### पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे या कामाचे अंदाजपत्रक बनविण्याकरीता खाली नमूद केलेल्या बाबींकरीता खालील नमूण्यात दर मागविण्यात येत आहे.

अ.क्र.	कामाचे नाव	मुदत
	पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग	_
	क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या	१० / ०८ / २०२३ ते
१	भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय	२१ / ०८ / २०२३
	इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे.	
	(Electrical Vehicle Charging Stations)	

SR. NO.	ITEM	REFF ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
			NOTE- ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY/ GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.		
	ELECTRICAL VEHICLE CHARGING STATIONS	A.1			
1	7 KW Type 2 AC Electric Vehicle Charger	1.1	Supplying, erecting, testing and commissioning of <b>7 KW Type 2 AC Electric</b> Vehicle Charger (suitable for 4 wheeler)having minimum IK08 & IP54 protection suitable for single phase 220Vac +/- 10% AC 50/60Hz incoming supply and 1 no.output charger interface mennekes (type2) with of <b>7 kW</b> capacity,interlocking arrangement with 5 meter charging cable , with display screen for human interface & LED light for status indication, metering for measurement of consumed energy having metering accuracy +/-1%, 15mins battery backup for communication, mushroom type emergency push stop button. User interface by mobile application/QR Code/RIFD Card/Password Login with payment options and having short circuit, over & under voltage, surge protection, earth leakage protection and enclosure made of minimum 1.2mm duly RAL7035 coated M.S,erected on iron/GI frame on provided cement concrete foundation complete with three years on site warranty, confirming to IS 17017 Series as per specification As directed by Engineer in charge Should include 2 pole circuit breakers against overcurrent, short circuit and residual current protection and SIM card charges for 3 years. Make- Bombay Powerco/Wuerth E/Legrand/delta	12	nos

2 3.3 KW Type 2 AC Electric Vehicle Charger	1.2 Supplying, erecting, testing and commissioning of 3.3 KW Type 2 AC Electric Vehicle Charger (suitable for 2 wheeler)having minimum IK08 & IP54 protection suitable for single phase 220Vac +/- 10% AC 50/60Hz incoming supply with of 3.3 kW capacity, including 16A outdoor socket conforming to IS 1293, LED light for status indication, metering for measurement of consumed energy having metering accuracy +/-1%, 15mins battery backup for communication, mushroom type emergency push stop button. User interface by mobile application/QR Code/RIFD Card/Password Login with payment options and having short circuit, over & under voltage, surge protection, earth leakage protection and enclosure made of minimum 1.2mm duly RAL7035 coated M.S,erected on iron/GI frame on provided cement concrete foundation complete with three years on site warranty, confirming to IS 17017 Series as per specification As directed by Engineer in charge Should include 2 pole circuit breakers against overcurrent, short circuit and residual current protection conforming to IS 12640 Part 2 along with mounting box. Should include mobile application and SIM card charges for 3 years. Make- Bombay Powerco/Wuerth E/Legrand/	70	
3 MS. Painted	delta MS_Painted Mounting structure for all EV	82	nos
3 MS, Painted Mounting structure	1.3 charging stations		

१) सीलबंद निविदा दि. %/०८/२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात

२) प्राप्त झालेल्या निविदा शक्यतो दि. २१/०८/२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या

दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.

- अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे. प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर कर<u>ण्याचा</u> हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे. शहर अभियंता

पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/ २३२७/प्र.क्र. ०३ / २९३२/५/२०२३ दि . ९ / ६ /२०२३ प्रत माहितीस्तव — १. प्रसिध्दीकरीता २. माहिती फलक करीता

## पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे या कामाचे अंदाजपत्रक बनविण्याकरीता खाली नमूद केलेल्या बाबींकरीता खालील नमूण्यात दर मागविण्यात येत आहे.

अ.क्र.	कामाचे नाव	मुदत
	पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या	१० / ०८ / २०२३ ते
	भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (EXTERNAL ELECTRICAL WORK)	२१ / ०८ / २०२३

SR. NO.	ITEMS	BOQ REFF. ITEM	ITEM DESCRIPTION	QUANTI TY	UNIT
			NOTE- ALL ITEM RATES SHOULD CONSIST OF DEFECT LIABILITY PERIOD (FOR ITEM NO. 1 TO 39 FIVE YEARS & FOR ITEM NO. 40 TO 76 THREE YEARS) INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT.		
			EXTERNAL ELECTRICAL WORK		
			HT ELECTRICAL WORK		
1	RMU	1.1.1	Supplying , erecting, testing & commissioning SF 6 Insulated 33kV, 800A, 16kA/3sec, 3 way outdoor, extensible motorised SCADA compatible RMU as per electric supply company specification consisting of 2 nos. feeder with load break switch and 1 no. feeder with VCB as per specification no. SW-HTS / RMU SCADA (2LBS +1VCB) as per MSEDCL guidelines,As directed by Engineer in charge <b>MAKE</b> - L&T / ABB / SIEMENS/SCHNIEDER	1	EACH
2	HT METERING	1.2.1	Supplying, erecting, testing and commissioning 33KV HT metering cubical (compact type) with Solar power Bi directional net metering approved by MSEDCL / licensee fabricated with 2 mm (14SWG) M.S. sheets with supporting angle, painted with powder coating / epoxy paint of required shade, copper bus bar size 25 x 6 mm, heavy duty mechanical lock, with counter meter for measuring no. of times the opening of meter door, top side cover (CT, PT cover) interlock with meter door, epoxy casted 3 nos. CT having required ratio between 50/5A to 200/5A, VA 10 or 15, Class 0.2S, epoxy casted 3 nos. PT having ratio 33000/V3/110/V3 VA 50, Class 0.2 suitable for provided trivector meter, and provision for incoming and outgoing cables	1	EACH

	· · · · · · · · · · · · · · · · · · ·			1	
3	СНЕСК	1.2.2	complete duly tested by licensee with necessary test certificates and erected on provided plinth/ cc foundation and calibrated by EDC/EB/Local authority etc.earthing terminals as required as approved and calibrated by EDC/EB/Local authority etc. <b>Check Metering</b> :Supplying, erecting,	1	ЕАСН
5	METERING	1.2.2	<b>Check Metering</b> :Supplying, erecting, testing and commissioning 33KV HT metering cubical (compact type) with Solar power Bidirectional net metering approved by MSEDCL / licensee fabricated with 2 mm (14 SWG) M.S. sheets with supporting angle, painted with powder coating / epoxy paint of required shade, copper bus bar size 25 x 6 mm, heavy duty mechanical lock, with counter meter for measuring no. of times the opening of meter door, top side cover (CT, PT cover) interlock with meter door, epoxy casted 3 nos. CT having required ratio between 50/5A to 200/5A, VA 10 or 15, Class 0.2S, epoxy casted 3 nos. PT having ratio 33000/V3/110/V3 VA 50, Class 0.2 suitable for provided trivector meter, and provision for incoming and outgoing cables complete duly tested by licensee with necessary test certificates and erected on provided plinth/ cc foundation. and calibrated by EDC/EB/Local authority etc.earthing terminals as required as approved and calibrated by EDC/EB/Local authority etc.		LACH
4	HT PANEL	1.3.1	Supply Installation, Testing and Commissioning etc. of <b>HT PANEL</b> -Supplying of indoor 33KV,25KA for 3s HT Switchboard as under: 1nos 800A Incoming and 2 nos 800A VCB outgoing 33kV,25kA for 3Sec. 800A HT Vaccum Circuit Breaker with CC / TC -24V DC,Motor- 230 AC, with manual trip, anti pumping device, closing device, operation counter, Rack in & out handle, Trip Rod, Aux 6NO+6NC,Al Busbar with suitable rating,6 NO Single Phase Current transformer STC 25kA/1S Ratio: 50/1-1A , Core1: CL-0.5, 5VA for Metering, Core2-CL- 5P10,5VA for protection, 3 NO-Single Phase Current transformer STC 25kA/1S Ratio: 100/1A , Core1: 0.5, 5VA for metering and Core-2-5VA, CL-5P10, 3 NO- Voltage transformer with ratio of 33kV/RT3/110V/RT3/110/RT3, Core1-CL- 0.5,30VA, Core2-CL-3P,30VA, 3 NOs-HT Fuses with 33kV 3.15 curent rating,Digital MFM with class-0.2,Digital Ammeter with inbuilt selector switch,Digital Voltmeter with inbuilt selector switch 1 NO 6Window Annunciators,2 NO 12Window Annunciators 9 NOs Surge Arrestser,3 NO Numerical protection relay with ANSI 50/51/51/51N,with includes trip circuit supervision function with RS485 communication protocal,3 NO Master Trip Relay(86) VAJH13 2 NOs Aux.plug in realys Transforemer faults,LED lamp Red For L1,L2, L3 ON 110V AC (3 Nos.]3 NOs LED indicating Lamp, 24V DC, for CB ON, OFF,	1	EACH

5	DRY TYPE	1.4.1	TRIP, TCH, Test/Service , SPRING CHARGE , Auto Trip,3 NOs Local Remote selector switch,3 NOs TNC switch, 2 NOs Emergency Trip push button,3 NOs Thermostat & Spaceheater,Panel Light LED TYPE, with DLS,LT Chamber Sheetmetal, Terminals, Wires and other BOC,as per MSEDCL guidelines & As directed by Engineer in charge <b>Make-</b> L&T/ABB/SIEMENS/SHRI RAM SWITCHGEARS /SCHNEIDER Supply Installation, Testing and	2	EACH
	TRANSFORMER	1.7.1	Commissioning of approved make 1600 kVA,3 phase,50 c/s, Referrance Standard IS:11171 & IS 2026, VPI Dry Type Transformer, Copper wound, Dyn11 Vector Group,with delta connection on HV side & star connection on LV side with additional neutral brought out on load side,For Indoor Use Continuous Duty, Average Temp rise of Winding ( at Principal Tap) 115 Deg C at Ambient Temp Max 50 Deg C & Min -5 Deg C at full load rating, Voltage rating 33/ 0.433 kV with Tapping ( with off circuit Tap Links type tap changer) Tappings on Transformer For Off Load +5 to - 5% @ 2.5% in +2/-2 Steps, HV Variation, Class of Insulation H/H, Method of cooling AN, no load Losses 1.9 KW, full load Losses 6.65 KW, with 98.87 % Efficiency at Full Load & 99.11 % at 1/2 Full Load, with 75 KV peak Full Wave Lightning Impulse withstand Voltage with Complete Enclosure having IP 21 Degree of protection, Cable Box arrangement at HV side & Busduct at LV side ,with rating & Diagram Plate, Base Channel, Earthing Terminals & WTI Scanner with 3 PT-100 Sensors,etc. standard accessories complete with Test Certificate (as per IS:11171 ) VPI, Dry Type Transformer as per MSEDCL losses/as per MSEDCL guidelines,As directed by Engineer- in-charge. Make - ABB/SIEMENS/SCHNEIDER/KIRLOSKAR/ CROMPTON GREAVES/ VOLTAMP/SHRI RAM SWITCHGEARS /SUPER POWER / INDCOIL TRANSFORMERS PVT.LTD.	2	
6	SAFETY ACCESSORIES	1.7.1	Providing Round bottom fire bucket of 9 Litres capacity as per IS : 2546 made out of 24 gauge G.I. sheet with extra handle at bottom duly painted white inside and red outside with FIRE Mark, on provided stand/ wall hook complete. As directed by Engineer in charge	12	Each
7	SAFETY ACCESSORIES	1.7.2	<b>Providing Floor mounting stand for</b> <b>keeping 4 Nos. of FIRE buckets 1500mm</b> <b>in length, 900mm in height frame</b> made out of 30x30x4 mm angle iron with cross supports for legs, welded with 4 hooks and duly painted with one coat of red lead and two coats of silver paint complete.As directed by Engineer in charge	3	Each

0	CAPETV	172	Supplying and greating DOD tone Di	2	Fach
8	SAFETY ACCESSORIES	1.7.3	Supplying and erecting <b>D.C.P. type Fire</b> <b>Extinguisher 9 kg capacitycartridge type</b> <b>with Gun Metal cap 150 gram CO2 gas</b> <b>cartridge,</b> powder and brackets conforming to IS 2171-1985 and complete erected with necessary clamps made from 50x6 mm M.S. flat with nuts & bolts grouted in wall complete. As directed by Engineer in charge	3	Each
9	SAFETY ACCESSORIES	1.7.7	Providing pair of duly tested <b>rubber hand</b> <b>gloves</b> as per IS :47705 suitable for working up to 33 kV supply complete As directed by Engineer in charge	2	Each
10	Liasioning works	1.8.1	Coordinating with Supply co., equipment manufactures, metering department, CEIG, and other agencies etc.(for 2x 1600 33/.433kv kva dry type transformer )as per MSEDCL guidelines	1	job
11	DIESEL GENERATOR SET	1.1	Supply Installation, Testing and Commissioning etc. of <b>750 KVA Diesel</b> <b>Generator set</b> with alternator Rated Voltage 415V enclosed in aucostic enclosure with min. decible level of 75db (1 Mtr Away) with water cooled/ engine with 900 Ltrs fuel tank (Inbilt/External/To be confirmed by vendor) digital fuel gauge, and PSO601 controller compatible for AMF mode operation Suitable for the Sychcronisation panel connectivity Including Alternator , AVM PADS, ACOUSTIC CANPOPY, with acoustic treating and support Factory test at manufacturing works , And BMS compatible as required.DG sets will be working in Stand Alone Mode Fuel tank shall have digital fuel gauge and remote fuel indication DG set shall be capable of running on 100% load for minimum 2 hours Complete with all neccessery protection.& with exhaust pipe Suitable for 415 V, 3 phase / 4 Wire System , 50 Hz supply 1 set - LED Based Phase indicating lamps 1 set - Ammeter and Voltmeter with selectoe switch (Digital Type) with RS485 port with followings START/STOP/EME.STOP etc. and the acessories(EC2) Electronic Hoooter with Accept/Reset Buttons 8 Window Annunciator for Faults/Trip signal from DG Switchgear - 1 No 1600A, ACB TP+ N, EDO with ,OC,UV, EF Relays 1 set -LED Based indicating lamps for ON/OFF/TRIP Status ( with Rs485 shall be supplied with Microsoft windows' compatible software kits] PowerCommand digital genset control for AMF Operation control Suitable for synchronisation operation. As directed by Engineer in charge <b>Make-</b> CUMMINS / MAHINDRA/ PERKINS / CROMPTON / MTU/ GREAVES POWER	4	Set
12	ALLIED WORKS:	1.2.1	Transportation, loading, unloading, storing, Installation and commissioning of the above mentioned DG sets along with PSO601 Controller for AMF operation at demarkated position Rate Shall Also include the cost of first fill of the diesel for testing & commissioning of the DG sets along with Initial Battery Charging cost Cost to include obtaing the road permit from locat	1	Job

			authorities including all documentation As directed by Engineer in charge		
13	Liaison Charges	1.2.2	Liaison Charges for obtaining necessary approvals from MPCB and Fire Department, Local Electrorate, EI/CIEG, PWD etc. along with necessary coordination with other authorities. As directed by Engineer in charge		
			DG Set of 4 x 750 KVA	1	Job
14	DG SETS SYNCHRONISIN G PANEL	1.3.1	Supply Installation, Testing and Commissioning etc. of DG set sychronising panel with 80 KA , 4 nos, 1250 amp. Incomer EDO,ACB and 2 Nos EDO 2500 Amp. Out going ACB. & 1 no. EDO 2500 Amp. Spare ACB with all accesories Automatic Fire suppression gas flooding system complete with Perfluoro Ketone (FK- 5-1-12)/ HFC 227ea, DLP Assembly with automatic valve, push in connector for tube, Perfluoro Ketone (FK-5-1-12)/ HFC 227ea, mounting bracket, End of Line adopter and low pressure switch for monitoring system activation.Perfluoro Ketone (FK-5-1-12)/ HFC 227ea gas of suitable capacity , Heat detection tube as required and A/V alarm with all necessary installation to complete the system as per specifications. Or as directed etc. As directed by Engineer in charge <b>Make - SCHNEIDER / LEGRAND/</b> <b>SIEMENS / L&amp;T / HAVELLS/</b> DB ELECTRICALS / DEVTA ELECTRICALS / VIVID ELECTROMECH / GOEL POWER / ARROW ENGINNERS /ABAC / ZENIT ENGINEERING <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS	1	Each
		A.3	Supply Installation, Testing and Commissioning etc. of Accesseries for		
			750 KVA D.G Set As directed by Engineer in charge As directed by Engineer in charge Make- CUMMINS / MAHINDRA/ PERKINS / CROMPTON / MTU/ GREAVES POWER		
15	Exhaust Piping	1.1.1	M.S exhaust pipe with flanges, bends, etc 5 mm wall thickness. (B-Class)	20	Running Meter
16	Exhaust Piping	1.1.2	MS support for E.pipe (Angle, Channel of different size etc.) complete with fabrication ,erection & painting etc.	6,000	Kg
17	Exhaust Piping	1.1.3	50 mm thick insulation for exhaust pipe (Aluminium 24/26 SWG sheet & glass wool / rockwool for 500 mm dia	20	Running Meter
18	Exhaust Piping	1.1.4	Insulation of Residential silencer	4	Nos.
19	Fuel piping	1.2.1	1"dia M.S. 'B' class Fuel piping between Engine & Fuel Tank complete with Flanges, bends etc.	36	Running Meter
20	AVM Pads	1.2.2	AVM Pads	1	

21	BUS DUCT AND RISER MAIN (TR-1 TO LT PANEL)		Supply Installation, Testing and Commissioning etc of 2500A, 1000V, 50Hz, 50kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.1.1	Straight Length with Tap off Opening at	1	Mtr
		110	every 1 Mtr. Interval	20	Mtn
		1.1.2 1.1.3	Straight Length without Tap off Opening Horizantal Bracket at Every 1 Mtr Inteval for	20 14	Mtr No.
			Horizantal Busbar Installation		
		1.1.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	6	No.
		1.1.5	Horizantal Elbow	4	No.
		1.1.6	Vertical Elbow	4	No.
		1.1.7	Flange End only	4	No.
		1.1.8	End feed unit - direct cable termination arrangment only	1	No.
		1.1.9	End cover IP55	1	No.
		1.1.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
22	BUS DUCT AND RISER MAIN (TR-2 TO LT PANEL)		upply Installation, Testing and Commissioning etc. of 2500A, 1000V, 50Hz, 50kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical		

		1.2.1 1.2.2 1.2.3 1.2.4 1.2.5 1.2.6 1.2.7	agents. As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T Straight Length with Tap off Opening at every 1 Mtr. Interval Straight Length without Tap off Opening Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation Horizantal Elbow Vertical Elbow Flange End only	1 20 14 6 4 4 4	Mtr Mtr No. No. No. No. No.
		1.2.8	End feed unit - direct cable termination arrangment only	1	No.
		1.2.9	End cover IP55	1	No.
		1.2.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
23	BUS DUCT AND RISER MAIN (SYNC PANEL TO LT PANEL)	121	Supply Installation, Testing and Commissioning etc. of 2500A, 1000V, 50Hz, 50kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		Mto
		1.3.1	Straight Length with Tap off Opening at every 1 Mtr. Interval		Mtr
		1.3.2	Straight Length without Tap off Opening	36	Mtr
		1.3.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	16	No.
		1.3.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	12	No.
		1.3.5	Horizantal Elbow	6	No.
		1.3.6	Vertical Elbow	4	No.
		1.3.7	Flange End only	4	No.
		1.3.8	End feed unit - direct cable termination arrangment only	1	No.
		1.3.9	End cover IP55	1	No.
		1.3.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.

0.4	DUO DUOT AND				1
24	BUS DUCT AND RISER MAIN (DG SYNC PANEL TO LT PANEL)		Supply Installation, Testing and Commissioning etc. of 2500A, 1000V, 50Hz, 80kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.4.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	1	Mtr
		1.4.2	Straight Length without Tap off Opening	36	Mtr
		1.4.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	16	No.
		1.4.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	12	No.
		1.4.5	Horizantal Elbow	6	No.
		1.4.6	Vertical Elbow	4	No.
		1.4.7	Flange End only	4	No.
		1.4.8	End feed unit - direct cable termination arrangment only	1	No.
		1.4.9	End cover IP55	1	No.
		1.4.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
25	BUS DUCT AND RISER MAIN (DG-1 TO SYNC PANEL )		Supply Installation, Testing and Commissioning etc. of 1250A, 1000V, 50Hz, 80kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical		

			agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.5.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	1	Mtr
		1.5.2	Straight Length without Tap off Opening	35	Mtr
		1.5.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	25	No.
		1.5.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	6	No.
		1.5.5	Horizantal Elbow	4	No.
		1.5.6	Vertical Elbow	3	No.
		1.5.7	Flange End only	3	No.
		1.5.8	End feed unit - direct cable termination arrangment only	1	No.
		1.5.9	End cover IP55	1	No.
		1.5.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
26	BUS DUCT AND RISER MAIN (DG-2 TO SYNC PANEL )	1.6.1	Supply Installation, Testing and Commissioning etc. of 1250A, 1000V, 50Hz, 80kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T	1	Mtr
			every 1 Mtr. Interval		
		1.6.2	Straight Length without Tap off Opening	35	Mtr
		1.6.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	25	No.
		1.6.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	6	No.
		1.6.5	Horizantal Elbow	4	No.
		1.6.6	Vertical Elbow	3	No.
		1.6.7	Flange End only	3	No.
		1.6.8	End feed unit - direct cable termination arrangment only	1	No.
		1.6.9	End cover IP55	1	No.
		1.6.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.

07	DUO DUOT AND		O 1 I I I I I I I I I I I I I I I I I I		
27	BUS DUCT AND RISER MAIN (DG-3 TO SYNC PANEL )		Supply Installation, Testing and Commissioning etc. of 1250A, 1000V, 50Hz, 80kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.7.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	1	Mtr
		1.7.2	Straight Length without Tap off Opening	35	Mtr
		1.7.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	25	No.
		1.7.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	6	No.
		1.7.5	Horizantal Elbow	4	No.
		1.7.6	Vertical Elbow	3	No.
		1.7.7	Flange End only	3	No.
		1.7.8	End feed unit - direct cable termination arrangment only	1	No.
		1.7.9	End cover IP55	1	No.
		1.7.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
28	BUS DUCT AND RISER MAIN (DG-4 TO SYNC PANEL )		Supply Installation, Testing and Commissioning etc. of 1250A, 1000V, 50Hz, 80kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical		

			agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.8.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	1	Mtr
		1.8.2	Straight Length without Tap off Opening	35	Mtr
		1.8.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	25	No.
		1.8.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	6	No.
		1.8.5	Horizantal Elbow	4	No.
		1.8.6	Vertical Elbow	3	No.
		1.8.7	Flange End only	3	No.
		1.8.8	End feed unit - direct cable termination arrangment only	1	No.
		1.8.9	End cover IP55	1	No.
		1.8.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
29	BUS DUCT AND RISER MAIN (FP-1 TO APFCR-1 )	1.0.1	Supply Installation, Testing and Commissioning etc.of 2000A, 1000V, 50Hz, 36kA for 1 Sec 3P+N-100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss- section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		Mto
		1.9.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	1	Mtr
		1.9.2	Straight Length without Tap off Opening	22	Mtr
		1.9.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	14	No.
		1.9.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	11	No.
		1.9.5	Horizantal Elbow	5	No.
		1.9.6	Vertical Elbow	4	No.
		1.9.7	Flange End only	4	No.
		1.9.8	End feed unit - direct cable termination arrangment only	1	No.
		1.9.9	End cover IP55	1	No.
		1.9.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1.00	No.

	I			1	n
30	BUS DUCT AND		Supply Installation, Testing and		
	RISER MAIN		Commissioning etc. of 2000A, 1000V, 50Hz,		
	(FP-2 TO		36kA for 1 Sec 3P+N-100%+PE- internal		
	APFCR-2)		earth Sandwich type Aluminium Busbar		
			Trunking system with earth fault protection		
			& impulse withstand voltage of 8KV as per		
			IEC 61439-1/2. Outer casing of system		
			consists of four C-ribbed section bars,		
			bordered and riveted with excellent mechanical, electrical and heat loss		
			efficiency. The sheetmetal is made of electro-		
			galvenized steel 1.6mm thick with epoxy		
			coating having degree of protection IP55. The		
			busbar conductor have a rectangular corss-		
			section with rounded corner, Aluminium		
			alloy with Tin Plating at joint to avoid		
			oxidation.The Insulation between the bars		
			shall be Class F. The junction contact is		
			ensured for each phase, insulated with red		
			class F thermosetting plastic material with		
			breakdown voltage of minimum		
			6KV.Enclosure is painted with RAL7035		
			resins with a high resistance to chemical		
			agents. As directed by Engineer in charge. <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER		
			/ L & T		
		1.10.1	Straight Length with Tap off Opening at	1	Mtr
			every 1 Mtr. Interval		
		1.10.2	Straight Length without Tap off Opening	22	Mtr
		1.10.3	Horizantal Bracket at Every 1 Mtr Inteval for	14	No.
			Horizantal Busbar Installation		
		1.10.4	Vertical Spring Bracket at Every 1.5 Mtr	11	No.
			Inteval for Vertical Busbar Installation		
		1.10.5	Horizantal Elbow	5	No.
		1.10.6	Vertical Elbow	4	No.
		1.10.7	Flange End only	4	No.
		1.10.8	End feed unit - direct cable termination	1	No.
			arrangment only		
		1.10.9	End cover IP55	1	No.
		1.10.10	Copper Flexible Braid Connection Length	1.00	No.
			[mm] 300-450 RYBN set		
	EXTERNAL LT		Note- ALL LT PANELS ARE TYPE TESTED		
	PANEL		- IP-52 RATING Breakers shall be		
			compitable to monitored through' IBMS] The Energy multifunction meter with RS		
			485/RS232 port shall be provided as per		
			SLD As directed by Engineer in charge,		
			Make - SCHNEIDER / LEGRAND/		
			SIEMENS / L&T / HAVELLS/DB		
			ELECTRICAL/PRATIK SYSTEMS		
31	MAIN LT PANEL	1.1	MAIN LT PANEL PART -1	1	No.
	PART -1		Supply, installation, testing & commissioning	1	İ
			etc. of LT panel <b>Construction</b> - Floor		
			mounted cubicle type panel, Fabricated from		
			14/16G CRCA ,IP52 sheet steel totally		
			compartmentalized, treted for rust proofing.		
			with separate busbarcamber & cable		
			chambers Front/ back access for		
			switchgears, connectors etc. Suitable for 430		
			V, 3 phase / 4 Wire System , 50 Hz supply,		

		Automatic Fire suppression gas flooding	
		system complete with Perfluoro Ketone (FK-	
		5-1-12)/ HFC 227ea, DLP Assembly with	
		automatic valve, push in connector for tube,	
		Perfluoro Ketone (FK-5-1-12)/ HFC 227ea,	
		mounting bracket, End of Line adopter and	
		low pressure switch for monitoring system	
		activation.Perfluoro Ketone (FK-5-1-12)/	
		HFC 227ea gas of suitable capacity, Heat	
		detection tube as required and A/V alarm	
		with all necessary	
		installation to complete the system as per	
		specifications. Or as directed etc.	
		Main Source Control Unit/ Incomer- 1 No	
		2500A EDO ACB, 50kA, FP with	
		O/C,S/C,E/F,U/V, E/L and Shunt coils etc.	
		LED Based Phase indicating lamps, control	
		RCBOs, CTs, etc Set - ON/OFF/ TRIP	
		lamps with control RCBOs Set - ON/OFF/	
		TRIP lamps with control RCBOs,	
		DG Source Control Unit/ Incomer- 1 No	
		2500A EDO ACB, 50kA, FP with	
		O/C,S/C,E/F,U/V, E/L and Shunt coils etc.	
		LED Based Phase indicating lamps, control	
		RCBOs, CTs, etc Set - ON/OFF/ TRIP	
		lamps with control RCBOs CT-2500/5A,15	
		VA BURDEN, CLASS- 1 WITH multifunction	
		meter,	
		Auto Transfer Switch for Solar:- 250 A,	
		FP,ATS FOR SOLAR (PROVIDED FOR DG	
		PROTECTION / SAFETY)	
		Potential Bus/Busbar 1 set - 2500A TPN+E	
		Potential Bus/Busbar 1 set - 2500A TPN+E	
		<b>Potential Bus/Busbar 1 set</b> - 2500A TPN+E 91E Aluminium busbar,Insulated with heat	
		<b>Potential Bus/Busbar 1 set</b> - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves	
		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS	
		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP</li> </ul>	
		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No400A 4P MCCB,MPO/C,S/C.U/V,E/F ,VEHICLE CHARGINGPANEL-1 No630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDING	
		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No400A 4P MCCB,MPO/C,S/C.U/V,E/F ,VEHICLE CHARGINGPANEL-1 No630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL-1 No	
		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No400A 4P MCCB,MPO/C,S/C.U/V,E/F ,VEHICLE CHARGINGPANEL-1 No630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL-1 No160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2-1 No.	
		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No400A 4P MCCB,MPO/C,S/C.U/V,E/F , VEHICLE CHARGINGPANEL-1 No630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL- 1 No160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No63A 4P RCBO,O/C,S/C.,SPARE-1 No	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> <li>Bus Coupler - 2500 A 4P BUS COUPLER, 50</li> </ul>	
		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCB0,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> <li>Bus Coupler - 2500 A 4P BUS COUPLER, 50 KA</li> </ul>	
32	MAIN LT PANEL	<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> <li>Bus Coupler - 2500 A 4P BUS COUPLER, 50</li> </ul>	
32	MAIN LT PANEL -PART 2	<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> <li>Bus Coupler - 2500 A 4P BUS COUPLER, 50 KA</li> <li>MAIN LT PANEL -PART 2</li> </ul>	
32		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCB0,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> <li>Bus Coupler - 2500 A 4P BUS COUPLER, 50 KA</li> </ul>	
32		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.,SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> <li>Bus Coupler - 2500 A 4P BUS COUPLER, 50 KA</li> <li>MAIN LT PANEL -PART 2</li> <li>Supply,installation, testing &amp; commissioning</li> </ul>	
32		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MPO/C,S/C.U/V,E/F , VEHICLE CHARGINGPANEL-1 No 630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL- 1 No 160A 4PMCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No 63A 4P RCBO,O/C,S/C.,SPARE-1 No2000A 4P MCCB,MP O/C,S/C.U/V,E/F,SPARE-1 No 1600A 4P MCCB,MPO/C,S/C.U/V,E/F, SPARE-1 No 630A 4PMCCB,MP O/C,S/C.U/V,E/F.Bus Coupler - 2500 A 4P BUS COUPLER, 50KAMAIN LT PANEL -PART 2Supply,installation, testing & commissioningetc of LT panel Construction- Floor	
32		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MPO/C,S/C.U/V,E/F , VEHICLE CHARGINGPANEL-1 No 630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL-1 No 160A 4PMCCB,TM O/C,S/C.,PUMP PANEL-2-1 No 63A 4P RCBO,O/C,S/C.,SPARE-1 No2000A 4P MCCB,MP O/C,S/C.U/V,E/F,SPARE-1 No 1600A 4P MCCB,MPO/C,S/C.U/V,E/F, SPARE-1 No 630A 4PMCCB,MP O/C,S/C.U/V,E/FBus Coupler - 2500 A 4P BUS COUPLER, 50KAMAIN LT PANEL -PART 2Supply,installation, testing & commissioningetc of LT panel Construction- Floormounted cubicle type Panel Enclosure	
32		<ul> <li>Potential Bus/Busbar 1 set - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : -ALL FEEDERS 50 KA , 800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , LIGHT,POWER, INDOOR AC, PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MP O/C,S/C.U/V,E/F ,VEHICLE CHARGING PANEL-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F , UTILITY BUILDING DISTRIBUTION PANEL- 1 No 160A 4P MCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No.  63A 4P RCBO,O/C,S/C.SPARE-1 No 2000A 4P MCCB,MP O/C,S/C.U/V,E/F ,SPARE-1 No 1600A 4P MCCB,MP O/C,S/C.U/V,E/F, SPARE-1 No 630A 4P MCCB,MP O/C,S/C.U/V,E/F.</li> <li>Bus Coupler - 2500 A 4P BUS COUPLER, 50 KA</li> <li>MAIN LT PANEL -PART 2</li> <li>Supply,installation, testing &amp; commissioning etc of LT panel Construction- Floor mounted cubicle type Panel Enclosure Fabricated from 14/16G CRCA ,IP52 sheet</li> </ul>	
32		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MPO/C,S/C.U/V,E/F , VEHICLE CHARGINGPANEL-1 No 630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL- 1 No 160A 4PMCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No 63A 4P RCBO,O/C,S/C.U/V,E/F,SPARE-1 No 1600A 4P MCCB,MPO/C,S/C.U/V,E/F, SPARE-1 No 630A 4PMCCB,MP O/C,S/C.U/V,E/F.Bus Coupler - 2500 A 4P BUS COUPLER, 50KAMAIN LT PANEL -PART 2Supply,installation, testing & commissioningetc of LT panel Construction- Floormounted cubicle type Panel EnclosureFabricated from 14/16G CRCA ,IP52 sheetsteel totally compartmentalized, treted for	
32		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MPO/C,S/C.U/V,E/F , VEHICLE CHARGINGPANEL-1 No 630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL- 1 No 160A 4PMCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No 63A 4P RCBO,O/C,S/C.U/V,E/F,SPARE-1 No 1600A 4P MCCB,MPO/C,S/C.U/V,E/F, SPARE-1 No 630A 4PMCCB,MP O/C,S/C.U/V,E/F.Bus Coupler - 2500 A 4P BUS COUPLER, 50KAMAIN LT PANEL -PART 2Supply,installation, testing & commissioningetc of LT panel Construction- Floormounted cubicle type Panel EnclosureFabricated from 14/16G CRCA ,IP52 sheetsteel totally compartmentalized, treted forrust proofing. with separate busbarcamber &	
32		Potential Bus/Busbar 1 set - 2500A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing : -ALL FEEDERS50 KA , 800 KVA APFCR PANEL-1 No1600A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIGHT,POWER, INDOOR AC, PANEL-1 No2000A 4P ACB,EDO,O/C,S/C.U/V,E/F ,LIFT PANEL-1 No 400A 4P MCCB,MPO/C,S/C.U/V,E/F , VEHICLE CHARGINGPANEL-1 No 630A 4P MCCB,MPO/C,S/C.U/V,E/F , UTILITY BUILDINGDISTRIBUTION PANEL- 1 No 160A 4PMCCB,TM O/C,S/C.,PUMP PANEL-2- 1 No 63A 4P RCBO,O/C,S/C.SPARE-1 No2000A 4P MCCB,MP O/C,S/C.U/V,E/F,SPARE-1 No 1600A 4P MCCB,MPO/C,S/C.U/V,E/F, SPARE-1 No2000A 4P MCCB,MP O/C,S/C.U/V,E/FBus Coupler - 2500 A 4P BUS COUPLER, 50KAMAIN LT PANEL -PART 2Supply,installation, testing & commissioningetc of LT panel Construction- Floormounted cubicle type Panel EnclosureFabricated from 14/16G CRCA ,IP52 sheetsteel totally compartmentalized, treted forrust proofing. with separate busbarcamber &cable chambers Front/ back access for	

				1	
			Main Source Control Unit/ Incomer- 1 No 2500A EDO ACB, 50kA, FP with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs DG Source Control Unit/ Incomer- 1 No 2500A EDO ACB, 50kA, FP with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs CT-2500/5A,15 VA BURDEN,CLASS- 1 WITH Multifunction meter, <b>Potential Bus/Busbar 1 set</b> - 2500A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves Feeder section/Outgoing :All feeder 50 KA , CHILLER PLANT-1 No 1250A 4P ACB,EDO,O/C,S/C., 125 TR CHILLER ALONG WITH 620 TR CHILLER -1 No 315A 4P MCCB TM,EDO,O/C,S/C.,AC VRV,VENTILATION,PL,EXT LIGHT PANEL-1 No 2000A 4P ACB,EDO,O/C,S/C. ,FIRE FIGHTING PANEL-1 No 500A 4P MCCB,MP O/C,S/C.,PUMP PANEL-1- 1 No 63A 4P RCBO,O/C,S/C.,800 KVA APFCR PANEL-1 No 1600A 4P ACB,EDO,O/C,S/C.U/V,E/F , SPARE-1 No 1250A 4P ACB, O/C,S/C.,SPARE-1 No 1250A 4P ACB, O/C,S/C.,SPARE-1 No 1250A 4P ACB, O/C,S/C. As directed		
			by Engineer in charge <b>Make</b> -SCHNEIDER / LEGRAND/ SIEMENS		
			/ L&T / DB ELECTRICALS / DEVTA ELECTRICALS / VIVID ELECTROMECH / GOEL POWER / ARROW ENGINNERS		
			/ABAC / ZENIT ENGINEERING		
33	APFCR PANEL	1.2	APFCR PANEL- AS PER SLD - IP-52 Breakers shall be compitable to	2	No.
			<b>monitored through' IBMS]</b> Supply,installation,testing & commissioning		
			of panel Construction- Floor mounted		
			cubicle type panel, IP 52 Enclosure Fabricated from 14/16G CRCA sheet steel		
			totally compartmentalized, treted for rust proofing with separate busbarcamber &		
			cable chambers, Front/back access for switchgears, connectors etc.Suitable for 430		
			V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer Suitable rating		
			ACB EDO/ MCCB, TM/MP, FP/TPN O/C,S/C,E/F,U/V and shunt coils as		
			required Breakers shall be compitable to monitored through' IBMS], LED Based Phase indicating lamps, control RCBOs, CTs, etc		
			Set - ON/OFF/ TRIP lamps with control RCBOs Potential Free Contacts for Remote		
			Monitoring The Energy multifunction meter with RS 485/RS232 port shall be provided		
-	1	İ.	as per SLD,	1	

		1		1	
			Main Control Unit/ Incomer 1No 1600A		
			ACB EDO,36kA,FP/MP O/C,S/C,E/F,U/V and LED Based Phase indicating lamps,		
			control RCBOs, CTs, etc Set - ON/OFF/		
			TRIP lamps with control RCBOs Set -		
			Mannual Operation Selector switch Potential		
			Free Contacts for Remote Monitoring.		
			Potential Bus/Busbar 1 set - 1600 A TPN +E		
			91E Aluminium busbar Insulated with heat		
			shrinkable sleeves,		
			FEEDER OUTGOING - (ALL FEEDER OF		
			<b>36KA):-</b> 1 NO. 25A,1 NO. 32A, 1 NO. 63 A, 1		
			NO. 100A ,7 NO 200A, MCCB TPN,16KA		
			with , 1 NO. 25A,1 NO. 32A, 1 NO. 63 A, 1		
			NO. 100A ,7 NO 200A Contactor ,with		
			thyrister/thermister controls. with ON/OFF		
			lamp & Start/Stop Push Button 1 NO. 10 KVAR,1 NO. 15 KVAR,1 NO. 25 KVAR, 1		
			NO 50 KVAR, 7 NO 100 KVAR, Capacitor		
			panel to be provided With 7% detuned		
			capaciters APP/MPP CAPACITOR heavy		
			duty, with thyrister/thermister controls. [All		
			the outgoing feeders shall have 'ON'		
			/'OFF'/'TRIP' ,indication/Lamps. I/C's shall		
			be mechanically & Electrically interlocked		
			All the Lamps shall be of LED Type Only		
			Breakers shall be compitable to monitored		
			through' IBMS]. As directed by Engineer in		
			charge. Make - SCHNEIDER / LEGRAND/ SIEMENS	4	
			/ L&T / DB ELECTRICALS / DEVTA		
			ELECTRICALS / DEVIA		
			GOEL POWER / ARROW ENGINNERS		
	i da la companya da la companya da la companya da la companya da la companya da la companya da la companya da l			1	1
			/ABAC / ZENIT ENGINEERING/HAVELLS		
34	PUMP PANEL-1	1.3		1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOS , CTs, etc Set - ON/OFF/ TRIP	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER )	1	No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER ) <b>Potential Bus/Busbar 1 set - 63</b> A TPN+E	1	No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER)</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat</li> </ul>		No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER)</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> </ul>		No.
34	PUMP PANEL-1	1.3	/ABAC / ZENIT ENGINEERING/HAVELLS <b>PUMP PANEL-1</b> Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOS Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER) <b>Potential Bus/Busbar 1 set - 63</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> :		No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER )</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing :</li> <li>OWC -1 No 32A TPN RCBO</li> </ul>	1	No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER)</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing :</li> <li>OWC -1 No 32A TPN RCBO</li> <li>WATER BODY-1,2 (1W+1S) -4 No 40A</li> </ul>	1	No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER)</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : OWC -1 No 32A TPN RCBO</li> <li>WATER BODY-1,2 (1W+1S) -4 No 40A TPN RCBO</li> </ul>	1	No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER)</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing :</li> <li>OWC -1 No 32A TPN RCBO</li> <li>WATER BODY-3,4 (1W+1S) -4 No 25A</li> </ul>		No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER)</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : OWC -1 No 32A TPN RCBO</li> <li>WATER BODY-1,2 (1W+1S) -4 No 40A TPN RCBO</li> <li>WATER BODY-3,4 (1W+1S) -4 No 25A TPN RCBO</li> </ul>		No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER )</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : OWC -1 No 32A TPN RCBO</li> <li>WATER BODY-1,2 (1W+1S) -4 No 40A TPN RCBO</li> <li>BIOGAS PLANT -1 No 32A TPN RCBO</li> </ul>		No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER)</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing :</li> <li>OWC -1 No 32A TPN RCBO</li> <li>WATER BODY-1,2 (1W+1S) -4 No 40A TPN RCBO</li> <li>WATER BODY-3,4 (1W+1S) -4 No 25A TPN RCBO</li> <li>BIOGAS PLANT -1 No 32A TPN RCBO</li> </ul>		No.
34	PUMP PANEL-1	1.3	<ul> <li>/ABAC / ZENIT ENGINEERING/HAVELLS</li> <li>PUMP PANEL-1</li> <li>Supply,installation, testing &amp; commissioning etc. of LT panel Construction- Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No 63A MCCB,10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER )</li> <li>Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing : OWC -1 No 32A TPN RCBO</li> <li>WATER BODY-1,2 (1W+1S) -4 No 40A TPN RCBO</li> <li>BIOGAS PLANT -1 No 32A TPN RCBO</li> </ul>		No.

			SPARE - 1 Nos -40A TPN RCBO		
			As directed by Engineer in charge <b>Make</b> -SCHNEIDER / LEGRAND/ SIEMENS / L&T / DB ELECTRICALS / DEVTA ELECTRICALS / VIVID ELECTROMECH / GOEL POWER / ARROW ENGINNERS /ABAC / ZENIT ENGINEERING <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS		
35	PUMP PANEL-2	1.4	PUMP PANEL-2	1	No.
	TOMITIANEL-2	1.7	Supply,installation, testing & commissioning etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A MCCB, 10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, <b>Potential Bus/Busbar 1 set -63</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : WATER TRANSFER PUMP-1 No 40A TPN RCBO (BMS COMPATIBLE ENERGY METER) RWH PLANT - 2 No 40A TPN RCBO SUMP PUMP FOR FIREFIGHTING ROOM - 2 Nos- 25 A TPN RCBO BASEMENT PUMP PANEL - 1 No - 40A TPN MCCB O/C,S/C, TM COOLING TOWER MAKE WATER TRANSFER FROM STP TREATED WATER - 1 No- 40A TPN RCBO SPARE- 1 Nos- 40A TPN RCBO SPARE- 1 Nos- 63A TPN RCBO SPARE- 1 Nos- 100A TPN MCCB O/C,S/C,		
			As directed by Engineer in charge <b>Make</b> -SCHNEIDER / LEGRAND/ SIEMENS / L&T / DB ELECTRICALS / DEVTA ELECTRICALS / VIVID ELECTROMECH / GOEL POWER / ARROW ENGINNERS /ABAC / ZENIT ENGINEERING <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS		
36	BASEMENT	1.5	BASEMENT PUMP PANEL	1	No.
	PUMP PANEL		Supply,installation, testing & commissioning etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,		

			SPARE -1 No 160A TPN MCCB 16kA, As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T		
			CAR CHARGING POINT DB - 1 No 200A TPN MCCB,TM 16kA, BIKE CHARGING POINT DB-1-1 No 160A TPN MCCB,TM 16kA, BIKE CHARGING POINT DB-2-1 No 160A TPN MCCB,TM 16kA, BIKE CHARGING POINT DB-3-1 No 160A TPN MCCB,TM 16kA, SPARE -1 No 200A TPN MCCB 16kA,		
			control RCBOs, <b>Potential Bus/Busbar 1 set - 630</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> :		
			Control Unit/ Incomer- 1 No 630A MCCB, 16kA, TPN /MP with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs, CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with		
	PANEL		etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,		
31	VEHICLE CHARGER	1.0	VEHICLE CHARGER PANEL Supply, installation, testing & commissioning	1	INO.
37	VEHICIE	1.6	SPARE - 1 Nos - 25A TPN RCBO As directed by Engineer in charge <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / DB ELECTRICALS / DEVTA ELECTRICALS / VIVID ELECTROMECH / GOEL POWER / ARROW ENGINNERS /ABAC / ZENIT ENGINEERING <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS	1	No.
			40A TPN RCBO CUTTER PUMP IN BASEMENT -4 No25A TPN RCBO SPARE - 2 Nos - 40A TPN RCBO		
			SUMP PUMP -6 No 25A TPN RCBO FLOODING PUMP IN BASEMENT -4 No		
			Feeder section/Outgoing :		
			RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, <b>Potential Bus/Busbar 1 set - 4</b> 0A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves		
			Control Unit/ Incomer- 1 No 40A MCCB, 10kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs, CTs, etc Set - ON/OFF/ TRIP lamps with control		

BUILDING	Supply, installation, testing & commissioning	
DISTRIBUTION	etc. of LT panel <b>Construction-</b> Floor	
PANEL	mounted cubicle type panel, Fabricated from	
	14/16G CRCA ,IP52 sheet steel totally	
	compartmentalized, treted for rust proofing.	
	with separate busbarcamber & cable	
	chambers Front/ back access for	
	switchgears, connectors etc. Suitable for 430	
	V, 3 phase / 4 Wire System, 50 Hz supply,	
	Control Unit/ Incomer- 1 No 160A MCCB,	
	16kA, FP /TM with O/C,S/C,E/F,U/V, E/L	
	and Shunt coils etc. LED Based Phase	
	indicating lamps, control RCBOs, CTs, etc	
	Set - ON/OFF/ TRIP lamps with control	
	RCBOs Set - ON/OFF/ TRIP lamps with	
	control RCBOs,	
	Potential Bus/Busbar 1 set - 160A TPN+E	
	91E Aluminium busbar,Insulated with heat	
	shrinkable sleeves	
	Feeder section/Outgoing : ALL FFEDER	
	OF 16 KA	
	LIGHT DB FOR STP -1 No25A TPN RCBO	
	STP ROOM EX FAN DB -1 No40A TPN	
	RCBO	
	CHILLER PLANT EX FAN DB- 1 No40A	
	TPN RCBO	
	WATER TRANSFER PUMP- 2 No63A TPN	
	RCBO	
	LANDSCAPE IRRIGATION PUMP - 2 No	
	63A TPN RCBO	
	STP 70 KLD- 1 No63A TPN RCBO	
	SUMP PUMP FOR STP- 2 No25A TPN	
	RCBO	
	COOLING TOWER MAKEUP WATER FROM	
	STP- 2 No40A TPN RCBO	
	SUMP PUMP FOR STP- 2 No25A TPN	
	RCBO	
	LIGHT DB FOR CHILLAR PLANT -1 No	
	25A TPN RCBO	
	CHILLER ROOM EX FAN DB -1 No40A	
	TPN RCBO	
	LIGHT DB FOR DG AREA -1 No25A TPN	
	RCBO	
	LIGHT DB FOR TRANSFORMER AREA -1	
	No25A TPN RCBO SUBSTATION FAN DB -1 No32A TPN	
	RCBO	
	SOFTNER FOR THIRD PARTY GREY WATER	
	-1 No25A TPN RCBO	
	LDB FOR UTILITY BLOCK TERRACE AREA-	
	1 No25A TPN RCBO	
	SCADA ROOM -1 No40A TPN RCBO	
	SPARE - 2 Nos - 25A TPN RCBO	
	SPARE - 1 Nos - 32A TPN RCBO	
	SPARE - 1 Nos - 40A TPN RCBO	
	SPARE - 1 Nos - 63A TPN RCBO	
	As directed by Engineer in charge	
	Make -SCHNEIDER / LEGRAND/ SIEMENS	
	/ L&T / DB ELECTRICALS / DEVTA	
	ELECTRICALS / VIVID ELECTROMECH /	
	GOEL POWER / ARROW ENGINNERS	
	ABAC / ZENIT ENGINEERING Make -	
	SCHNEIDER / LEGRAND/ SIEMENS / L&T	

			/ HAVELLS		
39	EXTERNAL	1.8	EXTERNAL LIGHT PANEL	1	No.
	LIGHT PANEL		Supply,installation, testing & commissioning etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No160A MCCB, 10kA, FP /MP with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, <b>Potential Bus/Busbar 1 set - 16</b> 0A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : DRYWAY & PARKING LIGHT DB -4 No 25A TPN RCBO 1ST FLOOR LANDSCAPE LDB -1 No25A TPN RCBO WATER BODY LDB - 1 No25A TPN RCBO AMPHI THEATER LDB 1 No25A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-1- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-3- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-4- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-3- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-3- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-4- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-3- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-4- 1 No40A TPN RCBO BUILDING FACADE & LANDSCAPE LDB-3- 1 No40A TPN RCBO SPARE - 1 Nos - 40A TPN RCBO SPARE - SCHNEIDER / LEGRAND/SIEMENS / L&T / DB ELECTRICALS / UVID ELECTROM		
	EXTERNAL COMMON AREA				
	LT CABLE / LUGS /GLANDS:-				
	1.1 kV grade stranded Cu conductor, XLPE insulated, FRLSOH CABLE				

40	1.2.1	Supplying, erecting & terminating of FRLSOH armoured cable <b>2 core 4 sq mm</b> <b>copper cable</b> As directed by Engineer in	35	М
41	1.2.2	charge         Supplying, erecting & terminating of         FRLSOH armoured cable 2 core 6 sq. mm.         copper cable. As directed by Engineer in         charge	35	М
42	1.2.3	Supplying, erecting & terminating of FRLSOH armoured cable <b>2 core 10 sq. mm.</b> <b>copper cable.</b> As directed by Engineer in charge	35	М
43	1.2.4	Supplying, erecting & terminating of FRLSOH armoured cable <b>4 core 4 sq. mm.</b> <b>copper cable.</b> As directed by Engineer in charge	1000	М
44	1.2.5	Supplying, erecting & terminating of FRLSOH armoured cable <b>4 core 6 sq. mm.</b> <b>copper cable.</b> As directed by Engineer in charge	2000	М
45	1.2.6	Supplying, erecting & terminating of FRLSOH armoured cable <b>4 core 10 sq. mm.</b> <b>copper cable.</b> As directed by Engineer in charge	1000	М
1.1 kV grade stranded Al conductor, XLPE insulat FRLSOH CAE				
46	1.2.7	Supplying, erecting & terminating of FRLSOH armoured cable <b>4 core 16 sq. mm.</b> <b>aluminium cable</b> . As directed by Engineer in charge	35	М
47	1.2.8	Supplying, erecting & terminatingof FRLSOH armoured cable <b>3½</b> core <b>16</b> sq. mm. <b>aluminium cable.</b> As directed by Engineer in charge	50	М
48	1.2.9	Supplying, erecting & terminating of FRLSOH armoured cable <b>3<sup>1</sup>/<sub>2</sub> core 35 sq.</b> <b>mm. aluminium cable.</b> As directed by Engineer in charge	35	М
49	1.2.10	Supplying, erecting & terminating of FRLSOH armoured cable <b>3<sup>1</sup>/<sub>2</sub> core 50 sq.</b> <b>mm. aluminium cable.</b> As directed by Engineer in charge	35	М
50	1.2.11	Supplying, erecting & terminating of FRLSOH armoured cable <b>3<sup>1</sup>/<sub>2</sub> core 70 sq.</b> <b>mm. aluminium cable.</b> As directed by Engineer in charge	800	М
51	1.2.12	Supplying, erecting & terminating of FRLSOH armoured cable <b>3<sup>4</sup><sub>2</sub> core 95 sq.</b> <b>mm. aluminium cable.</b> As directed by Engineer in charge	35	М
52	1.2.13	Supplying, erecting & terminating of FRLSOH armoured cable <b>3<sup>1</sup>/<sub>2</sub> core 120 sq.</b> <b>mm. aluminium cable.</b> As directed by Engineer in charge	35	М
53	1.2.14	Supplying, erecting & terminating of FRLSOH armoured cable <b>3½ core 150 sq.</b> <b>mm. aluminium cable</b> . As directed by Engineer in charge	200	М
54	1.2.15	Supplying, erecting & terminating of FRLSOH armoured cable <b>3<sup>1</sup>/<sub>2</sub> core 185 sq.</b> <b>mm. aluminium cable</b> . As directed by Engineer in charge	700	М

55		1.2.16	Supplying, erecting & terminating of FRLSOH armoured cable 1100 V. <b>3½ core 240 sq. mm. aluminium cable</b> . As directed by Engineer in charge	2800	М
56		1.2.17	Supplying, erecting & terminating of FRLSOH armoured cable <b>3½core 300 sq.</b> <b>mm. aluminium cable</b> . As directed by Engineer in charge	1000	М
	Wiring for circuit/ submain wiring along with earth wire		Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLSZH insulated copper conductor wire in surface/ recessed hot dipped GI conduit as required. As directed by Engineer in charge <b>Make (WIRE)</b> - RR / FINOLEX / ANCHOR / POLYCAB / HAVELS <b>Make (CONDUIT)</b> - BEC / VIMCO / JINDAL		
57		1.3.4	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire in 20mm gi Conduit	2200	М
58		1.3.5	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire in 20mm gi Conduit	2750	M
59		1.3.6	2 X 4 sq. mm + 1 X 4 sq. mm earth wire in 25mm gi Conduit	880	М
60	perforated type cable tray	1.4.5	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 150 mm width & 75 mm height complete with necessary coupler plates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	150	M
61	perforated type cable tray	1.4.6	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 200 mm width & 75 mm height complete with necessary coupler plates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	150	M
62	perforated type cable tray	1.4.7	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 300 mm width & 75 mm height complete with necessary coupler plates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	150	M
63	perforated type cable tray	1.4.8	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 400 mm width & 75 mm height complete with necessary coupler plates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	150	M
64	perforated type cable tray	1.4.9	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 500 mm width & 75 mm height complete with necessary coupler plates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	150	М

65	ladder type cable tray	1.4.10	Providing & erecting Hot dipped galvanized ladder type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 1000 mm width & 100 mm height comprising all required standard accessories.As directed by Engineer in charge. Make - PROFAB / LEGRAND / INDANA	400	М
66	TIMER FOR LIGHT	1.5.1	Supplying installation testing and commissioning of TIMER FOR LIGHT As directed by Engineer in charge. <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS	60	EACH
67	HDPE PIPE/CONDUIT	1.9.11	Supply & laying I.S.I. mark 'B' class GI Pipe for surface / under ground cable protection As directed by Engineer in charge <b>Make</b> - BEC / VIMCO / JINDAL	50	
			20 mm dia.	50	RMtr.
			25 mm dia.	50	RMtr.
68	EXTERNAL LIGHT FIXTURE LED OUTDOOR LIGHTS	1.1.10	Supplying and erecting <b>LED flood light</b> <b>fitting of 200W, including lamp</b> , with PF > 0.95,class IP 65 and above housing of	2	Each
69	LED OUTDOOR	1.1.14	pressure die cast aluminium alloy and heat sink extruded aluminium.As directed by Engineer in charge. <b>Make</b> - PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	2	Fach
69	LIGHTS	1.1.14	Supplying and erecting highbay LED fitting IP 65 with lamp 140W-150W, CRI> 80,CCT upto 3000- 6000K, PF >0.95 duly connected complete with accessories as per specification no. FG- ODF/LED. As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	2	Each
70	LED OUTDOOR DECORATIVE LIGHTS	1.2.2	Supplying and erecting recess mounted 20W LED wall washers, tilted 70° outwards and swivels 360° to offer best illumination on the wall with any colour with driver complete. (Including Compatible Driver).As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	30	Each
71	LED OUTDOOR DECORATIVE LIGHTS	1.2.3	Supplying and erecting recess mounted 30W LED wall washers, tilted 70° outwards and swivels 360° to offer best illumination on the wall with any colour with driver complete. (Including Compatible Driver).As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	15	Each
72	LED OUTDOOR DECORATIVE LIGHTS	1.2.4	Supplying & erecting <b>12W LED PAR (30</b> <b>Lamp E-27 Base, SPOTO series) lights</b> by making necessary arrangement/recess in wall to make it flush with surface.As directed by Engineer in charge. <b>Make-</b> PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	25	Each
73	LED OUTDOOR DECORATIVE LIGHTS	1.2.5	Supplying & erecting <b>20W LED PAR (30</b> <b>Lamp E-27 Base, SPOTO series) lights</b> by making necessary arrangement/recess in wall to make it flush with surface.As directed by Engineer in charge.	20	Each

1				<b>Make</b> - PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO		
	74	LED OUTDOOR DECORATIVE LIGHTS	1.2.6	Supplying and erecting cylindrical shaped integral decorative with high power 12W- 16W LED bollard upto 1000mm with opal acrylic diffuser and IP65 protection on provided foundation complete.As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	20	Each
	75	LED OUTDOOR DECORATIVE LIGHTS	1.2.7	Supplying and erecting <b>mushroom shaped</b> integral 12W-16W LED decorative bollard upto 680mm with IP65 protection on provided foundation complete.As directed by Engineer in charge. <b>Make</b> - PHILIPS / BAJAJ	20	Each
	76	LED OUTDOOR DECORATIVE LIGHTS	1.2.8	<ul> <li>/HAVELLS / FANASOMIC / WE LED post top made in cast aluminium spigot housing with decorative clear opal acrylic diffuser and IP65 protection on provided pole/ bracket. As directed by Engineer in charge.</li> <li>Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO</li> </ul>	20	Dati

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- १) सीलबंद निविदा दि.१७/०८/२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि. 29/ ०८/२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) अनु क्रं. १ ते ३९ मधील सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी पाच वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.
- ५) अनु क्रं. ४० ते ७६ मधील सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.

पनवेल महानगरपलिका

जा.क पमपा/बांधकाम/ 2329 /प्र.क. •३/२९३२०१२०२३

G. e/ L/2023

प्रत माहितीस्तव —

१. प्रसिध्दीकरीता २. माहिती फलक करीता

# पनवेल महानगरपालिका <u>जाहीर निविदा दरपत्रक</u>

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (FIRE FIGHTING NON CSR ITEM)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

SR. NO.	ITEM	BOQ ITEM REF.	ITEM DESCRIPTION	QTY	UNIT
			FIRE FIGHTING NON CSR ITEM		
1	MAIN FIRE DIESEL PUMP	1.4	Supplying,installation,testingandcommissioning ofmain firepump(MFP / EP)suitableforwaterdischargeof2280to2850LPM at140to120m headdrivenby electricmotor415volts, 3phase50Hz, ACsupply of93kWorofsuitablekWcapacityformanual/automaticoperationandconsistingoffollowing:(MAINDIESELDRIVENPUMP)MAKE-Kirloskar/KSB / Wilo/Grundfos(a)Horizontaltype,single/multistage,centrifugal/splitcasingpump ofcastiron body&bronzeimpellerwithstainlesssteelshaft(SS410grade),mechanicalsealconforming to IS 1520.(b)Squirrelcageinductionmotor,TEFC,synchronousspeed3000RPM,suitableforoperationwith IP 55protection forenclosure,horizontalfootmountedtypewith Class-'F'insulation, conforming to IS-325.(c)M.S. fabricatedcommon base plate, coupling,coupling,coupling,coupling,coupling,couplingguard,foundationboltsetc.asrequired.(d)Erectedonprovidedsuitablesizecementconcrete	1.00	SET

			No of store proformed single (my)!	
			No. of stage preferred - single/multi	
			Speed RPM - 3000	
			Material of construction	
			a) Impeller - Bronze	
			b) Casing - C.I.	
			c) Shaft & Shaft Sleeve - SS-410	
			d) Bearing - Grease Lubicated	
			e) Seal & Make - Mechanical	
			Type of pump - End suction	
			Main Fire Control Electrical Panel (With Fire	
			Gas suppression Arrangement)- DB	
			Electricals/VIVID Electromech/ GOEL	
			Power/Arrow Engineers/ Zenit	
			Design, manufacture, supplying, fixing in position, testing and commissioning of the	
			following front operated cubicle type, front	
			access 2mm thick steel enclosed free standing,	
			dust and vermin proof, switchboard with IP 52	
			protection with hinged and lockable doors	
			complete with interconnections, tinned copper crimping lugs, bonding to earth and painting,	
			suitable for use at 415 volts, 3 phase 4 wire 50	
			Hz system and suitable for a fault level of 25	
			MVA symmetrical at 415 volts with a suitable	
			power capacitor to improve power factor, and	
			Automatic Fire suppression gas flooding system complete with Perfluoro Ketone (FK-5-1-12)/	
			HFC 227ea, DLP Assembly with automatic valve,	
			push in connector for tube,Perfluoro Ketone (FK-	
		1.6	5-1-12)/ HFC 227ea, mounting bracket, End of	
		1.0	Line adopter and low pressure switch for	
			monitoring system activation.Perfluoro Ketone (FK-5-1-12)/ HFC 227ea gas of suitable capacity	
			, Heat detection tube as required and A/V alarm	
	FIRE		with all necessary installation to complete the	
2	CONTROL		system as per specifications.or as directed etc.	
4	ELECTRICAL		All switchboards shall have provision for entry of	
	PANEL		cables from the top or bottom as required. All live accessible parts shall be shrouded and all	
			equipment shall be finger touch proof. The	
			busbars insulation shall be with heat shrinkable	
			sleeves. SMC/DMC shrouds and busbar	
			supports shall be used. Padlocking facility shall	
			be provided on all outgoing feeders doors and switch handles shall be locakble in OFF	
			position. Interlocking arrangement shall be	
			provided such that when Main Pump starts	
			Jockey Pump should stop and vice versa.	
			Switcgear make:-	
			Schnieder/Legrand/Siemens/L&T	
		1.6.1	INCOMER	
			1 Nos.630 amps 4P incoming microprocessor	
			based 4P MCCB with following accesories:	
		1.6.2	Metering	
			1 set 0-500 volts digital electronic volt meter	
			with selector switch protected by 2 amps TP	
			MCB's.	
			0-400 Amps digital electronic ammeter with selector switch and 400/5 amps 15 VA, CL 1	
			CTs.	
Ì			1 No KWH meter with suitable CT's.	
				1

					-
			Phase indicating light protected by 2 amps SP MCB's.		
		1.6.3	BUSBAR		
			630 amps TPN aluminium bus bars (36 KA for 1 sec.) with coloured heat shrinkable insulated		
		1.6.4	sleeve. OUTGOING UNITS		
		1.0.4			
			Diesel engine battery charger: - 25 Amp. TPN MCCB ,36 KA		
		1.6.5	Hydrant Main Pump		
			1 Nos 250 amps TP MCCB of 36 kA breaking capacity with 111 kW SOFT starter. These compartment shall contain CT operated digital ammeter of 0-400 amps range with selector switch, and an indicating lamp with 2A SP MCB		
		1.6.6	Hydrant Jockey Pump		
			1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter . These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB		
			Interlocking arrangement shall be provided such that when Main Pump starts Jockey Pump should stop and vice versa.		
		1.6.7	Sprinkler Main Pump		
			1 Nos 250 amps TP MCCB of 36 kA breaking capacity with 111 kW SOFT starter. These compartment shall contain CT operated digital ammeter of 0-400 amps range with selector		
			switch, and an indicating lamp with 2A SP MCB		
		1.6.8	Sprinkler Jockey Pump		
			1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector		
		1.6.9	1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital		
			1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB		
			1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB <b>For charging Deisel Engine Battery</b>	2.00	Nos.
		1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER</li> </ul>	2.00	Nos.
		1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER PUMP ELECTRICAL PANEL</li> <li>INCOMING (FEEDER FROM COMMON AREA MAIN PANEL)</li> <li>1 Nos. 63 amps TP incoming TM based TP MCCB with following accessories:</li> </ul>	2.00	Nos.
2	BOOSTER PUMP	1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER PUMP ELECTRICAL PANEL</li> <li>INCOMING (FEEDER FROM COMMON AREA MAIN PANEL)</li> <li>1 Nos. 63 amps TP incoming TM based TP MCCB with following accessories:</li> <li>1 set 0-500 volts digital electronic volt meter with selector switch protected by 2 amps DP MCB's.</li> </ul>	2.00	Nos.
3		1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER PUMP ELECTRICAL PANEL</li> <li>INCOMING (FEEDER FROM COMMON AREA MAIN PANEL)</li> <li>1 Nos. 63 amps TP incoming TM based TP MCCB with following accessories:</li> <li>1 set 0-500 volts digital electronic volt meter with selector switch protected by 2 amps DP MCB's.</li> <li>0-100 Amps digital electronic ammeter with selector switch and 400/5 amps 15 VA, CL 1 CTs.</li> </ul>	2.00	Nos.
3	PUMP ELECTRICAL	1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER PUMP ELECTRICAL PANEL</li> <li>INCOMING (FEEDER FROM COMMON AREA MAIN PANEL)</li> <li>1 Nos. 63 amps TP incoming TM based TP MCCB with following accessories:</li> <li>1 set 0-500 volts digital electronic volt meter with selector switch protected by 2 amps DP MCB's.</li> <li>0-100 Amps digital electronic ammeter with selector switch and 400/5 amps 15 VA, CL 1</li> </ul>	2.00	Nos.
3	PUMP ELECTRICAL	1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER PUMP ELECTRICAL PANEL</li> <li>INCOMING (FEEDER FROM COMMON AREA MAIN PANEL)</li> <li>1 Nos. 63 amps TP incoming TM based TP MCCB with following accessories:</li> <li>1 set 0-500 volts digital electronic volt meter with selector switch protected by 2 amps DP MCB's.</li> <li>0-100 Amps digital electronic ammeter with selector switch and 400/5 amps 15 VA, CL 1 CTs.</li> <li>Phase indicating light protected by 2 amps SP</li> </ul>	2.00	Nos.
3	PUMP ELECTRICAL	1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER PUMP ELECTRICAL PANEL</li> <li>INCOMING (FEEDER FROM COMMON AREA MAIN PANEL)</li> <li>1 Nos. 63 amps TP incoming TM based TP MCCB with following accessories:</li> <li>1 set 0-500 volts digital electronic volt meter with selector switch and 400/5 amps 15 VA, CL 1 CTs.</li> <li>Phase indicating light protected by 2 amps SP MCB's.</li> </ul>	2.00	Nos.
3	PUMP ELECTRICAL	1.6.9	<ul> <li>1 Nos 63 amps TP MCCB of 36 kA breaking capacity with 11.2 kW Star delta starter. These compartment shall contain CT operated digital ammeter of 0-63 amps range with selector switch, and an indicating lamp with 2A SP MCB</li> <li>For charging Deisel Engine Battery</li> <li>25 amp DP MCB 25 kA breaking capacity</li> <li>OUTDOOR TYPE FIRE FIGHTING BOOSTER PUMP ELECTRICAL PANEL</li> <li>INCOMING (FEEDER FROM COMMON AREA MAIN PANEL)</li> <li>1 Nos. 63 amps TP incoming TM based TP MCCB with following accessories:</li> <li>1 set 0-500 volts digital electronic volt meter with selector switch protected by 2 amps DP MCB's.</li> <li>0-100 Amps digital electronic ammeter with selector switch and 400/5 amps 15 VA, CL 1 CTs.</li> <li>Phase indicating light protected by 2 amps SP MCB's.</li> <li>100 amps TPN aluminium bus bars (16 KA for 1 sec.) with coloured heat shrinkable insulated</li> </ul>	2.00	Nos.

			Booster fire Pump		
			1 Nos 63 amps TP MCCB of 16 kA breaking capacity with Star-Delta starter (type 2 co ordination chart shall be refered for starters). These compartment shall contain CT operated digital ammeter of 0-100 amps range with selector switch, and an indicating lamp with 2A SP MCB		
4	PUSH BUTTON	1.30	Providing, installation, testing, & commissioning of 63 amp. Push button station suitable for out door <b>,with out starter</b> for fire fighting terrace pump by pass manual operation (start and stop) and to be located at ground floor level and terrace level complete in all respects. Local Push Button station:- DB Electricals/VIVID Electromech/ GOEL Power/Arrow Engineers/ Zenit	2.00	Set
_	Neoprene Flexible Pipe	1.31	Providing and fixing reinforced Neoprene flexible pipe connectors with all accessories on all pumps delivery.		
5		1.31.1	80 mm	4.00	Each
		1.31.2	150 mm	10.00	Each
6	MOTORISED VALVE	2.8	Providing and fixing <b>Motorised valve</b> suitable for 240 Volts , with suitable motorised rotor and control panel , to operate gravity line from OH Fire Tank to Low Level Wet Riser <b>Motorised</b> <b>valve</b> make:-Belimo /Honeywell /Siemens/L&T	2.00	Each
7	SINLE OUTLET HYDRANT VALVE	2.23	Supplying and erecting <b>floor mounted</b> stainless steel single outlet hydrant valve fitted with necessary accessories complete as per specification no. FF-VL/HV. Supplying fire fighting reinforced rubber lined (R.R.L.) hose pipe, 63mm dia, 15m in length, fitted with necessary accessories complete as per specification no. FF-FFA/RRL <b>Fire Brigade</b> <b>Header make- Indian Rayon/Newage/ safex</b>	9.00	Each
8	FIXED TYPE WATER MONITER	2.24	Supply ,installation ,testing and commissioning of Fixed type Water Monitor, 50 Mtr throw,63 mm,with 2 no, Gunmetal or Stainless Steel Swivel Joints with Ball Bearing, Tiller Bar fixed on the Barrel ,threaded Locks ,for flow direction control Water Monitor MAKE- Indian Rayon/Newage/ Safex	2.00	Each
9	GUNMETAL BALL VALVE	3.14	Providing & fixing 25 mm dia gunmetal inspecting & testing assembly with ball valve (3 nos.), 25mm sight glass, by pass valve & connected to drain line. <b>Ball Valve</b> <b>make:Leader /Sant/Zoloto</b>	55.00	Each
10	UPRIGHT SPRINKLER	3.16	15 mm dia. quartzoid bulb type <b>G. M upright</b> <b>sprinkler head K 5.6/80</b> set to operate at 68 Deg.C, UL/FM Approved and as per IS 9972. <b>make:-Tyco / Grinnel/Newage/HD</b>	2319.00	Each
11	SIDE WALL SPRINKLER	3.17	15 mm dia. quartzoid bulb type <b>G. M side wall</b> sprinkler head K 5.6/80 set to operate at 68 Deg.C, UL/FM Approved and as per IS 9972. make:-Tyco / Grinnel/Newage/HD(FOR PROVISION)	38.00	Each

12	QUICK RESPONSE PENDENT SPRINKLER 68 DEG.	3.18	15 mm dia. quartzoid bulb type <b>G. M Quick</b> <b>Response Pendent sprinkler head K 8/115</b> set to operate at 68 Deg.C, UL/FM Approved and as per IS 9972. <b>make:-Tyco /</b> <b>Grinnel/Newage/HD</b>	253.00	Each
13	QUICK RESPONSE PENDENT SPRINKLER 93 DEG.	3.19	15 mm dia. quartzoid bulb type G. M Quick Response Pendent sprinkler head K 8/115 set to operate at 93 Deg.C, UL/FM Approved and as per IS 9972. make:-Tyco / Grinnel/Newage/HD(FOR KITCHEN AND PANTRY AREA)	46.00	Each
14	FLEXIBLE BRAIDED DROPER PIPE 1500 MM	3.20	Providing and fixing flexible braided dropper pipes upto 1500 mm length from ceiling with necessary reducer coupling (dropper length specified to deflector of sprinkler) etc complete. Flexible dropperb pipe make- Indian Rayon/Newage/ safex	1600.00	Each
15	FLEXIBLE BRAIDED DROPER PIPE 1000 MM	3.21	Providing and fixing flexible braided dropper pipes upto 1000 mm length from ceiling with necessary reducer coupling (dropper length specified to deflector of sprinkler) etc complete. Flexible dropperb pipe make- Indian Rayon/Newage/ safex	1200.00	Each
16	WATER FLOW DETECTOR	3.25	Supplying & erecting vane type water flow detector suitable for detecting flow of water in wet sprinkler pipe of main line or branch lines of 150 mm dia having following features 1) Visual Switch Activation 2) Rugged Switch Assembly 3) Heavy Duty Alluminium pipe Saddles 4) Durable Metal Encloser 5) Steel U Bolts For Secure Mounting 6) Two SPDT (Single Pole Double Track) Synchronised Switches 7) Serviceable Without Draining Pipes. Water Flow detecter/Flow switch:Siemens / Honeywell / Johnson Control	26.00	Each
17	CONTROL VALVE	3.26 3.26.1	Providing, Installation, testing and commissioning of <b>Control Valve</b> inclusive of : (for each phase) Control/alarm valve make:- Newage/ HD Fire/ Mather & Platt/Ascoa Sprayface Alarm Valve with Water Motor Gong	1.00	Each
		3.26.2	Glycerin filled Pressure gauge and other miscellaneous		
		3.26.3	Valves and fittings as required.		
18	DELUGE VALVE	4.9	<b>Deluge valves</b> of PN16 Rating with tamper Switch, accessories, Tap off Socket Arrangement as Required, Potential free contact with 2 nos. NO / NC, complete as per the technical specifications and drawings. Rates shall be inclusive of galvanised bolts, nuts and washers and gaskets. <b>Deluge valve MAKE- Indian Rayon/Newage/</b> <b>Safex</b>		
		4.9.1	80 mm	4.00	Each
		4.9.2	100 mm	0.00	Each
19	WATER CURTAIN NOZZLE	4.11	Water Curtain Nozzle K23, with 15mm Dia end connection complete as per Technical Specifications and Drawings. Nozzle shall be of brass construction, chrome finish with orifice not less than 6mm.Nozzles shall be UL Listed / FM approved. Water Curtain nozzel MAKE:- Tyco / Grinnel/Newage/HD	165.00	Each

	ADO		Completing and anothing ADO mender to the	02.00	E - 1-
20	ABC POWDER TYPE EXTINGUISH ER	5.1	Supplying and erecting <b>ABC powder type fire</b> <b>extinguisher</b> as per IS : 13849 /15683 of 6 kg capacity with necessary clamp for erection on wall. <b>Extiguisher make:-Jainax Fire /</b> <b>Safeguard/ Safex/ Ceasefire</b>	93.00	Each
21	FIRE BUCKET	5.3	Providing Round bottom <b>FIRE Bucket</b> of 9 Litres capacity as per IS : 2546 made out of 24 gauge G.I. sheet with extra handle at bottom duly painted white inside and red outside with FIRE Mark, on provided stand/ wall hook. <b>Make: Indian Rayon/Newage/ Safex</b>	6.00	Each
22	FLOOR MOUNTING STAND FOR FIRE BUCKET	5.4	Providing Floor mounting stand for keeping 4 Nos. of FIRE buckets 1500mm in length, 900mm in height frame made out of 30x30x4 mm angle iron with cross supports for legs, welded with 4 hooks and duly painted with one coat of red lead and two coats of silver paint. <b>Make: Indian Rayon/Newage/ Safex</b>	8.00	Each
23	WALL HOOK FOR FIRE BUCKET	5.5	Supplying and erecting Wall hook 225 mm projection for keeping fire buckets made out of 15 mm dia. M.S. Rod grouted in wall to a depth of minimum 15cms. <b>Make: Indian</b> <b>Rayon/Newage/ Safex</b>	8.00	Each
24	FIRST AID BOX	5.6	Supplying standard <b>first aid box</b> with necessary antiseptic cream, medicine for use on wounds due burn, crepe bandage, gauge bandage,medicated ready to use bandage (Band- aid) adhesive tape for medicinal use, scissors, antiseptic solution (Savlon or similar) etc. (All above contents shall be of standard makes) <b>Make:-Jainax Fire / Safeguard/ Safex/</b> <b>Ceasefire</b>	9.00	Each
25	DCP TYPE FIRE EXTINGUISH ER	5.7	Supplying and erecting <b>D.C.P. type Fire</b> <b>Extinguisher</b> 9 kg capacitycartridge type with Gun Metal cap 150 gram CO2 gas cartridge, powder and brackets conforming to IS 2171- 1985 and complete erected with necessary clamps made from 50x6 mm M.S. flat with nuts & bolts grouted in wall complete.(1 @ each LMR room). <b>Make:-Jainax Fire / Safeguard/ Safex/</b> <b>Ceasefire</b>	18.00	Each
26	BRATHING APPARATUS	5.8	BreathingApparatuscomprisingof:a)BackplatewithDemandValveb)Siliconefullfacemaskc)CarbonCompositecylinderwithMSA valve.Make:-Newagefire/ShrijitFire/NishantEnter.	1.00	Set
27	LIASIONING AUTHORITY	5.9	Liasioning Work For fire fighting works of Mumbai Municipal Corporation including getting all necessary permissions & approvals from them all complete.	1.00	Lot

- १) सीलबंद निविदा दि. १० / ०८ / २०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- प्राप्त झालेल्या निविदा शक्यतो दि. २१ / ०८ / २०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- ३) अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.

४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे. प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.

**पनवेल** महानगरपलिका

जा.क पमपा/बांधकाम/ 2321 /प्र.क्र. ७३/ १९३२(३)२०२३

दि. e / /२०२३

प्रत माहितीस्तव —

१. प्रसिध्दीकरीता २. माहिती फलक करीता

# पनवेल महानगरपालिका <u>जाहीर निविदा दरपत्रक</u>

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे ''स्वराज्य'' मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (GAS Suppression System)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

SR. NO.	ITEM	REFF ITEM	ITEM DESCRIPTION	QTY	UNIT
			GAS SUPPRESSION SYSTEM		
	Gas Suppression system		NOTE:- ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.Supply ,installation,testing and commssioning of Gas Suppression system :- Inert Gas System (IG - 541) Clean Agent		
			System (300 bar) for server room (6.4 MTR X 5.4 MTRx3.0 MTR HT) Make: Johnson controls, Fire Safe technologies LLP & MSD Control		
			Filled Cylinders, including reserve cylinders (300 Bar working pressure) wilh valves, lnertech Pressure Controllers, lnertech Check Valves, Pressure switches, Pneumatic Actuators, Solenoid Actuators, Discharge Hoses, Actuation hoses, Discharge Pressure Swilches & Inertech Nozzles, piping,manifold, gas release panel, battery		
		1	and battery charger, warning sign etc. Fire Suppression System comprising	1	Lot
1	Inert Gas System (IG - 541) Gas cylinder	1.1	following items Inert Gas System (IG - 541) Gas cylinder c/w discharge valve, pressure gauge with Pressure Switch, Integrated solenoid & syphon tube.	2	Nos.
2	Inert Gas System (IG - 541)	1.2	Inert Gas System (IG - 541)	200	Kgs
3	Manual Pneumatic Actuator	1.3	Manual Pneumatic Actuator	2	Nos.
4	Pneumatic Actuator	1.4	Pneumatic Actuator	2	Nos.
5	Discharge Flexible Hose	1.5	Discharge Flexible Hose	2	Nos.

6	Pilot Hose	1.6	Pilot Hose	2	Nos.
7	Check valve	1.7	Check valve.	2	Nos.
8	Discharge Pressure switch	1.8	Discharge Pressure switch	1	Nos.
9	Discharge Nozzle Brass	1.9	Discharge Nozzle Brass	3	Nos.
10	Cylinder Manifold	1.10	Cylinder Manifold	2	Nos
11	2 Way Manifold	1.11	2 Way Manifold	1	Nos
12	Cylinder Clamp & Brackets.	1.12	Cylinder Clamp & Brackets.	4	Nos
13	Gas Discharge Indicator	1.13	Gas Discharge Indicator	1	Nos
14	Seamless	1.14	Seamless pipes as per ASTM A106 Gr B, Sch 40	1	Lot
15	Pipe Fittings	1.15	Pipe Fittings	1	Lot
16	Gas Release Unit	1.16	Gas Release Unit	1	Nos
17	Gas Inhibit Unit	1.17	Gas Inhibit Unit	1	Nos
18	Single Area Gas Release Panel	1.18	Single Area Gas Release Panel With Main & Standby Selector Switch and Battery backup	1	Nos
19	Horn With Flashing Lamp	1.19	Horn With Flashing Lamp	2	Nos
20	Warning sign	1.20	Warning sign (inside the room).	1	Nos
21	Warning sign	1.21	Warning sign (outside the room).	1	Nos
22	PVC insulated FRLS CU Cable.	1.22	2c x 1.5 sq.mm Cu conductor PVC insulated FRLS Cable.	150	Mtr
23	SITC of above items complete,	1.23	SITC of above items complete, etc as per the Engineer Incharge. Make: Johnson controls, Fire Safe technologies LLP & MSD Control	1	Lot

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- सीलबंद निविदा दि.१०/०८/२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि. 2१/ ७ ८/२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- ३) अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करपयाचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.

> शहर आभयता पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/ 2329 /प्र.क्र. 03/२९३२(४)२०२३

दि. ९/ ८/२०२३

प्रत माहितीस्तव —

१. प्रसिध्दीकरीता २. माहिती फलक करीता

## पनवेल महानगरपालिका <u>जाहीर निविदा दरपत्रक</u>

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे ''स्वराज्य'' मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (IoT Based IBMS)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

SR. NO.	ITEM	REFF ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
			BMS & IBMS		
			NOTE:- ALL ITEM RATES SHOULD CONSIST OF THREE YEARS DEFECT LIABILITY PERIOD INCLUDING WARRANTY/GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.		
			Intelligent Building Management System,Wi fi based ,IoT & CLOUD BASED , WEB EX reports , ,JOHNSON CONTROL/ SIEMENS/ HONEYWLL/SCHNEIDER/L&T/PANASONIC /75 FSMART INNOVATION/MSD CONTROL/ENLITE		
1	IoT & Cloud BASED SOFTWARE	1	Supply, installation, testing and commissioning of IoT & Cloud BASED SOFTWARE(CLOUD ENABLED),Web ex , and also providing sufficient Cloud space for all the DATA/Error codes/WEB EX reports	1	Lot
			Necessary Buliding Management System Software and Software license as required to execute the all required function, Cloud data, Cloud reports, necessary dynamic graphics and building plans, Energy Management System, IBMS Programme, alarms, trends, reports, as per specifications, as directed, complete, etc. MAKE:- JOHNSON CONTROL/ SIEMENS/ HONEYWLL/SCHNEIDER/L&T/PANASONIC /75F SMART INNOVATION/MSD CONTROL//ENLITE		

			Quantity of IO points as per IO summary enclosed (Approximately -2700 ANALOUGE/DIGITAL POINTS +11000 SOFT POINTS), THE SOFWARE SHOULD BE ABLE TO GENERATE THE CLOUD ELIPTICAL REPORTS, WEB EX Reports AND SHOULD HAVE LIMITED REMOTE ACCESS		
	INTEGRATION		INTEGRATION		
			Integration of standalone Systems with BMS (All hardware and software required for integration with the specific standalone system with BMS shall be supplied by respective contractor) for the below listed, HVAC Systems -Chillers,pumps,cooling tower,hrw, AHUs , Fans,VFD,etc. VRV System		
			ELECTRICAL FEEDERS		
			UPS/BATTERY DG SET/HSD TANK/PUMPS		
			LIFTS/ESCALATOR		
			ENERGY METERS		
			VFD		+
			PLUMBING PUMPS		
		<u> </u>	OWC		
			TANK LEVELS		
			STP EQUIPMENTS		
			FIRE ALARM SYSTEM & FLOW SWITCHES		
			VAV Boxes - 250 nos.		
			Cooling tower water treatment system		
			Condensor auto tube cleaning system		
			3RD PARTY SCADA SYSTEM		
2	Work station along with furniture in existing BMS room	2	Supply, installation, testing and commissioning of Work station along with furniture in existing BMS room, as per specifications , as directed , complete , etc. MAKE: - HP / DELL / LENOVO / LG / SAMSUNG	1	Set
3		2.1	Client Workstation with Output to		
4		2.2	Processer type - Core i7		
5		2.3	Xeon 2.13 / 2.4 GHz Processor		
6		2.4	8 GB RAM		
7		2.5	Dual / four port NVIDIA display card		
8		2.6	1 TB HDD		
9		2.7	Built in DVD R/W drive		
10		2.8	Gigabit TCP/IP port		
11		2.9	Windows		
12		2.10	1 Nos. of 32" Network based LED monitor along with accessories for table mount		
13	CABLES	3			

14		3.1	Supply and laying Control Cables of following		
		0.1	Armoured FRLS polyethylene insulated PVC		
			sheathed overall the shielded twisted		
			multistranded annealed tinned copper as per		
			specifications ,as directed ,complete , etc., to		
			match BMS as required at site.conductor cable		
			CONTROL CABLE MAKE: -		
			RR/FINOLEX/POLYCAB LV CABLES MAKE:-		
			LV CABLES MAKE:- SYSTIMAX/MOLEX/LEGRAND/D-		
			LINK/CLIPSAL/AMP NET CONNECT		
15	FRLS Cable.	3.1.1	2C x 1.5sqmm, ATC Conductor, Polyethylene	1100	RMT
10	TRES Cable.	0.1.1	insulaton, Shielded, Armoured(0.9mmGI), FRLS Cable.	1100	
16	FRLS Cable.	3.1.2	2 Core 1.5Sq.mm Communication Armoured(0.9mmGI), FRLS Cable.	11000	RMT
17	FRLS Cable.	3.1.3	4C x 1.5sqmm, ATC Conductor, Polyethylene insulaton, Shielded, Armoured(0.9mmGI), FRLS Cable	8500	RMT
18	FRLS Cable.	3.1.4	6C x 1.5sqmm, ATC Conductor, Polyethylene	7500	RMT
			insulaton, Shielded, Armoured(0.9mmGI), FRLS Cable.		
19	FRLS Cable.	3.1.5	8C x 1.5sqmm, ATC Conductor, Polyethylene	300	RMT
			insulaton, Shielded, Armoured(0.9mmGI),		
			FRLS Cable.		
20	FRLS Cable.	3.1.6	2 Core 1.5Sq.mm RS485 Communication	7500	RMT
01	DIDECT	6	Armoured (0.9mmGI), FRLS Cable.		
21	DIRECT DIGITAL	6	DIRECT DIGITAL CONTROLLER(DDC), loT &		
	CONTROLLER(		CLOUD Based as per specifications ,as directed ,complete , etc.		
	DDC),		MAKE:- JOHNSON CONTROL/ SIEMENS/		
			HONEYWLL/SCHNEIDER/L&T		
			/PANASONIC/75 F SMART		
			INNOVATION/MSD CONTROL//ENLITE		
22			DDC CONTROLLERS: Supply, Installation,		
			Testing and Commissioning of IP Based DDC		
			controllers. UL and BTL Automation stations /		
			DDC Controller. The controllers shall be 32 bit		
			microprocessor based standalone with real		
			time clock. The DDC's shall be capable of peer		
			to peer communication with other DDCs on		
			the basis of master & slave topology. Also it		
			should come up with lockable MS mounting		
			cabinets duly powder coated connector strip,		
			internal wiring and space to house controller		
			& relays, connector strip current transformer,		
			MCB, internal wiring. (Contractor shall		
			confirm his I/O provision w.r.t requirement on basis of data point). DDCs requiring more		
			than 2 additional Plug in type IO Module cards		
			or expansion modules to suffix the		
			requirement of required inputs/outputs are		
			not acceptable. Use of AI to DI multiplexer is		
			also not acceptable. DDCs shall be compact		
			factory fitted with IO Points.as per		
L			specifications ,as directed ,complete , etc.		
23	HVAC	6.1	HVAC SYSTEM / AIR HANDLING UNIT / FANS-	1	Lot
	SYSTEM /AIR		Refer IO Summary		
	HANDLING				
	UNIT /FANS-				
	Refer IO				
	Summary				1

24			Providing, installation, testing &		
25	Electrical panels Feeders	6.2	Providing, installation, testing & commissioning of programmable controller (Imported) having latest processors RS 485/ BACNET/ MODBUS/RS232 compatible, controller shall support easy Graphical Programming and shall be able to store the programme in the controller. rather than sote it in P.C. including Lockable Mounting Cabinets/Enclosures duly powder coated, connector strip, internal wiring, Terminal blocks, MCPs as per specifications , as directed , complete , etc. (Contractor shall mention Qty. of controller on basis of IO Point) Electrical panels Feeders PANEL Refer IO Summary	1	Lot
	PANEL Refer IO Summary				
26			Providing, installation, testing & commissioning of programmable controller (Imported) easy Graphical Programming and shall be able to store the programme in the controller.rather than sote it in P.C. including Lockable Mounting Cabinets/Enclosures duly powder coated, connector strip, internal wiring, Terminal blocks, MCPs etc. as per specifications ,as directed ,complete , etc(Contractor shall mention Qty. of controller on basis of IO Point)		
27	PHE System	6.3	PHE System Refer IO	1	Lot
	Refer IO Summary(Pum ps/OWC/STP)	0.0	Summary(Pumps/OWC/STP)	1	Dot
28			Providing, installation, testing & commissioning of programmable controller (Imported) having latest processors RS 485/ BACNET/ MODBUS/RS232,compatible, controller shall support easy Graphical Programming and shall be able to store the programme in the controller. rather than sote it in P.C. including Lockable Mounting Cabinets/Enclosures duly powder coated, connector strip, internal wiring, Terminal blocks,MCPs etc. as per specifications ,as directed ,complete , etc. (Contractor shall mention Qty. of controller on basisof IO Point) Note:		
			Independent DDC should be provided for all AHUS DDC of AHUS should have Analog signal (4-20 / 2-10 V)/(0-20 / 0-10 V) for taking DPT value as required. BTU meters should be with all communications/converters etc. as requireed to complete the system. The items indicated above are probable and main items. The vendor to include all allied and implied items and required quantity for complete BMS system, as indicated in various areas of BOQ. 15 % spares to be added/kept for I/O's at each stage ,as per specifications ,as directed ,complete , etc		
29	INTEGRATION & ROUTER/GAT EWAY	7.00	Supply, installation, testing, commissioning /INTEGRATION & ROUTER/GATEWAY, as per specifications, as directed, complete, etc MAKE:- JOHNSON CONTROL/ SIEMENS/ HONEYWLL/ SCHNEIDER/L&T	1	Lot

				1	
			/PANASONIC/75 F SMART INNOVATION/MSD CONTROL//ENLITE		
30			1 NO. CHILLER PLANT MANAGER		
31			53 NOS. VRV ODU AND 78 NOS. VRV IDU UNITS		
32			3 NOS. UPS		
33			4 NOS. DG SETS		
34			16 Nos. Lifts/Escalators		
35			140 NOS. KWH Energy meters with RS-485 Ports(All meters in the system must be capable of reporting hourly, daily, monthly, and annual energy use.		
36			FIRE ALARM PANELS AND CM OF FLOW SWITCHES		
37			VAV Boxes - 250 nos.		
38			Cooling tower water treatment system		
39			Condensor auto tube cleaning system		
40 41			3RD Party SCADA System The 3rd party Integration unit shall provide		
			the interface between Ethernet LAN and the 3rd party field control devices or any other devices which need to be integrated. These shall also provide supervisory capability of functions over the devices connected to it. The purpose of using these units should be limited to integrate devices only, not for any DDC interface with GUI, provided by others. The Unit must provide the following hardware features as a minimum: a. Two No. on Board RS-485 port b. Provision to include / add additional communication card c. Two onboard Ethernet port d. 4GB memory The Integration unit shall provide flexibility of adding communication ports (RS485) by adding communication cards, minimum one slot, when required rather than adding additional unit itself. The Integration unit should have inbuilt memory for program storage. The Unit must communicate over TCP/IP with communication speed of 10/100MBPS. The Integration unit should be capable of handling multiple protocol simultaneously and should not be restricted to single protocol such as Bacnet, Modbus, M-Bus, KNX, SNMP.All integrators should be mandatorily BTL listed.		
42	FILED EQUIPMENTS	8	FILED EQUIPMENTS		
43			Supply, Installation, testing & Commissioning of following Field Equipments ,as per specifications ,as directed ,complete , etc MAKE:- JOHNSON CONTROL/ SIEMENS/ HONEYWLL/SCHNEIDER/L&T /PANASONIC/75 F SMART INNOVATION/MSD CONTROL//ENLITE		
44		8.1	WATER SIDE TEMPERATURE SENSOR Immersion Temperature Sensor with SS thermowell (Pipe mounted,water side)	32	Nos.
45		8.2	OUT DOOR DATA - TEMP/HUMIDITY	1	Nos.

46		8.3	BTU Meter ( 600 US GPM CAPACITY)	2	Nos.
47		8.4	BTU Meter (250 US GPM CAPACITY)	1	Nos.
48		8.5	DP SWITCH (WATER SIDE)	18	Nos
49		8.6	WATER SIDE DP SENSOR/TRANSMITTER	4	Nos.
50		8.7	MULTI LEVEL SENSOR FOR WATER TANK- FLOAT TYPE (3 LEVELS-HIGH/MEDIUM/LOW)	10	Nos
51		8.8	DP Switch (Duct mounted type) For AHU and HRW	67	Nos
52		8.9	AIR SIDE DP SWITCH FOR PRE FILTERTER	85	Nos
53		8.10	AIR SIDE DP SWITCH FOR MERV 8 FILTER	12	Nos
54		8.11	AIR SIDE DP SWITCH FOR COMBINE MERV 8 & 13 FILTER	55	Nos
55		8.12	Duct Temperature Sensor ( SUPPLY SIDE TO CONTROL PICV VALVE)	43	Nos.
56		8.13	Duct Temperature /RH Sensor IN HRW - MONITORING	44	Nos.
57		8.14	CO2 SENSER FOR HRW VFD CONTROL AND MONITORING	61	Nos
58		8.15	FLAME PROOF LEVEL SENSER	9	Nos
59		8.16	FLAME PROOF LIQUID DP SWITCH	6	Nos
60	10/100/1000 Base-T Switch	10	Supply, Installation, Testing & Commissioning of 10/100/1000 Base-T Switch with IP multicast snooping and data-driven IGMP support and with 1000 baseT FO uplink ports and all related termination accessories as per vendor specific System requirement, as per specifications , as directed , complete , etc.(Pigtail,Sleeve, Patch Chords, termination etc.) MAKE :- NETGEAR GSM / ZYXEL /DIGISOL /LEGRAND /CISCO		
61	12 Port Switch	10.2	12 Port Switch	12	Nos

	FAS SYSTEM							
1.1		FIRE ALARM SYSTEM TO BE INTEGRATED WITH IBMS SYSTEM						
1.1.1	MCGM : R2-ME- 15-32-e	Intelligent Heat Detector	250.00	Each				
1.1.2	MCGM : R2-ME- 15-32-d	Intelligent Photoelectric Smoke Detector	935.00	Each				
1.1.3	MR-LV-04	Addressable Photo electric ABOVE CELING Smoke Detector.	805.00	Each				
1.1.4	MR-LV-09	Addressable Intelligent Multi Sensor Detector Make: NOTIFIER/HONEYWELL/MORLEY/SIEMENS/ EDWARD/L&T	210.00	Each				
1.1.5		Addressable Beam Detector	10.00	Each				
1.1.6	MCGM : R2-ME- 15-32-h	Addressable Manual Call Point	100.00	Each				
1.1.7	MR-LV-05	LPG Gas Detectror	5.00	Each				
1.1.8	MCGM : R2-ME- 15-32-j	Remote response indicator	805.00	Each				
1.1.9	MCGM : R2-ME- 15-32-1	CONTROL RELAY for GAS DETECTOR	5.00	Each				
$\begin{array}{c} 1.1.1 \\ 0 \end{array}$	MCGM : R2-ME- 15-32-k	Fault Isolator Module	140.00	Each				

1.1.1	Magni			
1.1.1 1.1.1	MCGM : R2-ME- 15-32-i	HOOTER	100.00	Each
2	MCGM: R2-ME- 15-32-1	Addressable Control Module for HOOTER	100.00	Each
1.1.1 3	MCGM: R2-ME- 15-32-1	Addressable Relay Module for PA system integration.	15.00	Each
1.1.1 4	MCGM : R2-ME- 15-32-1	Addressable Relay Module for Lift integration.	18.00	Each
$1.1.1 \\ 5$	MR-LV-06	MAIN FIRE PANEL : Supply, Installation, testing & Commissioning of Microprocessor based 12-loop panel ,	3.00	Each
1.1.1 6	MR-LV-07	Repeater Fire Panel : Supply, Installation, testing & Commissioning of Microprocessor based 12-loop panel,	3.00	Each
1.1.1 7	MR-LV-08	Addressable Monitor Module	200.00	Each
1.1.1 8	MR-LV-10	CM for Flow detector/flowswitch(on Floor Sprinkler branches)	50.00	Each
		TOTAL OF FIRE ALARM SYSTEM :-		
1.2		FIRE FIGHTER TELEPHONE SYSTEM:-		
1.2.2	MCGM : R2-ME- 15-32-1	Addressable Control Module for fire fighter telephone jack.	75.00	Each
1.2.3	MR-LV-10	Fire Fighter's Telephone Handset for two way communication between Remote Fire Fighter & Fire Command Center	14.00	Each

### अटी व शर्ती:

- श) सीलबंद निविदा दि. % / 
   ८/२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि. 29 /o //२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- ३) अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी
- साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.

पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/2329 /प्र.क्र. 03 / १९३२(५)/२०२३

दि. ९ / 🤇 /२०२३

### प्रत माहितीस्तव —

# पनवेल महानगरपालिका <u>जाहीर निविदा दरपत्रक</u>

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे या कामाचे अंदाजपत्रक बनविण्याकरीता खाली नमूद केलेल्या बाबींकरीता खालील नमूण्यात दर मागविण्यात येत आहे.

अ.क्र.	कामाचे नाव	मुदत
	पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या	१० / ०८ / २०२३ ते
१	भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (RODENT REPELLENT)	२० / ०८ / २०२३ त २१ / ०८ / २०२३

SR. NO	ITEM	REFF ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
			NOTE:- ALL ITEM RATES SHOULD CONSIST OF THREE YEARS DEFECT LIABILITY PERIOD INCLUDING WARRANTY/GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.		
		1.1	RODENT REPELLENT SYSTEM, MAKE:- JHONSON CONTROL/R SCAT / ANCHOR		
1	Main Rodent Panel	1.1.1	Supply, installation, testing & commissioning of Main Rodent Panel,suitable to connect 20 Satellites. MAKE:- JHONSON CONTROL/R SCAT /ANCHOR	60	Nos
2	Satellite Stations / Transducers	1.1.2	Supply, installation, testing & commissioning of Satellite Stations / Transducers covering 150sqft afc,300sqft bfc & 150sqft ffc. MAKE:- JHONSON CONTROL/R SCAT /ANCHOR	381	Nos
3	PVC CONDUIT	1.1.3	Supply & installation of PVC - 20 mm Medium Grade Conduits with following Cables, fittings ISI Marked: MAKE:-PRESISION/ANCHOR/POLYCAB	7010	Mtr
4	Cable for communication	1.1.4	Supply & installation of Cable for communication flexible wiring between panel to transducers. MAKE:RR/FINOLEX/POLYCAB	8763	Mtr



- सीलबंद निविदा दि. १०/०८/२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- प्राप्त झालेल्या निविदा शक्यतो दि. 29/0L/२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे. प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क

पनवेल महानगरपालिकेने राखुन ठेवला आहे.

पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/ 23 29 /प्र.क्र. ०३ / २९३२(६)/२०२३

दि. ८/ ८ /२०२३

## प्रत माहितीस्तव —

# पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (LV System)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

SR.	ITEM	REFF	ITEM DESCRIPTION	QUANTITY	UNIT
NO.		ITEM			
			FAS		
			NOTE:- ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT.		
	FIRE ALARM SYSTEM	1.1	FIRE ALARM SYSTEM:- MAKE:HONEYWELL/GLOBAL/SIEMENS/ EDWARD/L&T/PANASONIC (conforming to IS 2189: 2008, 11360_1985_Reff 2020 EN 54 or UL Approved with 3 years equipment replacement warranty)		
1	Addressable multi sensor heat detector	1.1.5	Supplying, erecting testing and commissioning of <b>Addressable multi sensor heat detector</b> (Below ceiling and for the Electrical/LV duct) with smoke and heat combination (RoR + fix temperature) with base on back box, necessary connections complete as per specification no. FF-FAS/HD. <b>Make:</b> <b>NOTIFIER/HONEYWELL/GLOBAL/MORLEY/</b> <b>SIEMENS/ EDWARD/L&amp;T/PANASONIC</b>	1145	Each
2	LPG Gas Detectror	1.1.6	Stemensy EDward       EDward       Francesorie         Supplying, erecting and testing LPG Gas         Detectror       with necessary interface module         complete       on       box.         Makes:       HONEYWELL/GLOBAL/SIEMENS/         EDWARD/L&T/PANASONIC	5	Each
3	Addressable control Relay module FOR PA SYSTEM	1.1.14	Supply, Installation, testing & commissioning of Addressable control Relay module with Operating temperature -10 to +50 deg cel. Output Relay contact rating 2A @ 30 VDC. Required accessories along with junction box, glands and terminators (For AC trip off, Access trip off, PA system, sprinkler flow switch, lift interface, sounder, fire fighter & telephone jack).(Addressable Control Module for PA SYSTEM) MAKES: -HONEYWELL/GLOBAL/SIEMENS/ EDWARD/L&T/PANASONIC	15	Each

4	MAIN FIRE	1.1.18	MAIN FIRE PANEL : Supply, Installation,	2	Each
-	PANEL	1.1.10	testing & Commissioning of Microprocessor	4	Lacii
	ITINEE		based 12-loop panel , True Peer-to-Peer		
			Networkable Addressable Integrated Fire Alarm		
			Control Panel with minimum 600 characters		
			LCD display, 10,000 event plus 1000 alarm log		
			history events, The graphic backlit LCD display.		
			The panel should be equipped with sufficient		
			numbers of loops considering 20% spare		
			capacity in each loop. The connectivity of nos.		
			of total detectors and devices in each loop shall		
			be as per vender design. Configuration software		
			freely downloadable.Modbus, Fibre optic,RS422		
			ports available. The fire alarm panel shall		
			inetgrated digital voice alarm controller & fire		
			fighter's telephone system. The panel shall have		
			inbuilt call station with sufficient number zone selection keys.The panel shall work in degrade		
			mode in case of CPU failure. Four access levels,		
			flash EPROM, 240 volts AC power supply,		
			automatic battery charger, 24 volts sealed lead		
			acid batteries sufficient for 24 hours normal		
			working and 30 mins in alarm condition. Note:		
			The fire alarm panel shall be servicable by any		
			system integrator. interfacing with third party		
			equipment via a MODBUS/ OPC/ L-ON		
			interface		
			etc. conforming to IS 15908:2021, IS 2189:		
			2008, EN 54 & VDS / FM/ UL 864		
			(10th edition) with 3 years replacement		
			warranty MAKES: -		
			HONEYWELL/GLOBAL/SIEMENS/		
_		1.1.10	EDWARD/L&T/PANASONIC		
5	repeater	1.1.19	Supplying, installing, testing and	2	Each
	panel		commissioning of <b>repeater panel</b> with suitable		
			battery backup of a minimum of 24 hours in		
			normal condition and 30 min in alarm condition, Suffiecient backlit alphanumeric LCD		
			display with inbuilt buzzer to indicate fault/fire		
			alarm, manual control keys for silence/mute		
			and to reset the FACP from the repeater station.		
			Panel conforming to EN 54 or UL approved with		
			3 years equipment replacement warranty		
			MAKE: -		
			NOTIFIER/HONEYWELL/GLOBAL/MORLEY/		
			SIEMENS/ EDWARD/L&T/PANASONIC		
6	BMS	1.1.20	Supply, installation, testing & commissioning of	1	Each
	Integration		BMS Integration with BACnet / Modbus		
	with		protocol as per technical specification for		
	BACnet /		monitoring & Control. Vendor to organize		
	Modbus		APIs/SDKs for custom integrations to other		
	protocol		systems.		
	FIDE	1.2	MAKES: -NOTIFIER / CERBERUS / BOSCH		
	FIRE FIGHTER	1.4	FIRE FIGHTER TELEPHONE SYSTEM:-MAKE: -NOTIFIER /HONEYWELL /GLOBAL/MORLEY		
	TELEPHON		/SIEMENS /EDWARD/L&T/PANASONIC		
	E SYSTEM:-				
7	Addressable	1.2.1	Supply, Installation, testing & Commissioning	80	Each
	Fire		of Addressable Fire Fighter's Telephone Jack		
	Fighter's		with suitable interface module for two way		
	Telephone		communication between Remote Fire Fighter &		
	Jack		Fire Command Center.along with addressable		
1	1		control module		
			MAKE: -NOTIFIER /HONEYWELL		

8	Fire Fighter's Telephone Handset	1.2.2	Supply, Installation, testing & Commissioning of Fire Fighter's Telephone Handset for two way communication between Remote Fire Fighter & Fire Command Center. The suitable housing shall be provided to keep handset. MAKE: NOTIFIER/HONEYWELL/GLOBAL/MORLEY/ SIEMENS /EDWARD/L&T/PANASONIC	20	Each
9	FRLS Copper cable for telephone jack	1.2.3	Supply and installation of 2 C X 1.5 Sq mm multi stranded twisted pair amoured FRLS Copper cable. <b>for telephone jack</b> (ADDRESEBLE). <b>MAKE:-</b> <b>FINOLEX/BELDON/POLYPLAST/POLYCAB</b>	800	METER

			PA		
		1.3	NOTE :- ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT. PUBLIC ADDRESS SYSTEM:-With 3 years		
			equipment replacement warranty		
1	6W Ceiling Recessed Speaker	1.3.1	Supply, Installation, testing & Commissioning of <b>6W Ceiling Recessed Speaker</b> with max SPL @1M/1W 88dB . Frequency response of 125Hz- 16KHz. The speaker must have a metal grill & tappings at 6W/3W/1.5W. White color speaker with good aesthetics. MAKE:- BOSCH/HONEYWELL/ATIES/AHUJA	775	Each
2	Booster amplifier	1.3.3	Supply and installation of <b>Booster amplifier</b> 480W with all accessories. MAKE:- BOSCH/HONEYWELL/ATIES/AHUJA	12	Each
3	16 channel zone control panel/ Zone selector	1.3.4	Supply & installation of <b>16 channel zone</b> <b>control panel/ Zone selector</b> to control the output of the amplifier. <b>MAKE:-</b> <b>BOSCH/HONEYWELL/ATIES/AHUJA</b>	10	Each
4	Dynamic Vocal & Speech Microphone.	1.3.5	Supply & installation of Unidirectional Dynamic Vocal & Speech Microphone. MAKE:- BOSCH/HONEYWELL/ATIES/AHUJA	6	Each

	ССТУ								
			NOTE :- ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT.						
			CCTV SYSTEM :-MAKE : - HONEYWELL / SONY /BOSCH/ PANASONIC (with 3 years equipment replacement warranty)						
		1.1	CAMERAS :-						
1	IP DOME CAMERA	1.1.1	Supply, Installation, Testing & Commissioning of <b>IP DOME CAMERA</b> with 5 MP IP Dome fixed varifocal IR, Water and dust resistant (IP67) and vandal-resistant (IK10), 1/4" PROGRESSIVE SCAN CCD/CMOS sensor, HD 1280 X 720P Horizontal Resolution, Dual H.264 streaming, 25 FPS, 2.7 to 8 mm, 4X DIGITAL ZOOM, fixed focal/varifocal auto iris lens, SD –Support Max 512GB, WDR, colour 1 lux, b/w 0.5 lux (at 30 IRE), audio built in microphone, IR Range 2.7 to 13.5 mm: up to 40 m, 7 to 35 mm: up to 50	350	EACH				

			mcompression,colour,brightness,sharpness,con trast,white balance,explosure control,backlight compensation,having HTTP, HTTPS, FTP, SMTP, RTSP, RTP, TCP,UDP,RTCP,DHCP,UPnP,QOs PROTOCOL, password protection, IP address filtering,user access log security,operating conditions of 0 to 50c, tamper resistant casing for indoor environment. MAKE : - HONEYWELL / SONY / BOSCH/PANASONIC		
2	IP Fixed Box/ Bullet camera	1.1.2	Supply, Installation, Testing & Commissioning of <b>IP Fixed Box/ Bullet camera</b> with 5 MP IP Bullet fixed IR, Water and dust resistant (IP67) and vandal-resistant (IK10),1/4" PROGRESSIVE SCAN CCD/CMOS sensor,HD 1280X720P Horizontal Resolution, Dual H.264 streaming, 25 FPS, 2.7 to 8 mm,4X DIGITAL ZOOM, fixed focal/varifocal auto iris lens, SD –Support Max 512GB, WDR,colour 1 lux,b/w 0.5 lux (at 30 IRE),IR Range 2.7 to 13.5 mm: up to 60 m, 7 to 35 mm: up to 80 m,audio built in microphone, compression, colour, brightness, sharpness, contrast,white balance,explosure control,backlight compensation,having HTTP, HTTPS, FTP, SMTP, RTSP, RTP, TCP,UDP,RTCP,DHCP,UPnP,QOS PROTOCOL, password protection, IP address filtering,user access log security,operating conditions of 0 to 50c,Outdoor cameras (in open sky) to include IP66 Casing. <b>MAKE : - HONEYWELL / SONY /</b> <b>BOSCH/PANASONIC</b>	20	EACH
3	PTZ Cameras	1.1.3	Supply, Installation, Testing & Commissioning of <b>PTZ Cameras</b> with 4 MP IP Bullet fixed IR, 1/4" PROGRESSIVE SCAN CCD/CMOS sensor, HD 1280X720P Horizontal Resolution, Dual H.264 streaming, 25 FPS, 4X DIGITAL ZOOM, Zoom Speed Approx. 4.8 s,10Xoptical zoom, fixed focal/varifocal auto iris lens, Focal Length 5.9 mm to 188.8 mm, colour 0.5 lux, b/w 0.1 lux (at 30 IRE), having panning range 360 degrees, tilting range from 0 degree to 90 degree, audio built in microphone, compression, colour, brightness, sharpness, contrast, white balance, explosure control, backlight compensation, auto tracking, pre-set tour setting, having HTTP, HTTPS, FTP, SMTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, UPnP, QOS PROTOCOL, password protection, IP address filtering, user access log security, operating conditions of 0 to 50c, tamper resistant Casing for indoor environment. MAKE : - HONEYWELL / SONY /	12	EACH
4	Hot dipped galvanised, round shape steel pole for installation of PTZ Camera	1.1.4	BOSCH/PANASONIC Supply, Installation, Testing & commissioning of Hot dipped galvanised, round shape steel pole for installation of PTZ Camera and Outdoor Dome Camera, length 6 meters, diameter 4 inches (Nominal bore) Medium class, ISIS marked to IS:1239 with latest amdts and with atleast 1 Meter below ground with grouting. MAKE:-TATA STEEL / JINDAL / BAJAJ / EQUI.	12	EACH

		1.2	<b>RECODER AND WIRELESS SYSTEM :-</b>		
5	Point to Point Wireless Radios along with Mounting Brackets & PoE Injectors	1.2.1	Supply, Installation, Testing & Commissioning of Point to Point Wireless Radios along with Mounting Brackets & PoE Injectors (LIFT) MAKE: -HONEYWELL / SONY / BOSCH/TP LINK/PANASONIC	12	EACH
6	Adapters & Spike guard	1.2.2	Supply, Installation,Testing & Commissioning of Adapters & Spike guard for powering up the TX RX unit (POE INJECTOR) ISI APPROVED MAKE:-HONEYWELL / SONY/ BOSCH/ANCHOR	12	EACH
7	modular 64 channel 1080P NVR,	1.2.3	Design, Supply, testing, installation and commissioning of <b>modular 64 channel 1080P</b> <b>NVR</b> , Recording: 1920X1080P, 15 FPS, 30 days recording, 24 hours/day; Real time monitoring with 25 FPS. Hard disc : 8 SATA III Ports, Each 6TB, up to 48TB, 1 eSATA port, Disk array: Support RAID 0/1/5/6/10, Two no's of RJ -45 10/100/1000 Mbps self adaptive Ethernet interface, RS 232, RS 485, keyboard interfaces, VGA/HDMI compatible, 2nos front USB 2.0 & 1 no at rear USB 2.0 compatible & &16 TB hard disc and as per storage configuration contractor shall consider the separate hard discs. <b>MAKE : - HONEYWELL / SONY / BOSCH /</b> <b>PANASONIC</b>	9	EACH
8	Servillance harddisk 6TB Storage	1.2.4	Supply, Installation, Testing & Commissioning of Servillance harddisk 6TB Storage (HDD) MAKE:- SEAGATE / WD	30	EACH
9	NAS back up storage device	1.2.5	Supply, Installation, Testing & Commissioning of Additional NAS back up storage device ,220 TB to keep 30 days backup recording. MAKE : - HONEYWELL / SONY / BOSCH / PANASONIC	1	Ecah
10	42inches LED monitor, Full HD Resolution	1.2.6	Supply, Installation, Testing & commissioning of <b>42inches LED monitor, Full HD</b> <b>Resolution</b> , Backlight LED, Brightness : 400 NITS min., Contrast : 1200 : 1 or better., Power supply : 230 ±10%, 50 Hz. <b>MAKE:- LG/SAMSUNG /ONIDA /SONY</b>	15	EACH
11	Video Splitter	1.2.10	Supply, Installation, Testing & Commissioning of 1IN/4OUT <b>Video Splitter</b> for additional viewing. <b>MAKE:- MX / LCOM / TIZUM</b>	5	EACH
		1.4	FIBER OPTIC CABLE & SYSTEM :-		
12	Single Mode Fiber Optic Connector	1.4.3	Supply, Installation, Testing & Commissioning of Single Mode Fiber Optic Connector MAKE: - NETGEAR GSM / ZYXEL /DIGISOL /LEGRAND /CISCO	20	EACH
13	Single Mode Fiber Optic Patch Chord	1.4.4	Supply, Installation, Testing & Commissioning of Single Mode Fiber Optic Patch Chord MAKE: - NETGEAR GSM / ZYXEL /DIGISOL /LEGRAND /CISCO	20	EACH
14	Light Interface Unit (LIU)	1.4.5	Supply, Installation, Testing & Commissioning of Light Interface Unit (LIU) MAKE: - NETGEAR GSM / ZYXEL /DIGISOL /LEGRAND /CISCO	5	EACH

		1.5	POE SWITCH & RACKS :-		
15	12 port Fiber optic patch panel	1.5.2	Supplying and fixing <b>12 port Fiber optic patch</b> <b>panel</b> with tool-less keystone jacks in provided U Rack complete as per specification MAKES: - EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	1	EACH
16	12-ports fiber optic switches.	1.5.7	Supplying, fixing, and configuring <b>12-ports</b> <b>fiber optic switches</b> . Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	1	EACH
17	4-ports managed gigabit switches	1.5.10	Supplying, fixing, and configuring <b>4-ports</b> managed gigabit switches layer-2, 10/100/1000 base-T PoE smart switch plus 2 SFP (Fiber optic Uplink Port, enable the switch to connect to all fiber in cables) only complete. Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	9	EACH
18	12-ports managed gigabit switches	1.5.11	Supplying, fixing, and configuring <b>12-ports</b> <b>managed gigabit switches</b> layer-2, 10/100/1000 base-T PoE smart switch plus 2 SFP (Fiber optic Uplink Port, enable the switch to connect to all fiber in cables) only complete. Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	2	EACH
19	16-ports managed gigabit switches	1.5.12	Supplying, fixing, and configuring <b>16-ports</b> <b>managed gigabit switches</b> layer-2, 10/100/1000 base-T PoE smart switch plus 2 SFP (Fiber optic Uplink Port, enable the switch to connect to all fiber in cables) only complete. Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	1	EACH
20	32 U floor MOVABLE SERVER Rack	1.5.21	Supplying and fixing <b>32 U floor MOVABLE</b> <b>SERVER Rack</b> (Dimension-DxWxH - 800X1000x1620 mm) MAKES: - EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL	2	EACH
21	42 U floor MOVABLE SERVER Rack	1.5.22	Supplying and fixing <b>42 U floor MOVABLE</b> <b>SERVER Rack</b> (Dimension-DxW – 800x1000 x2070mm) as per specification No. WG- NAS/RAK MAKES: - EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL	2	EACH

			CCTV WITH MIC		
			NOTE :- ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT. CCTV SYSTEM :-MAKE : - HONEYWELL / SONY / BOSCH/PANASONIC		
		1.1	CAMERAS :-		
1	IP DOME CAMERA WITH INBUILD MIC	1.1.1	Supply, Installation, Testing & Commissioning of <b>IP DOME CAMERA WITH INBUILD MIC</b> with 5 MP IP Dome fixed varifocal IR, 1/4" PROGRESSIVE SCAN CCD/CMOS sensor, HD 1280 X 720P Horizontal Resolution, Dual H.264 streaming, 25 FPS, 2.7 to 8 mm,4X DIGITAL ZOOM, fixed focal/varifocal auto iris lens, SD – Support Max 512GB, WDR, colour 1 lux, b/w 0.5 lux (at 30 IRE), audio built in microphone, compression, colour , brightness, sharpness, contrast, white balance, explosure control, backlight compensation, having HTTP, HTTPS, FTP, SMTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, UPnP, QOS PROTOCOL, password protection, IP address filtering, user access log security, operating conditions of 0 to 50c, tamper resistant casing for indoor environment. <b>MAKE : - HONEYWELL / SONY /</b> <b>BOSCH/PANASONIC</b>	15	EACH
		1.2	<b>RECODER AND WIRELESS SYSTEM :-</b>		
2	NVR	1.2.1	Design, Supply, testing, installation and commissioning of <b>modular 4 channel 1080P</b> <b>NVR</b> , Recording: 1920X1080P, 15 FPS, <b>30 days</b> <b>recording</b> , 24 hours/day; Real time monitoring with 25 FPS. Hard disc : 8 SATA III Ports, 1 eSATA port, Disk array: Support RAID 0/1/5/6/10, Two no's of RJ -45 10/100/1000 Mbps self adaptive Ethernet interface, RS 232, RS 485, keyboard interfaces, VGA/HDMI compatible, 2nos front USB 2.0 & 1 no at rear USB 2.0 compatible & required capacity hard disc and as per storage configuration contractor shall consider the separate hard discs. <b>MAKE : -MAKE : - HONEYWELL / SONY /</b> <b>BOSCH/PANASONIC/ESSL</b>	15	EACH
3	4TB Storage (HDD)	1.2.2	Supply, Installation,Testing & Commissioning of <b>4TBStorage</b> MAKE:-SEAGATE / WD	15	EACH
4	NAS back up storage device	1.2.3	Supply, Installation,Testing & Commissioning of Additional NAS back up storage device 75 TB to keep 30 days backup recording.MAKE : - HONEYWELL / SONY / BOSCH / PANASONIC	1	EACH
5	HDMI extender	1.2.4	Supplying & erecting <b>HDMI extender</b> over RJ45 Ethernet Cable Cat5e/6/7 10M 200ft complete. <b>MAKE:-MX / LCOM / TIZUM</b>	15	EACH

			ACCESS BOQ		
			NOTE: - ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT.		
	ACCESS CONTROL SYSTEM		ACCESS CONTROL SYSTEM		
1	2 Door Controller	1.1	Supply, Installation, Testing & commissioning of 2 Door Controller. MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH	50	NOS.
2	OSDP Multi Card Reader	1.2	Supply, Installation, Testing & commissioning of OSDP Multi Card Reader MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH	50	NOS.
3	Emlock with feedback - 600 LBS	1.3	Supply, Installation, Testing & commissioning of Emlock with feedback - 600 LBS MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	50	NOS.
4	12VDC Buzzer for Door open alarm	1.4	Supply, Installation, Testing & commissioning of 12VDC Buzzer for Door open alarm MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	50	NOS.
5	2 Exit Switch	1.5	Supply, Installation, Testing & Commissioning of 2 Exit Switch MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	50	NOS.
6	Manager Access Control & Time & Attendance Software	1.6	Supply, Installation, Testing & commissioning of Manager Access Control & Time & Attendance Software MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	1	NOS.
7	Wired Door Contact sensor	1.7	Supply, Installation, Testing & commissioning of Wired Door Contact sensor MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	50	NOS.
	BIOMETRI C ACCESS CONTROL SYSTEM		BIOMETRIC ACCESS CONTROL SYSTEM		
8	Palm and Face Recognition Performanc e Reader	2.1	Supply, Installation, Testing & commissioning of Unrivaled Palm and <b>Face Recognition</b> <b>Performance Reader, OSD</b> P, AES-128 encryption standards, IP 66, POE Power enabled, Multi card Support, metal enclosure with a tempered glass panel <b>MAKE:-</b> <b>ARGUS/ESS/HONEYWELL/SIEMENS/HID/O</b> <b>RYGGITECH/HIKVISION</b>	30	NOS.
9	Emlock with feedback - 600 LBS	2.2	Supply, Installation, Testing & commissioning of Emlock with feedback - 600 LBS MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	30	NOS.
10	12VDC Buzzer for Door open	2.3	Supply, Installation, Testing & commissioning of <b>12VDC Buzzer for Door open alarm</b> <b>MAKE:-</b>	30	NOS.

	alarm		ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION		
11	2 Exit Switch	2.4	Supply, Installation, Testing & Commissioning of 2 Exit Switch MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	30	NOS.
12	Manager Access Control & Time & Attendance Software	2.5	Supply , Installation, Testing & commissioning of Manager Access Control & Time & Attendance Software MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	1	Lot
13	Wired Door Contact sensor	2.6	Supply, Installation, Testing & commissioning of Wired Door Contact sensor MAKE:- ARGUS/ESS/HONEYWELL/SIEMENS/HID/O RYGGITECH/HIKVISION	30	NOS.
	ACCESS CONTROL SYSTEM		ACCESS CONTROL SYSTEM		
14	12-ports managed gigabit switches	3.1	Supplying, fixing, and configuring <b>12-ports</b> managed gigabit switches layer-2, 10/100/1000 base-T PoE smart switch plus 2 SFP (Fiber optic Uplink Port, enable the switch to connect to all fiber in cables) only complete. Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	2	EACH
15	4-ports managed gigabit switches	3.3	Supplying, fixing, and configuring <b>4-ports</b> managed gigabit switches layer-2, 10/100/1000 base-T PoE smart switch plus 2 SFP (Fiber optic Uplink Port, enable the switch to connect to all fiber in cables) only complete. Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	18	NOS
16	12 port Fiber optic patch panel	3.7	Supplying and fixing <b>12 port Fiber optic patch</b> <b>panel</b> with tool-less keystone jacks in provided U Rack complete as per specification <b>MAKES: - EMS / VALRACK / DIGISOL /</b> <b>CISCO / LEGRAND / RITTAL/D LINK</b>	1	EACH
17	12-ports fiber optic switches.	3.8	Supplying, fixing, and configuring <b>12-ports</b> fiber optic switches. Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	1	EACH
18	C-windows 11 os, 1 TB HDD, 64bit,16 GB ram, 2 nos USB keyboard	4.1	Supply, Installation, Testing & commissioning of PC-windows 11 os, 1 TB HDD, 64bit,16 GB ram, 2 nos USB keyboard	1	NOS
19	32 inch LED monitor with wall mount bracket	4.2	Supply, Installation, Testing & commissioning of 32 inch LED monitor with wall mount bracket	1	Each
20	access card	4.3	Supply, Installation, Testing & commissioning of access card	100	Each

		WIFI ACCESS POINT		
		NOTE: - ALL ITEM RATES SHOULD CONSIST OF THREE YEAR DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT. WIFI ACCESS POINT		
1	WIFI ACCESS POINT	1.1 Supply, Installation, Testing & commissioning of <b>WIFI ACCESS POINT</b> MAKES:- Tp- Link/NetGear/CISCO/ASUS/Zyxel	180	NOS.
2	4-ports managed gigabit switches	1.5 Supplying, fixing, and configuring <b>4-ports</b> managed gigabit switches layer-2, 10/100/1000 base-T PoE smart switch plus 2 SFP (Fiber optic Uplink Port, enable the switch to connect to all fiber in cables) only complete. Make:- EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK	7	NOS.
3	12 port Fiber optic patch panel	1.6 Supplying and fixing <b>12 port Fiber optic patch</b> <b>panel</b> with tool-less keystone jacks in provided U Rack complete as per specification MAKES: - EMS / VALRACK / DIGISOL / CISCO / LEGRAND / RITTAL/D LINK		NOS.
4	12-ports fiber optic switches.	1.7       Supplying, fixing, and configuring 12-ports         fiber       optic         switches.         Make:-       EMS / VALRACK / DIGISOL / CISCO /         LEGRAND / RITTAL/D LINK	1	NOS.

#### अटी व शर्ती:

- १) सीलबंद निविदा दि. % / 0 2 / २०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात
   स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि. 29 / o L/२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- ३) अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी 👅 साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.

शहर आमयता पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/ 2329 /प्र.क्र. 03/2032(1)2023

दि. ९ / 🤇 /२०२३

#### प्रत माहितीस्तव —

# पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (PLUMBING)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

SR. NO.	ITEM	BOQ ITEM REF.	ITEM DESCRIPTION	QTY	UNIT
			TOILET INTERNAL		
1	<ul> <li>INTERNAL WATER SUPPLY</li> <li>2.8</li> <li>Supplying and erecting midget type 5.0 litres instant type water heater of rustproof &amp; shockproof ABS plastic body, high grade SS inner tank &amp; 4.5-5.5 kW heating element with corrosion &amp; hard water protection, with minimum 3 safety protections (i.e. thermostat &amp; thermal cut-out, function valve) complete with 6.5 bar pressure withstanding capacity 230/250V, 50Hz, A.C. supply with inlet and outlet, with 3 core PVC flexible copper wire leads duly tested and marking sr. no. and date of erection complete. Make :-Racold ,Crompton,Bajaj,Havells</li> </ul>				
2	2 INTERNAL 2 WATER 3.8 SUPPLY		Providing and fixing in position tested CPVC pipes conforming to ASTM F441 CPVC Schedule 80 with all fittings like bends, tees, reducers, elbows, unions et conforming to ASTM F438 Schedule 80 including supporting on walls complete including scaffolding and hydraulic testing after laying of pipes as specified and including making holes in the walls or floors as required and redoing the same etc.complete as directed by Engineer in charge. Make - Ashirwad/ Supreme/ Astral		
		А	65 mm nominal bore	4.00	RMT
		В	Chlorinated Polyvinyl - chloride (CPVC) pipe 75 mm inner dia	4.00	RMT
3	PVC NAHANI TRAP WITH SS GRATING	4.6	Providing and fixing 10cm PVC Nahani Trap including S.S. grating bend and piece of C.I. pipe upto the outside face of the wall complete. Make - Ashirvad/ Supreme/ Astral	180.00	

			Providing	and	fixing	Multi	floor	trap	of	50.00	Number
<b>INTERNAL</b> 110x110mm with jali 50 mm minimum seal											
4	SOIL/	4.7	suitable fo	r kitcl	nen all o	complete	e, as di	rected	by		
	WASTE		Engineer	in (	charge.	Make	- A	shirwa	ad/		
			Supreme/	Astra							

			INTERNAL BUILDING		
1	BLDG INTERNAL WATER SUPPLY		Providing and fixing in position tested uPVC easy fit pipes conforming to ASTM D-1785 Schedule 80 with all fittings like bends, tees, reducers, elbows, unions Schedule 80 including supporting on walls complete including scaffolding and hydraulic testing after laying of pipes as specified and including making holes in the walls or floors as required and redoing the same (For pump outlet to OH Tank, Terrace looping, Downcomer of domestic & flushing water supply pipes ) etc.complete as directed by Engineer in charge. Make:- Ashirvad/Prince / Supreme/ Astral		
		1.1.7	65 mm nominal bore	58.00	Running Metre
2	Gun Metal Valve	1.2	Providing and fixing Supplying and erecting <b>gun metal gate valve</b> complete with PN16 pressure rating, of approved make with material and labour etc all complete as per drawings, specifications complete as directed by Engineer in charge. <b>Make:-</b> Leader /Sant/Zoloto		
		1.2.3	32mm	58	Number
		1.2.4	40mm	14	Number
3	Pressure Reducing Valve	1.3	Providing and fixing <b>Pressure Reducing valves</b> <b>PN 16</b> of approved make as indicated including provision of 3 nos. of ball valves/Butterfly valves, for bypass arrangement etc. complete as directed by engineer-in-charge. Contractor to set pressure as per instructions from consultant during execution. (1 no. PRV + 3 Nos. Ball valve/Butterfly valve) Make:- Honywell/ Leader/Zoloto		
		1.3.1	25 mm dia	2.00	Number
		1.3.2	32 mm dia	13.00	Number
		1.3.3	40 mm dia	15.00	Number
		1.3.4	50 mm dia	6.00	Number
		1.3.5	65 mm dia	4.00	Number
4	Air Release Cock	1.4	Supplying and erecting gun metal air release cock, with necessary G.I. coupling to be fitted on top of air vessel or on wet riser complete as per specification no. FF-FFA/ARV. <b>Make:-</b> <b>Honywell/Leader/Zoloto</b>		N 1
i i i i i i i i i i i i i i i i i i i		1.4.1	15 mm dia.	4	Number

5	Solenoid Valve	1.5	Providing and fixing spring return motorised Solenoid valve PN 10 suitable for 240 Volts , with suitable motorised rotor 3 nos of float type sensors and control panel , to shut and close valve when water level is low / high in water tanks complete as directed by Engineer in charge. Make- Leader /Sant / Zooloto		
		1.5.1	25 mm dia	2	Each
		1.5.2	50 mm dia	2	Each
		1.5.3	80 mm dia	2	Each
6	GI Puddle Flanges	1.6	Supplying & fixing in position galvanised iron puddle flanges of approx. 60 cm length with flange on one end (Table E) and welded to mild steel plate (8mm thick) in the centre etc. complete as directed by engineer-in-charge. Make - Tata / Zenith / Jindal		
		1.6.1	250 mm dia Both Sides Flange with 60cm length	3.00	Number
		1.6.2	200 mm dia One Side Flange with 60cm length	3.00	Number
		1.6.3	150 mm dia Both Flange with 60cm length	11.00	Number
		1.6.4	150 mm dia single Side Flange with 60cm length	1.00	Number
		1.6.5	100 mm dia Both Side Flange with 60cm length	8.00	Number
		1.6.6	100 mm dia Single Side Flange with 60cm length	1.00	Number
		1.6.7	80 mm dia Double Side Flange with 60cm length	1.00	Number
		1.6.8	80 mm dia Single Side Flange with 60cm length	6.00	Number
		1.6.9	80 mm dia No Flange/Plain Ends with 60cm length	5.00	Number
		1.6.10	50 mm dia No Flange/Plain Ends with 60cm length	1.00	Number
7	PVC Vent	1.7	Providing and fixing PVC Vents of following sizes in O.H.T./ U.G.R. over delivery pipes along with provision of inverted U bend & mosquito proof jalli at the end etc. complete as directed by engineer-in-charge. Make - Ashirvad/ Supreme/ Astral		
		1.7.1	50mm dia	10	Number
8	BLDG INTERNAL DRAINAG, RAIN WATER DRAIN	1.8	Providing, fixing and testing Silent fit UPVC pressure pipes for soil waste and Rain pipes (IS:4985-81) 10 KG/CM2 including all fittings at 6-10KG/CM2 pressure rating such as bends, junctions, inspection doors, offsets, cowls, access pieces/plugs, brass floor cleanouts etc. clamps/ structural steel supports,haunching etc. as required/directed at site, jointing with SOLVENT joints including cutting holes in walls and making good the same. Silentfit Low Noise SWR Piping Systems are three layered pipes of which, outer and inner layers are made up of UPVC material and intermediate layer of specially formulated PVC material which serves as a noise insulator, providing silent operation when water flows through the system, etc. complete as directed by Engineer in charge. Make - Ashirvad/ Supreme/ Astral		

		1.8.1	75mm nominal bore.	498.00	Running Metre
		1.8.2	100mm nominal bore.	210.00	Running Metre
		1.8.3	160mm nominal bore.	2085.00	Running Metre
		1.8.4	200mm nominal bore.	322.00	Running Metre
		1.8.5	250mm nominal bore.	79.00	Running Metre
9	Double Angle Bracket	1.9	Providing & fixing M.S. fabricated double angle bracket of required size in 50 x 50 x 5 mm of required length with all necessary fabrication & fixing the same and grouting in wall / R.C.C wall using anchor fasteners of required size and clamping of pipe with G.I. 'U' clamp with nut & bolts including applying primer & 2 coats of enamel paint of approved color to brackets etc. complete as per directions of engineer-in-charge. Make - Tata / Zenith / Jindal	250	Kg
10	PVC Cow1	1.10	Supply,Providing and fixing PVC Cowl for the following pipes including making all solvent joints with material & labour etc. all complete as per direction of the engineer-in-charge. Make - Ashirvad/ Supreme/ Astral		
		1.10.1	75 mm dia	4	EACH
		1.10.2	110 mm dia	6	EACH
		1.10.3	160 mm dia	8	EACH
11	SS Clean Out Plugs	1.11	Providing and fixing SS Clean out plugs of following sizes for maintenance and cleaning purpose etc. complete as per directions of engineer-in-charge. Make - Ashirvad/ Supreme/ Astral		
		1.11.1	150 mm dia.	25	Nos
12	Grease Trap for Pantry Area	1.12	Providing and fixing <b>Oil Grease trap</b> <b>seperator</b> LW 400, NS 1.5, Class II, B with above ground lifting station and minilift etc.complete as per direction of engineer-in- charge.Make-Kessel /Aco	15	Set
13	Grease Trap for Kitchen Area	1.13	Providing and fixing Oil Grease trap seperator EasyClean free, Article No.: NS 7 93007.21/D Sludge trap capacity: 700 liter, Total separator capacity: 1350 liter, Grease storage capacity: 280 liter, Inlet / Outlet: OD 160 mm, Dimensions: Length: 1880 mm ; Width: 940 mm; Height: 1653 mm, Inlet height h2: 1250 mm ; Outlet height h1: 1185 mm, Set up dimensions: Length: 2147 mm ; Width: 970 mm ; Height: 1653 mm etc. complete as per direction of engineer-in- charge. (FOR GROUND FLOOR KITCHEN)Make-Kessel /Aco	1	Set

			PUMPS		
			The scope of Contractor work shall include basic design, construction detailed design, supply installation, testing and commissioning and handling over the entire system along with Shop drawings, As-built drawings and O&M manual.		
1	VERTICAL SUBMERSI BLE SUMP PUMP		Sump Pump: - Providing & fixing & commissioning of Vertical Submersible Sump pump having built in overload protector.Pump outer casing to be of cast iron, Motor houshing, suction plate, bottom screen & all screws to be of stainless steel. Motor cover & pump housing to be of corrosion proof cast iron. Pump will have cast iron impeller & double mechanical seals in oil chambers.include one no.sheet steel clade wall mounting control panel for control of 2 nos. phase water pumps having suitable rated incoming isolating switch, branch MCBs, incoming voltmeter with selector switch & fuses DOL starter with hand reset overlaod relay, OFF/AUTO/MANUAL selector switch, ammeters,approved make level control switch for automatic control of pumps, with 1 nos.Low level and 1 nos.float senser in sump tank, and control wiring to stop the pump in case of full tank sensing from both the float sensors & electonic toggle relay for automatic alternating of pupms. Make - Grundfos/Ebara/Xylem/Wilo		
		1	Note:-All Sump Pumps.1) All SumpPumps should be with set of Butterfly Valve,Non return Valves & Control Panel for Autocontrol operation.2) Should haveindication/ alarm panel to show High,medium& low level with indication/alarm.a) Pump for Sump		
2	VERTICAL SUMP PUMP	A	Each Set comprising 2 nos. pumps (1W+1S)Vertical sump Pump 250 lpm @ 20 m Headaveragedischargepressure(INCLUDINGCOMMONPUMPSPANELWITHINTERLOCKING AND AUTOMATION)PANEL - 2 EBS 2.2 T DLPump Housing- Cast IronImpeller- Ductile CastIron- Cast Iron EN-GJL-250Rated Power- 2.2kWRated Speed- 2850rpm	6	Set
3	FLODING SUMP PUMP	в	Each set comprising 2 nos. pumps (1W+1S)Flooding sump Pump 1000 lpm @ 20 mHead average discharge pressure (INCLUDING COMMON PUMPS PANEL WITH INTERLOCKING AND AUTOMATION)PANEL - 2 EBS 5.5 T DLPump Housing- Cast IronImpeller- Ductile Cast IronMotor- Cast Iron EN-GJL-250Rated Power- 5.5kW	2	Set

			Rated Speed - 2850rpm		
4	CUTTER SUMP PUMP	С	Each Set comprising 2 nos. pumps (1W+1S)Vertical Cutter sump Pump 200 lpm @ 25 mHead average discharge pressure (INCLUDING COMMON PUMPS PANEL WITH INTERLOCKING AND AUTOMATION)PANEL - 2 EBS 3.7 T DLPump Housing- Cast IronImpeller- Cast IronMotor- Cast Iron EN-GJL-250Rated Power- 3.2kWRated Speed- 2870rpm	2	Set
		0	WATER TRANSFER SYSTEM FOR FLUSHING		
5	HYDROPN EUMATIC PUMPING SYSTEM FOR DOMESTIC AND FLUSHING	2	AND DOMESTIC Providing, fixing, testing & commissioning of Multi-stage centrifugal pump with VFD for HYDROPNEUMATIC PUMPING purpose having built in overload protector.Pump outer casing to be of cast iron, Bronze impeller, SS shaft,Motor houshing, suction plate, bottom screen & all screws to be of stainless steel.Motor cover & pump housing to be of corrosion proof cast iron. Each Pump will have Bronze impeller & double mechanical seals in oil chambers.include one no.sheet steel clade wall mounting control panel for control of water pumps having suitable rated incoming isolating switch, branch MCBs, incoming voltmeter with selector switch & fuses Stardelta/DOL starters with hand reset overlaod relay, OFF/AUTO/MANUAL selector switch, ammeters,approved make pressure switch for automatic control of pumps, AIR VESSEL ,Diffrential pressure sensor , control wiring & electronic toggle relay for automatic start/stop of pupms. Make - Grundfos/Ebara/Xylem/Wilo Note:- Water transfer Pumps. 1) All Pumps		
			should be with set of Butterfly Valve, Non return Valves & Control Panel for Auto control		
			operation.		
6	DOMESTIC WATER HYN SYSTEM	2.1 A	<b>DOMESTIC WATER HYN SYSTEM</b> HYN set comprising 2 nos. pumps (1W+1S) each pump capacity <b>300 lpm &amp; Head 80 m</b> (INCLUDING,AIR VESSEL ,DIFFRENTIAL PRESSURE SENSOR, COMMON PUMPS PANEL WITH INTERLOCKING AND AUTOMATION)	1	Set
			Base - Cast Iron EN 1561 EN-GJL-200 ASTM A48-25B		
			Impeller - Stainless Steel EN 1.4301 AISI 304		
			Maxi.Operating Presssure - 1600 KPa		
			Motor Standard - IES		
			Rated Power - 7.5kW		
			Rated Speed - 2920-2940rpm		
7	FLUSHING WATER HYN SYSTEM	2.2 A	FLUSHING WATER HYN SYSTEMHYN Set comprising 2 nos. pumps (1W+1S)Capacity each pump 400 lpm & Head 80 m(INCLUDING,AIR VESSEL ,DIFFRENTIALPRESSURE SENSOR, COMMON PUMPS PANELWITH INTERLOCKING AND AUTOMATION)Base- Cast Iron EN 1561	1	Set

			EN-GJL-200 ASTM A48-25B		
			Impeller- Stainless Steel EN1.4301 AISI 304- 1600 KPa		
			Motor Standard - IES		
			Rated Power   - 7.5kW		
			Rated Speed - 2910-2920rpm		
8	WATER TRANSFER SYSTEM FOR COOLING WATER	3	Providing, fixing, testing & commissioning of Multi-stage centrifugal pump FOR PUMPING purpose having built in overload protector.Pump outer casing to be of cast iron, Bronze impeller, SS shaft,Motor houshing, suction plate, bottom screen & all screws to be of stainless steel.Motor cover & pump housing to be of corrosion proof cast iron. Each Pump will have Bronze impeller & double mechanical seals in oil chambers.include one no.sheet steel clade wall mounting control panel for control of water pumps having suitable rated incoming isolating switch, branch MCBs, incoming voltmeter with selector switch & fuses Stardelta/DOL starters with hand reset overlaod relay, OFF/AUTO/MANUAL selector switch, ammeters,approved make pressure switch for automatic control of pumps,to operate on signal from Low level , medium level and high level float senser in OH tank,Solenoid valve and control wiring to stop the pump in case of full tank sensing from both the float senssors & electronic toggle relay for automatic start/stop of pupms. Make - Grundfos/Ebara/Xylem/Wilo		
			Note:- Water transfer Pumps. 1) All Pumps should be with set of Butterfly Valve, Non return Valves & Control Panel for Auto control operation as per below details		
		3.1	FRESH COOLING WATER TRANSFER PUMP TO COOLING TOWER MAKEUP WATER TANK		
	FRESH WATER		Each set comprising 2 nos. pumps (1W+1S) capacity 150 lpm & Head 50 m (INCLUDING COMMON PUMPS PANEL WITH INTERLOCKING AND AUTOMATION) PANEL - 2 EBS 2.2 T DL	1	Set
9	TRANSFER PUMP FOR	А	Base - Cast Iron EN 1561 EN-GJL-200 ASTM A48-25A		
	MAKE UP WATER		Impeller     - Stainless Steel       EN 1.4301 AISI 304		
			Maxi.Operating Presssure -1000 KPa		
			Motor Standard - IES		
			Rated Power - 3.0kW		
			Rated Speed - 2900-2920rpm		
		3.2	STP TREATED WATER TRANSFER PUMP TO COOLING TOWER MAKEUP WATER TANK		
10	TREATED WATER TRANSFER PUMP FOR MAKE UP WATER	A	Each set comprising 2 nos. pumps (1W+1S) 150 lpm & Head 50 m (INCLUDING COMMON PUMPS PANEL WITH INTERLOCKING AND AUTOMATION) PANEL - 2 EBS 2.2 T DL	1	Set
			Base - Cast Iron EN 1561 EN-GJL-200 ASTM A48-25B		

			Impeller - Stainless Steel EN 1.4301 AISI 304		
			Maxi.Operating Presssure -1600 KPa		
			Motor Standard - IES		
			Rated Power - 2.2kW		
			Rated Speed - 2890-2910rpm		
11	Y-Strainer	15	Supplying and installing <b>65 mm dia end line</b> strainer for +ve suction as per specification No. FF-VL/ELS. Make:-Kirloskar/ C & R / Sant / Leader	2	Each
12	Dual Check NRV	18	Supplying and installing <b>Dual Check NRV</b> of size <b>65 mm dia</b> as per specification No. FF- VL/NRV. <b>Make:-Leader / Sant/Zoloto</b>	20	Each
13	PRV	21	Supplying & erecting <b>Pressure regulating</b> <b>valves</b> for controlling pressure at filling of multitanks with all accseeries. <b>Make:</b> - <b>Honywell/Leader/Zoloto</b>		
		21.1	65MM	2	Each
14	Solenoid Valve	27	Supplying and erecting <b>65mm Motorised</b> <b>solenoid valve</b> in Soft water and cooling tower water tank. Make - Sant/ Rotex / Avcon	2	Each

			GEBERIT SYPHONIC		UNIT
1	GEBERIT SYPHONIC ROOF DRAINAGE SYSTEM	1	Providing, fixing and testing Geberit HDPE range of pipes as per following sizes. the system is the ideal system to meet the requirements of the Pluvia roof drainage system. Due to its outstanding material characteristics Geberit HDPE is especially suitable for prefabrication. The Geberit Pluvia roof drainage system includes roof outlets, pipes and fittings made of Geberit HDPE. Unlike conventional roof drainage methods, the Geberit Pluvia system functions as a syphonic system. The pipeline fills completely as rapidly as possible and creating a negative pressure. The water is drawn away by suction and not allowed to drain away constantly. This also ensures an improved self-cleaning function, etc. complete as directed by Engineer in charge. ARTICLE NO.365.000.16.0, 367.000.16.0, 369.000.16.0,30.000.16.0. Make:- Geberit		
		1.1	PIPE PE -HD d75x3 L500	20.00	Running Metre
	GEBERIT	1.2	PIPE PE -HD d110x4.3 L500	125.00	Running Metre
	HDPE PIPES	1.3	PIPE PE -HD d160x6.2 L500	1005.00	Running Metre
		1.4	PIPE PE -HD d200x6.2 L500	145.00	Running Metre

2	GEBERIT SYPHONIC ROOF DRAINAGE SYSTEM	2	Providing, fixing and testing the Geberit Pluvia outlets are developed for all types of roof structures. Due to the different discharge rates of the outlets (12 1/s or 25 1/s) an economical layout of the roof drainage system can be reached. The wide range of contact sheets and accessories allows to connect with every roof material. The Geberit Pluvia outlets can also be transformed into emergency outlets with an additional installation kit, etc. complete as directed by Engineer in charge. ARTICLE NO.359.108.00.1, 359.099.00.1, 359.117.00.1. Make:- Geberit		
	GEBERIT	2.1	PLU RO w/contsht d56 121/s	14	PC
	PLUVIA	2.2	PLU RO w/contsht d90 251/s	4	PC
	OUTLETS	2.3	PLU roof outer DAF d56 91/s horiz	10	PC

			EXTERNAL BUILDING		
			BLDG EXTERNALWATER SUPPLY		
1	UPVC PIPES	1	Providing and fixing in position tested uPVC easy fit pipes conforming to ASTM D-1785 Schedule 80 with all fittings like bends, tees, reducers, elbows, unions Schedule 80 including supporting on walls complete including scaffolding and hydraulic testing after laying of pipes as specified and including making holes in the walls or floors as required and redoing the same (For pump outlet to OH Tank, Terrace looping, Downcomer of domestic & flushing water supply pipes) etc.complete as directed by Engineer in charge. MAKE- Ashirwad/ Supreme/ Astral		
		1.1	80 mm nominal bore	615.00	Running Metre
		1.2	100 mm nominal bore	72.00	Running Metre
2	GI PIPES	6	Providing and fixing on walls/ ceiling/ floors, 150 mm dia.heavy grade having embossed as ISI Mark <b>galvanised iron pipes</b> weight of 14.74 Kg/meter with necessary fittings. and remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky etc. complete as directed by Engineer in charge.(MUNICIPAL WATER SUPPLY LINE) Make:-Tata / Zenith / Jindal	102.00	Running Metre
3	WATER METER FLOW RATE 300LPM	11	Providing and fixing <b>150mm diameter water</b> <b>meter with non-return valve</b> including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. Meter for Municiple line <b>Make:-Woltman/Kranti / Sant</b> / Kapstan	1.00	Number
			Meter for Municiple water line		
			FLOW RATE - 300 LPM		

4	WATER METER FLOW RATE 250LPM	12	Providing and fixing <b>150mm diameter water</b> <b>meter with non-return valve</b> including strainer, sockets/ union nut and including water meter box making locking arrangements and lock. [Without chamber]. <b>Make:-</b> <b>Woltman/Kranti / Sant / Kapstan</b> <b>Meter for Domestic water line</b> <b>FLOW RATE - 250 LPM</b>	1.00	Number
5	WATER METER FLOW RATE 310LPM	13	Providing and fixing <b>150mm diameter water</b> <b>meter with non-return valve</b> including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. <b>Make:-</b> <b>Woltman/Kranti / Sant / Kapstan</b> <b>Meter for Flushing water line</b> <b>FLOW RATE - 310 LPM</b>	1.00	Number
6	WATER METER FLOW RATE 150LPM	14	Providing and fixing <b>100mm diameter water</b> <b>meter with non-return valve</b> including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. <b>Make:-</b> <b>Woltman/Kranti / Sant / Kapstan</b> <b>Meter for Irrigation water line</b>	1.00	Number
7	WATER METER FLOW RATE 150LPM	15	FLOW RATE - 150 LPMProviding and fixing 100mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. Make:- Woltman/Kranti / Sant / KapstanMeter for rain water treated water line	1.00	Number
8	WATER METER FLOW RATE 150LPM	16	FLOW RATE - 150 LPMProviding and fixing 100mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. Make:- Woltman/Kranti / Sant / KapstanMeter for COOLING TOWER MAKE WATER TRANSFER FROM STP TREATED WATERFLOW RATE - 150 LPM	1.00	Number
9	WATER METER FLOW RATE 150LPM	17	Providing and fixing 100mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. Make:- Woltman/Kranti / Sant / Kapstan Meter for COOLING TOWER MAKE WATER TRANSFER FROM FRESH WATER FLOW RATE - 150 LPM	1.00	Number

10	WATER METER FLOW RATE 80LPM	18	Providing and fixing 80mm diameter water meter with non-return valve including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. Make:- Woltman/Kranti / Sant / Kapstan Meter for Centrifugal Self priming for STP FLOW RATE - 80 LPM	1.00	Number
11	WATER METER FLOW RATE 80LPM	19	Providing and fixing <b>80mm diameter water</b> <b>meter with non-return valve</b> including strainer, sockets/ union nut and including water meter box making locking arrangements and lock etc.complete as directed by Engineer in charge. [Without chamber]. <b>Make:-</b> <b>Woltman/Kranti / Sant / Kapstan</b> <b>Meter for Filter feed cum backwash pumps</b>	1.00	Number
			for STP FLOW RATE - 80 LPM		
12	PVC VENT	21	Providing and fixing PVC Vents of following sizes in O.H.T./ U.G.R. over delivery pipes along with provision of inverted U bend & mosquito proof jalli at the end etc. complete as directed by engineer-in-charge. MAKE - Ashirwad/ Supreme/ Astral		
		21.1	50mm dia	8.00	Number
13	DI MANHOLE		'Providing and fixing Circular type Ductile Iron Manhole Covers with frame of approved make of 525 mm dia and 75 kg human weight for OHT including all necessary supports, grouting of the frame in RCC, etc. complete as directed by engineer-in-charge.MAKE - Thermodrain / Supreme / Everlast	4.00	Each
			BLDG EXTERNAL DRAINAGE, RAIN WATER DRAIN		
14	DOUBLE ANGLE BRACKET	23	Providing & fixing M.S. fabricated double angle bracket of required size in 50 x 50 x 5 mm of required length with all necessary fabrication & fixing the same and grouting in wall / R.C.C wall using anchor fasteners of required size and clamping of pipe with G.I. 'U' clamp with nut & bolts including applying primer & 2 coats of enamel paint of approved color to brackets etc. complete as per directions of engineer-in- charge. Make:-Tata / Zenith / Jindal	80.00	Kg
15	UPVC	24	Supply,Providing and fixing <b>UPVC Cowl</b> for the following pipes including making all solvent joints with material & labour etc. all complete as per direction of the engineer-in-charge. Make - Ashirvad/ Supreme/ Astral		
	COWL	24.1	75 mm dia	4.00	EACH
1			110 mm dia	6.00	EACH
		24.2		0.00	LACH

16	160MM SN8 PVC PIPE	25	Providing, laying & fixing, jointing 160 mm SN 8 PVC underground pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete as per directions of engineer-in-charge. MAKE - Ashirwad/ Supreme/ Astral	1002.00	Running Metre	
17	200MM SN8 PVC PIPE	26	Providing, laying & fixing, jointing 200 mm SN 8 PVC underground pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete as per directions of engineer-in-charge. MAKE - Ashirwad/ Supreme/ Astral	290.00	Running Metre	
18	250MM SN8 PVC PIPE	27	Providing, laying & fixing, jointing 250 mm SN 8 PVC underground pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete as per directions of engineer-in-charge. MAKE - Ashirwad/ Supreme/ Astral	79.00	Running Metre	
19	315MM SN8 PVC PIPE	28	Providing, laying & fixing, jointing 315 mm SN 8 PVC underground pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete as per directions of engineer-in-charge. MAKE - Ashirwad/ Supreme/ Astral	2.00	Running Metre	
		29	Constructing 300x300 internal size <b>brick</b> <b>masonry gully trap</b> chamber including ( waste pipe)			
		29.1	i. 115 thick brick walls in C.M. 1:5			
		29.2	ii. 100 thick CC bed in M-15			
	DDIOU	29.3	iii. Installing in it glazed stoneware gully trap 150x100 size			
20	BRICK MANSORY GULLY	29.4	iv. Connecting C.I. waste pipes on top of gully trap with cover	15.00	Number	
	TRAP	29.5	v. Filling space between gully trap and chamber with C.C. M 10			
			29.6	vi. Plastering inside the chamber with C.M. 1:3 to form a hopper		
		29.7	vii. Fixing hinged D.I. frame cover ,HEAVY DUTY ,40 TON in C.C. M 15 and finished smooth on top etc. complete as per directions of engineer-in-charge. (NECO Make for cover)			

21	POLYMER CONCRET DRAIN	32	Supply, Installation, Testing & Commissioning of Polymer concrete drain channel with edge protection, width 130 mm.height varies from 150-250mm, with Ductile iron Grating D*400 Load Class, and conform to the EN 1433, etc. complete as per directions of engineer-in- charge.(for STP overflow drain & in pump room & basement drain) <b>MAKE - Kessel/ACO</b>	230.00	Metre
	CHANNEL	32.1	A Drain Connecting element for Drain Channel	12.00	Nos
		32.2	A closed End cap Withoutlet connector Ø 100 mm	8.00	Nos
		32.3	Closed End cap suitable for for channel start/end	8.00	Nos
22	POLYMER CONCRET DRAIN	33	Supply, Installation, Testing & Commissioning of Polymer concrete drain channel with edge protection, width 240 mm.height varies from 280-380mm, with Ductile iron Grating D*400 Load Class, and conform to the EN 1433, etc. complete as per directions of engineer-in-charge <b>MAKE - Kessel/ACO</b>	196.00	Metre
	CHANNEL	33.1	A Drain Connecting element for Drain Channel	12.00	Nos
		33.2	A closed End cap Withoutlet connector Ø 160 mm	8.00	Nos
		33.3	Closed End cap suitable for for channel start/end	8.00	Nos

	STP					
		1	Supply, Installation, Testing and Commissioning of 70 Cu.mtr/day STP consisting of the following items ,MAKE- Thermax/ION Exchange /Pentair			
		1.1	Manually inclined bar screen in MOC - SS 304 ,230 mm Thick with 8 mm perforation, with frame. No as required with a minimum retention time	1	Set	
		1.2	Equalized sewage transfer pumps- (1 working & 1 standby). Capacity - 3.5cu.mtr/hr. Discharge head - 10 mtr.	2	Set	
		1.3	Agitator in Pre-anoxic de-nitrifying tank- Qty 1 no. MOC - SS , Type of agitator - slow speed and motor hp suitable.	1	Each	
1	STP MBBR TECHNOLY	1.4	Anoxic system sludge recirculation pump from lamella zone to Anoxic tank (1 working & 1 standby). Capacity - 20.0 cu.mtr/hr. Discharge head - 10 mtr.	2	Each	
		1.5	COARSE BUBBLE air diffuser for Equalization tank to diffuse air. MOC - EPDM for membrane of diffusers. Type - Tubular or Disc type	1	Lot	
		1.6	FINE BUBBLE air diffuser for MBBR tank to diffuse air. MOC - SILLICON for membrane of diffusers. Type - Disc membrane type	1	Lot	
		1.7	Floating MBBR media in bio reactor - Qty as required. Type - Cylindrical, floating type, MBBR media. MOC - PP	1	Lot	
		1.8	Air blower (for aeration tank / Effluent collection tank / Equalization tank / sludge holding tank) - 2 nos (1 working & 1 standby). MOC - C.I, Discharge capactiy - 120 cu.mtr/hr, pressure - at required mm wg, Twin lobe rotary type, Noise level - max 95 dba at 3 mtr distance.	2	Set	

		1.9	Sewage Recycle pumps for - MOC - CI, 2 nos (1 working & 1 standby),Capacity - 3.5 cu.mtr / hour, Head - 10mtr, Type - Horizontal Centrifugal Self priming.	2	Nos
		1.10	Clarifier/Tube settler media for Inclined Tube Secondary Clarifier- MOC - PVC, Type - Inclined tube,	1	M3
		1.11	Centrifuge feed pump MOC - CI, Type - Horizontal Centrifugal Self priming, capacity - 3.5 cu.mtr/hour, head - 10mtr, 2 nos (1 working & 1 standby)	2	Set
		1.12	NAOCL (Hypochlorite) dosing with dosing tank and dosing pump. Tank capacity - 100 ltrs with electronic metering facility including meter, 0 to 6 LPH	1	Each
		1.13	Filter feed cum backwash pumps- MOC - CI, capacity - 3.5 cu.mtr.hr, Head - 30 mtr, Type - Horizontal centrifugal self priming, (1 working & 1 standby)	2	Set
		1.14	Multi Graded Sand Filter- MOC -MSEP- Dia 500mm x 1500 mm HOS ht with interconnecting piping ,valves and media	1	Each
		1.15	Activated Carbon Filter- MOC -MSEP- Dia 500mm x 1500 HOS mm ht with interconnecting piping ,valves and media	1	Each
		1.16	SOFTENER - MOC -MSEP- Dia 800mm x 1500 HOS mm ht with interconnecting piping ,valves and RESIN	1	Each
		1.17	UV STERLIZER with UV Doage of 600 JM2@ 80% UVT- , FLOW : 3.5 m3/hr	1	Lot
		1.18	Sludge dewatering unit - 1 lot, MOC - MS / PP, Capacity - 50 ltrs wet cake holding capacity, Type - Basket centrifuge	1	Lot
2	ELECTRICAL CONTROL PANEL FOR STP	2	Electrical works including main electrical panel- self standing floor mounted, compartmantalized panel, along with copper flat / round armounted cabling from panel to all equipments inside the ETP/STP. Cable shall be proerly clamped on the ceiling or on GI perforated cable tray while dropping down. (Only incoming power input cable will be provided by other agency.) Complete electrical works including copper earthing with 8 swg wire is inside the scope of STP vendor. Busbar inside the panel shall be with copper with a current carrying density of maximum 1.2 amps / sq.mm. Panel Incomer shall be suitably sized 4 pole MCCB with 96 x 96 size digital meter for voltage, ampere and kwh provided with BMS interface facility. Outgoings shall be suitably sized MCBs or MCCBs,All equipments starters should have sufficient NO/NC ,potential free contacts ,relay contacts to integrate/monitor with IBMS system.	1	Each
2	SOFTNER FOR	3	SOFTNER FOR COOLING TOWER MAKE UP WATER (RECEIVED FROM 3RD PARTY SOURCE 94 KLD )(Design Softner for 400 ppm Hardness)		
3	COOLING TOWER MAKE UP	3.1	NAOCL (Hypochlorite) dosing with dosing tank and dosing pump. Tank capacity - 150 ltrs with electronic metering facility including meter, 0 to 10 LPH	1	Each

		3.2	Filter feed cum backwash pumps- MOC - CI, capacity - 5 cu.mtr.hr, Head - 35 mtr, Type - Horizontal centrifugal self priming, (1 working & 1 standby)	1	Each
		3.3	Multi Graded Sand Filter- MOC -MSEP- Dia 750mm HOS ht with interconnecting piping ,valves and media	1	Each
		3.4	Activated Carbon Filter- MOC -MSEP- Dia750 mm HOS mm ht with interconnecting piping ,valves and media	1	Each
		3.5	SOFTENER - MOC -MSEP- Dia 925mm x 1800 HOS mm ht with interconnecting piping ,valves and RESIN- Dia 1000mm x 1875 HOS mm & RESIN 590 LITS FOR 94 KLD STP SYSTEM	1	Each
		3.6	UV STERLIZER with UV Doage of JM2@ 80% UVT-, FLOW : 5 m3/hr	1	Each
4	ULTRAFILTR ATION PLANT	4	ULTRA FILTERATION COMMON FOR FOR FLUSHING (STP RECYCLED WATER 60 KLD) AND COOLING TOWER MAKE UP WATER (RECEIVED FROM 3RD PARTY SOURCE 94 KLD)= 154 KLD	-	
		4.1	ULTRAFILTRATION PLANT , PERMEATE FLOW : 8 m3/hr , for 20hr working	1	Each
		4.2	Ozonisation sytem for treated water tank 1 (230 CUM STP TREATED WATER TANK)	1	Set
	INSTRUMENT ATION	5	INSTRUMENTATION	-	
		5.1	Hi / lo Level switches - 3 sets , CAPACITANCE TYPE	-	
		5.2	Glycerine filled 100 mm dia pressure guage with siphone connection -	-	
		5.3	Rotameter - 2 nos		
5		5.4	Interconnecting piping - GI C CLASS FOR AIR PIPING - UPVC SCH 40 FOR SEWAGE LINE	1	Each
		5.5	VALVES -SS 304 FOR AIR LINE -PP FOR SEWAGE LINE		
		5.6	All equipments should have intergatable with IBMS system, and should have sufficient NO/NC, Potential free and relay contacts.		
		5.7	TECHNICAL SUPPORT AND DOCUMENTATION FOR MPCB & LOCAL AUTHORITY LIASONING		
6	Market Rate	6	SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ONLINE STP PARAMETERS MONITORING SYSTEM, AND ALSO MONITOR/INTEGRATE IN IBMS SYSTEM MAKE- ION Exchange /Thermax/Pentair/Pratham enviro/Kesari Infrabuild.	1	Set
		6.1	STP online monitoring system with data transfer system to MPCB Comprise of online transfering data of Ph , BOD,COD,TSS and flow to MPCB and also monitoring in IBMS system with communication port		

			BIO GAS & OWC		
			MISCELLANEOUS ITEMS-WATER COOLER, BIO GAS, OWC, MAKE- LAHS green india pvt. Ltd./Urja Bio System Pune/Super clean/Pratham enviro		
		1	Supply, installation, testing and commissioning of Bio-gas plant. Comprising of following items:		
		1.1	Civil construction of Biogas Plant Units-		
			Waste Unloading and Crushing Shed 1 No/2.5m x 3m x 3m/ MS Fabrication		
			Slurry preparation tank 1 no./250 lit/MS/PVC		
			Biogas digester 1 nos./12cum/ RCC,		
			Digested slurry tank 1 no./6 cum / brick work		
			BiogasBalloonshedsroom1no/MSFabrication – 3m x3m x3mGRT and Blower platform 1 No /PCC		
			MS Gas Holder 1 No/MS		
		1.2	Electro- Mechanical Items :		
		1.4	Food Waste Crusher 1 no / 3 HP		
	BIO GAS		Biogas Balloon with accessories -1 No./ 5 cum		
1	PLANT		/ PVC rubber balloon with guide pipes, moisture traps, inlet and out let connections, Biogas auto pressure maintaining system, pressure switch, pressure gauge, Gas receiving tank. etc.complete as directed by Engineer in charge.	1	Each
		1.3	Biogas pressure regulation system		
			Biogas Culture Loading 10 tons		
			Waste Collection Bins 30-40kg - Wheel		
			Arrangements – 4 nos		
			Biogas stoves 25 CFT , 1 Nos.		
			Control panel for Biogas blower, Crusher. 1 set std.		
			Piping & Cabling. UPVC – 1.5 & 1 ",@ 150 ft		
			Installation, Erection & commissioning . For 100 kg/day /10 cum Biogas plant. MAKE- LAHS green india pvt. Ltd./Urja Bio System		
			Pune/Super clean/Pratham enviro         Organic Waste Disposal System	1	Each
		2		_	
2	ORGANIC WASTE DISPOSAL	2.1	Fully automatic Micro-organism based natural composting system with PLC based control ,Stainless Steel (SS304) shaft & mixing blade to convert organic waste like kitchen waste , canteen waste etc. to organic manure etc.complete as directed by Engineer in charge.		
		2.2	Capacity 60 Kg /day ,with Waste Collection Bins 30-40kg – Wheel Arrangements – 3nos. MAKE- LAHS green india pvt. Ltd./Urja Bio System Pune/Super clean/Pratham enviro		

			RWT		
			RAIN WATER TREATMENT PLANT - 150LPM /9 M3/HR ,Make - ION Exchange /Thermax/Pentair/Pratham enviro/Kesari Infrabuild.		
1	RAIN WATER TRATMENT PLANT	1	Water Treatment Plant of cap. <b>150 LPM/9.0</b> <u><b>cum/hr</b></u> incld all interconnecting piping valves & other accessories incld necessary internal cabling, termination support stays, clamps, inlet & outlet connections fdn works etc. comprising of the following :-		
	MULTI GRADE FILTER	1.1	(a) Supply & erection commissioning of Multi Grade filter , vertical cylindrical type, MS fabricated vessel of suitable size as per IS-2062, incld pipeline 80mm dia, butterfly valve of suitable size incld 2 nos. pressure gauge, sampling cocks filled with Sand & under bed media. The shell thickness shall be of 4mm and dished end having 4mm with MS Header and PVC lateral collecting system . Multi Grade Filter should have Red Oxide paint from out side and Epoxy paint from inside .The shell shall also be provided with adequate size of air vent line with valve etc.complete as directed by Engineer in charge.	1	EACH
	ACTIVATED CARBON FILTER	1.2	<ul> <li>(b) Supply &amp; erection commissioning of Activated Carbon Filter , vertical cylindrical type, MS fabricated vessel of suitable size as per IS-2062, incld pipeline 80mm dia, butterfly valve of suitable size incld 2 nos. pressure gauge, sampling cocks filled with activated carbon media with iodine value 1000. The shell thickness shall be of 4mm and dished end having 5mm and bed plate under drain collecting system will be strainer on bed plate. Activated Carbon filter should have Epoxy paint from inside and outside red oxide paint .The shell shall also be provided with adequate size of air vent line with valve etc.complete as directed by Engineer in charge. Note : Test certificate for Iodine Value for Activated Carbon.</li> </ul>	1	EACH
	CHEMICAL DOSING SYSTEM	1.3	<ul> <li>(c) Chemical Dosing System (CDS-2 without High Speed Agitator) for Sodium Hypo-chlorite at raw water collection tank with electromagnetic metering pump run on 220V AC for 100% accurate dosing with all accessories with 200 ltrs PVC tank.</li> </ul>	1	EACH
	FILTER FEED PUMP	1.4	(d) Supply & erection commissioning of Filter Feed Pump (1W+1S) to Multi Grade filter - Activated Carbon Filter , flow rate - 9m3/hr (1W+1S)	1	SET
	UV SYSTEM	1.5	(e) Supply & erection commissioning of UV System-01no.	1	EACH
			NOTE :- (i) Minimum working pressure of the plant - 2Kgs/Sqcm.Maximum working pressure of the plant - 3.5Kgs/Sqcm		
			<ul> <li>interval of 8 hrs.</li> <li>(iii) Turbidity contents permissible limit &lt; 5 NTU after outlet of MGF and ACF .</li> </ul>		

### अटी व शर्ती:

- १) सीलबंद निविदा दि.१८/०८/०८/२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि. 27 / ८८ /२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे. प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क

पनवेल महानगरपालिकेने राखुन ठेवला आहे.

पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/ 2329 /प्र.क्र. 03/2032()२०२३

दि. ९/८/२०२३

### प्रत माहितीस्तव –

# पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे ''स्वराज्य'' मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (Internal Electrical Work)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

ITEM	BOQ REFF ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
,		INTERNAL ELE BOQ	1	•
		NOTE- ALL ITEM RATES SHOULD CONSIST OF THREE YEARS DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.		
INTERNAL BUSDUCT				
BUS DUCT AND RISER MAIN WING A LIGHT & POWER	1.1			
		etc of 250A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
	1.1.1	Straight Length with Tap off Opening at every 1	35	Mtr
	INTERNAL BUSDUCT BUS DUCT AND RISER MAIN WING A LIGHT &	REFF         INTERNAL         BUSDUCT         BUS DUCT AND         RISER MAIN         WING A LIGHT &         POWER	REFF ITEM         INTERNAL ELE BOQ           INTERNAL ELE BOQ           NOTE - ALL ITEM RATES SHOULD CONSIST OF THREE YEARS DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.           INTERNAL BUSDUCT         1.1           BUS DUCT AND RISER MAIN WING A LIGHT & POWER         1.1           Supply Installation, Testing and Commissioning etc of 250A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge Make - LEGRAND/ SIEMENS / SCHNEIDER / L & T	REFF ITEM         INTERNAL ELE BOQ           INTERNAL ELE BOQ           NOTE- ALL ITEM RATES SHOULD CONSIST OF THREE YEARS DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.           INTERNAL BUSDUCT         BUS DUCT AND RISER MAIN WING A LIGHT & POWER         1.1           Supply Installation, Testing and Commissioning etc of 250A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge Make - LEGRAND/ SIEMENS / SCHNEIDER / L & T           1.1.1         Straight Length with Tap off Opening at every 1         35

		1.1.2	Straight Length without Tap off Opening	63	Mtr
		1.1.3	Horizantal Bracket at Every 1 Mtr Inteval for	45	No.
		1.1.4	Horizantal Busbar Installation Vertical Spring Bracket at Every 1.5 Mtr	27	No.
		1.1.5	Inteval for Vertical Busbar Installation Horizantal Elbow	3	No.
		1.1.6	Vertical Elbow	2	No.
		1.1.0	Flange End only	1	No.
		1.1.7		I	NO.
		1.1.8	End feed unit - direct cable termination arrangment only	1	No.
		1.1.9	End cover IP55	1	No.
		1.1.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
		1.1.11	T- Joint	1	Nos
		1.1.12	32 Amp Empty Tap off Box with 32A 36kA FP MCCB	9	No.
		1.1.13	63 Amp Empty Tap off Box with 63A 36kA FP MCCB	3	No.
2	BUS DUCT AND RISER MAIN WING B LIGHT & POWER	1.2			
		1.2.1	Supply Installation, Testing and Commissioning etc of 400A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T Straight Length with Tap off Opening at every 1	35	Mtr
		1.2.1	Mtr. Interval Straight Length without Tap off Opening	69	Mtr
		1.2.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	28	No.
		1.2.4	Vertical Spring Bracket at Every 1.5 Mtr	27	No.
		1.2.5	Inteval for Vertical Busbar Installation Horizantal Elbow	3	No.
			Vertical Elbow	2	No.
		1.2.6			
		1.2.7	Flange End only	1	No.
		1.2.8	End feed unit - direct cable termination arrangment only	1	No.
		1.2.9	End cover IP55	1	No.
		1.2.10	Copper Flexible Braid Connection Length [mm]	1	No.
			300-450 RYBN set		

		1.2.11	T- Joint	1	Nos
		1.2.12	32 Amp Empty Tap off Box with 32A 36kA FP MCCB	9	No.
		1.2.13	63 Amp Empty Tap off Box with 63A 36kA FP MCCB	5	No.
3	BUS DUCT AND RISER MAIN WING C LIGHT & POWER	1.3			
			Supply Installation, Testing and Commissioning etc of 250A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.3.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	35	Mtr
		1.3.2	Straight Length without Tap off Opening	35	Mtr
		1.3.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	45	No.
		1.3.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	27	No.
		1.3.5	Horizantal Elbow	4	No.
		1.3.6	Vertical Elbow	3	No.
		1.3.7	Flange End only	1	No.
		1.3.8	End feed unit - direct cable termination arrangment only	1	No.
		1.3.9	End cover IP55	1	No.
		1.3.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
		1.3.11	T- Joint	1	Nos
		1.3.12	32 Amp Empty Tap off Box with 32A 36kA FP MCCB	11	No.
		1.3.13	63 Amp Empty Tap off Box with 63A 36kA FP MCCB	3	No.
4	BUS DUCT AND RISER MAIN WING D LIGHT & POWER	1.4			

			Supply Installation, Testing and Commissioning		
			etc of 400A, 1000V, 50Hz, 16kA for 1 Sec 3P+N-		
			100%+PE- internal earth Sandwich type		
			Aluminium Busbar Trunking system with earth		
			fault protection & impulse withstand voltage of		
			8KV as per IEC 61439-1/2. Outer casing of		
			system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical,		
			electrical and heat loss efficiency. The		
			sheetmetal is made of electro-galvenized steel		
			1.6mm thick with epoxy coating having degree		
			of protection IP55. The busbar conductor have		
			a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at		
			joint to avoid oxidation. The Insulation between		
			the bars shall be Class F. The junction contact		
			is ensured for each phase, insulated with red		
			class F thermosetting plastic material with		
			breakdown voltage of minimum 6KV.Enclosure		
			is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm),		
			As directed by Engineer in charge <b>Make</b> -		
			LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.4.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	35	Mtr
		1.4.2	Straight Length without Tap off Opening	35	Mtr
		1.4.3	Horizantal Bracket at Every 1 Mtr Inteval for	45	No.
		1 4 4	Horizantal Busbar Installation	07	N
		1.4.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	27	No.
		1.4.5	Horizantal Elbow	3	No.
		1.4.6	Vertical Elbow	2	No.
		1.4.7	Flange End only	1	No.
		1.4.8	End feed unit - direct cable termination	1	No.
			arrangment only		
		1.4.9	End cover IP55	1	No.
		1.4.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
		1.4.11	T- Joint	1	Nos
		1.4.12	32 Amp Empty Tap off Box with 32A 36kA FP MCCB	9	No.
		1.4.13	63 Amp Empty Tap off Box with 63A 36kA FP MCCB	5	No.
5	BUS DUCT AND	1.5	Supply Installation, Testing and		
	RISER MAIN		Commissioning etc of 400A, 1000V, 50Hz, 16kA		
	WING AB UPS		for 1 Sec 3P+N-100%+PE- internal earth		
			Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse		
			withstand voltage of 8KV as per IEC 61439-1/2.		
			Outer casing of system consists of four C-		
			ribbed section bars, bordered and riveted with		
			excellent mechanical, electrical and heat loss		
			efficiency. The sheetmetal is made of electro- galvenized steel 1.6mm thick with epoxy coating		
			having degree of protection IP55. The busbar		
			conductor have a rectangular corss-section with		
					1 1

		1.5.1	corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T Straight Length with Tap off Opening at every 1	35	Mtr
		1.5.2	Mtr. Interval Straight Length without Tap off Opening	37	Mtr
		1.5.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	45	No.
		1.5.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	27	No.
		1.5.5	Horizantal Elbow	4	No.
		1.5.6	Vertical Elbow	3	No.
		1.5.7	Flange End only	1	No.
		1.5.8	End feed unit - direct cable termination arrangment only	1	No.
		1.5.9	End cover IP55	1	No.
		1.5.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
		1.5.11	T- Joint	1	Nos
		1.5.12	32 Amp Empty Tap off Box with 32A 36kA FP MCCB	3	No.
		1.5.13	63 Amp Empty Tap off Box with 63A 36kA FP MCCB	3	No.
		1.5.14	125 Amp Empty Tap off Box with 125A 36kA FP MCCB	1	No.
6	BUS DUCT AND RISER MAIN WING CD UPS	1.6			
		1.6.1	Supply Installation, Testing and Commissioning etc of 400A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T Straight Length with Tap off Opening at every 1	35	Mtr
			Mtr. Interval		
		1.6.2	Straight Length without Tap off Opening	87	Mtr
		1.6.3	Horizantal Bracket at Every 1 Mtr Inteval for	45	No.

			Horizantal Busbar Installation		
		1.6.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	27	No.
		1.6.5	Horizantal Elbow	3	No.
		1.6.6	Vertical Elbow	2	No.
		1.6.7	Flange End only	1	No.
		1.6.8	End feed unit - direct cable termination arrangment only	1	No.
		1.6.9	End cover IP55	1	No.
		1.6.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
		1.6.11	T- Joint	1	Nos
		1.6.12	80 Amp Empty Tap off Box with 80A 36kA FP MCCB	1	No.
		1.6.13	63 Amp Empty Tap off Box with 63A 36kA FP MCCB	6	No.
7	BUS DUCT AND RISER MAIN WING AB AC/VENTI	1.7			
			Supply Installation, Testing and Commissioning etc of 630A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars, bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded corner, Aluminium alloy with Tin Plating at joint to avoid oxidation.The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV.Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm), As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.7.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	35	Mtr
<u> </u>		1.7.2	Straight Length without Tap off Opening	35	Mtr
		1.7.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	45	No.
		1.7.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	27	No.
		1.7.5	Horizantal Elbow	3	No.
ļ		1.7.6	Vertical Elbow	2	No.
		1.7.7	Flange End only	1	No.
		1.7.8	End feed unit - direct cable termination arrangment only	1	No.
		1.7.9	End cover IP55	1	No.
		1.7.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
		1.7.11	T- Joint	1	Nos
		1.7.12	25 Amp Empty Tap off Box with 25A 36kA FP MCCB	6	No.

		1.7.13	32 Amp Empty Tap off Box with 32A 36kA FP	1	No.
		1.7.14	MCCB 63 Amp Empty Tap off Box with 63A 36kA FP	3	No.
			MCCB		
		1.7.15	100 Amp Empty Tap off Box with 100A 36kA FP MCCB	1	No.
		1.7.16	250 Amp Empty Tap off Box with 250A 36kA FP MCCB	1	No.
8	BUS DUCT AND RISER MAIN WING CD AC/VENTI	1.8	Supply Installation, Testing and Commissioning		
			etc of 630A, 1000V, 50Hz, 16kA for 1 Sec 3P+N- 100%+PE- internal earth Sandwich type Aluminium Busbar Trunking system with earth fault protection & impulse withstand voltage of 8KV as per IEC 61439-1/2. Outer casing of system consists of four C-ribbed section bars,		
			bordered and riveted with excellent mechanical, electrical and heat loss efficiency. The sheetmetal is made of electro-galvenized steel 1.6mm thick with epoxy coating having degree of protection IP55. The busbar conductor have a rectangular corss-section with rounded		
			corner, Aluminium alloy with Tin Plating at joint to avoid oxidation. The Insulation between the bars shall be Class F. The junction contact is ensured for each phase, insulated with red class F thermosetting plastic material with breakdown voltage of minimum 6KV. Enclosure is painted with RAL7035 resins with a high resistance to chemical agents. (130X130mm),		
			As directed by Engineer in charge <b>Make</b> - LEGRAND/ SIEMENS / SCHNEIDER / L & T		
		1.8.1	Straight Length with Tap off Opening at every 1 Mtr. Interval	35	Mtr
		1.8.2	Straight Length without Tap off Opening	72	Mtr
		1.8.3	Horizantal Bracket at Every 1 Mtr Inteval for Horizantal Busbar Installation	45	No.
		1.8.4	Vertical Spring Bracket at Every 1.5 Mtr Inteval for Vertical Busbar Installation	27	No.
		1.8.5	Horizantal Elbow	3	No.
		1.8.6	Vertical Elbow	2	No.
		1.8.7	Flange End only	1	No.
		1.8.8	End feed unit - direct cable termination arrangment only	1	No.
		1.8.9	End cover IP55	1	No.
		1.8.10	Copper Flexible Braid Connection Length [mm] 300-450 RYBN set	1	No.
		1.8.11	T- Joint	1	Nos
		1.8.12	25 Amp Empty Tap off Box with 25A 36kA FP MCCB	5	No.
		1.8.13	32 Amp Empty Tap off Box with 32A 36kA FP MCCB	3	No.
		1.8.14	63 Amp Empty Tap off Box with 63A 36kA FP MCCB	2	No.
		1.8.15	100 Amp Empty Tap off Box with 100A 36kA FP MCCB	2	No.

A.2		A.2	INTERNAL LT PANEL		
A.2		A.2			
			Note- ALL LT PANELS ARE TYPE TESTED - IP-		
			52 RATING Breakers shall be compitable to monitored through' IBMS] The Energy		
			multifunction meter with RS 485/RS232 port		
			shall be provided as per SLD		
			PANEL BUILDER Make -		
			SCHINIEDER/SEIMENS/L&T/LEGRAND/ DB		
			ELECTRICALS / DEVTA ELECTRICALS / VIVID		
			ELECTROMECH / GOEL POWER / ARROW		
			ENGINNERS /ABAC / ZENIT ENGINEERING /PRATIK SYSTEMS		
			STATE STATES STATEMENTEMENT STATEMENT STATEMEN		
			SCHNEIDER / POWEREASY/LEGRAND/L&T		
	WING-A BUS				
1		1 1	AND BLOOD DAW DOWDD & 40 OMADE DO	1	NI.
1	2ND FLOOR RAW POWER &	1.1	<b>2ND FLOOR RAW POWER &amp; AC SMART DB</b> FOR DATA IN CLOUD- Supply.	1	No.
	AC SMART DB		<b>FOR DATA IN CLOUD-</b> Supply, installation, testing & commissioning Type Of		
	FOR DATA IN		Construction Floor mounted cubicle type		
	CLOUD		panel Fabricated from 14/16G CRCA sheet		
			steel totally compartmentalized, treated for rust		
			proofing.with separate busbar chamber & cable		
			chambers Front & Back access for switchgears,		
			connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply		
			Main Control Unit/ Incomer WITH SMART	-	
			IoT LINK TO GET DATA IN CLOUD		
			1 No32A MCCB,10kA,FP/TM ,		
			O/C,S/C,E/F,U/V and Shunt coils , Phase		
			reversal relay etc., WITH SMART IOT LINK TO		
			<b>GET DATA IN CLOUD</b> Basic Event Summary and Pass/Fail Reports		
			for IEEE 519 for Volatge and current		
			Harmonics, 50160 Power Frequency, supply		
			voltage indication, Supply Volatge Dips, Short		
			and Long interuptions, Temporary Over		
			Voltages, Voltage Unbalance and Harmonic		
			Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics		
			upto 63rd for current and Voltage, High		
			Resolution waveform capture and directly from		
			meter via FTP. Distrurbance Direction		
			Detection, Sag/swell on any volatge, current		
			channel.		
			Visual Indication 1-LED Based Phase indicating		
			lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps	{	
			with control RCBOs		
			Additional Controller-Set - Manual Operation	1	
			Selector switch		
			Signal Relayer-Potential Free Contacts for		
			Remote Monitoring		
			Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR		
			OUTGOING WITH SMART IOT LINK TO GET	1	
			DATA IN CLOUD		
ı		•		i	

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and		
			Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off		
			cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In		
			addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone.		
			32A TPN RCBO,1 NOS. (WAITING ROOM AHU) 32A TPN RCBO, 1 NOS. (AUDITORIUM + STAGE AHU)		
			32A TPN RCBO, 1 NOS. (GREEN ROOM AHU) 25A TPN RCBO, 1NOS. (RAW POWER DB-1)		
			32A TPN RCBO, 2 NOS.(SPARE)		
			25A TPN RCBO, 1 NOS.(SPARE)		
2	2ND FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.2	<b>2ND FLOOR LIGHT SMART DB FOR DATA IN</b> <b>CLOUD-</b> Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System, 50 Hz supply	1	No.
			Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD		
			1 No32A MCCB,10kA,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase		
			reversal relay etc., WITH SMART IOT LINK TO GET DATA IN CLOUD		
			<b>GET DATA IN CLOUD</b> Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short		
			<b>GET DATA IN CLOUD</b> Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics		
			<b>GET DATA IN CLOUD</b> Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current		
			<b>GET DATA IN CLOUD</b> Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps		
			<b>GET DATA IN CLOUD</b> Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs		
			<b>GET DATA IN CLOUD</b> Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs		
			GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch		

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release,		
			Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact,		
			Trip alarm contact). The circuit breakers shall		
			be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off		
			cycles and Number of Tripping over universally		
			open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any		
			Energy and Building Management System. In addition the circuit breaker should be able to		
			communicate through GSM module the status		
			of the device (On/Off/Trip) through mobile phone.		
			16A TPN RCBO, 1 NOS. (WAITING AREA +		
			COMMON AREA LDB ) 16A TPN RCBO, 1 NOS. (AUDITORIUM +	-	
			STAGE +GREENROOM LDB ) 16A TPN RCBO, 3 NOS.(SPARE)	-	
3	3RD FLOOR	1.3	<b>3RD FLOOR RAW POWER &amp; AC SMART DB</b>	1	No.
	RAW POWER & AC SMART DB		<b>FOR DATA IN CLOUD-</b> Supply, installation,testing & commissioning Type Of		
	FOR DATA IN		Construction Floor mounted cubicle type		
	CLOUD		panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust		
			proofing.with separate busbar chamber & cable		
			chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4		
			Wire System, 50 Hz supply Main Control Unit/ Incomer WITH SMART		
			IoT LINK TO GET DATA IN CLOUD		
			1 No63A MCCB,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay		
			etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD		
			Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current		
			Harmonics, 50160 Power Frequency, supply		
			voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over		
			Voltages, Voltage Unbalance and Harmonic		
			Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics		
			upto 63rd for current and Voltage, High Resolution waveform capture and directly from		
			meter via FTP. Distrurbance Direction		
			Detection, Sag/swell on any volatge, current channel.		
			Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.		
			Visual Indication 2-Set - ON/OFF/ TRIP lamps	•	
			with control RCBOs Additional Controller-Set - Manual Operation		
			Selector switch Signal Relayer-Potential Free Contacts for	-	
			Remote Monitoring		
			Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR		
			OUTGOING WITH SMART IoT LINK TO GET	1	
1	1	1	DATA IN CLOUD		

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under voltage release, Shunt trip) and		
			Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall		
			be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off		
			cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any		
			Energy and Building Management System. In addition the circuit breaker should be able to		
			communicate through GSM module the status of the device (On/Off/Trip) through mobile		
			phone. 40A TPN RCBO, 1 NOS. ( AHU )		
			25A TPN RCBO, 1 NOS. (PDB-1)		
			25A TPN RCBO,1 NOS. (PDB-2)		
			40A TPN RCBO,1 NOS.(SPARE) 25A TPN RCBO,2 NOS.(SPARE)		
4	3RD FLOOR	1.4	3RD FLOOR LIGHT SMART DB FOR DATA IN	1	No.
	LIGHT SMART DB FOR DATA IN CLOUD	1.1	<b>CLOUD-</b> Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from		110.
			14/16G CRCA sheet steel totally compartmentalized, treated for rust		
			proofing.with separate busbar chamber & cable		
			chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4		
			Wire System , 50 Hz supply		
			Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD		
			1 No32A MCCB,10kA,FP/TM ,		
			O/C,S/C,E/F,U/V and Shunt coils , Phase		
			reversal relay etc., WITH SMART IoT LINK TO GET DATA IN CLOUD		
			Basic Event Summary and Pass/Fail Reports		
			for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply		
			voltage indication, Supply Volatge Dips, Short		
			and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic		
			Voltage. THD on Voltage and current harmonics		
			with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High		
			Resolution waveform capture and directly from		
			meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.		
			Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.		
			Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs		
			Additional Controller-Set - Manual Operation Selector switch		
			Signal Relayer-Potential Free Contacts for Remote Monitoring		
			Potential Bus/Busbar: set -32A		
			TPN,Aluminum BUSBAR		

		RCBOs shall be suitable for field-fittable		
		Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)		
	1 5		1	No
5 4TH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.5	<ul> <li>4TH FLOOR RAW POWER &amp; AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No63A MCCB,,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>		No.

6       4TH FLOOR       1.6         6       4TH FLOOR       1.6         126 HT FLOOR       1.6       4TH FLOOR         126 HT FLOOR       1.6       4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD       1         0 A TPN RCBO, 1 NOS. (PDB-1)       25A TPN RCBO, 2 NOS. (SPARE)       1         25A TPN RCBO, 2 NOS. (SPARE)       25A TPN RCBO, 2 NOS. (SPARE)       1         10 HT FLOOR LIGHT SMART DB FOR DATA IN CLOUD       1       Not CLOUD       1         11 CLOUD       1.6       4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD       1       Not CLOUD         11 HT NOR CLOUP SUPPLY       1       1       Not CLOUP       1         126 HT FLOOR LIGHT SMART DB CO DATA IN CLOUD       1       Not CLOUP SUPPLY       1       1         126 HT FLOOR LIGHT SMART DB CO DATA IN CLOUD       1       Not CLOUP SUPPLY       1       1       Not CLOUP SUPPLY       1         127 HT PLOR LIGHT SMART				RCBOs shall be suitable for field-fittable	
6       4TH FLOOR       1.6       4TH FLOOR LIGHT SMART DB FOR DATA IN LIGHT SMART DB FOR DATA IN CLOUD       1.6       4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD-Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing,with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4       No         Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN COUD       1       No32A MCCB,,FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD         Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage, THD on Voltage and current harmonic voltage, THO no Voltage and current harmonic voltage, THD on Voltage and Unrent harmonic Voltages, Solf for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrubance Direction Detection, Sag/swell on any volatge , current channel.         Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.       Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs				Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 1 NOS. (PDB-1) 25A TPN RCBO, 1 NOS. (PDB-2) 40A TPN RCBO, 1 NOS.(SPARE)	
LIGHT SMART DB FOR DATA IN CLOUDCLOUD-Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1 No32A MCCB,,FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interruptions, Temporary Over Voltage, Voltage Unbalance and Harmonic Voltage, THD on Voltage and current harmonics with custom alarming, Individual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and Voltage, Igh Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs					
Additional Controller-Set - Manual Operation       Selector switch         Signal Relayer-Potential Free Contacts for       Remote Monitoring         Potential Bus/Busbar:       set -32A         TPN,Aluminum BUSBAR       OUTGOING WITH SMART IoT LINK TO GET	6	LIGHT SMART DB FOR DATA IN	1.6	<ul> <li>4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD- Supply, installation, testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No32A MCCB,,FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR</li> </ul>	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB - 1) 16A TPN RCBO, 3 NOS.(SPARE)	
7 STH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.7	STH FLOOR RAW POWER & AC SMART DBFOR DATA IN CLOUD- Supply,installation,testing & commissioning Type OfConstruction Floor mounted cubicle typepanel Fabricated from 14/16G CRCA sheetsteel totally compartmentalized, treated for rustproofing.with separate busbar chamber & cablechambers Front & Back access for switchgears,connectors etc.Suitable for 430 V, 3 phase / 4Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMARTIoT LINK TO GET DATA IN CLOUD1 No63A MCCB,FP/TM , O/C,S/C,E/F,U/Vand Shunt coils , Phase reversal relayetc.,WITH SMART IoT LINK TO GET DATA INCLOUDBasic Event Summary and Pass/Fail Reportsfor Volatge and currentHarmonics, 50160 Power Frequency, supplyvoltage indication, Supply Volatge Dips, Shortand Long interuptions, Temporary OverVoltage, Voltage Unbalance and Harmonicswith custom alarming, Indivividual Harmonicswith custom alarming, Indivividual Harmonicsvith control RCBOs , CTs, etc.Visual Indication 1-LED Based Phase indicatinglamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lampswith control RCBOsAdditional Controller-Set - Manual OperationSelector switch </td <td>No.</td>	No.

8	5TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.8	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 3 NOS. (PDB) 40A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 2 NOS.(SPARE) <b>STH FLOOR LIGHT SMART DB FOR DATA IN</b> <b>CLOUD</b> - Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc., <b>WITH SMART IOT LINK TO GET DATA IN</b> <b>CLOUD</b>	No.
			Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR OUTGOING WITH SMART IOT LINK TO GET DATA IN CLOUD	

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 3 NOS. (LDB -1) 25A TPN RCBO, 1 NOS. (LDB-4) 16A TPN RCBO, 3 NOS.(SPARE)	
9	6TH LOWER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.9	6TH LOWER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation, testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic with custom alarming, Indivividual Harmonics with custom RCBOs , CTs, etc. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

TPN,Aluminum BUSBAR OUTGOING WITH SMART IOT LINK TO GET
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		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO,3 NOS. (LDB -1) 16A TPN RCBO,3 NOS.(SPARE)	
11 6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.11	6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

12	6TH UPPER FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.12	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 3 NOS. (PDB) 32A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 2 NOS.(SPARE) 25A TPN RCBO, 2 NOS.(SPARE) <b>6TH UPPER FLOOR LIGHT SMART DB FOR</b> <b>DATA IN CLOUD</b> - Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>1</b> No32A MCCB, .FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage, Noltage Unbalance and Harmonic Voltage, THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with control RCBOs, CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring <b>Potential Bus/Busbar: set -32A</b> <b>TPN,Aluminum BUSBAR</b>		No.
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			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 3 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
	WING-B BUS DUCT			
13	2ND FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.1	2ND FLOOR RAW POWER & AC SMART DBFORDATAINCLOUD-Supply,installation,testing & commissioning Type OfConstructionFloor mounted cubicle typepanel Fabricated from 14/16G CRCA sheetsteel totally compartmentalized, treated for rustproofing.with separate busbar chamber & cablechambers Front & Back access for switchgears,connectors etc.Suitable for 430 V, 3 phase / 4Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMARTIot LINK TO GET DATA IN CLOUD1No63AMCCB, ,FP/TM ,O/C,S/C,E/F,U/V and Shunt coils , Phasereversal relay etc.,WITH SMART IoT LINK TOGET DATA IN CLOUDBasic Event Summary and Pass/Fail Reportsfor IEEE 519 for Volatge and currentHarmonics, 50160 Power Frequency, supplyvoltage indication, Supply Volatge Dips, Shortand Long interuptions, Temporary OverVoltages, Voltage Unbalance and Harmonicswith custom alarming, Indivividual Harmonicswith custom alarming, Indivividual Harmonicswith custom alarming, Indivividual Harmonicsupto 63rd for current and Voltage, HighResolution waveform capture and directly frommeter via FTP. Distrurbance DirectionDetection, Sag/swell on any volatge , currentchannel.Visual Indication 1-LED Based Phase indicatinglamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lampswith control RCBOsAdditional Controller-Set - Manual OperationSelector switch <td>No.</td>	No.

proofing.with separate busbar cham chambers Front & Back access for s connectors etc.Suitable for 430 V, 3 Wire System , 50 Hz supplyMain Control Unit/ Incomer WI IOT LINK TO GET DATA IN CLOUD1No32A1No32AMCCB, O/C,S/C,E/F,U/V and Shunt coir reversal relay etc.,WITH SMART Ic GET DATA IN CLOUDBasic Event Summary and Pass/I for IEEE 519 for Volatge at Harmonics, 50160 Power Frequer voltage indication, Supply Volatge and Long interuptions, Tempor Voltages, Voltage Unbalance and Voltage, THD on Voltage and curren with custom alarming, Individual upto 63rd for current and Vo Resolution waveform capture and d meter via FTP. Distrurbance Detection, Sag/swell on any volatge channel.Visual Indication 1-LED Based Phas lamps, control RCBOs, CTs, etc.Visual Indication 2-Set - ON/OFF/ with control RCBOs Additional Controller-Set - Manua Selector switchSignal Relayer-Potential Free Co Remote MonitoringPotential Bus/Busbar: set	agh mobile         R DB-1)         R DB-1)         R DATA IN esting & on Floor cated from 1 totally for rust ber & cable witchgears, 3 phase / 4         FH SMART         ,FP/TM , ls , Phase T LINK TO         rail Reports dd current ccy, supply Dips, Short rary Over Harmonics tage, High irectly from Direction e , current e indicating         TRIP lamps         . Operation
TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LIN DATA IN CLOUD	

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 2NOS. (LDB) 16A TPN RCBO, 3 NOS.(SPARE)	
15 3RD FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.3	<ul> <li><b>3RD FLOOR RAW POWER &amp; AC SMART DB</b> <b>FOR DATA IN CLOUD.</b> Supply, installation, testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li><b>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</b></li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li><b>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</b></li> </ul>	No.

. 1			RCBOs shall be suitable for field-fittable		
			Protection auxiliaries (viz. Over-voltage release,		
			Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact,		
			Trip alarm contact). The circuit breakers shall		
			be communication ready to indicate the status		
			of the device (On/Off/Trip), Number of On/Off		
			cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so		
			as to have seamless connectivity with any		
			Energy and Building Management System. In		
			addition the circuit breaker should be able to communicate through GSM module the status		
			of the device (On/Off/Trip) through mobile		
			phone.		
			40A TPN RCBO, 1 NOS. (AHU)	_	
			25A TPN RCBO, 1 NOS. (PDB-1)	-	
			25A TPN RCBO, 1 NOS. (PDB-2)		
			40A TPN RCBO, 1 NOS.(SPARE)	4	
			25A TPN RCBO, 2 NOS.(SPARE)		
16	3RD FLOOR LIGHT SMART	1.4	<b>3RD FLOOR LIGHT SMART DB FOR DATA IN</b> <b>CLOUD-</b> Supply, installation,testing &	1	No.
	DB FOR DATA IN		commissioning Type Of Construction Floor		
	CLOUD		mounted cubicle type panel Fabricated from		
			14/16G CRCA sheet steel totally compartmentalized, treated for rust		
			proofing, with separate busbar chamber & cable		
			chambers Front & Back access for switchgears,		
			connectors etc.Suitable for 430 V, 3 phase / 4		
			Wire System, 50 Hz supply Main Control Unit/ Incomer WITH SMART	-	
			IoT LINK TO GET DATA IN CLOUD		
			IoT LINK TO GET DATA IN CLOUD1No32AMCCB,,FP/TM,	-	
			IoT LINK TO GET DATA IN CLOUD1No32AMCCB,,FP/TM,O/C,S/C,E/F,U/Vand Shunt coils , Phase	-	
			IoT LINK TO GET DATA IN CLOUD1No32AMCCB,,FP/TM,	-	
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports	-	
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current		
			IoT LINK TO GET DATA IN CLOUD1No32AMCCB, ,FP/TM,O/C,S/C,E/F,U/V and Shunt coils , Phasereversal relay etc.,WITH SMART IoT LINK TOGET DATA IN CLOUDBasic Event Summary and Pass/Fail Reportsfor IEEE 519 for Volatge and currentHarmonics, 50160 Power Frequency, supply	-	
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic		
			IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, ,FP/TM, O/C,S/C,E/F,U/V and Shunt coils, Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction		
			IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, ,FP/TM, O/C,S/C,E/F,U/V and Shunt coils, Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating		
			IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, ,FP/TM, O/C,S/C,E/F,U/V and Shunt coils, Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS Additional Controller-Set - Manual Operation		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS Additional Controller-Set - Manual Operation Selector switch		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring		
			IoT LINK TO GET DATA IN CLOUD1No32AMCCB, ,FP/TM ,O/C,S/C,E/F,U/V and Shunt coils , Phasereversal relay etc.,WITH SMART IoT LINK TOGET DATA IN CLOUDBasic Event Summary and Pass/Fail Reportsfor IEEE 519 for Volatge and currentHarmonics, 50160 Power Frequency, supplyvoltage indication, Supply Volatge Dips, Shortand Long interuptions, Temporary OverVoltages, Voltage Unbalance and HarmonicVoltage. THD on Voltage and current harmonicswith custom alarming, Indivividual Harmonicsupto 63rd for current and Voltage, HighResolution waveform capture and directly frommeter via FTP. Distrurbance DirectionDetection, Sag/swell on any volatge , currentchannel.Visual Indication 1-LED Based Phase indicatinglamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lampswith control RCBOsAdditional Controller-Set - Manual OperationSelector switchSignal Relayer-Potential Free Contacts forRemote MonitoringPotential Bus/Busbar: set -32A		
			<b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring		

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
17 4TH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.5	4TH FLOOR RAW POWER & AC SMART DBFORDATAINCLOUD-Supply,installation,testing & commissioning Type OfConstructionFloor mounted cubicle typepanelFabricated from 14/16G CRCA sheetsteel totally compartmentalized, treated for rustproofing.with separate busbar chamber & cablechambers Front & Back access for switchgears,connectors etc.Suitable for 430 V, 3 phase / 4Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMARTIoT LINK TO GET DATA IN CLOUD1No63AMCCB, ,FP/TM ,O/C,S/C,E/F,U/V and Shunt coils , Phasereversal relay etc.,WITH SMART IoT LINK TOGET DATA IN CLOUDBasic Event Summary and Pass/Fail Reportsfor IEEE 519 for Volatge and currentHarmonics, 50160 Power Frequency, supplyvoltage indication, Supply Volatge Dips, Shortand Long interuptions, Temporary OverVoltages, Voltage Unbalance and Harmonicswith custom alarming, Indivividual Harmonicsupto 63rd for current and Voltage, HighResolution waveform capture and directly frommeter via FTP. Distrurbance DirectionDetection, Sag/swell on any volatge , currentchannel.Visual Indication 2-Set - ON/OFF/ TRIP lampswith control RCBOsAdditional Controller-Set - Manual OperationSelector switchSignal Relayer-Potential Free Contacts forRemote MonitoringPotential Bus/Busbar: set -63ATPN,Aluminum BUSBAR	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 1 NOS. (PDB-1) 25A TPN RCBO, 1 NOS. (PDB-2) 40A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 2 NOS.(SPARE)	
I	4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.6	4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD-Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1 No32A MCCB, FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS Additional Control RCBOSAdditional Control RCBOS Additional Control RCBOSAdditional Control RCBOSSignal Relayer-Potential Free Contacts for<	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
19 5TH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.7	<ul> <li>STH FLOOR RAW POWER &amp; AC SMART DB FOR DATA IN CLOUD- Supply, installation, testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET</li> </ul>	No.

20	5TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.8	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 2 NOS. (PDB) 40A TPN RCBO, 2 NOS. (PDB) 40A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 1 NOS.(SPARE) 5TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply 1 No32A MCCB,,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD	1	No.
			for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage, THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR OUTGOING WITH SMART IOT LINK TO GET DATA IN CLOUD		

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 2 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
21 6TH LOWER FLOOR RAW POWER & AC SMART DB FI DATA IN CLO	OR	6TH LOWER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1No32A1No32AMCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge indicating lamps, control RCBOs, CTs, etc.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -32A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

-		10	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 1 NOS. (PDB) 32A TPN RCBO, 1 NOS. (SPARE) 25A TPN RCBO, 1 NOS. (SPARE) 25A TPN RCBO, 2 NOS. (SPARE) <b>6TH LOWER FLOOR LIGHT SMART DB FOR</b> <b>DATA IN CLOUD</b> - Supply, installation, testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART IOT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Individual Harmonics with custom alarming, Individual Harmonics with custom alarming, Individual Harmonics with custom alarming, Individual Harmonics with custom alarming, Individual Harmonics with custom alarming, Individual Harmonics with custom alarming, Individual Harmonics with custom alarming. Free Contacts for Remote Monitoring Potential Bus/Bu		No.
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		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
23 6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.11	6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

00 FLOC SMAI	UPPER OR LIGHT AT DB FOR A IN CLOUD	1.12	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 2 NOS.(SPARE) <b>6TH UPPER FLOOR LIGHT SMART DB FOR</b> <b>DATA IN CLOUD</b> - Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART IOT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, _FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, _FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, _FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, _FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD 2 Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication 2-Stet - ON/OFF/ TRIP lamps with control RCBOs , CTs, etc. Visual Indication 2-Stet - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector		No.
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			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 3 NOS. (LDB) 16A TPN RCBO, 3 NOS.(SPARE)	
FLO POV SMA	RRACE DOR RAW WER & AC ART DB FOR FA IN CLOUD	1.13	TERRACE FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -63A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 1 NOS. (PDB) 25A TPN RCBO, 3 NOS.(SPARE)	
26. TERRACE 00 FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.14	<ul> <li>TERRACE FLOOR LIGHT SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

			<ul> <li>RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone.</li> <li>40A TPN RCBO, 1 NOS. (TERRACE FLOOR MESEUM LDB)</li> <li>16A TPN RCBO, 2 NOS.(SPARE)</li> <li>16A TPN RCBO, 1 NOS.(SPARE)</li> </ul>	
	WING-C BUS DUCT			
27	1ST FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.1	IST FLOOR RAW POWER & AC SMART DBFORDATAINCLOUD-Supply,installation,testing & commissioning Type OfConstructionFloor mounted cubicle typepanel Fabricated from 14/16G CRCA sheetsteel totally compartmentalized, treated for rustproofing.with separate busbar chamber & cablechambers Front & Back access for switchgears,connectors etc.Suitable for 430 V, 3 phase / 4Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMARTIot LINK TO GET DATA IN CLOUD1No.1No.1No63AMCCB, ,FP/TM ,O/C,S/C,E/F,U/V and Shunt coils , Phasereversal relay etc.,WITH SMART IoT LINK TOGET DATA IN CLOUDBasic Event Summary and Pass/Fail Reportsfor IEEE 519 for Volatge and currentHarmonics, 50160 Power Frequency, supplyvoltage indication, Supply Volatge Dips, Shortand Long interuptions, Temporary OverVoltages, Voltage Unbalance and Harmonicswith custom alarming, Indivividual Harmonicsupto 63rd for current and Voltage, HighResolution waveform capture and directly frommeter via FTP. Distrurbance DirectionDetection, Sag/swell on any volatge , currentchannel.Visual Indication 1-LED Based Phase indicatinglamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lampswith control RCBOsAdditional Controller-Set - Manual OperationSelector switchSignal Relayer-Potential Free Contacts for </td <td>No.</td>	No.

			T1
		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 4 NOS. (AHU) 25A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 2NOS. (RAW POWER DB-1) 32A TPN RCBO, 2 NOS.(SPARE) 25A TPN RCBO, 1 NOS.(SPARE)	
28 1ST FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.2	<ul> <li><b>1ST FLOOR LIGHT SMART DB FOR DATA IN</b> </li> <li><b>CLOUD</b>- Supply, installation,testing &amp;         commissioning Type Of Construction Floor         mounted cubicle type panel Fabricated from         14/16G CRCA sheet steel totally         compartmentalized, treated for rust         proofing.with separate busbar chamber &amp; cable         chambers Front &amp; Back access for switchgears,         connectors etc.Suitable for 430 V, 3 phase / 4         Wire System , 50 Hz supply     </li> <li><b>Main Control Unit/ Incomer WITH SMART</b>         Iot LINK TO GET DATA IN CLOUD         1 No32A MCCB, ,FP/TM ,         O/C,S/C,E/F,U/V and Shunt coils , Phase         reversal relay etc.,WITH SMART IoT LINK TO         GET DATA IN CLOUD         Basic Event Summary and Pass/Fail Reports         for IEEE 519 for Volatge and current         Harmonics, 50160 Power Frequency, supply         voltage indication, Supply Volatge Dips, Short         and Long interuptions, Temporary Over         Voltages, Voltage Unbalance and Harmonics         with custom alarming, Indivividual Harmonics         with custom alarming, Indivividual Harmonics         upto 63rd for current and Voltage, High         Resolution waveform capture and directly from         meter via FTP. Distrurbance Direction         Detection, Sag/swell on any volatge , current         channel.         Visual Indication 1-LED Based Phase indicating         lamps, control RCBOs , CTs, etc.         Visual Indication 2-Set - ON/OFF/ TRIP lamps         with control RCBOs         Additional Controller-Set - Manual Operation         Selector switch         Signal Relayer-Potential Free Contacts for         Remote Monitoring         Potential Bus/Busbar: set -32A         TPN,Aluminum BUSBAR         OUTGOING WITH SMART IoT LINK TO GET         DATA IN CLOUD         CLOUD         Selector switch         Signal Relayer-Potential Free Contacts for         Remote Monitoring         Potential Bus/Busbar: set -32A         TPN,Aluminum BUSBAR         OUTGOING WITH SMART IoT LI</li></ul>	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 4NOS. (LDB) 16A TPN RCBO, 3 NOS.(SPARE)	
29 2ND FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.3	<ul> <li>2ND FLOOR RAW POWER &amp; AC SMART DB FOR DATA IN CLOUD- Supply, installation, testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 2NOS. (LDB) 16A TPN RCBO, 3 NOS.(SPARE)	
31 3RD FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.5	<b>3RD FLOOR RAW POWER &amp; AC SMART DB</b> FOR DATA IN CLOUD- Supply, installation, testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>IoT LINK TO GET DATA IN CLOUD</b> 1No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltage, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge indicating lamps, control RCBOs , CTs, etc.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -63A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 1 NOS. (PDB-1) 25A TPN RCBO, 1 NOS. (PDB-2) 40A TPN RCBO, 1 NOS. (SPARE)	
32 3RD FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.6	<ul> <li>25A TPN RCBO, 2 NOS.(SPARE)</li> <li>3RD FLOOR LIGHT SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
33	4TH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.7	<ul> <li>4TH FLOOR RAW POWER &amp; AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> </ul>	No.
			Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring <b>Potential Bus/Busbar:</b> set -32A <b>TPN,Aluminum BUSBAR</b> OUTGOING WITH SMART IOT LINK TO GET DATA IN CLOUD	

			<ul> <li>RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone.</li> <li>40A TPN RCBO, 1 NOS. (AHU)</li> <li>25A TPN RCBO, 1 NOS. (PDB-1)</li> <li>40A TPN RCBO, 1 NOS.(SPARE)</li> <li>25A TPN RCBO, 2 NOS.(SPARE)</li> </ul>	
LIC	TH FLOOR GHT SMART B FOR DATA IN LOUD	1.8	<b>4TH FLOOR LIGHT SMART DB FOR DATA INCLOUD-</b> Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -32A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
35 STH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.9	STH FLOOR RAW POWER & AC SMART DBFOR DATA IN CLOUD- Supply,installation, testing & commissioning Type OfConstruction Floor mounted cubicle typepanel Fabricated from 14/16G CRCA sheetsteel totally compartmentalized, treated for rustproofing, with separate busbar chamber & cablechambers Front & Back access for switchgears,connectors etc.Suitable for 430 V, 3 phase / 4Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMARTIoT LINK TO GET DATA IN CLOUD1 No32A MCCB, ,FP/TM ,O/C,S/C,E/F,U/V and Shunt coils , Phasereversal relay etc.,WITH SMART IoT LINK TOGET DATA IN CLOUDBasic Event Summary and Pass/Fail Reportsfor IEEE 519 for Volatge and currentHarmonics, 50160 Power Frequency, supplyvoltage indication, Supply Volatge Dips, Shortand Long interuptions, Temporary OverVoltage, Voltage Unbalance and Harmonicswith custom alarming, Indivividual Harmonicsvoltage, Voltage Unbalance and Harmonicswith custom alarming, Indivividual Harmonicsvoltage, ThD on Voltage and current harmonicswith custom alarming, Indivividual Harmonicsvoltage for current and Voltage, HighResolution waveform capture and directly frommeter via FTP. Distrurbanc	No.

	5TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.10	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 2 NOS. (PDB) 32A TPN RCBO, 2 NOS. (PDB) 32A TPN RCBO, 2 NOS.(SPARE) <b>STH FLOOR LIGHT SMART DB FOR DATA IN</b> <b>CLOUD-</b> Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit / Incomer WITH SMART IOT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, .FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage, Noltage Unbalance and Harmonic Voltage, THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom ICBOs Additional Controller-Set - Manu	1.00	No.
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		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 2 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
37 6TH LOWER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.11	6TH LOWER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1No32A1No32AMCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -32A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

38. 00	6TH LOWER FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.12	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 1 NOS.(SPARE) 32A TPN RCBO, 1 NOS.(SPARE) <b>6TH LOWER FLOOR LIGHT SMART DB FOR</b> <b>DATA IN CLOUD</b> - Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>IO LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, _FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage, Noltage Unbalance and Harmonic Voltage, THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with control RCBOs, CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring <b>Potential Bus/Busbar: set -32A</b> <b>TPN,Aluminum BUSBAR</b> <b>OUTGOING WITH SMART IoT LINK TO GET</b> <b>DA</b>	1.00	No.
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		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 3 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
39 6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.13	6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

40.	6TH UPPER FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.14	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 2 NOS. (PDB) 32A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 2 NOS.(SPARE) <b>6TH UPPER FLOOR LIGHT SMART DB FOR</b> <b>DATA IN CLOUD</b> - Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>IO LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, .FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage, Noltage Unbalance and Harmonic Voltage, THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with control RCBOS Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring <b>Potential Bus/Busbar: set -32A</b> <b>TPN,Aluminum BUSBAR</b> <b>OUTGOING WITH SMART IoT LINK TO GET</b> <b>DATA IN CLOUD</b>	1.00	No.
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			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 3 NOS. (LDB) 16A TPN RCBO, 3 NOS.(SPARE)	
	WING-D BUS DUCT			
41	2ND FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.1	2ND FLOOR RAW POWER & AC SMART DBFORDATAINCLOUD-Supply,installation,testing & commissioning Type OfConstructionFloor mounted cubicle typepanel Fabricated from 14/16G CRCA sheetsteel totally compartmentalized, treated for rustproofing.with separate busbar chamber & cablechambers Front & Back access for switchgears,connectors etc.Suitable for 430 V, 3 phase / 4Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMARTIot LINK TO GET DATA IN CLOUD1No63AMCCB, ,FP/TM ,O/C,S/C,E/F,U/V and Shunt coils , Phasereversal relay etc.,WITH SMART IoT LINK TOGET DATA IN CLOUDBasic Event Summary and Pass/Fail Reportsfor IEEE 519 for Volatge and currentHarmonics, 50160 Power Frequency, supplyvoltage indication, Supply Volatge Dips, Shortand Long interuptions, Temporary OverVoltage, Voltage Unbalance and Harmonicsvoltage, THD on Voltage and current harmonicswith custom alarming, Indivividual Harmonicsupto 63rd for current and Voltage, HighResolution waveform capture and directly frommeter via FTP. Distrurbance DirectionDetection, Sag/swell on any volatge , currentchannel.Visual Indication 1-LED Based Phase indicatinglamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lampswith control RCBOsAdditional Controller-Set - Manual OperationSelector switchSignal Relayer-Potential Free Contacts for	No.

Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD         1       No32A       MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD         Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.         Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.         Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs         Additional Controller-Set - Manual Operation Selector switch         Signal Relayer-Potential Free Contacts for Remote Monitoring         Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR         OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD
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		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 4NOS. (LDB) 16A TPN RCBO, 3 NOS.(SPARE)	
43 3RD FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.3	<b>3RD FLOOR RAW POWER &amp; AC SMART DBFOR DATA IN CLOUD-</b> Supply, installation, testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>IoT LINK TO GET DATA IN CLOUD</b> 1No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOSAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -63A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

		DODOn shall be suitable for the state	
		<ul> <li>RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone.</li> <li>40A TPN RCBO, 1 NOS. (AHU)</li> <li>25A TPN RCBO, 1 NOS. (PDB-1)</li> <li>25A TPN RCBO, 1 NOS. (PDB-2)</li> <li>40A TPN RCBO, 2 NOS.(SPARE)</li> </ul>	
44 3RD FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.4	<b>3RD FLOOR LIGHT SMART DB FOR DATA IN</b> <b>CLOUD</b> - Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: Set -32AOUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
45 4TH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.5	<ul> <li>4TH FLOOR RAW POWER &amp; AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

		RCBOs shall be suitable for field-fittable		
		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 1 NOS. (PDB-1) 25A TPN RCBO, 1 NOS. (PDB-2) 40A TPN RCBO, 1 NOS.(SPARE) 25A TPN RCBO, 2 NOS.(SPARE)		
46 4TH FLOOR	1.6		1	No
46 4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD	1.6	<ul> <li>4TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No32A MCCB, ,FP/TM, O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>		No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 1 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
47 STH FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.7	<ul> <li>STH FLOOR RAW POWER &amp; AC SMART DB FOR DATA IN CLOUD- Supply, installation, testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

48 STH FLOOR LIGHT SMART DB FOR DATA IN CLOUD	Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 2 NOS. (PDB) 32A TPN RCBO, 2 NOS. (SPARE) 25TH FLOOR LIGHT SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing, with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART Iot LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics voltage, THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics Wisual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -32A	No.
	Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 2 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
49 6TH LOWER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.9	6TH LOWER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation, testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1No63A1No63AMCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOSAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -63A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

	RCBOs shall be suitable for field-fittable		
	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 2 NOS. (AHU) 40A TPN RCBO, 1 NOS. (AHU) 25A TPN RCBO, 1 NOS. (PDB) 40A TPN RCBO, 1 NOS.(SPARE)		
1.10	25A TPN RCBO, 2 NOS.(SPARE) <b>6TH LOWER FLOOR LIGHT SMART DB FOR</b> <b>DATA IN CLOUD-</b> Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>IoT LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short	1.00	No.
	and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring <b>Potential Bus/Busbar: set -32A</b> <b>TPN,Aluminum BUSBAR</b> <b>OUTGOING WITH SMART IOT LINK TO GET</b>		
	1.10	<ul> <li>Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact). The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone.</li> <li>32A TPN RCBO, 2 NOS. (AHU)</li> <li>40A TPN RCBO, 1 NOS. (AHU)</li> <li>25A TPN RCBO, 2 NOS. (PDB)</li> <li>40A TPN RCBO, 1 NOS. (SPARE)</li> <li>25A TPN RCBO, 2 NOS. (SPARE)</li> <li>25A TPN RCBO, 2 NOS. (SPARE)</li> <li>25A TPN RCBO, 2 NOS. (SPARE)</li> <li>25A TPN RCBO, 2 NOS. (SPARE)</li> <li>25A TPN RCBO, 2 NOS. (SPARE)</li> <li>1.10</li> <li><b>6TH LOWER FLOOR LIGHT SMART DB FOR DATA IN CLOUD</b>. Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for LEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages. Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrubance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, con</li></ul>	Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip). Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have scamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 2 NOS. (AHU) 40A TPN RCBO, 1 NOS. (SHU) 25A TPN RCBO, 2 NOS. (PDB) 40A TPN RCBO, 1 NOS. (SPARE) 25A TPN RCBO, 2 NOS. (SPARE) 25A TPN RCBO, 2 NOS. (SPARE) 1.10 <b>6 TH LOWER FLOOR LICHT SMART DB FOR</b> 1.00 <b>DATA IN CLOUD</b> - Supply, installation, testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>IO LINK TO GET DATA IN CLOUD</b> 1 No32A MCCB, .FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc., WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage, indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarm

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 4 NOS. (LDB -1) 16A TPN RCBO, 3 NOS.(SPARE)	
51 6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD	1.11	6TH UPPER FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release,		
			Under-voltage release, Shunt trip) and		
			Indication Auxiliaries (like Auxiliary Contact,		
			Trip alarm contact). The circuit breakers shall be communication ready to indicate the status		
			of the device (On/Off/Trip), Number of On/Off		
			cycles and Number of Tripping over universally		
			open Modbus and Ethernet (TCP IP) protocol so		
			as to have seamless connectivity with any Energy and Building Management System. In		
			addition the circuit breaker should be able to		
			communicate through GSM module the status		
			of the device (On/Off/Trip) through mobile phone.		
			32A TPN RCBO, 3NOS. (AHU)		
			40A TPN RCBO, 1 NOS. (AHU)		
			25A TPN RCBO, 3 NOS. (PDB)		
			40A TPN RCBO, 1 NOS.(SPARE)		
			32A TPN RCBO, 1 NOS.(SPARE)		
			25A TPN RCBO, 1 NOS.(SPARE)		
52.	6TH UPPER	1.12	6TH UPPER FLOOR LIGHT SMART DB FOR	1.00	No.
00	FLOOR LIGHT SMART DB FOR		<b>DATA IN CLOUD-</b> Supply, installation,testing & commissioning Type Of Construction Floor		
	DATA IN CLOUD		mounted cubicle type panel Fabricated from		
			14/16G CRCA sheet steel totally		
			compartmentalized, treated for rust proofing.with separate busbar chamber & cable		
			chambers Front & Back access for switchgears,		
			connectors etc.Suitable for 430 V, 3 phase / 4		
			Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART		
			IoT LINK TO GET DATA IN CLOUD		
			1 No32A MCCB, ,FP/TM ,		
			O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO		
			GET DATA IN CLOUD		
			Basic Event Summary and Pass/Fail Reports		
			for IEEE 519 for Volatge and current		
			Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short		
			and Long interuptions, Temporary Over		
			Voltages, Voltage Unbalance and Harmonic		
			Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics		
			upto 63rd for current and Voltage, High		
			Resolution waveform capture and directly from		
			meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge, current		
			channel.		
			Visual Indication 1-LED Based Phase indicating		
			lamps, control RCBOs, CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps		
			with control RCBOs		
			Additional Controller-Set - Manual Operation		
			Selector switch Signal Relayer-Potential Free Contacts for		
			Remote Monitoring		
			Potential Bus/Busbar: set -32A TPN,Aluminum BUSBAR		
			OUTGOING WITH SMART IoT LINK TO GET		
1		1	DATA IN CLOUD		

	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 16A TPN RCBO, 4 NOS. (LDB) 16A TPN RCBO, 3 NOS.(SPARE)	
53 TERRACE FLOOR RAW POWER & AC SMART DB FOI DATA IN CLOU	TERRACE FLOOR RAW POWER & AC SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar:Set -63A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 40A TPN RCBO, 2 NOS. (AHU) 25A TPN RCBO, 3 NOS.(SPARE)		
54. TERRACE 00 FLOOR LIG: SMART DB DATA IN CL	FOR	TERRACE FLOOR LIGHT SMART DB FOR DATA IN CLOUD- Supply, installation, testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing, with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltage, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOS , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOSAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: Set -32A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	1.00	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 32A TPN RCBO, 1 NOS. (TERRACE MESEUM AREA LDB) 16A TPN RCBO, 1 NOS. (TERRACE EXTERNAL AREA LDB) 32A TPN RCBO, 2 NOS.(SPARE) 16A TPN RCBO, 1 NOS.(SPARE)	
WING-AB UPS BUS DUCT         55       2ND FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1.1	<ul> <li>2ND FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA</li> <li>IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4</li> <li>Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET</li> </ul>	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 4NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)	
56	3RD FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1.2	<ul> <li><b>3RD FLOOR (AB WING) UPS POWER</b> <b>DISTRIBUTION PANEL SMART DB FOR DATA</b> <b>IN CLOUD-</b> Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing,with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li><b>Main Control Unit/ Incomer WITH SMART</b> <b>IOT LINK TO GET DATA IN CLOUD</b></li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li><b>Potential Bus/Busbar: set -63A</b> <b>TPN,Aluminum BUSBAR</b></li> </ul>	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 6NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)	
57	4TH FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1.3	<ul> <li>4TH FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing,with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics with custom REBOS , CTS, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOS</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 6NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)	
58	5TH FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1.4	<ul> <li>STH FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing,with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>No125A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -125A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

59     6TH LOWER     1.5     63       59     6TH LOWER     1.5     63       90     FLOOR (AB     DI       WING) UPS     IN     00       POWER     DISTRIBUTION     m       PANEL SMART     14       DB FOR DATA IN     CC       CLOUD     0       I     0	<ul> <li>to have seamless connectivity with any nergy and Building Management System. In Idition the circuit breaker should be able to mmunicate through GSM module the status the device (On/Off/Trip) through mobile none.</li> <li>A TPN RCBO,10KA - 4NOS. (UPS POWER)</li> <li>A TPN RCBO,10KA - 2NOS. (UPS POWER)</li> <li>A TPN RCBO, 10KA - 2 NOS. (SPARE)</li> <li>A TPN RCBO, 10KA - 1 NOS.(SPARE)</li> <li>A CLOUD- Supply, installation,testing &amp; mmissioning Type Of Construction Floor ounted cubicle type panel Fabricated from 1/16G CRCA sheet steel totally mpartmentalized, treated for rust oofing. with separate busbar chamber &amp; cable ambers Front &amp; Back access for switchgears, nnectors etc.Suitable for 430 V, 3 phase / 4 ire System , 50 Hz supply</li> <li>ain Control Unit/ Incomer WITH SMART T LINK TO GET DATA IN CLOUD</li> <li>No32A MCCB, ,FP/TM , /C,S/C,E/F,U/V and Shunt coils , Phase versal relay etc.,WITH SMART IoT LINK TO ET DATA IN CLOUD</li> <li>asic Event Summary and Pass/Fail Reports r IEEE 519 for Volatge and current armonics, 50160 Power Frequency, supply dtage indication, Supply Volatge Dips, Short d Long interuptions, Temporary Over oltages, Voltage Unbalance and Harmonics th custom alarming, Indivividual Harmonics to 63rd for current and Voltage, High esolution waveform capture and directly from eter via FTP. Distrurbance Direction etection, Sag/swell on any volatge , current lannolics th control RCBOs , CTs, etc.</li> <li>sual Indication 1-LED Based Phase indicating mps, control RCBOs + ON/OFF/ TRIP lamps</li></ul>	No.
Po Tl O	emote Monitoring otential Bus/Busbar: set -32A PN,Aluminum BUSBAR OUTGOING WITH SMART IOT LINK TO GET ATA IN CLOUD	

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 4NOS. (UPS POWER)	
FLOO WINO POW DIST PANI	OR (AB G) UPS 'ER 'RIBUTION EL SMART FOR DATA IN	1.6	6TH UPPER FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge, current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -32A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 6NOS. (UPS POWER)	
61 TERRAO FLOOR WING) U POWER DISTRII PANEL DB FOF CLOUD	(AB JPS BUTION	TERRACE FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System, 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1 No32A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: Set -32A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

	WING-CD UPS		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 2NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)		
62	BUS DUCT 1ST FLOOR (AB	1.1	1ST FLOOR (AB WING) UPS POWER	1	No.
	WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD		DISTRIBUTION PANEL SMART DB FOR DATA DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD- Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD 1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel. Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD		

63	2ND FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART	1.2	<ul> <li>RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone.</li> <li>32A TPN RCBO, 10KA - 1NOS. (UPS POWER)</li> <li>25A TPN RCBO, 10KA - 2NOS. (UPS POWER)</li> <li>32A TPN RCBO, 10KA - 1 NOS.(SPARE)</li> </ul>	1	No.
	PANEL SMART DB FOR DATA IN CLOUD		mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply <b>Main Control Unit/ Incomer WITH SMART</b> <b>IoT LINK TO GET DATA IN CLOUD</b> 1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD Basic Event Summary and Pass/Fail Reports		
			for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonic Voltage. THD on Voltage and current harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge, current channel.		
			Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc. Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs Additional Controller-Set - Manual Operation Selector switch Signal Relayer-Potential Free Contacts for Remote Monitoring Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR OUTGOING WITH SMART IOT LINK TO GET DATA IN CLOUD		

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 6NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)	
64	3RD FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1.3	<ul> <li><b>3RD FLOOR (AB WING) UPS POWER</b> <b>DISTRIBUTION PANEL SMART DB FOR DATA</b> <b>IN CLOUD-</b> Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li><b>Main Control Unit/ Incomer WITH SMART</b> <b>IoT LINK TO GET DATA IN CLOUD</b></li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 1-LED Based Phase indicating lamps, control RCBOs, CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li><b>Potential Bus/Busbar: set -63A</b> <b>TPN,Aluminum BUSBAR</b></li> <li><b>OUTGOING WITH SMART IoT LINK TO GET</b> <b>DATA IN CLOUD</b></li> </ul>	No.

		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 6NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)	
4TH FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1.4	4THFLOOR(ABWING)UPSPOWERDISTRIBUTION PANEL SMART DB FOR DATAINCLOUD-Supply, installation,testing & commissioning Type Of ConstructionFloormountedcubicle type panel Fabricated from14/16GCRCAsheetsteeltotally compartmentalized, treated forrustproofing.with separatebusbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMARTIot LINK TO GET DATA IN CLOUD1No63AMCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotentialBus/Busbar:Set -63A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 5NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)	
66	STH FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1.5	<ul> <li>5TH FLOOR (AB WING) UPS POWER DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD- Supply, installation,testing &amp; commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber &amp; cable chambers Front &amp; Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply</li> <li>Main Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>1 No63A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUD</li> <li>Basic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs, CTs, etc.</li> <li>Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOs</li> <li>Additional Controller-Set - Manual Operation Selector switch</li> <li>Signal Relayer-Potential Free Contacts for Remote Monitoring</li> <li>Potential Bus/Busbar: set -63A TPN,Aluminum BUSBAR</li> <li>OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD</li> </ul>	No.

			RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 6NOS. (UPS POWER)	
FLOC WING POWI DISTI PANE	PR (AB b) UPS ER RIBUTION L SMART OR DATA IN	1.6	<b>GTH LOWER FLOOR (AB WING) UPS POWER</b> <b>DISTRIBUTION PANEL SMART DB FOR DATA</b> <b>IN CLOUD-</b> Supply, installation,testing & commissioning Type Of Construction Floor mounted cubicle type panel Fabricated from 14/16G CRCA sheet steel totally compartmentalized, treated for rust proofing.with separate busbar chamber & cable chambers Front & Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supplyMain Control Unit/ Incomer WITH SMART IoT LINK TO GET DATA IN CLOUD1 No80A MCCB, ,FP/TM , O/C,S/C,E/F,U/V and Shunt coils , Phase reversal relay etc.,WITH SMART IoT LINK TO GET DATA IN CLOUDBasic Event Summary and Pass/Fail Reports for IEEE 519 for Volatge and current Harmonics, 50160 Power Frequency, supply voltage indication, Supply Volatge Dips, Short and Long interuptions, Temporary Over Voltages, Voltage Unbalance and Harmonics with custom alarming, Indivividual Harmonics upto 63rd for current and Voltage, High Resolution waveform capture and directly from meter via FTP. Distrurbance Direction Detection, Sag/swell on any volatge , current channel.Visual Indication 1-LED Based Phase indicating lamps, control RCBOs , CTs, etc.Visual Indication 2-Set - ON/OFF/ TRIP lamps with control RCBOsAdditional Controller-Set - Manual Operation Selector switchSignal Relayer-Potential Free Contacts for Remote MonitoringPotential Bus/Busbar: set -80A TPN,Aluminum BUSBAROUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD	No.

TPN,Aluminum BUSBAR OUTGOING WITH SMART IoT LINK TO GET DATA IN CLOUD
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		RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO, 10KA - 7NOS. (UPS POWER) 25A TPN RCBO, 10KA - 3 NOS.(SPARE)	
INVERTER DISTRIBUTION PANEL			
69 INVERTER LIGHT DISTRIBUTION PANEL SMART DB FOR DATA IN CLOUD	1	INVERTERLIGHTDISTRIBUTIONPANELSMARTDBFORDATAINCLOUD-Supply,installation,testing& commissioningTypeOfConstructionFloormountedcubicletypepanelFabricatedfrom14/16GCRCAsheetsteeltotallycompartmentalized,treatedforrustproofing.with separatebusbarchamber & cablechambersFront & Backaccessforsustconnectorsetc.Suitablefor 430 V, 3 phase / 4WireSystem, 50 HzsupplyMainControl Unit/IncomerWITHSMARTInIotLINK TOGET DATA IN CLOUDInNo63AMCCB,, FP/TM,O/C,S/C,E/F,U/VandShuntcoils, Phasereversalrelayetc.,WITHSMARTIoTLINK TOGET DATA IN CLOUDBasicEventSummary and Pass/FailReportsforIEEE519forVolatgeDistremonicsforIEEE519forVolatgeDistremonicswoltageindication, Supply VolatgeDirectionShortandLonginteruptions, TemporaryOverVoltages, VoltageUnbalanceand Harmonicswith customalarming, Indivividual Harmonicsupto 63rd forcurrentupto 63rdforcurrentand Voltage, HighResolutionwaveformc	No.

70	LIGHT,POWER,	1.3	RCBOs shall be suitable for field-fittable Protection auxiliaries (viz. Over-voltage release, Under-voltage release, Shunt trip) and Indication Auxiliaries (like Auxiliary Contact, Trip alarm contact).The circuit breakers shall be communication ready to indicate the status of the device (On/Off/Trip), Number of On/Off cycles and Number of Tripping over universally open Modbus and Ethernet (TCP IP) protocol so as to have seamless connectivity with any Energy and Building Management System. In addition the circuit breaker should be able to communicate through GSM module the status of the device (On/Off/Trip) through mobile phone. 25A TPN RCBO,10KA - 8NOS. (EMERGENCY LIGHT DB) 25A TPN RCBO, 10KA - 3 NOS.(SPARE) LIGHT,POWER, INDOOR AC, PANEL	1	No.
			cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 2000A ACB, 25KA , FP /MP with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER ) <b>Potential Bus/Busbar 1 set</b> - 2000A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : WING A BUSDUCT -1 No 250A TPN MCCB 25kA, TPN /TM with O/C,S/C,E/F, WING B BUSDUCT -1 No 400A TPN MCCB		
			WING C BUSDUCT -1 No 250A TPN MCCB 25kA, TPN / TM with O/C,S/C,E/F WING D BUSDUCT -1 No 400A TPN MCCB 25kA, TPN / MP with O/C,S/C,E/F BASEMENT FLOOR LIGHT PANEL -1 No 32A TPN MCCB 25kA, TPN / TM with O/C,S/C,E/F GROUND FLOOR LIGHT PANEL -1 No 25A TPN MCCB 25kA, TPN / TM with O/C,S/C,E/F BASEMENT FLOOR ,POWER,INDOOR AC, PANEL -1 No 32A TPN MCCB 25kA, TPN / TM with O/C,S/C,E/F GROUND FLOOR ,POWER,INDOOR AC, PANEL -1 No 125A TPN MCCB 25kA, TPN / TM with O/C,S/C,E/F 30 KVA INVERTER LIGHT DB -1 No 63A TPN MCCB 25kA, TPN / TM with O/C,S/C,E/F UPS INCOMING PANEL -1 No 800A TPN ACB 25kA, TPN / MP with O/C,S/C,E/F SPARE - 1 Nos - 200A TPN MCCB 25KA TPN / TM with O/C,S/C,E/F		

			SPARE - 1 Nos - 400A TPN MCCB 25KA TPN / MP with O/C,S/C,E/F		
			SPARE - 1 Nos - 630A TPN MCCB 25KA TPN /		
			MP with O/C,S/C,E/F		
			As directed by Engineer in charge, <b>Make</b> -		
			SCHNEIDER / LEGRAND/ SIEMENS / L&T /		
			HAVELLS/DB ELECTRICALS/PRATIK		
			SYSTEMS		
71	BASEMENT	1.4	BASEMENT FLOOR LIGHT PANEL	1	No.
	FLOOR LIGHT PANEL		Supply,installation, testing & commissioning etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 32A MCCB, 16kA, TPN /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER) <b>Potential Bus/Busbar 1 set - 32</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : BASEMENT FLOOR LDB-1-1 No 16A TPN RCBO 16kA,		
			RCBO 16kA, BASEMENT FLOOR LDB-2-1 No 16A TPN RCBO 16kA, SPARE -3 No 16A TPN RCBO 16kA,		
			As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
72	GROUND	1.5	GROUND FLOOR LIGHT PANEL	1	No.
	FLOOR LIGHT PANEL		Supply,installation, testing & commissioning etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 32A MCCB, 16kA, TPN /MP with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs , CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, (BMS COMPATIBLE METER) <b>Potential Bus/Busbar 1 set - 32</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable slaeves		
			shrinkable sleeves Feeder section/Outgoing : GROUND FLOOR LIGHT DB A WING-1 No 16A TPN RCBO 16kA, GROUND FLOOR LIGHT DB B WING -1 No 16A TPN RCBO 16kA,		

	1	1			,
			GROUND FLOOR LIGHT DB 3 CAFETERIA -1		
			No 16A TPN RCBO 16kA, GROUND FLOOR LIGHT DB 4 C WING -1 No		
			16A TPN RCBO 16kA,		
			GROUND FLOOR LIGHT DB 5 RECREATION &		
			LIBRARY -1 No 16A TPN RCBO 16kA, GROUND FLOOR LIGHT DB 4 D WING -1 No		
			16A TPN RCBO 16kA,		
			SPARE -3 No 16A TPN RCBO 16kA,		
			As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK		
			SYSTEMS		
73	BASEMENT FLOOR ,POWER,	1.6	BASEMENT FLOOR ,POWER, INDOOR AC, PANEL	1	No.
	INDOOR AC,		Supply,installation, testing & commissioning		
	PANEL		etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G		
			CRCA ,IP52 sheet steel totally		
			compartmentalized, treted for rust proofing.		
			with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors		
			etc. Suitable for 430 V, 3 phase / 4 Wire		
			System, 50 Hz supply, Control Unit/ Incomer- 1 No 25A MCCB,		
			16kA, TPN /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase		
			indicating lamps, control RCBOs, CTs, etc Set		
			- ON/OFF/ TRIP lamps with control RCBOs Set		
			- ON/OFF/ TRIP lamps with control RCBOs,		
			(BMS COMPATIBLE METER) Potential Bus/Busbar 1 set - 25A TPN+E 91E		
			Aluminium busbar,Insulated with heat		
			shrinkable sleeves Feeder section/Outgoing :		
			BASEMENT FLOOR PDB-1-1 No 16A TPN		
			RCBO 16kA,		
			BASEMENT FLOOR PDB-2-1 No 16A TPN RCBO 16kA,		
			SPARE -3 No 16A TPN RCBO 16kA,		
			As directed by Engineer in charge, Make -		
			SCHNEIDER / LEGRAND/ SIEMENS / L&T /		
			HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
74	GROUND FLOOR ,POWER,	1.7	GROUND FLOOR ,POWER, INDOOR AC, PANEL	1	No.
	INDOOR AC,		Supply, installation, testing & commissioning		
	PANEL		etc. of LT panel <b>Construction-</b> Floor mounted		
			cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally		
			compartmentalized, treted for rust proofing.		
			with separate busbarcamber & cable chambers		
			Front/ back access for switchgears, connectors		
			etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,		
			Control Unit/ Incomer- 1 No 125A MCCB,	•	
			16kA, TPN /TM with O/C,S/C,E/F,U/V, E/L		
			and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs, CTs, etc Set		
			- ON/OFF/ TRIP lamps with control RCBOs Set		
			- ON/OFF/ TRIP lamps with control RCBOs,		
			(BMS COMPATIBLE METER) Potential Bus/Busbar 1 set - 125A TPN+E		
			91E Aluminium busbar, Insulated with heat		

			shrinkable sleeves		
			Feeder section/Outgoing :		
			GROUND FLOOR PDB-1 A WING-1 No 25A TPN RCBO 16kA,		
			GROUND FLOOR PDB-1 B WING-1 No 25A		
			TPN RCBO 16kA, GROUND FLOOR PDB-1 C WING-1 No 25A		
			TPN RCBO 16kA,		
			GROUND FLOOR PDB-1 D WING-1 No 25A		
			TPN RCBO 16kA, CAFETERIA PDB -1 No25A TPN RCBO		
			16kA,		
			KITCHEN PDB -1 No 100A TPN MCCB 16kA,		
			RECREATION AREA PDB-1 No16A TPN		
			RCBO 16kA,		
			SPARE -2 No 25A TPN RCBO 16kA,		
			SPARE -1 No 16A TPN RCBO 16kA,		
			As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK		
75		1.0	SYSTEMS	1	NT
75	UPS INCOMING PANEL	1.8	<b>UPS INCOMING PANEL</b> Supply,installation, testing & commissioning	1	No.
			etc. of LT panel <b>Construction</b> - Floor mounted		
			cubicle type panel, Fabricated from 14/16G		
			CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.		
			with separate busbarcamber & cable chambers		
			Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire		
			System, 50 Hz supply,		
			Control Unit/ Incomer- 1 No 800A ACB, 16kA,TPN /MP with O/C,S/C,E/F,U/V, E/L		
			and Shunt coils etc. LED Based Phase		
			indicating lamps, control RCBOs, CTs, etc Set		
			- ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs,		
			Potential Bus/Busbar 1 set - 800A TPN+E		
			91E Aluminium busbar,Insulated with heat shrinkable sleeves		
			Feeder section/Outgoing :		
			160KVA UPS -1 - 1 No 250A TPN MCCB		
			16kA, TPN/TM with O/C,S/C 160KVA UPS- 2 - 1 No 250A TPN MCCB		
			16kA, TPN /TM with O/C,S/C		
			160KVA UPS- 3 - 1 No 250A TPN MCCB		
			16kA, TPN /TM with O/C,S/C As directed by Engineer in charge, <b>Make</b> -		
			SCHNEIDER / LEGRAND/ SIEMENS / L&T /		
			HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
76	UPS POWER	1.9	UPS POWER DISTRIBUTION PANEL	1	No.
	DISTRIBUTION PANEL		Supply, installation, testing & commissioning		
			etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 14/16G		
			CRCA ,IP52 sheet steel totally		
			compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers		
			Front/ back access for switchgears, connectors		
1		1	etc. Suitable for 430 V, 3 phase / 4 Wire		1
			System , 50 Hz supply,		

77       AC       1.1         77       AC       VRV, VENTILATI         ON & EX LIGHT       1.1         PANEL       I	Control Unit/ Incomer- 3 No 250A MCCB, 16kA, FP /TM with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs, CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs, <b>Potential Bus/Busbar 1 set - 800</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing :</b> WING A-B UPS BUSDUCT - 1 No 400A TPN MCCB 16kA, TPN /MP with O/C,S/C WING C-D UPS BUSDUCT - 1 No 400A TPN MCCB 16kA, TPN /MP with O/C,S/C GROUND FLOOR UPS DB - 1 No 400A TPN RCB0 16kA, SERVER,BMS,FIRE CONTROL ROOM UPS POWER -1 No 63A TPN RCB0 16kA, HUB ROOM UPS POWER -1 No 16A TPN RCB0 16kA, SPARE -1 No 63A TPN RCB0 16kA, SPARE -1 No 400A TPN MP MCCB 16kA, O/C,S/C SPARE -1 No 400A TPN RCB0 16kA, As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS <b>AC VRV,VENTILATION &amp; EX LIGHT PANEL</b> Supply.installation, testing & commissioning etc. of LT panel <b>Construction</b> - Floor mounted cubicle type panel, Fabricated from 1/4/16G CRCA , JP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Automatic Fire suppression gas flooding system complete with Perfluoro Ketone (FK-5-1-12)/ HFC 227ea, DLP Assembly with automatic valve, push in connector for tube, Perfluoro Ketone (FK-5-1-12)/ HFC 227ea, mounting bracket, End of Line adopter and low pressure switch for monitoring system activation.Perfluoro Ketone (FK-5-1-12)/ HFC 227ea gas of suitable capacity , Heat detection tube as required and A/V alarm with all necessary installation to complete the system as per specifications. Or as directed etc. Control Unit/ Incomer- 1 No 2000A ACB, 16kA, FP /MP with O/C,S/C,E/F,U/V,E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOS (TS, etc Set - ON/OFF/ TRIP lamps with control RCBOS Set - ON/OFF/ TRIP lamps with control RC	1 No.

			GROUND FLOOR AC ,VRV & ODU PANEL 1 FOR A & B WING, 1 No125A TPN MCCB 16kA, TPN/MP with O/C,S/C GROUND FLOOR AC ,VRV & ODU PANEL 1 FOR C & D WING, 1 No100A TPN MCCB 16kA, TPN/MP with O/C,S/C FIRST FLOOR AC ,VRV & ODU PANEL 1 , 1 No. 315A TPN MCCB 16kA, TPN/MP with O/C,S/C GROUND FLOOR VENTILATION PANEL 1 No 40A TPN MCCB 16kA, TPN/TM with O/C,S/C WING A-B AC, VENTILATION BUS DUCT 1 No. 630A TPN MCCB 16kA, TPN/TM with O/C,S/C WING C-D AC,VENTILATION BUS DUCT 1 No 630A TPN MCCB 16kA, TPN/TM with O/C,S/C BASEMENT FLOOR Exhaust Air,FRESH AIR FAN,EXHAUST AIR JET FAN PANEL 1 No 315A TPN MCCB 16kA, TPN/TM with O/C,S/C SPARE -1 No 315A TPN MCCB ,MP 16kA,		
78	2ND FLOOR A-B	1.11	O/C,S/C SPARE -1 No 160A TPN MCCB,TM 16kA, O/C,S/C SPARE -1 No 630A TPN MCCB,MP 16kA, O/C,S/C As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS <b>2ND FLOOR A-B WING VENTILATION PANEL</b>	1	No.
	WING VENTILATION PANEL		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction-</b> Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 25A RCBO, 10kA, TPN <b>Potential Bus/Busbar 1 set - 25</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 4 No 25A TPN RCBO 10kA, SPARE	-	
79	2ND FLOOR C-D WING VENTILATION PANEL	1.12	As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS <b>2ND FLOOR C-D WING VENTILATION PANEL</b> Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction-</b> Wall	1	No.
	FANEL		mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers		

80     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.13       80     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.13       80     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.13       81     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.13       82     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.13       84     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.13       85     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.10       86     3RD FLOOR A-B     1.13     3RD FLOOR A-B     1.10       87     Stopply.installation, testing & commissioning etc. of LT DB panel Construction Wall mounted clubic type panel, Fabricated from 14/16G CRCA, JPS2 sheet steel totally compartmentalized, treted for rust proofing, with separate busbacramber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire Scherberg / LEORNAD SERMENS / L&T / HAVELLS/DB       81     3RD FLOOR A-B     1.14     3RD FLOOR A-B       81     3RD FLOOR A-B     1.14     3RD FLOOR A-B WING VENTILATION PANEL       9ANEL     10 No 25A TPN RCBO 10kA, SPARE     1     No.       81     3RD FLOOR A-B     1.14     3RD FLOOR A-B WING VENTILATION PANEL     1       9ANEL     10 KO-CA     3RD FLOOR A-B     1     No.       81     SRD FLOOR A-B				Control Unit/ Incomer- 1 No 25A RCBO,		
81       3RD FLOOR A-B       1.13       Surphylastallation, testing & commissioning etc. of LT DB panel Construction-Wall mounted cubicle type panel, Pabricated from 14/16G CRCA, JPS2 sheet steel totally compartmentalized, TFN RCBO 10kA, SPARE       1       No.         80       3RD FLOOR A-B       1.13       3RD FLOOR A-B UNG AC DB PANEL       1       No.         80       3RD FLOOR A-B       1.13       3RD FLOOR A-B UNG AC DB PANEL       1       No.         80       3RD FLOOR A-B       1.13       3RD FLOOR A-B UNG AC DB PANEL       1       No.         80       3RD FLOOR A-B       1.13       3RD FLOOR A-B UNG AC DB PANEL       1       No.         80       3RD FLOOR A-B       1.13       3RD FLOOR A-B UNG AC DB PANEL       1       No.         81       3RD FLOOR A-B       1.13       3RD FLOOR A-B UNG AC DB PANEL       1       No.         81       3RD FLOOR A-B       1.14       SRD FLOOR A-B UNG YOUNG SIEMENS / LAT / HAVELLS/DB       1       No.         81       3RD FLOOR A-B       1.14       SRD FLOOR A-B UNG YOUNG SIEMENS / LAT / HAVELLS/DB       1       No.         81       3RD FLOOR A-B       1.14       Supply.installation, testing & commissioning etc. of LO DB panel Construction Wall mounted cubicle type panel, Fabricated from HA/HARD YEAR YEAR YEAR YEAR YEAR YEAR YEAR YEAR						
80       3RD FLOOR A-B       1.13       No 25A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB       1         80       3RD FLOOR A-B       1.13         80       3RD FLOOR A-B       1.13         SWING AC DH PANEL       1.13       SUBPLOOR A-B WING AC DB PANEL       1         80       3RD FLOOR A-B       1.13       SUBPly,installation, testing & commissioning etc. of LT DB panel Construction-Wall mounted cubicle type panel, Fabricated from 14/16G CRCA , JFS2 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System .50 Hz supply.       No 25A TPN RCBO 10kA,         81       3RD FLOOR A-B WING VENTILATION PANEL       1.14       SUB FLOOR A-B WING VENTILATION PANEL SYSTEMS       1         81       3RD FLOOR A-B WING VENTILATION PANEL       1.14       SUB FLOOR A-B WING VENTILATION PANEL SYSTEMS       1       No.         81       3RD FLOOR A-B WING VENTILATION PANEL       1.14       SUB FLOOR A-B WING VENTILATION PANEL SYSTEMS       1       No.         81       3RD FLOOR A-B WING       1.14       SUB FLOOR A-B WING VENTILATION PANEL SYSTEMS       1       No.         81       3RD FLOOR A-B WING       1.14       SUB FLOOR A-B WING VENTILATION PANEL SYSTEMS       1				Aluminium busbar,Insulated with heat shrinkable sleeves		
3 No 25A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEDRF / LEGRAND / SIRMENS / LAT / HAVELLS/DB ELECTRICALS/PRATIK         80 3RD FLOOR A-B WING AC DB PANEL       1.13         3RD FLOOR A-B WING AC DB PANEL       1.13         3RD FLOOR A-B WING AC DB       1.13         3RD FLOOR A-B WING AC DB PANEL       1.13         3RD FLOOR A-B WING AC DB       1.13         3RD FLOOR A-B WING AC DB       1.13         3RD FLOOR A-B WING AC DB       1.14         3RD FLOOR A-B WING C						
80       3RD FLOOR A-B WING AC DB PANEL       1.13       3RD FLOOR A-B WING AC DB PANEL       1.14       3RD FLOOR A-B WING AC DB PANEL       1.16       1.16         81       3RD FLOOR A-B WING VENTILATION PANEL       1.14				-		
80       SRD FLOOR A-B       1.13       SRD FLOOR A-B       1.13       SRD FLOOR A-B       1       No.         80       SRD FLOOR A-B       1.13       SRD FLOOR A-B       1.13       SRD FLOOR A-B       1       No.         80       WING AC DB       1.13       SRD FLOOR A-B       WING AC DB PANEL       1       No.         80       WING AC DB       1.13       SRD FLOOR A-B       WING AC DB PANEL       1       No.         81       WING AC DB       PANEL       Control Unit/ Incomer-1       No 32A       RCBO, 10kA, TPN         9       Potential Bus/Busbar 1 set - 32A       RCBO, 10kA, TPN       Potential Bus/Busbar 1 set - 32A       RCBO, 10kA, TPN         9       Potential Bus/Busbar 1 set - 32A       RCBO, 10kA, TPN       Potential Bus/Busbar 1 set - 32A       RCBO, 10kA, TPN         9       No 25A TPN RCBO 10kA, SPARE       As directed by Enginer in charge, Make - SCHNEDDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB       ELECTRICALS/PRATIK       No.         81       3RD FLOOR A-B       1.14       SRD FLOOR A-B WING VENTILATION PANEL       1       No.         81       SRD FLOOR A-B       1.14       SRD FLOOR A-B WING VENTILATION PANEL       1       No.         81       SRD FLOOR A-B       1.14       SRD FLOOR A-B WING VENTILATION PAN				,		
WING AC DB PANEL       Supply,installation, testing & commissioning etc. of LT DB panel. Construction-Wall mounted cubicle type panel, Fabricated from 14/16G CRCA .JP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System .50 Hz supply.         Control Unit/ Incomer- 1 No 32A RCBO, 10kA, TPN         Potential Bus/Busbar 1 set - 32A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves         Feeder section/Outgoing :         10 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB         81       3RD FLOOR A-B WING VENTILATION PANEL         82 <t< td=""><td></td><td></td><td></td><td>SCHNEIDER / LEGRAND/ SIEMENS / L&amp;T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS</td><td></td><td></td></t<>				SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
PANEL       Supply.instantation, testing to Construction-Wall mounted cubicle type panel, Fabricated from 14/16G CRCA , JPS2 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System SO HokA, TPN         Potential Bus/Busbar 1 set - 32A TRN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves       Feeder section/Outgoing :         10 No 25A TPN RCBO 10kA, SPARE       As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB         81       3RD FLOOR A-B       1.14         WING VENTILATION PANEL       Supply.installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA , JPS2 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System, S0 Hz supply.         Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TM         PANEL         81       3RD FLOOR A-B         82       Supply.installation, testing & commissioning etc. of LT DB panel Construction- Wall compartmentalized, treted for rust proofing.         WING       Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TM         Potential Bus/Busbar 1 set - 25A TPN+FE 91E Aluminium busbar,Insulated with heat shrinkable sleeves         Feeder section/Outgoing :         4 No 25A TPN RCBO 10kA,         3 No 25A TPN	80		1.13		1	No.
81       3RD FLOOR A-B WING VENTILATION PANEL       1.14       3RD FLOOR A-B WING VENTILATION PANEL Supply,installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System ,50 Hz supply,       No.         Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TM       Potential Bus/Busbar 1 set - 25A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves       Feeder section/Outgoing : 4 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS       Ast /				etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 32A RCBO, 10kA, TPN <b>Potential Bus/Busbar 1 set - 32</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 10 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T /		
WING VENTILATION PANELSupply,installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TMPotential Bus/Busbar 1 set - 25A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleevesFeeder section/Outgoing : 4 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPAREAs directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS	0.1		1.1.4		1	N
VENTILATION PANEL VENTILATION PANEL Barbon Let the state of the stat	81		1.14			No.
823RD FLOOR C-D1.153RD FLOOR C-D WING AC DB PANEL1No.		VENTILATION PANEL		etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 25A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 25</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 4 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
	82	3RD FLOOR C-D	1.15	<b>3RD FLOOR C-D WING AC DB PANEL</b>	1	No.

PANEL       etc. of LT DB panel Construction- Wall mounted cubic type panel, Fabricated from 14/16G CRCA JP52 sheet steet totally compartmentalized, treed for rust proofing, with separate busbarcamber & cable chambers Front J back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System, 50 Hz supply.         Control Unit/ Incomer 1 No32A RCBO, 10kA, TPN       Potential Bus/Busbar 1 set - 32A RCBO, 10kA, TPN         Potential Bus/Busbar 1 set - 32A RCBO, 10kA, TPN       Potential Bus/Busbar 1 set - 32A RCBO, 10kA, TPN         Feeder section/Outgoing :       10.0 25A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEDER / LEGRAND/SIENENS / LET / HAVELLS/DB       ELECTRICALS/PRATIK         83       3RD FLOOR C-D WING VENTILATION PANEL       1         WING VENTILATION PANEL       3RD FLOOR C-D WING VENTILATION PANEL       1         PANEL       Star FLOOR C-D WING VENTILATION PANEL       1         PANEL       Star FLOOR C-D WING VENTILATION PANEL       1         VENTILATION PANEL       Star FLOOR C-D WING VENTILATION PANEL       1         PANEL       Star FLOOR C-D WING VENTILATION PANEL       1         WING VENTILATION PANEL       1       No.         VENTILATION PANEL       1       No.         VENTILATION PANEL       1       No 25A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEDEE / LEGRAND/SIENEMS / LAT / HAVELLS/DB       1			1			
WING VENTILATION PANEL       Supply,installation, testing & commissioning et. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA .JP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System, 50 Hz supply,         Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TM         Potential Bus/Busbar 1 set - 25A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves         Feeder section/Outgoing :         4 No 25A TPN RCBO 10kA,         3 No 25A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB         84       4TH FLOOR A-B WING VEENTILATION PANEL       1.17         84       4TH FLOOR A-B WING         VENTILATION PANEL       1.17         94       4TH FLOOR A-B WING         95       91         94       4TH FLOOR A-B WING         95       92         94       4TH FLOOR A-B WING         95       92         94       91         95       92         94       92         94       94         95       95         94       95         95       95         96       95		WING AC DB PANEL		<ul> <li>mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber &amp; cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,</li> <li>Control Unit/ Incomer- 1 No32A RCBO, 10kA, TPN</li> <li>Potential Bus/Busbar 1 set - 32A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves</li> <li>Feeder section/Outgoing :</li> <li>10 No 25A TPN RCBO 10kA,</li> <li>4 No 25A TPN RCBO 10kA, SPARE</li> <li>As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&amp;T / HAVELLS/DB ELECTRICALS/PRATIK</li> </ul>		
VENTILATION PANEL       Supply, installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,         Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TM         Potential Bus/Busbar 1 set - 25A TPN+E 91E Aluminum busbar,Insulated with heat shrinkable sleeves         Feeder section/Outgoing : 4 No 25A TPN RCBO 10kA, SPARE As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS         84       4TH FLOOR A-B WING VENTILATION PANEL       1.17         4TH FLOOR A-B WING VENTILATION PANEL       1.17         4TH FLOOR A-B WING VENTILATION PANEL       1.17         500 CRCA , JP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,       1       No.	83	3RD FLOOR C-D	1.16		1	No.
84       4TH FLOOR A-B WING VENTILATION PANEL       1.17       4TH FLOOR A-B WING VENTILATION PANEL       1       No.         Supply,installation, testing & commissioning etc. of LT DB panel       Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,       Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TM         Potential Bus/Busbar 1 set - 25A TPN+E 91E       1		VENTILATION		etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 25A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 25</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 4 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T /		
WING VENTILATION PANELSupply,installation, testing & commissioning etc. of LT DB panelConstruction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,Control Unit/ Incomer- 1 No 25A MCCB, 10kA, TPN /TMPotential Bus/Busbar 1 set - 25A TPN+E 91E	0.4		1 17		1	No
shrinkable sleeves         Feeder section/Outgoing :         4 No 25A TPN RCBO 10kA,         3 No 25A TPN RCBO 10kA, SPARE	84	WING VENTILATION	1.17	Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 25A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 25</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 4 No 25A TPN RCBO 10kA,		110.

			As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
85	4TH FLOOR C-D	1.18	4TH FLOOR C-D WING VENTILATION PANEL	1	No.
	WING VENTILATION PANEL		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 32A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 32</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 8 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK		
			SYSTEMS		
86	5TH FLOOR A-B	1.19	5TH FLOOR A-B WING AC DB PANEL	1	No.
	WING AC DB PANEL		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 32A RCBO, 10kA, TPN		
			Potential Bus/Busbar 1 set - 32A TPN+E91EAluminiumbusbar,Insulatedwithheat		
			shrinkable sleeves Feeder section/Outgoing :	-	
			10 No 25A TPN RCBO 10kA,		
			4 No 25A TPN RCBO 10kA, SPARE		
			As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
87	5TH FLOOR	1.2	5TH FLOOR VENTILATION PANEL	1	No.
	VENTILATION PANEL		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 100A RCBO, 10kA, TPN <b>Potential Bus/Busbar 1 set - 100</b> A TPN+E 91E Aluminium busbar,Insulated with heat		

		shrinkable sleeves		
		Feeder section/Outgoing :		
		4 No 32A TPN RCBO 10kA,		
		7 No 25A TPN RCBO 10kA,		
		2 No 25A TPN RCBO 10kA, SPARE		
		2 No 32A TPN RCBO 10kA, SPARE		
		As directed by Engineer in charge, <b>Make</b> -		
		SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
88 5TH FLOO		<b>5TH FLOOR C-D WING AC DB PANEL</b>	1	No.
WING AC I PANEL	)B	Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 32A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 32</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 6 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK		
89 5TH FLOO	R C-D 1.22	SYSTEMS 5TH FLOOR C-D WING AC DB PANEL	1	No.
89 SINFLOO WING AC I PANEL		SIN FLOOR C-D WING AC DB PANELSupply,installation, testing & commissioningetc. of LT DB panel Construction- Wallmounted cubicle type panel, Fabricated from14/16G CRCA ,IP52 sheet steel totallycompartmentalized, treted for rust proofing.with separate busbarcamber & cable chambersFront/ back access for switchgears, connectorsetc. Suitable for 430 V, 3 phase / 4 WireSystem , 50 Hz supply,Control Unit/ Incomer- 1 No 100A RCBO,10kA, TPNPotential Bus/Busbar 1 set - 100A TPN+E91E Aluminium busbar,Insulated with heatshrinkable sleevesFeeder section/Outgoing :4 No 32A TPN RCBO 10kA,7 No 25A TPN RCBO 10kA, SPARE1 No 32A TPN RCBO 10kA, SPAREAs directed by Engineer in charge, Make -SCHNEIDER / LEGRAND/ SIEMENS / L&T /HAVELLS/DBELECTRICALS/PRATIKSYSTEMS		NO.
90 6TH LOWE	CR 1.23	6TH LOWER FLOOR AB WING AC DB	1	No.

	FLOOR AB		PANEL		
	FLOOR AB WING AC DB PANEL		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 250A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 250</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 9 No 25A TPN RCBO 10kA, 11 No40A TPN RCBO 10kA, 2 No 25A TPN RCBO 10kA, 2 No 25A TPN RCBO 10kA,		
			3 No 40A TPN RCBO 10kA, SPARE	1	
			1 No 63A TPN RCBO 10kA, SPARE As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS	-	
91	6TH LOWER FLOOR A-B VENTILATION PANEL	1.24	6TH LOWER FLOOR A-BVENTILATIONPANELSupply,installation, testing & commissioning etc. of LT DB panelConstruction-Mail mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,Control Unit/ Incomer- 1 No 25A RCBO, 10kA, TPNPotential Bus/Busbar 1 set - 25A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleevesFeeder section/Outgoing : 3 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, S No 25A TPN RCBO 10kA, S No 25A TPN RCBO 10kA, S No 25A TPN RCBO 10kA, S No 25A TPN RCBO 10kA, S No 25A TPN RCBO 10kA, S No 25A TPN RCBO 10kA, S SYSTEMS		No.
92	6TH LOWER FLOOR C-D WING AC DB PANEL	1.25	<b>6TH LOWER FLOOR C-D WING AC DB PANEL</b> Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 200A MCCB, 10kA, TPN /TM	1	No.

			Potential Bus/Busbar 1 set - 200A TPN+E		
			91E Aluminium busbar, Insulated with heat		
			shrinkable sleeves	-	
			Feeder section/Outgoing :		
			15 No 25A TPN RCBO 10kA,	-	
			1 No 40A TPN RCBO 10kA,	-	
			1 No 63A TPN RCBO 10kA,	-	
			2 No 25A TPN RCBO 10kA, SPARE	-	
			3 No 40A TPN RCBO 10kA, SPARE	-	
			1 No 63A TPN RCBO 10kA, SPARE	-	
			As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
93	6TH LOWER FLOOR CD	1.26	6TH LOWER FLOOR CD VENTILATION PANEL	1	No.
	FLOOR CD VENTILATION PANEL		PANELSupply,installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 25A RCBO, 10kA, TPNPotential Bus/Busbar 1 set - 25A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleevesFeeder section/Outgoing : 3 No 25A TPN RCBO 10kA, SPARE As directed by Engineer in charge, Make -		
			SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
94	6TH UPPER	1.27	6TH UPPER FLOOR AB WING AC DB PANEL	1	No.
	FLOOR AB WING AC DB PANEL		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 25A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 25</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> : 2 No 25A TPN RCBO 10kA, 3 No 25A TPN RCBO 10kA, SPARE 1 No 63A TPN RCBO 10kA, SPARE As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T /		

95	6TH UPPER FLOOR A-B VENTILATION PANEL	1.28	6TH UPPER FLOOR A-BVENTILATION PANELSupply,installation, testing & commissioning etc. of LT DB panelConstruction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, 	1	No.
96	6TH UPPER FLOOR C-D WING AC DB PANEL	1.29	SYSTEMS <b>GTH UPPER FLOOR C-D WING AC DB PANEL</b> Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction-</b> Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No</b> 25A MCCB, 10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 25</b> A TPN+E 91E 	1	No.
97	6TH UPPER FLOOR CD VENTILATION PANEL	1.3	SYSTEMS6TH UPPER FLOOR CD VENTILATION PANELSupply,installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, 	1	No.

		Feeder section/Outgoing :		
		2 No 25A TPN RCBO 10kA,		
		As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK		
TERRACE	1.31	TERRACE FLOOR AB WING ODU PANEL AC	1	No.
98 TERRACE FLOOR AB WING ODU PANEL AC DB PANEL		<b>DB PANEL</b> Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction-</b> Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, <b>Control Unit/ Incomer- 1 No.</b> - 160A MCCB,		
		10kA, TPN /TM <b>Potential Bus/Busbar 1 set - 160</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves		
		Feeder section/Outgoing :		
		4 No 40A TPN RCBO 10kA,		
		3 No 40A TPN RCBO 10kA, SPARE		
		As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
99 TERRACE FLOOR A-B VENTILATION PANEL	1.32	TERRACE FLOOR A-B VENTILATION PANEL	1	No.
		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction-</b> Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No 63A RCBO, 10kA, TPN	_	
		<b>Potential Bus/Busbar 1 set - 63</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves		
		Feeder section/Outgoing :		
		12 No 25A TPN RCBO 10kA,		
		4 No 25A TPN RCBO 10kA, SPARE		
		As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
TRRACE FLOOR	1.33	TRRACE FLOOR C-D WING AC DB PANEL	1	No.
C-D WING AC DB PANEL		Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction-</b> Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire		
	FLOOR AB WING ODU PANEL AC DB PANEL TERRACE FLOOR A-B VENTILATION PANEL TRRACE FLOOR C-D WING AC	FLOOR AB WING ODU PANEL AC DB PANELImage: colored system PANELTERRACE FLOOR A-B VENTILATION PANEL1.32TRRACE FLOOR C-D WING AC1.33	TERRACE       1.31       TERRACE FLOOR A-B WING ODU PANEL AC DB PANEL         WING ODU       TERRACE FLOOR A-B WING ODU PANEL AC DB PANEL       Supply,installation, testing & commissioning etc. of LT DB panel Construction. Wal mounted cubicle type panel, Fabricated from 14/16G CRCA , JP52 sheet steel totally compartmentalized, treted for rust proofing. With separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System, 50 Hz supply,         Control Unit/ Incomer- 1 No 160A MCCB, 10kA, TEP /TM       Potential Bus/Busbar 1 set - 160A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves         Feeder section/Outgoing :       4 No 40A TPN RCBO 10kA,         As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS         TERRACE       1.32         TERRACE FLOOR A-B VENTILATION PANEL         YENTILATION PANEL       1.33         TERRACE FLOOR A-B VENTILATION PANEL         Supply,installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA , JP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System, 50 Hz supply,         Control Unit/ Incomer- 1 No 63A RCBO, 10/kA, TPN       Potential Bus/Busbar 1 set - 63A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves         Feeder section/Outgoing:       12 No 25A TPN RCBO 10/kA, 4 No	As directed by Engineer in Charge, Make SCHNEIDER / LEGRAND/SIEMENS / LAT / HAVELLS/DB           TERRACE FLOOR A-B WING ODU PANEL AC DB         1           TERRACE AC DB         TERRACE FLOOR A-B WING ODU PANEL AC DB PANEL         1           Supply.installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA JP52 sheet steel totally compartmentalized, treted for rust proofing, with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply.           Control Unit/ Incomer- 1 No 160A MCCB, 10kA, TPN /TM         Potential Bus/Busbar 1 set - 160A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves           Feeder section/Outgoing: 4 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, 5 YSTEMS         1           TERRACE FLOOR A-B VENTILATION PANEL         TERRACE FLOOR A-B VENTILATION PANEL 1         1           TERRACE FLOOR A-B VENTLATION PANEL         TERRACE FLOOR A-B VENTILATION PANEL 1         1           TERRACE FLOOR A-B VENTLATION PANEL         TERRACE FLOOR A-B VENTILATION PANEL 1         1           TERRACE FLOOR A-B VENTLATION PANEL         TERRACE FLOOR A-B VENTLATION PANEL 1         1           TERRACE FLOOR A-B VENTLATION PANEL         TERRACE FLOOR A-B VENTLATION PANEL 1         1           TERRACE

101TERRACE FLOOR C-D VENTILATION PANEL1.341.34101TERRACE FLOOR C-D VENTILATION PANEL1.341.34101TERRACE FLOOR C-D VENTILATION PANEL1.341.34101TERRACE FLOOR C-D VENTILATION PANEL1.341.34101TERRACE FLOOR C-D VENTILATION PANEL1.341.34101TERRACE FLOOR C-D VENTILATION PANEL1.341.34101TERRACE FLOOR C-D VENTILATION PANEL1.341.34101TERRACE FLOOR C-D VENTILATION PANEL1.34101TERRACE FLOOR C-D VENTILATION PANEL1.34	1	No.
Potential Bus/Busbar 1 set - 160A TPN+E91E Aluminium busbar,Insulated with heat shrinkable sleevesFeeder section/Outgoing :4 No 40A TPN RCBO 10kA,3 No 40A TPN RCBO 10kA,3 No 40A TPN RCBO 10kA, SPAREAs directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS101TERRACE FLOOR C-D VENTILATION PANEL103TERRACE FLOOR C-D VENTILATION PANEL104TERRACE FLOOR C-D VENTILATION PANEL1051.34106CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
101       TERRACE       1.34         FLOOR C-D       VENTILATION         PANEL       1.34    Shrinkable sleeves Feeder section/Outgoing : 4 No 40A TPN RCBO 10kA, 3 No 40A TPN RCBO 10kA, SPARE As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS 101 TERRACE FLOOR C-D VENTILATION PANEL Supply, installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA , IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
Image: Provide the section of the sectin of the sectin of the section of the section of the sec	1	No.
4 No 40A TPN RCBO 10kA,         3 No 40A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make -         SCHNEIDER / LEGRAND/ SIEMENS / L&T /         HAVELLS/DB       ELECTRICALS/PRATIK         SYSTEMS         101       TERRACE         FLOOR C-D         VENTILATION         PANEL         1.34         TERRACE floor C-D VENTILATION PANEL         Supply,installation, testing & commissioning etc. of LT DB panel         Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
3 No 40A TPN RCBO 10kA, SPAREAs directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS101TERRACE FLOOR C-D VENTILATION PANEL1.34TERRACE FLOOR C-D VENTILATION PANEL Supply,installation, testing & commissioning etc. of LT DB panel mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS101TERRACE FLOOR C-D VENTILATION PANEL1.34103TERRACE FLOOR C-D VENTILATION PANEL104Supply,installation, testing & commissioning etc. of LT DB panel mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
101       TERRACE       1.34       SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS         101       TERRACE FLOOR C-D VENTILATION PANEL       Supply, installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
101TERRACE FLOOR C-D VENTILATION PANEL1.34 <b>TERRACE FLOOR C-D VENTILATION PANEL</b> 101FLOOR C-D VENTILATION PANEL1.34 <b>TERRACE FLOOR C-D VENTILATION PANEL</b> 101Supply, installation, testing & commissioning etc. of LT DB panelConstruction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.	1	No.
FLOOR C-D VENTILATION PANEL Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.		
VENTILATION PANELetc. of LT DB panelConstruction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.		
14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing.		
compartmentalized, treted for rust proofing.		
Front/ back access for switchgears, connectors		
etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,		
Control Unit/ Incomer- 1 No 63A RCBO,		
10kA, TPN		
Potential Bus/Busbar 1 set - 63A TPN+E 91EAluminiumbusbar,Insulatedwithheat		
shrinkable sleeves		
Feeder section/Outgoing :		
12 No 25A TPN RCBO 10kA,		
4 No 25A TPN RCBO 10kA, SPARE		
As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T /		
HAVELLS/DB ELECTRICALS/PRATIK		
SYSTEMS		
102GROUND FLOOR1.35GROUND FLOORA-BWINGACVRV&A-B WING ACVENTILATION PANEL	1	No.
VRV & Supply,installation, testing & commissioning		
VENTILATION etc. of LT DB panel <b>Construction</b> - Wall		
PANEL mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally		
compartmentalized, treted for rust proofing.		
with separate busbarcamber & cable chambers		
Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire		
System, 50 Hz supply,		
Control Unit/ Incomer- 1 No125A		
RCBO,10kA, TPN Potential Bus/Busbar 1 set - 125A TPN+E		
91E Aluminium busbar, Insulated with heat		
shrinkable sleeves Feeder section/Outgoing :		
7 No 25A TPN RCBO 10kA,		
2 No 40A TPN RCBO 10kA,		
1 No 63A TPN RCBO 10kA,		
2 No 25A TPN RCBO 10kA, SPARE		
1 No 40A TPN RCBO 10kA, SPARE		
1 No 63A TPN RCBO 10kA, SPARE		
As directed by Engineer in charge, <b>Make</b> -		
SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		

103	GROUND FLOOR C D WING AC VRV & VENTILATION PANEL	1.36	GROUND FLOOR C D WING AC VRV & VENTILATION PANELSupply,installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No100A RCBO, 10kA, TPNPotential Bus/Busbar 1 set - 100A TPN+E 91E Aluminium busbar,Insulated with heat 	1	No.
104	FIRST FLOOR AC VRV & VENTILATION PANEL	1.37	SYSTEMS         FIRST FLOOR AC VRV & VENTILATION PANEL         Supply,installation, testing & commissioning etc. of LT DB panel Construction- Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,         Control Unit/ Incomer- 1 No315A RCBO, 10kA, TPN         Potential Bus/Busbar 1 set - 315A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves         Feeder section/Outgoing :         10 No 25A TPN RCBO 10kA,         3 No 40A TPN RCBO 10kA, SPARE         3 No 40A TPN RCBO 10kA, SPARE         As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS	1	No.
105	GROUND FLOOR VENTILATION PANEL	1.38	<b>GROUND FLOOR VENTILATION PANEL</b> Supply,installation, testing & commissioning etc. of LT DB panel <b>Construction</b> - Wall mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Control Unit/ Incomer- 1 No40A RCBO, 10kA, TPN	1	No.

			<b>Potential Bus/Busbar 1 set - 40</b> A TPN+E 91E Aluminium busbar,Insulated with heat		
			shrinkable sleeves		
			Feeder section/Outgoing :		
			9 No 25A TPN RCBO 10kA,		
			1 No 32A TPN RCBO 10kA,		
			1 No 40A TPN RCBO 10kA,		
			2 No 25A TPN RCBO 10kA, SPARE		
			1 No 32A TPN RCBO 10kA, SPARE		
			1 No 40A TPN RCBO 10kA, SPARE		
			As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T /		
			HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
106	LIFT PANEL	1.39	LIFT PANEL	1	No.
			Supply,installation, testing & commissioning etc. of LT panel <b>Construction-</b> Floor mounted cubicle type panel, Fabricated from 14/16G CRCA ,IP52 sheet steel totally compartmentalized, treted for rust proofing. with separate busbarcamber & cable chambers Front/ back access for switchgears, connectors etc. Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply, Automatic Fire suppression gas flooding system complete with Perfluoro Ketone (FK-5-1-12)/ HFC 227ea, DLP Assembly with automatic valve, push in connector for tube, Perfluoro Ketone (FK-5-1-12)/ HFC 227ea, mounting bracket, End of Line adopter and low pressure switch for monitoring system activation.Perfluoro Ketone (FK-5-1-12)/ HFC 227ea gas of suitable capacity , Heat detection tube as required and A/V alarm with all necessary installation to complete the system as per specifications. Or as directed etc.		
			Control Unit/ Incomer- 1 No 400A MCCB,16kA, TPN /MP with O/C,S/C,E/F,U/V, E/L and Shunt coils etc. LED Based Phase indicating lamps, control RCBOs, CTs, etc Set - ON/OFF/ TRIP lamps with control RCBOs Set - ON/OFF/ TRIP lamps with control RCBOs, <b>Potential Bus/Busbar 1 set - 400</b> A TPN+E 91E Aluminium busbar,Insulated with heat shrinkable sleeves <b>Feeder section/Outgoing</b> :		
			16 No 63A TPN RCBO 16kA,		
			4 No 63A TPN RCBO 16kA, SPARE As directed by Engineer in charge, <b>Make</b> -		
			As directed by Engineer in charge, Make - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS/DB ELECTRICALS/PRATIK SYSTEMS		
A.3	INTERNAL COMMON AREA WORK	A.3			
	LT CABLE /	1.2			
	LUGS /GLANDS:-				
	/ GLANDS:-	l	1	l	

107	1 1 1 1 7 1			1	
107	1.1 kV grade stranded Cu	A	1.1 kV grade stranded Cu conductor, XLPE insulated, extruded FRLSOH Inner sheathed		
	conductor, XLPE		and outer sheathed Extruded FRLSOH,		
	insulated,		galvanised steel round armoured cables. As		
	extruded		directed by Engineer in charge Make- RR /		
	FRLSOH		FINOLEX / POLYCAB		
108		1.2.1	Supplying, erecting & terminating of FRLSOH	105	М
			armoured cable 2 core 4 sq mm copper cable		
			As directed by Engineer in charge		
109		1.2.2	Supplying, erecting & terminating of FRLSOH	105	Μ
			armoured cable 2 core 6 sq. mm. copper		
			cable. As directed by Engineer in charge		
110		1.2.3	Supplying, erecting & terminating of FRLSOH	105	М
			armoured cable 2 core 10 sq. mm. copper		
111		1.2.4	<b>cable.</b> As directed by Engineer in charge	7415	M
111		1.2.4	Supplying, erecting & terminating of FRLSOH armoured cable <b>4 core 4 sq. mm. copper</b>	7415	IVI
			<b>cable.</b> As directed by Engineer in charge		
112		1.2.5	Supplying, erecting & terminating of FRLSOH	9600	М
112		1.2.0	armoured cable 4 core 6 sq. mm. copper	5000	111
			<b>cable.</b> As directed by Engineer in charge		
113		1.2.6	Supplying, erecting & terminating of FRLSOH	5700	М
			armoured cable 4 core 10 sq. mm. copper		
			cable. As directed by Engineer in charge		
114		1.2.7	Supplying, erecting & terminating of FRLSOH	550	Μ
			armoured cable 4 core 16 sq. mm. copper		
		_	cable. As directed by Engineer in charge		
115	1.1 kV grade	В	1.1 kV grade stranded Al conductor, XLPE		
	stranded Al conductor, XLPE		insulated, extruded FRLSOH Inner sheathed		
	insulated,		and outer sheathed Extruded FRLSOH, galvanised steel round armoured cables. As		
	extruded		directed by Engineer in charge Make- RR /		
	FRLSOH		FINOLEX / POLYCAB		
116		1.2.8	Supplying, erecting & terminatingof FRLSOH	165	М
			armoured cable 3 <sup>1</sup> / <sub>2</sub> core 16sq. mm.		
			aluminium cable. As directed by Engineer in		
			charge		
117		1.2.9	Supplying, erecting & terminatingof FRLSOH	50	Μ
			armoured cable 3 <sup>1</sup> / <sub>2</sub> core 25 sq. mm.		
			aluminium cable. As directed by Engineer in		
118		1.2.10	charge Supplying, erecting & terminating of FRLSOH	300	М
110		1.2.10	armoured cable $3\frac{1}{2}$ core 35 sq. mm.	300	141
			aluminium cable. As directed by Engineer in		
			charge		
119		1.2.11	Supplying, erecting & terminating of FRLSOH	220	М
			armoured cable $3\frac{1}{2}$ core 50 sq. mm.		
			aluminium cable. As directed by Engineer in		
100		1.0.10	charge	110	
120		1.2.12	Supplying, erecting & terminating of FRLSOH	110	Μ
			armoured cable 3 <sup>1</sup> / <sub>2</sub> core 70 sq. mm.		
			<b>aluminium cable.</b> As directed by Engineer in charge		
121		1.2.13	Supplying, erecting & terminating of FRLSOH	110	М
		1.2.10	armoured cable $3\frac{1}{2}$ core 95 sq. mm.		
			aluminium cable. As directed by Engineer in		
			charge		
122		1.2.14	Supplying, erecting & terminating of FRLSOH	330	М
			armoured cable 3 <sup>1</sup> / <sub>2</sub> core 120 sq. mm.		
			aluminium cable. As directed by Engineer in		
			charge	1.57	
107		11015	Supplying, erecting & terminating of FRLSOH	165	Μ
123		1.2.15		100	
123		1.2.13	armoured cable 3 <sup>1</sup> / <sub>2</sub> core 150 sq. mm.	100	
123		1.2.13		100	

124		1.2.16	Supplying, erecting & terminating of FRLSOH	600	М
147		1.4.10	armoured cable <b>3</b> <sup>1</sup> / <sub>2</sub> <b>core 185 sq. mm.</b>		141
			aluminium cable. As directed by Engineer in		
105		1.2.17	charge Supplying, erecting & terminating of FRLSOH	220	M
125		1.2.17	armoured cable $3\frac{1}{2}$ core 240 sq. mm.	220	IVI
			aluminium cable. As directed by Engineer in		
			charge		
126		1.2.18	Supplying, erecting & terminating of FRLSOH	2000	Μ
			armoured cable <b>3<sup>1</sup>/<sub>2</sub> core 300 sq. mm.</b> aluminium cable. As directed by Engineer in		
			charge		
127	WIRE / POINT	1.3			
128	WIRING :-		Wining for singuit ( submain wining along with		
128			Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLSZH		
			insulated copper conductor wire in surface/		
			recessed hot dipped GI conduit as required. As		
			directed by Engineer in charge Make (WIRE) -		
			RR / FINOLEX / ANCHOR / POLYCAB / HAVELS <b>Make (CONDUIT)</b> - BEC / VIMCO /		
			JINDAL		
129		1.3.4	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire in	8800	М
			20mm gi Conduit		
130		1.3.5	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire in	6600	М
			20mm gi Conduit		
131		1.3.6	2 X 4 sq. mm + 1 X 4 sq. mm earth wire in 25mm giConduit	3300	М
132		1.3.7	Supplying & erecting mains with <b>2x1.5 sq.mm</b> .	49544	М
			and earth wire		
			<b>1.5 sq.mm</b> ZHFR PVC copper wire, in existing		
			raceways/conduit As directed by Engineer in charge. <b>Make</b> - RR / FINOLEX / POLYCAB		
			/HAVELLS		
133		1.3.8	Supplying & erecting mains with <b>2x2.5 sq.mm</b> .	50149	М
			and earth wire		
			<b>1.5 sq.mm</b> ZHFR PVC copper wire in existing raceways/conduit As directed by Engineer in		
			charge. <b>Make</b> - RR / FINOLEX / POLYCAB		
			/HAVELLS		
134		1.3.9	Supplying & erecting mains with 2x4 sq.mm.	5500	Μ
			and earth wire 2.5 sq.mm ZHFR PVC copper wire in existing		
			raceways/conduit, As directed by Engineer in		
			charge. Make - RR / FINOLEX / POLYCAB		
105			/HAVELLS		
135	CABLE TRAY :-	1.4		200	N
136	perforated type cable tray	1.4.5	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from	300	M
	capic lay		16 swg (1.6 mm thick) GI sheet of 150 mm		
			width & 75 mm height complete with necessary		
			coupler plates & hardware in approved		
			manner.As directed by Engineer in charge.		
137	perforated type	1.4.6	<b>Make</b> - PROFAB / LEGRAND / INDANA Providing & erecting Hot dipped galvanized	200	М
101	cable tray	1.1.0	perforated type	200	141
			cable tray manufactured from 16 swg (1.6 mm		
			thick) GI sheet of		
			200 mm width & 75 mm height complete with		
			necessary coupler plates & hardware in approved manner.As		
			directed by Engineer in charge.		
		1	Make - PROFAB / LEGRAND / INDANA		1

138	perforated type cable tray	1.4.7	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 300 mm width & 75 mm height complete with necessary coupler plates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	200	М
139	perforated type cable tray	1.4.8	Providing & erecting Hot dipped galvanized perforated type cable tray manufactured from 16 swg (1.6 mm thick) GI sheet of 400 mm width & 75 mm height complete with necessary coupler plates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	200	Μ
140	perforated type cable tray	1.4.9	Providing & erecting Hot dipped galvanized perforated typecable tray manufactured from 16 swg (1.6 mm thick) GI sheet of500 mm width & 75 mm height complete with necessary couplerplates & hardware in approved manner.As directed by Engineer in charge. <b>Make</b> - PROFAB / LEGRAND / INDANA	200	М
141	ACCESSORIES SUPPLY & FIXING	1.5			
142	PIR SWITCH SENSOR FOR LIGHT	1.5.1	Supplying installation testing and commissioning of PIR SWITCH SENSOR FOR LIGHT ,As directed by Engineer in charge <b>Make-</b> SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS	50	EACH
143	DUAL CHANNEL PIR SENSOR FOR LIGHT & VAV BOX	1.5.2	Supplying installation testing and commissioning of DUAL CHANNEL PIR SENSOR FOR LIGHT & VAV BOX ,As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS	500	EACH
144	TIMER FOR LIGHT	1.5.3	Supplying installation testing and commissioning of TIMER FOR LIGHT, As directed by Engineer in charge, <b>Make</b> - SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS	145	EACH
145	DAY LIGHT LUX LEVEL SENSOR FOR LIGHT	1.5.4	Supplying installation testing and commissioning of DAY LIGHT LUX LEVEL SENSOR FOR LIGHT, As directed by Engineer in charge, <b>Make-</b> SCHNEIDER / LEGRAND/ SIEMENS / L&T / HAVELLS	275	EACH
146	RACEWAY	1.5.5	Supplying installation testing and commissioning of Raceway 1.5MM THICK GI with cover for power /tel/ data wiring including necessary bends, T's, fixing screws, etc. fixed to wall /ceiling etc.As directed by Engineer in charge, <b>Make</b> - OBO / LEGRAND		
147		а	300X40MM	1650	Rmt
148		b	225X40MM	1650	Rmt
149		с	150X40MM	1980	Rmt
150		d	100X40MM	1650	Rmt
151		e f	75X40MM	1320	Rmt
152 153			50X40MM 150X25MM	1650 1320	Rmt Rmt
		g h	100X25MM	2200	Rmt
154		11		4400	1 1 1 11 1

156		j	50X25MM	1980	Rmt
157	JUNCTION BOX	1.5.6	Supplying installation testing and commissioning of GI Junction box with cover for power /tel/ data wiring including necessary screws, etc. fixed to wall /ceiling etc. As directed by Engineer in charge, <b>Make-</b> OBO / LEGRAND		
158		а	400X400X65	220	Nos.
159		b	300X300X65	385	Nos.
160		с	225X225X65	440	Nos.
161		d	150X150X65	880	Nos.
162	SWITCH & SOCKET OUTLETS	1.6			
163		1.6.5	Providing plug point with 3 phase industrial socket having CRCA sheet metal enclosure with 30A, 3 pin plug and earthsocket and 30A, 3 pin, plug top with 30A, triple pole RCBO, mains,switchgears with continuous earth wire upto three days. As directed by Engineer in charge.As directed by Engineer in charge. Make - ANCHOR / PANASONIC- ROMA PLUS / LEGRAND - MYRIUS / POLYCAB - LIVANA / L & T / HAVELLS	32	EACH
164	HDPE PIPE/CONDUIT:-	1.9			
165		1.9.11	Supply & laying I.S.I. mark 'B' class GI Pipe for surface / under ground cable protection As directed by Engineer in charge <b>Make</b> - BEC / VIMCO / JINDAL		
166			20 mm dia.	900	RMtr.
167			25 mm dia.	900	RMtr.
168	LIGHTING FIXTURE	A.4	LIGHTING FIXTURE		
169	INDOOR SQUARE / RECTANGLE CEILING LIGHT(SURFACE MOUNTED)	1.3.16	Supplying and erecting square Shaped CRCA /die-cast aluminium powder coated housing LED panel light (slim edge-lit) 600x600mm suitable for 36 W-40W polystyrene diffuser having system lumens output of Min 4200 Lumens, min. efficacy of 120 lumen/W, CRI>80, CCT upto 6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50 including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	265	Each

170	INDOOR SQUARE / RECTANGLE CEILING LIGHT(SURFACE MOUNTED)	1.3.17	Supplying and erecting rectangular shaped CRCA /die-cast aluminium powder coated housing LED panel (slim edge-lit) 300x1200mm of suitable for 36 to 40 W polystyrene diffuser having system lumens output of Min 4200 Lumens, min. efficacy of 120 lumen/W, CRI>80,CCT upto 6500K, Beam Angle of 120 deg., max. ripple of 5%, THD<10%, p.f. >0.95, operating range of 120-270V, surge protection of 2.5 kV, Life class of 50,000 Hrs. at L70B50 including driver, having mounting arrangement with board for surface type or spring loaded mounting clips complete with 3 years warranty As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	265	Each
171	LED MIRROR LIGHT		Supplying of <b>LED mirror light with integrated</b> <b>driver including 7W to 9W lamp</b> having lumens output of 1200 lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 6000K & polycarbonate housing and opal diffuser to be fixed above mirror or as required on clamps complete. As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	154	Each
172	LED MIRROR LIGHT	1.6.2	Supplying of <b>LED mirror light with integrated</b> <b>driver including 14W to 18W lamp</b> having lumens output of 1200 lumens, min. efficacy of 100 lumen/W, CRI>80, CCT upto 6000K & polycarbonate housing and opal diffuser to be fixed above mirror or as required on clamps complete. As directed by Engineer in charge. Make- PHILIPS / BAJAJ /HAVELLS / PANASONIC / WIPRO	12	Each
173	160 KVA ONLINE UPS SYSTEMS	A5. 1.1	Supply,installation, testing & commissioning etc. of <b>160 KVA ONLINE UPS SYSTEMS</b> , As directed by Engineer in charge. <b>Make</b> - APC /SCHNEIDER/ EATON / LEGRAND / NEOWATT / DELTA / SOCOMEC / EMERSON- VERTIV	3	nos
174			Parallel configuration		
175			Model: EASY 3M		
176			Input : Three Phase - 415 VAC		
177			Output : Three Phase - 415 VAC		
178			IGBT Based Technology		
179			96% Efficiency		
180			Modbus Card for RS 485 Connectivity		
181		1.2	Battery Back up Time – 15 Minutes Backup on 160kva load	132	nos
182 183			12V / 200 AH SMF Battery (44 Battery with each UPS) Rocket / Exide / Quanta make	-	
184		1.3	SNMP Card	3	nos
185		1.4	Battery DC Breaker with UV / OV Coil with Signal Cable for Battery & UPS Protection	3	nos
186		1.5	MS Powder Coated Open Battery Rack for Mounting Batteries	3	Set
187		1.6	Consumable Electronic Item - Battery Interlinks X 44Nos - Univyin Wires	3	Set
188		1.7	Consumable Electronic Item - Cable (UPS to Battery - 30 mtr max)	3	Set

189		1.8	UPS Base Frame	3	Set
190		1.9	Parallel Kit	3	nos
191		1.10	Installation Charges	3	Set
192	30 KVA GLOBE MAKE INVERTER SYSTEMS	A.6.1.1	Supply,installation, testing & commissioning etc. of <b>30 KVA GLOBE MAKE INVERTER</b> <b>SYSTEMS</b> As directed by Engineer in charge. <b>Make</b> - SUKAM / KEVIN / MICROTECH / DELTA / EMERSON-VERTIV/LEGRAND	1	Nos
193			Stand alone configuration		
194			Model : Sinewave		
195			Input : Three Phase - 415 VAC		
196			Output : Three Phase - 415 VAC		
197		1.2	Battery Back up Time – 15 Minutes Backup	30	Nos
198		-	12V / 65 AH SMF Battery ( 30 Battery with each Inverter )		
199			Rocket / Exide / Quanta make		
200		1.3	MS Powder Coated Open Battery Rack for Mounting Batteries	1	Set
201		1.4	Consumable Electronic Item - Battery Interlinks X 30Nos - Univyin Wires	1	Set
202		1.5	Consumable Electronic Item - Cable	1	Set
203		1.6	Inverter Base Frame	1	Set
204 205	Air Termination	1.7 <b>A.7</b>	Installation Charges	1	Set
	AS PER IS-IEC 62305-3 (Make- OBO/JMV/ELE CTRO POWER/STEMO N				
206	8 mm Aluminum Round Conductor	1.1.1	Supply, installation, testing & commissioning of 8 mm Aluminum Round Conductor complete as specified in drawing & Meets the requirements of DIN EN 50164-2 (VDE 0185 part 202) & VDE 0185-305 (IS/IEC 62305),	813	Nos
207	holder	1.1.2	Supply, installation, testing & commissioning holder: With M8 female thread or diameter 7mm, M8 Screw to connect the conductor holder. Weather and temperature resistant from -35 to +90 degree Celsius tested. Conductor holder @ 1 meter distance.	813	Nos
208	Polyamide roof cable holder for flat roof	1.1.3	Supply, installation, testing & commissioning OF Polyamide roof cable holder for flat roof: DIN 48829 Form B1. Closed form with bottom. Filling weight 1Kg (frost-resistant concrete). Sleeve from polyethylene, black @ 1 meter distance.	100	Nos
209	cross universal connector	1.1.4	Supply, installation, testing & commissioning of Providing of cross universal connector: For T and cross connection,to route vertical down conductor /mesh formation made of hot dipped galvanised iron with necessary screws etc as required. Installed with 4 hexagonal bolts M8*25 with M8 hexagonal nuts.	130	Nos
210	expansion piece with connector	1.1.5	Supply, installation, testing & commissioning of Providing of expansion piece with connector: For equalising temperature related length changes. Necessary on conductors length over 20 meters. For round conductor Rd 8/ALU.	80	Nos

011	m 1	110		40	
211	T cross and parallel connectors	1.1.6	Supply,installation, testing & commissioning of Connector: For T cross and parallel connectors. Quick installation using hexagonal bolt M10X30 high-grade hot dip galvanised. Conforms to the requirements according to DIN VDE 0185-305 (IS-IEC 62305)(2nos/expansion piece).	40	Mtr
212	Vertical air terminal with accessories	1.1.7	Supply,installation, testing & commissioning of Vertical air terminal with accessories:Providing of Air terminals as per IS-IEC -62305 part-3 10 mm aluminium rod : Meets the technical specification according to DIN EN 50164-2 (VDE 0815 part 202). Meets the requirement of VDE0185/305(IS/IEC 62305) 4 Mtr Airterminal: semi-hard (E-AlMgSiO5 corresponds to DIN 48801) Suitable for high wind load.	16	Nos
213	Fang Fix system 16 kg	1.1.8	Providing of Stand for Fang Fix system 16 kg with base and clamp ,made up of frost resistant concrete and tested upto 100KA lightning current .	16	Nos
214	Stand for Fang Fix system	1.1.9	Providing of Stand for Fang Fix system 16 kg with base and clamp ,made up of frost resistant concrete and tested upto 100KA lightning current.	16	Nos
215	Vertical air terminal with accessories	1.1.10	Vertical air terminal with accessories:Providing of Air terminals as per IS-IEC -62305 part-3 10 mm aluminium rod : Meets the technical specification according to DIN EN 50164-2 (VDE 0815 part 202).Meets the requirement of VDE0185/305(IS/IEC62305)2 Mtr Airterminal: semi-hard (E-AlMgSiO5 corresponds to DIN 48801) Suitable for high wind load. OBO Type No. 101 VL2000 (5401 98 3)	16	Nos
216	Rod holder	1.1.11	Rod holder suitable to fit with 16mm dia rod fixing at the wall.	48	Mtr
217	Down conductor & Ring system	1.2			
218	8 mm Aluminum Round Conductor	1.2.1	Supply,installation, testing & commissioning of 8 mm Aluminum Round Conductor complete as specified in drawing & Meets the requirements of DIN EN 50164-2 (VDE 0185 part 202) & VDE 0185-305 (IS/IEC 62305),	1200	Mtr
219	Roof conductor holder for parapet	1.2.2	Supply,installation, testing & commissioning of Roof conductor holder for parapet- Polyamide Conductor holder: With M8 female thread or diameter 7mm, M8 Screw to connect the conductor holder. Weather and temperature resistant from -35 to +90 degree Celsius tested. Conductor holder @ 1 meter distance.	1200	Nos
220	Galvanised Steel Flat 30X3 mm thickness from earth electrode	1.2.3	Supply,installation, testing & commissioning of Galvanised Steel Flat 30X3 mm thickness from earth electrode directly in ground as required. Flat conductor shall be of Hot Dipped & Cross sectional area of 90mm square According to DIN EN 50164-2 (VDE 0185 part 202) Meets the requirement of VDE0185/305(IS-IEC 62305) Zinc coating: 500 g/m square (Approx :70 micron coating) Should be tested and used exclusively for lightning protection earthing system and ring equipotential bonding.	2520	Mtr
221	diagonal clamp	1.2.4	Supply, installation, testing & commissioning of diagonal clamp suitable for FL 30. Installed with 2 hexagonal bolts.	2520	Nos

235	16 ports 10/100/1000 with 2 combo ports PoE switch	1.4.3	Supply, Installation, Testing & Commissioning of <b>16 ports</b> 10/100/1000 with 2 combo ports PoE switch with installation. <b>Make:- NETGEAR GSM / ZYXEL /DIGISOL</b> /LEGRAND /CISCO	13	EACH
234	POE SWITCH & RACKS :-	1.4			
004		1.4	MAKE: - NETGEAR GSM / ZYXEL /DIGISOL /LEGRAND /CISCO		
233	Light Interface Unit (LIU)	1.3.7	Supply, Installation,Testing & Commissioning of Light Interface Unit (LIU)	11	EACH
232	Single Mode Fiber Optic Connector	1.3.5	Supply, Installation, Testing & Commissioning of Single Mode Fiber Optic Connector MAKE: - NETGEAR GSM / ZYXEL /DIGISOL /LEGRAND /CISCO	3	EACH
231	Media Convertor.	1.3.4	Supply, Installation, Testing & Commissioning of Media Convertor. MAKE: - NETGEAR GSM / ZYXEL /DIGISOL /LEGRAND /CISCO	4	EACH
230	FIBER OPTIC EQUIPMENT & ACCESSIOERS:-	1.3			
229	DATA/ VOICE SYSTEM				
228	Cross connector for Flat	1.3.3	Providing of Cross connector for Flat: Suitable for 30mm Galvanised steel strip. Installed with 4 nos of hexagonal plate.	45	Nos
227	diagonal clamp	1.3.2	Providing of diagonal clamp suitable for FL 30. Installed with 2hexagonal bolts.	284	Nos
	earth electrode		Hot Dipped & Cross sectional area of 90mm square According to DIN EN 50164-2 (VDE 0185 part 202) Meets the requirement of VDE0185/305(IS-IEC 62305) Zinc coating: 500 g/m square (Approx :70 micron coating) Should be tested and used exclusively for lightning protection earthing system and ring equipotential bonding.		
226	earthing system Galvanised Steel Flat 30X3 mm thickness from	1.3.1	Supply of Galvanised Steel Flat 30X3 mm thickness from earth electrode directly in ground as required. Flat conductor shall be of	284	Mtr
225	Vertical	1.3			
224	cross connector for reinforcement	1.2.7	Providing of cross connector for reinforcement, Flat galvanized steel and earth fixed point. This connects earth fixed point to reinforcement. Installed with 2 hexagonal bolts M8x 20 (F).	190	Nos
			grade 316L. Connection to earthing systems, air terminals and reinforcement. Contact plate: 79 mm diameter, made of rustproof stainless steel (V4A). Clamping bolt 10mm diameter, rustproof (V2A). Including plastic cover for simple installation.		
223	poin earth fixed point	1.2.6	for FL 30. Installed with 2 hexagonal bolts. supply, installation, testing & commissioning of earth fixed point: Made of Stainless Steel,	190	Nos
222	Cross connector for earth fixing	1.2.5	Supply, installation, testing & commissioning of Cross connector for earth fixing point suitable	190	Nos

अटी व शर्ती:

- सीलबंद निविदा दि.१०/०८ /२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि.29 /o L /२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.



जा.क्र पमपा/बांधकाम/ 2329 /प्र.क्र. 03/2032(2)२०२३

दि. ९ / 🤇 /२०२३

### प्रत माहितीस्तव —

१. प्रसिध्दीकरीता २. माहिती फलक करीता

# पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (IoT cloud Based SCADA System Control)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

#### **Specification**

SR. NO.	ITEM	REFF ITEM	Description	QTY	UNIT
	IoT /CLOUD based BUILDING AUTOMATION SYSTEM	1	IoT /CLOUD based BUILDING AUTOMATION SYSTEM: SCADA Room Work Staion		
			NOTE:- ALL ITEM RATES SHOULD CONSIST OF THREE YEARS DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT.		
1	BMS Computer System:		BMSComputerSystem:- XeonProcessor(Latest Generation)- 8GBRAM, 2TBhard-3½"discdrive,DVDwriter,compatibleCDROM32"flatscreen,12002800,256colours(Full HD)Windows10andshallhaveMS-Officeinstalledc	1	Nos
2	IoT BMS Software & Licenece	2	IoT BMS Software & Licenece		
3			IoT BMS System Software : Cloud License & Mobile Apps - a.Building Automation/ SCADA System Control( If Software is in Cloud and hence do not require on premise Sever and can be accessed from any Location from any Device like Laptop, Mobile Phone, iPad etc. Cloud server price included in software.)(Cloud License & Mobile Apps -Building Automation. Software Should have third party user logins provision)	1	Lot.
4	Smart Central Controller with I/O module	3	Smart Central Controller with I/O module		

	1		I	1	
5		3.1	i) Central Controlling Unit (CCU) : For SCADA		
			System Control + Aggregation cloud gateway		
			for <u>BMS equipment integration</u> in a building		
			provided,		
			a. 8" / 10 "inch tablet - Android operating		
			system tablet, 7"inch screen, 1280x800		
			resolution, 2.1GHz Quad Core processor, 7		
			hours active battery life		
			b. CM Board - Control Mote with multiple		
			Relays, Analogue Inputs, Analogue Output, RS485, ethernet input		
			RS485, ethernet input c. Room Temperature & Humidity Sensor		
			d. PVC Back Box for CCU & RTH		
			e. Enclosure Panel (Internet/Wifi connection		
			will be provided by third party at CCU		
			Controller to enable communication with Cloud		
			Servers.		
6		3.1.1	ii) Controller with IO Modules & Panel	1	Lot
			Powered by 24VAC/DC	_	
7		3.1.2	Annual Subscription charges for maintaining	1	Lot
			SIM and CMS service for (Internet/Wifi		
			connection at CCU Controller to enable		
			communication with Cloud Servers.		
8	Smart	4	Smart Controller for Integration (Open		
	Controller for		Protocol Software Integration)		
	Integration				
	(Open Protocol				
	Software				
9	Integration)	4.1	Central Controlling Unit (CCU) : Aggregation	1	Lot
9		4.1	cloud gateway for BMS equipment integration in	1	LOU
			a. 8" / 10 "inch tablet - Android operating		
			system tablet, 7"inch screen, 1280x800		
			resolution, 2.1GHz Quad Core processor, 7		
			hours active battery life		
			b. CM Board - Control Mote with multiple		
			Relays, Analogue Inputs, Analogue Output,		
			RS485, ethernet input		
			c. Room Temperature & Humidity Sensor		
			d. PVC Back Box for CCU & RTH		
			e. Enclosure Panel		
10	Conduiting,	5	Conduiting, Wiring and cabling Including		
	Wiring and		Following Items		
	cabling				
	Including				
	Following				
11	Items	<b>F</b> 1	SMDO 04W for OOU Malal (O th	1	ODT
11		5.1	SMPS 24V for CCU, Modules (Central	1	SET
12		5.2	Controlling Unit ) RS485 to USB Converter	1	SET
14		5.4			
13	CABLES	6	CABLES		
15	CADLES	0	CABLES		
14		6.1	Supply and laying Control Cables of following		
14		0.1	Armoured FRLS polyethylene insulated PVC		
			sheathed overall the shielded twisted		
			multistranded annealed tinned copper as per		
			specifications ,as directed ,complete , etc., to		
			match BMS as required at site.conductor cable		
			CONTROL CABLE MAKE: -		
			RR/FINOLEX/POLYCAB		
			LV CABLES MAKE:-		
			SYSTIMAX/MOLEX/LEGRAND/D-		
1			LINK/CLIPSAL/AMP NET CONNECT		

15	FRLS Cable	6.1.1	2C x 1.5sqmm, ATC Conductor, Polyethylene insulaton, Shielded, Armoured (0.9mmGl), FRLS Cable.	500	RMT
16	FRLS Cable	6.1.2	2 Core 1.5Sq.mm Communication Armoured (0.9mmGI), FRLS Cable.	500	RMT
17	FRLS Cable	6.1.3	4C x 1.5sqmm, ATC Conductor, Polyethylene insulaton, Shielded, Armoured(0.9mmGI), FRLS Cable	900	RMT
18	FRLS Cable	6.1.4	6C x 1.5sqmm, ATC Conductor, Polyethylene insulaton, Shielded, Armoured (0.9mmGI), FRLS Cable.	0	RMT
19	FRLS Cable	6.1.5	8C x 1.5sqmm, ATC Conductor, Polyethylene insulaton, Shielded, Armoured (0.9mmGI), FRLS Cable.	0	RMT
20	FRLS Cable	6.1.6	2 Core 1.5Sq.mm RS485 Communication Armoured (0.9mmGI), FRLS Cable.	2500	RMT

### अटी व शर्ती:

- सीलबंद निविदा दि. 90/02/2023 रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि. २७ /०८/२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- ३) अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.

शहर आभयता पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/2329 /प्र.क्र. ०३/२९३२(७७)२०२३

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प्रत माहितीस्तव —

१. प्रसिध्दीकरीता २. माहिती फलक करीता

# पनवेल महानगरपालिका <u>जाहीर निविदा दरपत्रक</u>

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (SECURITY ITEMS)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

#### <u>Specification</u>

SR. NO.	ITEM	REFF ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
			NOTE:- ALL ITEM RATES SHOULD CONSIST OF THREE YEARS DEFECT LIABILITY PERIOD INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTAINANCE IN ALL RESPECT		
			SECURITY ITEMS BOQ		
1	HAND HELD METAL DETECTOR	1	Supply of Hand held metal detector to detect suspect items that contain metalic component weapons/illite contraband MAKE :- PANASONIC /JHONSON CONTROLS / PMS/ SISS/HIKVISION	10	Nos
2	WALK THROUGH METAL DETECTOR WITH 32 ZONE DETECTION	2	Supply, Installation, Testing & Commissioning of Walk-Through metal detector with 32 Zone detection. MAKE :- PANASONIC /JHONSON CONTROLS / PMS/ SISS/HIKVISION	6	Nos
3	X- RAY BAGGAGE SCANNER	3	Supply, Installation, Testing & Commissioning of X- ray baggage scanner MAKE :- PANASONIC /JHONSON CONTROLS / PMS/ SISS/HIKVISION	1	No.
4	Boom Barrier 6 mtr long	4	Supply, Installation, Testing & Commissioning of Boom Barrier 6 mtr long MAKE :- LEAPTOR/JHONSON CONTROLS / PMS/ SISS/HIKVISION	2	Nos.

### अटी व शर्ती:

 सीलबंद निविदा दि. १० / ०८ / २०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.

- प्राप्त झालेल्या निविदा शक्यतो दि. 29 /o ८ /२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) सर्व वस्तुंसाठी वरील दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क पनवेल महानगरपालिकेने राखुन ठेवला आहे.

शहर आभयता पनवेल महानगरपलिका

जा.क पमपा/बांधकाम/ 2329 /प्रे.क. 03/203 201)२०२३

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प्रत माहितीस्तव —

१. प्रसिध्दीकरीता २. माहिती फलक करीता

# पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे "स्वराज्य" मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे 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 'क' प्रभाग क्र.१४ मधील भुखंड क्र.०४, सेक्टर - १६, नवीन पनवेल (प) या भुखंडावर पनवेल महानगरपालिकेचे ''स्वराज्य'' मुख्यालय इमारतीचे अतंर्गत सजावट व इतर अनुषंगीक कामे करणे. (SOLAR PV PANEL)	१० / ०८ / २०२३ ते २१ / ०८ / २०२३

#### <u>Specification</u>

SR. NO.	ITEM	REFF ITEM	ITEM DESCRIPTION	QUANTITY	UNIT
	1	1	SOLAR PV PANEL		1
			NOTE- ALL ITEM RATES SHOULD CONSIST OF DEFECT LIABILITY PERIOD (FOR ITEM NO. 1 FIVE YEARS & FOR ITEM NO. 2 TO 4 THREE YEARS) INCLUDING WARRANTY / GUARANTEE PERIOD & COMPREHENSIVE MAINTENANCE IN ALL RESPECT.		
		A.1	SOLAR PANEL		
1	ON-GRID Solar PV System / Plant consisting Solar PV Poly Crystalline Panel	1.1	Supplying, installing, testing and commissioning of 123.12Wp ON-GRID Solar PV System / Plant consisting Solar PV Poly Crystalline Panel (540-545Wp) X 228 Nos.) and 125 Kw Solar ON-GRID Inverter of similar capacity (THD<3%) with ,Solar pwer consumption meters,HDG (Hot dip galvanised) Mounting structure with civil work and foundation for Solar Pv Module (The Solar PV panels will be mounted on Ground floor Open Parking area),ATS for DG set protection /safety ,DC combiner/junction box,AC combiner / junction box,AC isolation box,AC/DC interconnecting cables,other accseries, interconnecting wires / cables up to solar ON GRID inverter, proper base plate,canopy box to house Inverter and necessary accessories i.e. ACDB/ DCDB ,MCB etc. wiring up to solar Inverter in casing and capping, display board, signboard, two distinct earthing, lightning arrester, liaisoning charges, remote monitoring system with maintaining card/chip for Five years including net charges for RMS System, complete up to net meter installation and export to the grid with Five year ON-SITE warranty and fully comprehensive maintenance contract as per Specification. The scope of work also includes procurement, testing, commissioning of net meter & generation meter as per MSEDCL norms.	1	LOT
2	FRLSOH armoured cable	1.3	Supplying, erecting & terminating of FRLSOH armoured cable <b>3<sup>1</sup>/<sub>2</sub> core 150 sq. mm.</b> aluminium cable. As directed by Engineer in charge	150	М

	FRLSOH armoured cable	1.4	Supplying, erecting & terminating of FRLSOH armoured cable <b>3</b> ½ <b>core 120 sq. mm.</b> aluminium cable. As directed by Engineer in chargeMake- RR / FINOLEX / POLYCAB/KEI		М
4	FRLSOH armoured cable	1.5	Supplying, erecting & terminating of FRLSOH armoured cable <b>3</b> ½ <b>core 35 sq. mm.</b> aluminium cable. As directed by Engineer in chargeMake- RR / FINOLEX / POLYCAB/KEI	150	М

## अटी व शर्ती:

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- सीलबंद निविदा दि. 90/ 01/२०२३ रोजी दुपारी ३.०० वाजेपर्यंत पनवेल महानगरपालिकेच्या बांधकाम विभागात स्विकारण्यात येतील.
- २) प्राप्त झालेल्या निविदा शक्यतो दि. 29/0८ /२०२३ रोजी दुपारी ३.३० (शक्यतो) वाजता शहर अभियंता यांच्या दालनात उपस्थित ठेकेदार यांच्या समक्ष उघडण्यात येतील.
- अटी व शर्ती युक्त निविदांचा विचार केला जाणार नाही.
- ४) अनु क्रं. १ करीता दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी पाच वर्षांच्या दोष निवारण कालावधी

साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे. ५) अनु क्रं. २ ते ४ मधील सर्व वस्तुंसाठी दर नमुद करताना, बोलीदार / डीलर / उत्पादक यांनी तीन वर्षांच्या दोष

निवारण कालावधी साहित वारंटी / हमी आणि सर्व बाबतीत सर्वसमावेशक देखभाल याचा विचार करुन दर देण्यात यावे.

प्राप्त निविदेतील १ अथवा सर्व निविदा कोणतेही कारण न देता मंजुर अथवा ना मंजुर करण्याचा हक्क

पनवेल महानगरपालिकेने राखुन ठेवला आहे.

पनवेल महानगरपलिका

जा.क्र पमपा/बांधकाम/2329 /प्र.क्र. *०३/३९३३(१२)*२०२३

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प्रत माहितीस्तव —

१. प्रसिध्दीकरोता २. माहिती फलक करोता