

**पनवेल महानगरपालिका**  
**जाहीर निविदा दरपत्रक**

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती ड, प्रभाग क्र.१७ मधील अं.भु.क्र.४१४ मध्ये बॅडमिंटन प्रशिक्षण केंद्र बांधणे. या कामाचे अंदाजपत्रक बनविण्याकरीता खाली नमूद केलेल्या बाबींकरीता खालील नमूण्यात दर मागविण्यात येत आहे.

अ.क्र.	कामाचे नाव	मुदत
१	पनवेल महानगरपालिका हद्दीतील प्रभाग समिती ड, प्रभाग क्र.१७ मधील अं.भु.क्र.४१४ मध्ये बॅडमिंटन प्रशिक्षण केंद्र बांधणे. या कामाचे अंदाजपत्रक बनविण्याकरीता दर मागविणे बाबत.	१४ / ०४ / २०२६ ते २० / ०४ / २०२६ (७ दिवस)

**Specification**

Sr. No	DESCRIPTION	Quantity	Unit	Rate
1	<b>VRV BASED AHU /CASSETTE/HIWALL &amp; PIPING WORKS</b>			
1.1	<b>Supply, installation, testing &amp; commissioning of Ceiling Suspended as per specification</b>			
	Fan section with DIDW type centrifugal impeller with the motor shall be permanent magnet external rotor motor with integrated electronics and suitable for continuous operation, Dx Cooling coils of copper tube and aluminum fins construction section with six rows deep having 12-13 FPI with coil face velocity of 500 FPM, Filter section with synthetic fiber filters in corrugated shape rated for filter face velocity 500 FPM Prefilter, & MERV 13 Rating filters.IE-3 motor (inside AHU casing), , spring mounted vibration Isolators, Limit Switch, Emergency Light, UV Emitter section with UVC Lamps, Guard for Inspection Door. AHU motor should be minimum IE3 grade along with the necessary controller hosed in a panel. The internal wiring between the limit switches,UV lamp & interlock to be part of AHU vendor scope. Fan Vendor should also provide the BacNet card for each AHU for BMS integration.			
	The air-handling units shall be as per specifications with extruded aluminum framework having panels with outer pre-plasticised 0.6mm G.I / Galvalume sheets & inner plain 0.6mm GI / Galvalume sheet having injected 23- 25 mm PUF of 38 -kg/Cum density in between. The drain pan shall be of 18 G SS with 13mm thick nitrile rubber insulation. The frame for AHU shall be extruded aluminum. The entire AHU shall be mounted on GI base of min 70mm.			
	Drain pan: 1.2 mm thick SS304 with 25mm Nitrile rubber sandwiched. Provide 40 mm SS threaded drain nipple.			
	Dampers: Al. anodized low leakage aerofoil.			
	Filter section: MERV-13 filter , Non-Combustible Filter, access doors filters in extruded al. box type frames with gasket arrangements around filter frames. This should include one set of commissioning filters			
	Coil Section: Cu coils with hydrophilic coated al. fins,6 Row coil , <b>DX COIL</b>			
	Fan section: Centrifugal fans with access doors on both sides, inspection windows, limit switch to shut off fan on door opening, Emergency Light,UV Emitter section with UVC Lamp, VFD Starter Panel & cabling from control to fans shall be scope of HVAC VENDOR.			
	Drive: IE-3 motor with VFD starter			

	Vibration Isolators: For fans and mounting arrangements - Rust resistant spring			
	Flexible connectors: Non flammable, weather and fungus proof			
	<b>LOFT MOUNTED AHU ESP 25 mm with Prefilter</b>			
1.1.1	12000 CFM/22.0 TR with VFD Panel	Each	4.0	
1.1.2	5000 CFM/10.0 TR with VFD Panel	Each	2.0	
1.2	<b>TREATED FRESH AIR</b>			
	2300 CFM	Each	1.0	
2	SITC of Drain pump with required piping capable of lifting of water up to ceiling height of 4 mtrs with all necessary interlock etc with all necessary electrical control and power cabling.	Each	11.0	
3	Supply ,Installation,testing & Commissioning of Imported fittings like AHU kit and headers etc as per the layout( additional supports should consider for both ends of the AHU Kit)	Each	9.0	
4	Supply ,Installation,testing & Commissioning of MS stand for VRV ODU along with proper supports-suitable for above configuration	Set	13.0	
5	Filling, testing, commissioning including topping up of R410 A Refrigerant.	Kg	200.0	
6	<b>DUCTING , INSULATION WORKS &amp; AIR TERMINALS</b>			
	Supply,Fabrication, Installation, Testing & Commissioning of following gauges of factory fabricated Galvanised Iron ( GI ) Sheet complete with splitters, supports, dampers, and turning vanes. (Approved Makes: Jindal, SAIL, TATA, Equivalent) all duct with DTS /TDF FLANES ONLY.-			
6.1	1- 750 (1" - 30") -- 26 G	Sqm	50.0	
6.2	751 - 1500 (31" - 60") -- 24 G	Sqm	75.0	
7	Supply & Installation of Factory Pre-cut SMART Pre-Insulated CARE+ PIR Panels complete CFC & HCFC Free <b>20mm</b> thick with 80 micron Embossed Aluminium foil on the outer side and 45 micron Embossed Aluminium foil on the inner side (Anti microbial, Anti fungal, Anti corrosion and UV Protection coating) and close cell not less than 95% Rigid Cellular foam insulation of thickness as specified below and material shall be Class O as per BS 476 Part 6 & Part 7 with 2 hours fire rating, with Density of 45kg/m <sup>3</sup> and should have Thermal Conductivity 0.021 W/mK , Water absorption shall be not more than 0.03% as per EN 13403 standard and panel should be <b>GreenPro &amp; GRIHA certified</b> . The ductwork should be capable of handling pressures upto 2000 Pascals. The joint between the ducts shall be with polymer slide in type joints with Patented Gasketed Bayonet between the ducts for zero leakages and polymer connecting flange (manufacturer make) to be provided for connection of branches, collars, droppers, etc. All polymer accessories to be of the same manufacturer. Measurement would be done on outer to outer. Supporting of Threaded Rod (6mm) & C Channel/ Wire supporting of reputed make recommended by Manufacturer to be provided.			
7.1	20 mm Thickness (Internal Ducting)	Sqm	1,200.0	

8	Supply & Installation of double skin plenum of 40-45mm thick with puf insulation (factory fabricated ) of following sizes - Plenum Mouth Size to be cordinated with final Shop drawings for number of openings . Also scope covers for supply and fixing of double reinforced fire rated canvass. The scope also includes necessary hanging arrangements for plenum boxes,plenum cutouts as per HVAC layout . Color of plenum to match to nearest color of AHU body .Density of PUF 40+/-2 Kg/Cum. Note Quoted rate includes MS 50x50x6 mm angular support for plenum with suspension from dia 10mm threaded rods	Sqm	30.0	
9	<b>Sound Attenuators for Supply air Duct</b>	Sqm	40.0	
	Sound Attenuators of dissipative type to be provided on the supply & Return air duct entering the AHU Room.			
	Sound Attenuators shall consist of outer casing, sound absorbing material and internal baffles, splitters and supports as expalined in the technical specifications.			
	Casing shall be of galavanised steel of not less than 20G in thickness. Casings shall be tested to 150mmwg and shall show no leakage or distortion in this condition.			
	Sound absorbing material shall be high density fibre glass held in place with at least 5% compression to prevent voids due to settling. Absorption material density shall be minimum 48 kg/cum. Fibreglass faced with minimum 26 g perforated galvanised sheet metal of minimum 40% open area. Combustion ratings shall be as expalined in the tender specifications			
10	Supply, installation, testing & commissioning of multi blade, motorised fire & smoke dampers with spring return actuator. The damper shall be of atleast 2 hr. fire rating with 450 mm duct sleeve. The damper shall be as per UL Classified and CBRI approved. The damper shall be constructed out of 16G galvanised sheet steel. It shall be complete with control panel, actuator, sensor and interlocking / wiring / connection for tripping of AHU fan motor.All the fire dampers should be of factory flanged (four bolt system) connections. The regularn thin flange connection is not acceptable.	Sqm	5.0	
11	<b>ACTUATOR FOR FIRE DAMPER</b>			
	Actuators with Control Panel for above fire dampers- <b>HIGH TORQUE TYPE-10 NM</b>	Each	12.0	
12	Supply, erection of 26 G GSS factory fabricated return air transfer duct piece . The return air transfer piece duct to be insulated with 10mm thick Class 1, open cell insulation	Sqm	10.0	
13	Supply , Erection of factory fabricated Round VCDs of 16.0 guage of GI with insulation of 9mm thick nitrile rubber wuth aluclad.	Sqmt	2.0	
14	Supply, installation and adjusting of GSS made fresh air motorized volume contol damper opposed blades , frame shall be made of 18G and blades shall be made of 20G with prefilters for the louvers in all AHU room	Sqm	3.0	
15	<b>ACTUATOR FOR MOTORIZED DAMPER</b>			
	Actuators with with Co2 sensor & necessary poere control cabling, Control Panel for above fire dampers- <b>HIGH TORQUE TYPE-10 NM</b>	Each	8.0	
16	<b>Insulated Flexible Ducting</b>			
	Factory Fabricated Insulated Flexible made out aluminium for connecting from main duct to diffuser box. The length of the flexible duct shall be around 1.0 to 1.5 mtr			

	The flexible duct shall be made of double lamination of aluminium foil, polyester and metalised polyester film permanently bonded to a coated spring steel wire helix. The exterior shall be wrapped with 25mm thick 16 kg / cum fibreglass insulation. The outer insulation jacket / vapour barrier made of fibreglass reinforced metalised polyester film laminate.			
	150 mm dia insulated flexible duct	m	25.0	
17	Supply installation testing commissioning of perforated Heavy Duty PVC pipe of 6.0kg pressure rating for supply of cold air in Badminton court. Perforation as per the required airflow at very low velocity (perforation 2 to 5 mm) upto 8 feet height & half round of the pipe			
	300mm Dia.	m	300.0	
18	<b>Aluminium Grilles</b>			
18.1	Supply and Installation of Jet Nozzle	Each	20.0	
18.2	SITC of Exh. Grilles 4 way Deflection type			
	6" x 6"	Each	36.0	
18.3	150 mm Wide Linear Grill with al control Damper	m	100.0	
19	SITC OF GI Automatic Flow Control Office to control the air flow	Each	6.0	
20	Supply and Fixing of double reinforced fire rated canvass for AHUs ,fans.	Each	15.0	
21	<b>INSULATION WORK</b>			
21.4	SITC of AHU room /CSU/ Ductable Unit acoustic insulation with 25 mm thk. open cell Class 1 nitrile rubber insulation density of 140-180 kg/m <sup>3</sup> with 22G GI grid work in 1.2 x 0.6 mt. Insulation shall be applied AHU room walls after completing all works and cleaning the AHU room walls properly. Contractor shall ensure insulation is cut properly and applied properly minimising the joints.	Sqm	100.0	
22	SITC of Underdeck insulation for exposed roof			
22.4	25 mm thick Class O Nitrile Rubber insulation with Mechanical protection	Sqm	1,800.0	
23	Supply, Installation, testing and commissioning of EXHAUST Cabinet type single skin 0.8 mm thick outdoor mountable type, ceiling/floor mounted type fan with outlet velocity not more than 10 m/sec with all necessary supports.			
23.1	1050 CFM, EXHU. Inline 15mm ESP	Each	1.0	
23.2	750 CFM, EXHU. Inline 15mm ESP	Each	1.0	
23.3	450 CFM, EXHU. Inline 15mm ESP	Each	2.0	
24	Supply, Installation, testing and commissioning of Dia 300 mm Propeller fan			
24.1	PROPELLER FAN- "SITC of 450 mm sweep Propeller Exhaust Fan, direct-driven with metal blades and TEFC induction motor suitable for 230V, 1-Phase, 50Hz supply. Unit shall include a heavy-gauge mounting plate, inlet wire guard, and gravity louvers.	Each	6.0	
25	<b>Tube Axial Fans:</b> Supply and Installation of For ventilation Complete from OEM , non-flammable, vibration isolators, base plate, single piece rouged construction , IE- 4 motor, epoxy coated etc.The fan with 2 hours rating at 300 drg C of high temperature. (LOW NOISE ) with Starter Panel with NONCcontact Anti/manula switch selection 7 with trop on/off status lamp, fan to get operated on FAS signal in auto/manual mode. & necessary cabling (For Smoke Extraction)			
25.1	11500 CFM, 5mm ESP	Each	6.0	

26	Air balancing activity for entire floor with calibrated air hood , with required tools and subsequent air balancing report with consultants approval for entire project	Job	1.0	
27	Providing & fixing in position the following bare GI tape/ Cu wire including providing all fixing accessories & effecting proper connections.	m	200.0	
	8G GI Wire			
28	Supply and fabrication of 300x50mm MS powder coated Perforated tray / Raceway with necessary supports and bends. Tray supports also to be painted as per architects approval	m	200.0	

	<b>IT NETWORKING TELEPHONE ,TV WIRING</b>			
1	Supply & erection of junction box for 20 pair Telephone Tag Block Crone type with lock & key arrangement duly powder coated concealed in wall with 20 pair korne module, etc complete.	Set	1.00	
2	Supplying and erecting 6 way splitter with surge superator	Nos	1.00	
	<b>TOTAL OF IT NETWORKING TELEPHONE, TV WIRING</b>			
	<b>CCTV SURVEILLANCE SYSTEM</b>			
3	<b>IP CCTV SURVEILLANCE SYSTEM</b>			
	Supply, installation, testing and commissioning of following CCTV Cameras along with server, storage, networking and other accessories required for working of CCTV Surveillance System as per specifications complete with all interconnection, lens coverage adjustment as per site conditions, mounting accessories, GI arm/rod, interconnecting wires etc.			
	NOTE : i) OEM Part Numbers MUST be mentioned against each item in Technical and Commercial Bids ii) Data Sheets MUST be attached for each item in the Technical Bid iii) Any Additional items required for complete implementation of the project is in the scope of vendor iv) Vendor to get the doubts cleared before submitting the tender technical bid			
3.01	Supply, Installation, Testing & Commissioning of 32 ch upto 12 MP resolution supported, Incoming BW - Min. 320 Mbps, Outgoing Bandwidth - Min. 250 Mbps, Video o/p interfaces -2 HDMI port; atleast one supporting 4K resolution, 1 VGA port supporting 1080p resolution, Synchronous playback - 16ch, Facial Detection and Analytics - Face picture comparision, human face capture, face picture search, SATA interfaces - 8 sata interfaces with each supporting 10 TB, e-SATA - supported, Network interfaces - 2, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface, USB interface - 3× USB connectors, atleast one USB 3.0 supported, Alarm I/O - 16/8, Power supply - 100 to 240 VAC, CE,FCC,BIS/UL	Nos.	-	
3.02	Supply , Installation , Testing and commissioning of HDD, 4TB, 7200 RPM, SATA 6 Gb/s, including fixing accessories and cable termination with required, complete in all respect as per instruction of engineer in-charge.	Nos.	-	

3.03	2Megapixel IP IR Dome Network Camera - 4mm Supply, Installation, Testing & Commissioning of 2 MP with 4mm fixed lens ,True day/night (IR-cut filter) , UL listed, WDR (120DB) , supports upto 64 GB SD card, 3DNR, with 15 m (50 ft) viewing distance, Motion, tamper detection, Dynamic range, Day / night, Electronic shutter, White balance, H.264/H.265, PoE, DC12V/AC24V, ONVIF profile S & G, Data encryption with all accessories like tamper proof screws, clamps, wiring etc. to mount the camera should be included as required.	Nos.	-	
3.04	2Megapixel IP IR Dome Camera for Lift - 2.8mm Supply, Installation, Testing & Commissioning of 2 MP ,True day/night (IR-cut filter) , UL listed, WDR (120DB) , supports upto 64 GB SD card, 3DNR,Motion, tamper detection,Dyamic range,Day/night,Electronic shutter,White balance, H.264/H.265, PoE, DC12V/AC24V, ONVIF profile S & G, Data encryption with all accessories like tamper proof screws, clamps, wiring etc. to mount the camera should be included as required.	Nos.	-	
3.05	5Megapixel IP IR OUtdoor Bullet Supply, Installation, Testing & Commissioning of 5MP 20FPS (2560x1920P) ,Image sensor - 1/2.7 inch Progressive Scan CMOS, Illumination - Colour: 0.005 Lux @ (F1.6, AGC ON) with 4mm fixed lens ,True day/night (IR-cut filter) , CE, FCC, UL/BIS, WDR (120DB) , supports upto 256 GB SD card, 3DNR, with IR Up to 60 m viewing distance, Motion detection, tamper detection, Dynamic range, Day / night, Electronic shutter, White balance, H.264/H.265, PoE, DC12V/AC24V, ONVIF profile S & G, Three streams, IP67, Data encryption with all accessories like tamper proof screws, clamps, wiring etc. to mount the camera should be included as required..	Nos.	-	
3.06	Supplying, installing, Testing & commissioning 55" FHD LED Monitor suitable for CCTV 24x7 Application with required stand / bracket , HDMI Cable , complete in all respect	Nos.	-	
3.07	Supplying, installing, Testing & commissioning 24 Port Gigabit PoE Managed switch with 2SFP ,370W	Nos.	-	
3.08	Supplying, installing, Testing & commissioning Manged Gigabit Switch 24 port switch with 2SFP	Nos.	-	
3.09	Supplying, installing, Testing & commissioning FM 45 Connectors with boot	Nos.	-	
3.10	Supplying, installing, testing and commissioning CAT-6 UTP Armoured Cables , Price should be inclusive of all necessary termination requires to connect the cables , sadels & spacers as per standard practice for out door cameras	Rmt.	-	
3.11	Supplying, installing, Testing & commissioning 450-600mm long Mounting rod & bracket with required accessories for CCTV Dome/Bullet cameras from true ceiling	Nos.	-	
3.12	Supplying, installing, Testing & commissioning upto 3mtr long, 50mm Dia, GI Powder Coated, 2mm Thick , Mounting ploee with wall mount bracket , Camera mount & required etc accessories complete in all respect , for CCTV Dome/Bullet cameras from wall / on terrace	Nos.	-	
3.13	Supplying, installing, Testing & commissioning 6"x6" Metal Powder Coated back box for mounting Cameras, shade of powder coating to be matched with ceiling color	Nos.	-	
<b>TOTAL OF CCTV</b>				
<b>ACCESS CONTROL SYSTEMS</b>				
4	Supply, installation, testing & commissioning of of HID make only Readers (I Class R-10)	Set	2.00	
5	Supply, installation, testing & commissioning of Biometric Thumb print readers complete	Nos	1.00	

6	Supply, installation, testing & commissioning of HID make Door controllers of the following configuration. The controllers shall have open protocol and shall be integrated with Open Source Software. HID Aero X1100	Nos	2.00	
7	Supply and installation of surface mounted monitored Magnetic door locks capacity of holding pressure of 650 lbs. with door feedback	Nos	2.00	
8	Supply, installation, testing & commissioning of of Magnetic contacts for fire exit doors	Nos	2.00	
9	Supply, installation, testing & commissioning of of Touch free IR Exit Switch	Nos	2.00	
10	Supply, installation, testing & commissioning of Extra Exit Switch at Reception for Visitor Entry	Nos	1.00	
11	Supply, installation, testing & commissioning of of Emergency Release Switch Switch (Green MCP)	Nos	2.00	
11.1	8core 1.0 sq.mm Shielded, PVC Sheathed Copper armoured Cable	mtr	130.00	
11.2	4 core 1.0 sq.mm Copper PVC Sheathed Cable	mtr	130.00	
11.3	2 core 1.0 sq.mm Copper PVC Sheathed Cable	mtr	90.00	

<b>A</b>	<b>ELECTRICAL WORKS</b>			
<b>1</b>	<b>LT PANELS &amp; DISTRIBUTION BOARDS</b>			
	Supplying, installation, testing & commissioning of following Indoor type, compartmentalized and sectionalized cubicle panel of suitable size, fabricated from cold rolled CRCA sheet steel of 2 mm thick , having vibration free structure chemically treated surface with seven tank process before painting, epoxy powder coated after two coats of anti-rust primer, making earth connections by providing copper earth strip of size 25 x 5 mm thick all along horizontal run of the panel suitable for operation on 3 phase 415 V 50 HZ AC supply i/c providing and fixing the following switchgear to be mounted thereon complete with gaskets, interconnections and earthing with suitable size PVC insulated FRLS copper wire .The panel shall be dust free, vermin proof and totally enclosed with Degree of protection of IP 54 as per IS 2147, with suitable cable/busbar alleys and shall be mounted on MS channels of size not less than 100 x 75 mm iron frame on floor etc as per specifications complete as required .Gland plates should minimum 3 mm thick and top and bottom.			
	The boards shall be treated with all anticorrosive process before painting as per standards with 2 coats of red oxide primer & final approved shade of powder coating. 2 nos. earthing terminals shall be provided for 3 phase distribution boards. The boards shall be suitable for 415 V, 3 phase, 4 wire, 50 Hz supply system. Lifting hooks shall be provided in case of large boards. Boards shall be fabricated in easily transportable sections & length, height, depth etc to match with site conditions. An approval shall be taken for each panel before final manufacture.			
	Galvanised hardware with zinc passivation shall be used in fabrication of boards. Follow the detailed specifications at the time of fabrication.			
	<b>Note:</b>			
	Panels Should have separate BMS / ELV/Fire trip compartment as per SLD			
	Panels Should have Shunt Trip/ Fire trip as per SLD			
	All CTs should have 5VA Burden, CL : 1 accuracy			
	Manufactured as per Form 3B and IEC 61439 Standard.			
	Outgoings metering will be as per SLD & All Meters will be BMS compatible with accuracy Cl 1.0.			
	All MCCB/ACB will have On/Off/Trip Indicating lamps with required control MCB			

	All MCCB will have rotary handle			
	All MCCB should have $I_{cs}=I_{cu}$ 100%			
	All MCCB should have spreader links.			
	All MCB will be rated for 10KA breaking capacity & C'curve characteristics			
	MCB in capacitor panel & Computer DB should be with D'curve characteristics			
	All out door panels shall be IP65 with double door , canopy & small panels with 450-600 mm high stand			
1.01	<b>MAIN PANEL</b>	Set	1.00	
	<b>Incomer -</b>			
	1 No.630 A FP Solenoid type ATS with controller with all standard accessories			
	630A FP MCCB, 36KA - 1set			
	With MFM Meter with all elect parameters , LED Cluster Indicating lamps, ELR WITH CBCT per incomer and control MCBs- 3 Nos and 630/5 CTs - 3nos -01 Set & all other required accessories			
	CBCT & ELR for main incomer			
	<b>Bus :630A AL BUS TPN</b>			
	Outgoings			
	400A FP MCCB , 36KA- 02set			
	200A FP MCCB , 36KA- 03set			
	100A FP MCCB , 25KA- 03set			
	80A FP MCCB , 25KA- 01set			
	LIGHTING & RAW POWER SECTION			
	<b>Incomer -</b>			
	160 A FP MCCB, 25KA - 1set			
	VI-KWH Meter, LED Cluster Indicating lamps, all other required accessories			
	Bus :100A TPN AL BUS for 1 sec			
	Outgoing :			
	63A/40A FP MCB - 09 set			
	40/16A DP MCB - 06 set			
	The Metering Compartment shall be incorporated with the following for each Incommer.			
	1) Load Manager with RS 485 Interface with PF indication.BMS compatible with required CTs etc required accessories			
	RYB Indicating Lamps of LED Clustered type and Control MCBs			
	36KA SPD type -1& 2			
1.02	<b>APFC PANEL</b>	Set	1.00	
	<b>Incomer -</b>			
	<b>200A TP MCCB ,25KA - 1 SET</b>			
	<b>OUTGOING :</b>			
	Stages for APFC			
	<b>25KVAr MPP type Capacitor bank with 63A TP MCB &amp; Capacitor duty Contactor - 02set</b>			
	20KVAr MPP type Capacitor bank with 40A TP MCB & Capacitor duty Contactor - 01set			
	15KVAr MPP type Capacitor bank with 40A TP MCB & Capacitor duty Contactor - 02set			
	10KVAr MPP type Capacitor bank with 20A TP MCB & Capacitor duty Contactor - 01set			
	63A AHF inbuilt - 1set			

	Busbar :200A,TPN tinned Aluminium Basbar suitable for 25 KA for 1 sec			
	<b>APFC Realay , RYB Indicating Lamps of LED Clustered type and Control MCBs shall be provided.</b>			
1.03	HVAC PANEL-01	Set	1.00	
	Incomer -			
	200A FP MCCB, 36KA with shunt trip - 1set			
	<b>With MFM Meter with all elect parameters , LED Cluster Indicating lamps, ELR WITH CBCT per incomer and control MCBs- 3 Nos and 200/5 CTs - 3nos -01 Set &amp; all other required accessories</b>			
	CBCT & ELR for main incomer			
	Bus :200A AL BUS TPN			
	Outgoings			
	<b>63A/40A/25A FP MCB -10 set</b>			
	16A DP MCB - 01 set			
	RYB Indicating Lamps of LED Clustered type and Control MCBs			
	25KA SPD type -2			
1.04	HVAC PANEL-02	Set	1.00	
	Incomer -			
	<b>400A FP MCCB, 36KA with shunt trip - 1set</b>			
	<b>With MFM Meter with all elect parameters , LED Cluster Indicating lamps, ELR WITH CBCT per incomer and control MCBs- 3 Nos and 400/5 CTs - 3nos -01 Set &amp; all other required accessories</b>			
	CBCT & ELR for main incomer			
	<b>Bus :400A AL BUS TPN</b>			
	Outgoings			
	63A/40A FP MCB - 25 set			
	16A DP MCB - 01 set			
	<b>RYB Indicating Lamps of LED Clustered type and Control MCBs</b>			
	36KA SPD type -2			
1.05	Common utility Panel			
	<b>Incomer -</b>	Set	1.00	
	<b>100A FP MCCB, 36KA with shunt trip - 1set</b>			
	With MFM Meter with all elect parameters , LED Cluster Indicating lamps, ELR WITH CBCT per incomer and control MCBs- 3 Nos and 500/5 CTs - 3nos -01 Set & all other required accessories			
	CBCT & ELR for main incomer			
	Bus :100A AL BUS TPN			
	Outgoings			
	63A/40A FP MCB -07 set			
	25A DP MCB - 03 set			
	RYB Indicating Lamps of LED Clustered type and Control MCBs			
	25KA SPD type -2			
2.00	<b>External Lighting DB</b>	Set	1.00	
	Incomer			
	1 No.40A, FP MCB and 3 nos.40A/30 mA DP RCCBs each Timer switch with Contactor per phase with separate neutral & earth links per phase			
	Outgoings			
	18 Nos.6A/10/16/20 A SP MCB's			
	Note:			

	All MCCB Should have min Breaking capacity of min 25KA unless specified			
	All MCCB will have rotary handle			
	All MCCB should have 100% Ics=Icu			
	All MCCB including 250Amps & onwtrads will have microprocessor based releases			
	All MCB will be rated for 10KA breaking capacity & C'curve characteristics for power & B'curve for lighting power			
<b>3</b>	<b>CABLES &amp; SUB MAINS</b>			
3.01	12core 1.5 sqmm YFY control cable with including termination tinned Copper Lugs & glands	mtr	95.00	
3.02	24 core 2.5 sqmm YFY control cable with including termination tinned Copper Lugs & glands	mtr	95.00	
3.03	4core 2.5 sqmm YFY control cable with including termination tinned Copper Lugs & glands	mtr	95.00	
3.04	3 Core 1.5 sq. mm. 2XFY	mtr	1,050.00	
<b>4</b>	<b>LIGHITNG FIXTURES &amp; FITTINGS</b>			
	Supplying , erecting, testing & commisioing of following of prewired light fittings/ light tracks, complete with all accessories such as side holders, ballast, wherever required, complete factory wired with copper conductor as required <b>with lamp</b> . Housing should be CRCA sheet 7 tank Processed & Powder coated. The fitting shall be fixed with chain ,screws etc. & recessed mounted in false ceiling			
4.1	BADMINTON COURT LUMINAIRE - 150W - 1200x300mm LED Linear high bay	Nos.	115.00	
4.2	20W LED TUBE LIGHT			
	Supplying , erecting, testing & commisioing of decorative pre-wired box type fitting/batten Each suitable for 4' LED tube light including LED 20W tube light Each with heat sink, integrated HF electronic driver complete	Nos.	21.00	
5.00	Supplying and erecting integrated LYRA-30-40W, Power Module LED, 3000K,IP 66, Upper part in circular shape & Lower part in """"V"""" shape,both are in single piece made of die-cast aluminum using pressure die casting process. manufacturer name/logo should be embosed on the body. Prismatic/Frosted screen in Flat tempered glass. Pure polyester powder coating in customised colour Metallaic Grey. Silicone gasket ensures the IP Rating - IP 66. Height – 500mm, Diameter - 420mm,Weight -8Kgs., Power LED Module with Company/brand name printed on PCB with the metal core plate. CRI >70. LED chips of CREE/NICHIA/OSRAM/LUMILED make shall be used. Electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage & Over- Current, with in-built surge protection (an additional surge protection device of 10kV also provided in-built the fixture). protection screen in prismatic/frosted tempered glass with impact resistance IK 08 minimum.Optics with refractive lens in PMMA which should offer all the Type II,III,IV & V distribtuions. LED Lifetime >1,00,000hours@Ts 85°C. LM80 report from LED Manufacturer should be submitted. Safety test report as per IEC 60598/IS 10322 from UL/UL Authorised/3rd party NABL should be submitted. LM79 report also should be submitted fromUL/UL Authorised/3rd party NABL Laboratory. BIS Certificate with manufacturer name same as brand proposed should be submitted. Sample should be submitted for approval from concerned engineer-in charge. Approved Makes - NERI/ DW WINDSOR/GHM	Nos.	21.00	

6.00	<p>Supplying and erecting integrated of Neon Flex, NLS-N-10, Top bending, LED, 9-11 W/M, 3000K, IP 67, DC24V ,External common power supply</p> <p>Silicon material-Much more flexible,Efficient heat dissipation,Smooth plane lighting surface,Perfect resealing with silicone glue. Resistant UV, Flame, Salt, Chlorine. Top Bending with suitable aluminium fixing clips(3nos./M) for mounting. DC 24V, Efficacy&gt;50lm/W. SMD LED. It also includes DC 24V Electronic Power Supply-metal body(Inventronics/Meanwell) ,which offers Protection against Short Circuit, Over- Voltage &amp; Over- Current, with in-built surge protection. Sample Should be submitted for concerned engineer incharge for approval of light fixture.</p> <p>Approved Makes -NERI/Linealight/Kemps</p>	Mtrs	500.00	
7.00	<p>Supplying , erecting, testing &amp; commisioing of integrated of Recessed Light, NGB-6-12, 10-15 W,LED,3000k, DC24V, IP 67 with External Common Power Supply</p> <p>Body in circular shaped made of die cast aluminium using pressure die casting process. Top cover in stainless steel .Burring housing in Engineering plastic(ABS). Protection screen in tempered glass with high impact resistance . Precise structure and multi-protection silicon gasket ensures the ingress protection-IP 67.</p> <p>Dimension - Height – 130mm, Dia.-130mm, Weight - 1Kg.</p> <p>Power LED Module with high efficacy LED's, on Printed Circuit Board with metal core plate. Colour Rendering Index: Ra &gt; 80.</p> <p>External Common Electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage &amp; Over- Current, with in-built surge protection. Lens made of PC/PMMA which should offer various type of symmetric optics - 6°/15°/30°/45°/60°. Estimated LED Lifetime is &gt; L70 @50,000 hours-Ts=85°C-Supporting LM80 report from LED Manufacturer should be submitted. BIS Certificate with manufacturer name same as brand proposed should be submitted. Sample Should be submitted for concerned engineer incharge for approval of light fixture.</p> <p>Approved Makes-NERI/GVA Lighting/Lumen pulse</p>	Nos.	4.00	
8.00	<p>Supplying , erecting, testing &amp; commisioing of integrated of Projector Light, NPL-3-12, 25-35W, Power Module LED, 3000K, IP66</p> <p>The housing in light weight, made of high strength die cast aluminium. Protection screen in clear tempered glass with high impact resistance. High precision dial ensures precision angle adjustment. Premium thermal management by heat sink integrated on the body. Finish-Pure Polyester powder coating(60microns mininum) in customized mettalic grey Colour. Precise structure and multi-protection silicon gasket ensures the ingress protection-IP 66.</p> <p>Height – 225mm, Dia.-160mm, Depth: 166mm Weight - 2.7Kgs.</p> <p>Power LED Module with high efficacy LED's, on Printed Circuit Board with metal core plate. Inbuilt Electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over- Voltage &amp; Over- Current, with in-built surge protection. Lens made of PC/PMMA which should offer various type of optics - 10°/15°/30°/45°/60°/20°x40°. Estimated LED Lifetime is &gt; L70 @50,000 hours-Ts=85°C-Supporting LM80 report from LED Manufacturer should be submitted. BIS Certificate with manufacturer name same as brand proposed should be submitted. Sample Should be submitted for concerned engineer incharge for approval of light fixture.Approved Makes-NERI/GVA Lighting/Lumen pulse</p>	Nos.	16.00	
	Notes:			
a	All fixtures shall be complete with lamps and control gear, 0.9Pf drivers etc			
b	Necessary down rods, hanging chains etc shall be part of the fixtures.			


c	Samples of all the fixtures shall be submitted to the architect before supply & approval is taken.			
d	Please check the quantity from drawings / architect / consultant before ordering.			
e	Color rendering index of the lamps to be confirmed from architect / consultant before ordering.			
9	25A Socket near AC/geyser indoor unit & 25A switch with indicator nearest SB. For indoor Acs/ Geyser.	Nos.	11.00	
10	32A, 2P+E, IEC309 Socket with Plug top & DP MCB, PVC moulded & housed in metal board , IP 43	Nos.	2.00	
	<b>Supplying , erecting, testing &amp; commisioint of circuits mains as follows</b>			
11	Supplying , erecting, testing & commisioint of mains with 4x4 sq.mm.and earth wire 2.5 sq.mm FRLS PVC copper wire in rigid PVC conduit min.20mm dia, as per specification No: WG-MA/PC, para no.	Mtr	32.00	
12	Supplying , erecting, testing & commisioint of mains with 4x6 sq.mm.and earth wire 4 sq.mm FRLS PVC copper wire in rigid PVC conduit min.20mm dia, as per specification No: WG-MA/PC, para no.	Mtr	32.00	
	<b>CABLE TRAYS &amp; RACEWAY</b>			
13	Supply and laying raceways/conduits on floor/wall. The raceways/conduits shall be fixed to the floor/Wall with clamps for finished levels as per site conditions or through partitions with all accessories, bends, pull wire etc. but excluding the mounted junction boxes, bends, pull wire etc. but excluding the floor mounted junction boxes which shall be paid separately. The metal/PVC conduits/raceways shall be earth at suitable intervals the distance between data conduits and power conduits shall be maintained at least 6" apart.			
13.01	100mm x 38mm, 1.6mm thk GI raceway	meter	30.00	
13.02	100mm x 50mm, 1.6mm thk GI Powder coated trunking for DB dressing	meter	60.00	
14	Supply and installing of 2mm thick GI floor/Ceiling junction boxes for the raceway/conduits mentioned above of following sizes with cover with four nos. SS screws with proper cutouts on the sides for conduit entry and screwed top cover with rubber gasket and suitable knockouts ,as required complete in all respects.			
14.01	100mmx100mmx45mm deep 2mm thk'	Nos.	2.00	
14.02	150mmx150mmx45mm deep 2mm thk'	Nos.	2.00	
15	Supplying, design & fabrication of Iron work consisting of Various sections of MS and including Plates, Chequered Plates, Rods, Bars, MS pipes, etc. for panel board or any other purposes complete with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority	Kg	500.00	
16	<b>SAFETY ACCESSORIES</b>		-	
16.1	Supplying and fixing of Caution Boards - 11 KV danger board made from vitreous enameled steel & to be fixed on wall/ shutter etc	Nos.	1.00	

17	Supplying, erecting, testing and commissioning of diesel generating set with alternator of 320 kVA output continuous rating, 3 Phase, 415 V, 50c/s 0.8 p. f. A.C supply, a totally enclosed air cooled / liquid cooled multi-cylinder diesel engine developing suitable BHP at 1500 rpm with 10% overload for 1 hour in 12 hours, along with standard accessories, self-excited, self-regulated, screen protected alternator with static excitation system running at 1500 RPM as per IS 4722-2001 with voltage regulation +/- 5 %, with performance class G2 and maximum fuel consumption 170 Ltr/hr @75% loading. Both the engine and alternator direct coupled on a common fabricated steel base frame and mounted on anti-vibrating pads with standard control panel comprising meters, switchgears, indicators connected with suitable wires/cables, the complete set enclosed in composite acoustic enclosure as fully assembled integral unit made of 16 SWG CRCA sheet, sound absorbing material to restrict sound level up to 75 dB at 1.0 m / CPCB-IV Compliance , provided with first filling of oil, diesel not less than 990 Ltr etc. on provided M20 Grade CC Foundation and obtaining necessary approval from Electrical Inspector as per specification no. GEN-DG	SET	1.00	
	i) Engine Panel suitable for metering, protection, AMF , with circuit breaker within accoustin enclosure.			
	ii) Starting battery, leads & charger panel.			
	iii) Residential duty silencer with flanges.			
	iv) Flexible connections, bellows/expansion joints etc.			
	v)AVM pads , base frame.			
	vi) Radiator			
	viii) All internal power & control cabling between the D.G. Set & the associated breaker . The cables selection shall be from one of the Approved Vendor List.			
	ix) 750 Liters Inbuilt Day fuel tank, first fill of deisel to be considered in this scope.			
	x) Rate shall also include loading/unloading of the D.G. set to the proposed location at 1st level above sunstation , 7mtrs away from building.			
18	With Inbuilt fuel tank fabricated out of 14G MS sheet steel duly powder coated after anti-rust treatment and painted with 2Coats of synthetic enamel paint of approved shade. The rate shall include necessary arrangement for supporting the tank. as a standard part of the DG set. Also it should have provision of secondary containment with dual transfer pumps from and return piping to the storage tank . Secondary tank arranegment will be done by client whenever required .	SET	1.00	
	with engine starting battery set Lead Acid 12/24 Volt , Diesel rated batteries with automatic battery charger and indication complete with inter- connecting flexible copper leads etc			
	With Residential Silencer with 50mm thk. Insulation with rockwool density-64kg/m3 and 24 guage aluminium cladding for silencer as per manufacturer's standard practise.			

<b>FIRE FIGHTING WORKS BOQ</b>				
1	Supplying & erecting of IS marked <b>6 Kg Clean Agent</b> (IS:15683) portable fire extinguisher, Design - Hose & Nozzle, Fire rating- 2A :55b, Fire rating (as per EN)- 8A:55B, Heigh (Approx) - 530mm, Diameter (approx.) - 150 mm, Average discharge time - 22 Sec, Average range of throw- 4m, Average % Discharge - 96%, Operating temperature - (-30 dec to +60 dec), Service Pressure - 10 bar, Max service pressure - 12 Bar, Test Pressure - 35 Bar, Expelling Agent - Nitrogen (UHP Grade), Empty weight - 2.9 kg, Full weight - 8.9kg, including discharge hose of not less than 10 mm dia. 1 M long & complete in all respects including initial fill, wall suspension bracket (Location: -Panel, LMR, ELE & LV	Nos.	1	

	ROOM, )			
2	Supplying & erecting of ISI marked <b>Dry chemical powder</b> typr fire extinguisher of <b>capacity 6 Kgs</b> with gun metal cap and nozzle and complete in all respects including initial fill and wall suspension brackets.( At car parking area at ground level)	Nos.	4	
3	Providing and fixing Galvanised mild <b>steel Fire bucket</b> with clean sand & stand (3 buckets for each stand) in accordance with IS 2546. Fire bucket shall have two coats of anti corrosive paint, two coats of red colour conforming to shade No. 536 or 538 of IS 5. The paint shall conform to IS 2932 on its outside & two coats of white paint on the inside. The word "FIRE" shall be clearly stencilled on it in accordance with IS 2546. Vendor to include in his quote all costs relating to mounting of the bucket at locations stated by the Fire NOC & the architect. Vendor to include in his quote all costs all accessories, consumables, fittings & rigging equipment's necessary for the satisfactory installation of the same. (IN PUMP ROOM, GROUND FLOOR - ELV ROOM)	Set	1	
4	Supplying, fixing, testing and commissioning Ceiling Suspended Clean Agent Auto Fire extinguisher with pressure gauge , 5 KG - FOR Electrical Room.	Nos.	1	

वर नमूद सुचित दर्शविलेल्या बाबींचे पुरवठा करणारे पुरवठादार/दुकानदार/उत्पादक/विक्रेते यांनी नमूद केलेल्या बाबींकरिता असलेले दर स्वतःच्या लेटरहेडवर महापालिकेच्या कार्यालयात अथवा ई-मेल द्वारे pmcbandhkamdept01@gmail.com /panvelcorporation@gmail.com यावर दिनांक 20/08/2026 पर्यंत पाठवावे ही विनंती, सदर दर हे अंदाजपत्रक तयार करणेसाठी गृहित धरणेत येणार आहेत.

  
 कार्यकारी अभियंता  
 पनवेल महानगरपालिका

जा.क्र पमपा/बांधकाम/ २४२४/प्र.क्र.०५/११०५ /२०२६,  
 दि.१३ / ०८/२०२६

प्रत माहितीस्तव — १. माहिती फलक करीता