.00
4	R2-ME-15-32-e	Supply, Installation, testing & commissioning of Intelligent Heat Detector along with mounting box & termination glands.	12.00	Nos	₹ 3,256	39,072.00
5	R2-ME-15-32-f	Supply, Installation, testing & commissioning of Intelligent multi-criteria Detector along with mounting box & termination glands.	6.00	Nos	₹ 2,541	15,246.00
6	BAH-FAS-FA-10	S/I/T/C of UL Listed and FM Approved Addressable type isolator modules for isolating shorted, dewired and loose circuits between two successive fault isolators with automatic resetting arrangement.	10.00	Nos	₹ 3,155	31,550.00
7	BAH-FAS-FA-11	S/I/T/C of UL Listed and FM Approved Addressable Manual Pull Station with required accessories. Should have built in isolator.	55.00	Nos	₹ 5,246	2,88,530.00
8	BAH-FAS-FA-13	S/I/T/C of UL Listed and FM Approved Addressable Monitor Module with Built in isolator for hardware integration with 3rd party devices.	55.00	Nos	₹ 5,179	2,84,845.00
9	BAH-FAS-FA-14	S/I/T/C of UL Listed and FM Approved Addressable Control Module with Built in isolator for hardware integration with 3rd party devices.	70.00	Nos	₹ 5,179	3,62,530.00
10	BAH-FAS-FA-15	S/I/T/C of UL Listed Addressable Fire Fighters Telephone Jack with telephone module as per all requirements of contracts works.	55.00	Nos	₹ 9,259	5,09,245.00
11	BAH-FAS-FA-16	S/I/T/C of UL Listed Fire Fighters Telephone Receiver as per all requirements of contracts works.	2.00	Nos	₹ 10,992	21,984.00
		TOTAL AMOUNT FIRE ALARM SYSTEM (In Rs.)				**26,49,984.00**

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		BILL OF QUANTITIES PUBLIC ADDRESS SYSTEM				
12	BAH-PAS-FA-24	S/I/T/C of Network Controller for Public Address System consisting of Central Digital Signal Processor module, 2 x 16-character LCD Display, 8 **zone** Supervised Control Inputs and 4 Audio Inputs, Web server and Ethernet Interface for Configuration and Diagnostics & Logging functions, Digital message storage capable of storing at least up to last 200 faults messages, RS232 Interface for logging, OFC Network Inteface capability and PC Interface and an optional interface for Fire Alarm signal. It will support essential capabilities such as - pre-programmed emergency messages, background music & configurable multiple zones as per EN60849 or equivalent internationally accepted standards as per tender specifications. Important availability features will include loudspeaker line monitoring and loudspeaker monitoring without requiring any additional cabling for every loudspeaker installed. (For Indoor Speaker with considering of Room)	1.00	Nos	₹ 3,88,902	3,88,902.00
13	BAH-PAS-FA-25	S/I/T/C of Class D Power Amplifier - 500 watts for the amplification of audio signals for speakers. The amplifier shall support only 2 zones each of 250 watts. It shall be possible to select output voltages of 100 V, 70 V or 50 V, The power amplifier will have a 2 x 16-character display for status display and must be usable free-standing (tabletop) or in a 19" rack mounting arrangement.	3.00	Nos	₹ 2,21,309	6,63,927.00
14	BAH-PAS-FA-26	S/I/T/C of digital paging microphone capable of supporting upto 6 zones, inclusive of provision to announce over background music and a press-to-talk key, It should have an Analog-to-digital audio conversion circuit within the call station and a digital signal processor, which can be used for audio processing.	1.00	Nos	₹ 99,980	99,980.00
15	BAH-PAS-FA-27	S/I/T/C of Ceiling Mounted Loud Speaker: Rated Power – 6 Watts, Rated Voltage: 100 volts,Effective frequency range :(80 Hz to 16000 Hz).(For Indoor Speaker with considering of Room)	83.00	Nos	₹ 1,280	1,06,240.00
16	BAH-PAS-FA-28	S/I/T/C of Ceiling Mounted Loud Speaker: Rated Power – 6 Watts, Rated Voltage: 100 volts,Effective frequency range :(80 Hz to 16000 Hz). (For Indoor Passage Speaker)	10.00	Nos	₹ 1,280	12,800.00
17	BAH-PAS-FA-29	S/I/T/C of Wall Mounted Loud Speaker: Rated Power – 12 Watts, Rated Voltage: 100 volts,Effective frequency range :(80 Hz to 16000 Hz).	2.00	Nos	₹ 2,105	4,210.00
18	BAH-PAS-FA-30	S/I/T/C of Horn type Loud Speakers(20 watt water proof), covering wide range of frequences in outdoor harsh enviroments. Effective frequency range: (70 Hz to 16500 Hz).	1.00	Nos	₹ 13,718	13,718.00
19	BAH-PAS-FA-32	S/I/T/C of Network cables assembly and any applicable interfaces/cards/supervision modules for main controller, amplifier & paging microphone and any other devices as applicable.	1.00	SET	₹ 45,000	45,000.00
20	BAH-PAS-FA-34	S/I/T/C of Flexible PVC insulated multistrand multicore 1.1 kv grade ISI marked copper wires of following size to be erected as directed. FRLSZH 1.50 Sq.mm 2 core round Multistranded Armoured Cable.	2,000.00	Rmt	₹ 130	2,60,000.00
21	BAH-PAS-FA-35	S/I/T/C of 19-inch Equipment Rack: 42 U For PA equipment and accessories, floor mounted, lockable doors etc. being essential features with cooling fans and complete with necessary mounting hardware & accessories.	1.00	Nos	₹ 65,844	65,844.00
22	BAH-PAS-FA-36	S/I/T/C of Emergency Manual Override 25 Watt Volume Control with conesealed Backbox and accessories etc.	10.00	Nos	₹ 4,500	45,000.00
		TOTAL AMOUNT PUBLIC ADDRESS SYSTEM (In RS)				**17,05,621.00**

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		BILL OF QUANTITIES CCTV SYSTEM				
23	BAH-CCTV-FA-37	S/I/T/C of 4MP IP IR Dome Cameras, 1/3 CMOS sensor, Motorized Vari Focal 2.8 to 12 mm lens at frame rates 20fps or better, H.264 High Profile/JPEG, True Day/Night, ONVIF profile S compliant, Power on Ethernet (PoE) based.	57.00	Nos	₹ 45,000	25,65,000.00
24	BAH-CCTV-FA-38	S/I/T/C of 4MP IP IR Bullet Camera 1/3 CMOS sensor, Motorized Vari Focal 2.8 to 12 mm lens at frame rates 20-30 fps or better, H.264 High Profile/JPEG, True Day/Night, ONVIF profile S compliant, Power on Ethernet (PoE) based, IK10 Vandal Proof and IP 66 Ingrass Protection Level	4.00	Nos	₹ 55,000	2,20,000.00
25	BAH-CCTV-FA-39	S/I/T/C of 2MP IP IR Cameras, Outdoor PTZ, 1/1.9 CMOS sensor with 30x optical zoom or better, minimum resolution 2MP (1920X1080) or better, high speed dome, 350 degrees full rotation, complete with IK10/Equivalent rated vandal resistant weatherproof housing IP66, PoE+ Input Voltage or optional AC/DC supply, supporting True Day/Night operation, ONVIF Profile S compliant, supporting H.264 High Profile feature with pole mounted stand as per technical specification etc. as required.	4.00	Nos	₹ 2,25,000	9,00,000.00
26	BAH-CCTV-FA-40	S/I/T/C of Video Management Software Camera License with ONVIF Profile S compliant.	65.00	Nos	₹ 7,499	4,87,435.00
27	BAH-CCTV-FA-41	S/I/T/C of Server(s) required for the VMS - Industry standard Intel based platform, rack mounted, redundancy architecture for critical hardware components, licensed Microsoft Server Operating system and requisite user licenses, licensed application suites, Quad Core Intel® Xeon® 5150 processors, 2.66 GHz with Latest Generation, 4 MB Cache, 1333 MHz FSB or better, 8 GB of RAM, 2 x 500 GB of SSDs, minimum 4 additional hard disk drive bays for expansion, 1360 * 768 video resolution, 2 * 10/100/1000 Ethernet Network Interface Card, RAID support built-in and pre-installed DVD-R/W Drive and Appropriate Licensed Operating Systems. as per the technical specifications. (For 300 Cameras or Upgradable)	1.00	Nos	₹ 9,34,570	9,34,570.00
28	BAH-CCTV-FA-42	S/I/T/C of Client PC - Industry standard Intel based platform computer system. Intel Core i7 2600 @ 3.4 GHz with Latest Generation, 8 GB of RAM DDR4 ,1 TB SSD for OS and VMS applications, NVidia GTX 570 or DirectX VA 2.0 compatible card with 1 GB of RAM , 1600 x 1200 or higher screen resolution, 1000Mbps Ethernet Network Interface Card ,16x DVD+/- RW Drive alongwith appropriate licenced Operating Systemwith Antivirus, licenced applications suites from OEM and application licences as per the technical specifications.	1.00	Nos	₹ 2,06,677	2,06,677.00
29	BAH-CCTV-FA-43	S/I/T/C of Network RAID 0 TO 10 WITH TCPIP/E-SATA SSD Storage required with a capacity to store the content for up to 300 cameras for 24Hrs x30days at 25-30 fps and 1080p. It should be scalable (should have sufficient expansion bays for HDDs) . Vendor shall submit bandwidth and storage calculator for the proposed camera models as per technical specification etc. as required.	1.00	Nos	₹ 27,43,500	27,43,500.00
30	BAH-CCTV-FA-45	S/I/T/C of **GI pole of 5 mtr** height for Outdoor Cameras for more than one camera.	4.00	Nos	₹ 35,000	1,40,000.00
31	BAH-CCTV-FA-46	S/I/T/C of Armoured CAT - 6 Cable (UTP) for outside cameras including providing and fixing necessary saddles etc as required	500.00	Mtr	₹ 120	60,000.00
32	BAH-CCTV-FA-47	S/I/T/C of Power Cable 3 X 1.5 sq.mm flexible cable for Cameras / Network Racks and Switches inside MS conduit including providing and fixing necessary saddles etc as required	3,000.00	Mtr	₹ 105	3,15,000.00
		TOTAL AMOUNT CCTV SYSTEM (In RS)				85,72,182.00
		TOTAL AMOUNT ELV SYSTEM FOR RESIDNETIAL BUILDING (In RS)				1,29,27,787.00