

TRUSS AND ROOFING WORK OF IP BLOCK & TREATMENT BLOCK AT MCC THALASSERY

Tender No.HITES/IDS/MCC-TW/23-24/23 dated 13.02.2024
(E-tender ID: 2024_HITES_658341_1)

Pre Bid meeting Date & Time: 19.02.2024 @ 11.30 am

Pre Bid meeting Venue: HITES Office, Golden Jubilee Block, Poojapura (Through Video Conference)

Reply to pre-bid queries

S.No.	Tender Reference	As per Tender	Bidder Queries	Reply by HITES
1	General	Working time, Safety Measures	As proposed work is in Medical vicinity, kindly elaborate applicable restrictions regarding working time.	Working time to be fixed in coordination with EIC & Hospital authorities after award of work.
2	General	Labour Accomodation	We presume that we shall be allowed to construct temporary labour accommodation within the site premises without charging any rent for land. Kindly confirm.	No.Terms & conditions of e- tender prevail.
3	Extra Working time	We presume that the execution activity is allowed for Day & night.	If not allowed in night, then to consider the extension of time	Work to be completed with in the stipulated completion period. Accordingly panning to be done as per the direction of EIC.
4	NIT	Security deposit-5 % of tendered value (will be released only after completion of DLP Period)	We request you to kindly release 2.5% of security deposit after completion of work to maintain cash flow	No Change.Terms & conditions of e- tender prevail.
5	General	2. Approvals required	Kindly provide list of approvals required to be obtained by us.	Approvals if any required as per the scope of work to be obtained by the Contrator.
6	NIT 1.14 Water & Electricity	Tenderers are instructed to compulsorily inspect and examine the site and its surroundings at their own cost and satisfy themselves before submitting their tenders as to the nature of the ground and sub soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender.. The bidder shall be responsible for arranging and maintaining at its own cost all materials, tools & plants, water, electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work. The bidders shall submit along with the bid a declaration as per FORM-J of this document duly signed by nominated representative of HITES/Client after site visit. This is mandatory.	Shall be provided to us at single point connection on chargeble basis.	Can be provided after obtaining consent from Hospital authorities after award of work on chargeable basis
7	General	Order of precedance	Kindly provide order of precedence in terms of Drawings, specification's, tender document, IS codes.	Refer Voulme II GCC, I (Conditions of Contract) sl no. 8
8	General	Drawings are in blueprint scan pdf format.	We request you to kindly provide us the drawings in AutoCAD format.	Will be provided to the L1 bidder
9	General		The structure layout in tender drawings is different than the actual building layout at site. Please clarify if tender drawings are GFC.	The structural drawings provided are based on the actual building layout. Deviations if any will be dealt as per the provisions of the contract .
10	General	Quantity variation	As per pre-bid point no.09 quantities are likely to increase. Kindly clarify.	
11	General	EMD Amount	EMD amount mentioned is Rs.1,00,000/- while in the portal reflects Rs.5,00,000/-. Request you to please clarify and confirm which one is correct amount	Refer Corrigendum-01
12		List of Approved Make		List of approved makes to be followed for this work is Attached as Annexure A

Note: This corrigendum-02 (reply to prebid queries) shall form part of the tender. All other terms and conditions of the tender remains unchanged. Bidders shall submit this Corrigendum-02 signed & sealed by their authorised bidder along with the bid. separate advertisement will not be made for this.

For HITES
s/d
Authorised Signatory

LLIST OF APPROVED MAKES**1. CIVIL & PLUMBING WORKS:**

Sl. No	Details of equipment/ material	Make/ Manufacturer
A. <u>CIVIL WORKS</u>		
1.	Acoustical Panelling	ECOTONE/Armstrong/ Anutone
2.	Adhesive for Ceramic tiles/ Stone/ Stone Sealers	Cico / Pidilite / Ardex Endura / MYK Laticrete/ Fosroc/ Berger/ Sika/ Cera-Chem
3.	Adhesive for Wood Work	Fevicol/ Vamicol/ Dunlop/ 3M/ Sika
4.	Adhesive Tape	3M/ Norton/ BOPD/ TESA
5.	Aluminium Accessories and Hardware	Classic/ Crown /EBCO /Hardwyn/ Doorking
6.	Aluminium Composite Panels	Aludecor / Alucobond /Alstone/ Reynobond/ Alpolic/ Virgo/ Alstrong/ Viva/ Eurobond
7.	Aluminium Die-Cast handles &two point locking kit	Giesse / Securistyle / Alu – alpha
8.	Aluminium Extrusion/ Sections	Hindalco / Jindal / Bhoruka/ Nalco / Halco Aluminium Extrusions
9.	Anchor Fastner/Dash Fastner	Hilti / Fischer /Bosch/ Wurth/ Konzept/ Canon
10.	Anti – Termite Treatment	It should be done by permanent members of IPCA as approved by Engineer-in-Charge.
11.	APP Polymeric Polyethylene Felt	BITUMAT/ STP/ Bengal Bitumen
12.	Back up rod	Supreme Industry/ SYSTRANS Polymers/ Backer Rod Mfg. Inc.
13.	Batch Mix Concrete (BMC) / Ready Mix Concrete (RMC)	<p>The contractor to install his own computerized batching plant of suitable capacity and arrange for Transit Mixers, pumps etc. as per approval of Engineer – In- Charge.</p> <p>OR</p> <p>The RMC shall be procured from the source as approved by Engineer- In- Charge. RMC producing plants of the main Cement producers shall be preferred.</p>

Sl. No	Details of equipment/ material	Make/ Manufacturer
14.	Bitumen	Indian Oil, Hindustan Petroleum, Bharat Petroleum

15.	Cement	Refer GoK Circular No.24/2022-Fin dtd 19.03.2022. BIS mark with IS code No. and License number (CM/L.no) is insisted in Cement and to be approved by Engineer-in- Charge
16.	Cement: White	Birla White / JK / Ultratech/ Lafarge/ Travancore
17.	Cement bonded particle board	Bison Panel/ Viroc/ Viva/ HIL/ NCL
18.	Clean Room Wall Panels with/ without return air risers, Doors/ windows etc.	CLESTRA/ NICOMAC / HEMAIR / GMP / E-PACK
19.	Concrete Additive	Pidilite / Fosroc / MC Bauchemie /Sika/ Cico/ CHRYSO/ STP Ltd./ Asian Fairmate/ MYK Arment/ Berger/ MC Bauchemie/ Sunanda Chemicals/ Cera Chem/ Fibrex/Tremco
20.	Cover /Spacer Block	Fosroc / Astron/ KK
21.	Curtain Rod/ Drapery Rod/ Venetian Blinds	Vista / Mac/Decor/ Deck / Hunter /PHIFER
22.	Curing Compound	Pidilite / Fosroc / Sika/ Cico/ STP Ltd./ BASF/ MYK Arment/ Berger/ MC Bauchemie/ Cera-Chem
23.	Crash Guard/ Corner Guard	Construction Specialities/ Gradus Inprop India Pvt. Ltd./ PD Projects/ DK Engineering Group
24.	Coupler (mechanical)	Dextron/ Sanfield/ Usha Martin/ G- Tech Splicing/ Ascon
25.	Carpet Flooring & Skirting (Flotex)	Forbo/ Polyflor/ Tarket
26.	Compressed Chequered tiles	Somany/ Kajaria/ Nitco/ Orient/ Johnson
27.	Door closer / Floor spring	Godrej/ Dorma/ Geze/ Hafele/Assaabloy/ Hormann/ KICH/ Hardwyn/ Everite/ Autoingress
28.	Door Locks & Latches	Godrej / Harrison / Dorma/Link/ GEZE/ Hafele/ Hettich/ Hormann/ Ozone
29.	Door Seal	Anand Reddiplex/ Enviroseal / STP

30.	Door Shutters- Flush & Factory Hot Pressed Laminated Door Shutters	Duro / Greenply/ Archidply / Century / Merino/ Jayna / Kitply /JAIN DOORS/ AK Plywood
31.	Doors & Windows Fixtures / Fitting.	Godrej/Ebco / Hafele/ Geze /Assaabloy / Hardwyn/ Hettich /Dorma/Hormann/ Everite/ Classic/ Crown/ Earl Bihari
32.	Epoxy Flooring	Fosroc/ Dr. Beck/ Famaflor / STP/Asian Paints/ MYK Arment/ Berger/Ardex Endura/ Cera-Chem/ BASF
33.	Epoxy Mortar	Fosroc/ Sika/ MYK Arment/ Chryso/ BASF/ Pidilite/Dr. Fixit/Asian Paints/Cico/ Berger/ Cera-Chem
34.	Extruded Polystyrene Board	Styrofoam by DOW Chemical's / Insuboard by Supreme Industries /STP Ltd.
35.	False Ceiling - Calcium Silicate Boards & Tiles	Armstrong / Hilux / Saint Gobain (Gyproc)/Aerolite/ India Gypsum/ RAMCO (Hilux)/
36.	False Ceiling – Metal	Armstrong / Hunter-Douglas / USG- Knauf/ Saint Gobain/ Unimet/ DEXUNE/ Everest
37.	False Ceiling - Mineral fibre	Armstrong / Decosonic / USG-Knauf/ AMF / Saint Gobain / DEXUNE
38.	False Ceiling – GRG Ceiling Tiles	Saint Gobain /Diamond/or equivalent
39.	False Ceiling/ Dry wall partition system (ceiling/hanging sections)	Gyproc/ USG-Knauf/Armstrong/ Western /DEXUNE/ Hunter-Douglas
40.	Fire Rated Doors & Frames with accessories	Shakti-Hormann / Navair / Pacific/Promat/Bhawani Fire Protection/ Sukriti Fire Door/ ASES/ Jain Doors/ Tata Pravesh
41.	Fire Rated Glass	Asahi India Safety Glass Ltd./ Saint Gobain/ Pilkington, Schott, Pyroguard, Glaverbel/ Modi/ Schott Pyran
42.	Fire Retardant Paint	Viper (Navair) FRS 881/ Nullifire/ STP / Asian/ Berger
43.	Fire Seal	Sealz/ Alstroflam/ Abacus

44.	Fire: Door Closures, Mortise Dead locks, D- Type Pull Handles, Hinges, Panic Exit Devices, Tower Bolts	Becker Fire Solution/ Ingersoll Rand/ Dorma/ Godrej/ Geze/ Hafele/ Shakti- Hormann/D-Line/ Suzu/ Nulite/ Dorset/ Auto Ingress/ Bhawani Fire
45.	Fire: Sealant	Birla/ 3M/ Hilti
46.	Floor Hardener	Pidilite / SIKA/ Fairmate / BASF/STP Ltd./ Fosroc/ CHRYSO/ MYK Arment/ Asian Paints/ Berger
47.	Flooring -Synthetic Acrylic (as per ITF Specifications)	Rebound/ PACE Court/Nova Cushion/ Sports Master
48.	Glass : Float / Mirror /Structural Glazing /Toughened Glass	Modiguard / Atul / Saint Gobain/ Asahi India Safety Glass Ltd / Sisecam (HNG)/ Pilkington/ Cera-Chem
49.	Glass Wool / Insulation Boards	Rockwool / UP Twiga / Lloyd Insulation/ Pidilite/ Berger
50.	GRC Jali	Unistone/ Kuber Fibrostone/ Everest Composites/ Birla
51.	Grout: Non-Shrink	Fosroc / Sika/ Pidilite / STP/ MYK Arment/ MC Bauchemie/ Cera-Chem
52.	Grouting Compound	Ardex Endura/ Pidilite/ Laticrete/ Unitile/ STP/ Asian Paints/ MYK Arment/ Berger / MC Bauchemie /Cera-Chem
53.	Gypsum Board / Gypsum False Ceiling/ Gypsum Partitions	USG Knauf / Lafarge / Saint Gobain (Gyproc)/ Armstrong / India Gypsum
54.	Gypsum Plaster	Ferrous crete / Ultratech/ Saint Gobain / Asian Paints Marvelloplast /USG Knauf
55.	Laminates/ Veneers	Century/ Archidply /Greenlam/ Formica/ Sunmica / Merino
56.	Lead Lined Door	REBBON/ Kutty's/ AHALDA/ Navair/ Shakti-Hormann/ Metaflex
57.	Modular Grab bars and Disabled Hardware	Dorma / D-line/ KICH/ Jaquar/ Hindware/ Kohler
58.	Modular SS Railing System	Metallica India / D – Line International Denmark / Mobil Hardware /KICH/ Konzept
59.	Modular Kitchen Chimney	Hindware/ Elica/ Glen/ Faber/ Sleek.

60.	Neutron Shielded Door	Ray-Bar Enggcorp / A-FabcoIn/ A&L shielding INC/
61.	OT: Conductive Tile Flooring: ESD-Control Tile Flooring	Tarkett/ Gerflor / Armstrong / Forbo/ Trilux
62.	Paints - Cement Based	Snowcem Plus/ Berger/ Nerolac/ TATA Cem/ Asian Paints/ STP Ltd./ Dulux/ Jotun
63.	Paints - Epoxy paint	Akzonobel DULUX/ Nerolac / Cico/ Sika / BASF / Berger / Pidilite/ STP Ltd./ Fosroc/ MC Bauchemie/ Jotun/Cera-Chem
64.	Paints - Oil Bound Distemper / Acrylic Washable Distemper /Plastic Emulsion Paint	Akzonobel DULUX/ Asian Paints/ Berger / Nerolac /Jenson & Nicholson/ Jotun/ Nerolac/ Nippon
65.	Paints - Plastic Emulsion Paint (exterior)	Asian Paints (Apex Ultima)/ Berger (Weathercoat all Guard)/ Akzonobel (DULUX weather shield max)/ Jotun
66.	Paints - Synthetic Enamel Paints	Akzonobel DULUX (Gloss), Berger (Luxol Gold), Asian Paints (Apolite), Goodlas Nerolac (Full gloss hard drying), Jenson & Nicholson (Borolock) Jotun
67.	Paints - Texture paint	Berger / Spectrum / Unilite/ Heritage /Asian Paints / Akzonobel DULUX/STP Ltd./ Jotun
68.	Paint: Anti-Fungal	Sika by Liquid Plastic/ Viesmann/ SSK/ TRILUX/ STP Ltd./ Berger/ Ardex Endura/ Cera-Chem
69.	Paint-Wood Finish (Melamine & PU)	Nippon/Jivanjor/ Asian Paints / Akzonobel/ Berger
70.	Putty (Wall)	Ferroscrete/ JK/ Birla/ Berger/ Asian Paints
71.	Paver blocks / Tiles (All Types)/ Grass crete pavers	KK / Uni Stone Products (India) Pvt. Ltd/ Hindustan Tiles/ NITCO/ PAVIT/ ULTRA/ DURACRETE
72.	Plywood/Block board/Ply board	Duroply / Greenply/ Archidply/ Century/ Kitply/ National / Anchor/ Merino / Jayna
73.	Polycarbonate Sheets	Danpanlon India/ Gallina/ Sabic Lexanc/ Ultralite/ Polygal / Coxwell Domes / GE Plastic / Skyarch/ Polytechno/ Tuflite/ Palram

74.	Pre-coated Galvanised Steel Sheet/ Pre-coated Puff Sheet roofing	Tata BlueScope / Llyod Insulations India Ltd / S.R. Metals/Interarch / Bhushan/ Essar/Everest
75.	Pre-Laminated Particle Board	Novapan /Century / Greenlam / Merino / Archidply/ Action Tesa/ NCL/ AK Plywood/ Greenply/Everest
76.	PVC continuous fillet for periphery packing of glazings / Structural/ Glazing	Roop / Anand / Forex Plastic/ Nagalia/ Trading Company
77.	PVC Doors	Sintex/ Polyex/ Rajshri
78.	PVC Flooring	Tarkett Floors / LG Floors / Gerflor /Premier Vinyl flooring / Regent/ Armstrong / Responsive/ Wonderfloor
79.	Powder Coating Material pure Polyester	Jotun / Berger / Goodlass Nerolac
80.	PVC Water Stops	Prince /Supreme/ Finolex/ Maruti Astral/ Aarthi Cable & Compounds Compounds/ Sika
81.	RF Shielded Door	ETS Lindgern/ Synchrony Agency/ Huaming EMC India
82.	Reinforcement Steel / Structural Steel	Refer GoK Circular No.24/2022-Fin dtd 19.03.2022. BIS mark with IS code No. and License number (CM/L.no) is insisted in Steel and to be approved by Engineer-in-Charge
83.	Structural Steel (Hollow Sections)	SAIL/ RINL/ TATA Steel Ltd./ Jindal Steel & Power Ltd./ Apollo Tubes
84.	Restroom Cubicles	Merino/ Century/ Greenlam/ Action Tesa
85.	Sealant: Poly-sulphide	Pidilite / Fosroc / CICO / Sika /Berger/ Dr. Fixit/ Chowksey Chemical/ Wacker/Asian Smartcare/ MYK Arment
86.	SFRC / RCC Manhole Covers/ Perfect RCC Grating	KK Manholes / SK Precast Concrete/ Advent concrete vision / Daya concrete
87.	Silicon sealants /Weather Sealant / Structural Glazing Sealant	GE- Silicon / Pidilite / Forsoc / Cico /Dow Corning / Sika/ Wacker/STP/ Asian Smartcare/ MYK Arment/ Berger / Cera-Chem
88.	Stainless Steel	Salem Steel/ Jindal / TATA Steel/ SAIL
89.	Outdoor Sports Flooring	Great Sports Infra/PORPLASTIC/Sunflex

90.	Stainless Steel bolts, Screws, Nuts & Washers	Kundan / Puja / Atul/ GKW/Alloy
91.	Stainless Steel Clamps	Hilti /Intellotech / Konzept/ WURTH
92.	Stainless Steel CP Grating	Chilly / Camry/ Neer or equivalent
93.	Stainless Steel D-handles	D-line / Giesse /Dorma/ Hormann
94.	Stainless Steel Friction Stay	Earl Bihari / Securistyle / EBCO
95.	Stainless Steel Hinges/Handles/Door Window Fixtures	Hettich/ Godrej/ Dorma/ Hafele/ Gezze/ KICH/ Dorset/ Hormann / Sleek
96.	Sunken Portion Treatment	Choksey / Sika / CICO/ MC Bauchemie / BASF/ Berger / MYK Arment / Bostik/ Dr. Fixit/ Ardex Endura/ Cera- Chem
97.	Super plasticizer	CICO/ Roffes Construction Chemicals/ Pidilite / Berger/ Asian Paints/ MYK Arment/ MC Bauchemie / Bostik/ Cera- Chem/
98.	Tiles: Glass Mosaic Tiles	MRIDUL/ BIZZARE
99.	Tiles: Glazed /Ceramic Tiles	Kajaria / Somany/ RAK/ CER / Johnson / AGL/ Varmora
100.	Tiles: Heat Resistant Terrace Tiles	Thermatek/ Hindustan/ Johnson
101.	Tiles: Vitrified Tiles (Double / Multi Charged)/ Germ free/Full body)	Kajaria / Somany/ RAK / CERA/ Johnson/ AGL/ Varmora
102.	Vacuum Dewatered Flooring	Tremix / Sun Build / Avcon technics
103.	Veneered Particle Board	Duro / Greenply / Century / Novapan / Action Tesa
104.	Water Proofing Materials	BASF/ Fosroc / Sika / CICO / STP / Pidilite/ CHRYSO/ PENETRON/ Asian Paints / KRYTON/ XYPEX/ MYK Arment/ Berger/ MC Bauchemie/ Tikidan/ Ardex Endura/ Cera-Chem/ Sunanda Chemicals/ IWL/Tremco
105.	Water Proofing Compound (Crystalline)	Xypex Construction Chemicals/ Kryton/ Penetron/ Pidilite/MYK Arment/ Burger/Asian Paints/Sunanda Chemicals/Cera-Chem
106.	Wooden Laminated Flooring	Euro / Pergo/ Green Deco , Krono, Egger, Harro , Armstrong, Kaindl/ Action Tesa

107.	Auditorium Chairs	Godrej /Indo/ Wipro/ Bonton /Durian
108.	Expansion Joints	Sanfield (India) Ltd., MIGUA, TRISTAR, Z-TECH
109.	Raised/ False Flooring	UNIFLOOR, UNITILE, CAMFLOR
110.	uPVC door & window system	Fenesta, NCL Veka, Rehaue, Aluplast / Deceunick / AMD Overseas/ Lingel/ CASSA/ Evolution/ Kommerling/ Duroplast/Aparna Venster
111.	High Pressure Laminates	Greenlam/ Merino/ Virgo
B. <u>PLUMBING & SANITARY WORKS</u>		
1.	Automatic variable temperature control / fixed temperature control faucets	Jaquar / AOS-Robo-U-Tec/ Parry / Angash / Euronics
2.	Central Control	Rain Bird, USA/Toro/Nelson,
3.	Ball Cock	Sant / L&T/Audco/GPA
4.	Ball valves with floats	Zoloto / Leader / Sant/ Audco/GPA/ Jayco
5.	Butterfly valves	GM / Uday / Parthiv / Zoloto
6.	C. I Pipes & Fittings	Electrosteel/ NECO/ BIC / SKF/ Kapilansh/ RIF/ RPFM
7.	Centrifugally Cast Iron Hubless Pipes & Fitting	NECO/BIC/SKF/Kapilansh/RPFM
8.	C.I Sluice Valve & Non Return Valve	Kirloskar /Leader /Zoloto/ Audco/ Sant
9.	C.I Valves (Full way, Check and Globe Valves)	Leader / Kirloskar / SKF / Zoloto / Sant / Castle / Kartar
10.	C.I. Manhole Covers	NECO/B.I.C./R.I.F/HEPCO/ SKF/ KAJECO/ RPFM.
11.	C.P. Fittings: Mixer / Bib Cock/Stop Cock/ Pillar taps/ Angle valve/ Valves Washers / Waste/ Urinal / Spreaders / Accessories etc.	Jaquar /Kohler/ Grohe/ Marc/ Kerovit/ Somany/ CERA/ ASIAN Parryware / Queo/ Hindware
12.	Chlorinator	Thermax Ltd/ Watcon, Ion exchange/ Sigma DH Combine Inc./ Siemens/ Techcon/ Jesco / Prominent Heidelberg
13.	Cockroach Trap	Chilly/ Player/ Camry/ Viking
14.	Copper Pipe/Fittings (Capillary)	Yorkshire Imperial, U.K./ Rajco Metal Works Mumbai / IBP Conex Ltd.

15.	Disc Filter	Azud, Spain/ Amaid / Arkal,
16.	Drainage Pumps	KSB/ Grundfos/ Kirloskar/ Crompton/ Wilco-Mather & Platt/DP/ITT
17.	Ductile Iron Fittings (IS:9523) / Ductile Iron	Electrosteel/Kesoram/Tisco/Jindal/HEPC O
18.	E.P.D.M Gaskets	Anand Reddiplex / Enviro Seals / HANU
19.	Forged Steel Fittings & Flanges (For Welded joints)	Rohini /Kanwal/ Vijay Cycle & Steel (VS)
20.	Geysers	Spherehot / Racold / Usha /Bajaj/ Havells/AO Smith/ Orient/Crompton
21.	Hand Drier	Kopal / Utech Systems / Euronics Automat
22.	HDPE Pipes / Moulded Fittings	Emco /Polyefins/Pioneer Plyfab/ Jain Irrigation / Texmo/ Supreme/ Oriplast
23.	HDPE Solution tank	Watcon / Ion Exchange / Water Supply Specialist Pvt. Ltd.
24.	Inbuilt Drip Line	Azud/ Rainbrid/ Netafim
25.	Insulation of Hot water pipes	Vidoflex insulation / Superior insulation Kaiflex – Kaimann/Armoflex/Thermafex
26.	Liquid Level Controllers / Indicators	Advance Auto / Sridhan International / Minilec / Radar / Femac / Switzer / 21 st Century
27.	Liquid Soap Dispenser	Euronics/Utec/Kopal/ ASIAN
28.	MS Saddle with G.I. Riser	Harvel/Alprene/Rain Bird
29.	PVC flushing cistern	Commander / Parryware / Hindware/ Cera/ Kajaria Sanitary ware/ Somany/ ASIAN ./ Jaquar
30.	P.R.S. Dials	Rain Bird/ Toro/ Nelson,
31.	P.T.M.T. Fitting	Prince India / Symet/ Prayag/ Cera/ Polytuf
32.	Pipe coat material (pipe protection)	RPG Raychem/ Pypkote/ Makphalt/ Tikidan
33.	Pipe Fittings: G.I.	RR/Unik/Zoloto/K.S./Sun/ Swastik/Jainsons /DRP
34.	Pipe:- G.I.	Jindal / Tata / Prakash Surya/ SAIL/ Swastik/ APL-Apollo
35.	Pipes & fitting: PVC for SWR Soil, Waste & Vent Pipes and fittings, Type B PVC Casing & Screen Pipes	Prince / Supreme / Finolex/ Truflo (Hindware)/ Texmo/ Astral

36.	Pipes & Fittings: CPVC	Flowguard /Prince/ Astral/ Ashirvad/ AKG/Supreme / APL Apollo/ Birla HIL /Truflo (Hindware)/Texmo/ Finolex
37.	Pipes & fittings: UPVC	Finolex / Prince / Supreme / AKG / Kasta / Vector / Astral/ Ashirvad/ Birla HIL/ Truflo (Hindware)/ Texmo
38.	Pipes & Gully Trap: Stone ware	Perfect / S.K.F/ R.K/ Hind / Anand/ Burn
39.	Pipes and Accessories: PE-AL-PE	Kitec/ Jindal/ Kissan/Vista
40.	Pipes: Copper	Rajco Metal works, Mumbai / IBP Conex Ltd.
41.	Pipes: M.S.	Jindal / Prakash – Suyu /TATA /SAIL/APL-Apollo
42.	Pipes: PP-R (PN – 16)	Amitex Polymers Pvt. Ltd. / Prince/ Supreme
43.	Pipes: R.C.C	Indian Hume Pipe / Pragati Concrete Udyog Daya/ KK / JSP/ MCP
44.	Plastic seat cover of W.C	Commander/Hindware / Parryware/CERA/ ASIAN
45.	Polyethylene Storage Tank	Sintex / Polycon/ Fusion/ Amitex/ Sheetal
46.	PVC Floor trap	Jay/ Saffron/ Platinum/ Khodiyar/ Supreme/ Finolex
47.	Pop up Connecting Assembly	Rain Bird/Dura/Lasco,
48.	Popup Spray Head	Rain Bird/Toro, USA/Nelson,
49.	RQRC Hydrant	Harvel/Alprene/Rain Bird, USA
50.	RQRC Key	Harvel/ Aqua/ Drip& Drip
51.	Sensor Operated Auto Flushing System Urinals	Jaquar / AOS-Robo/U- tec/Angash/Euronics/ ASIAN / Hindware/ Parryware
52.	SS Gratings/ Soap Dish/Towel Rail etc.	Camry/Glacier/Gem/ Jaquar/ Grohe/ ASIAN/ JAYNA/NEER/NIRALI
53.	Stainless Steel Sink	Hindware / Neelkanth / Nirali / Jayna / Cera/ ASIAN .
54.	Safety foot Steps	MCP/ GP/ Surabh
55.	Valve Box	Rain Bird, USA/Carson Brook, USA/Dura.

56.	Valve: Air Release	Azud/ API/ Bermad/ BIR/ Kirloskar / Venus / Zoloto
57.	Valve: Butterfly	Zolato/Audco/Sant/KSB/ Kirlosakar/Advance
58.	Valve: Flush	Gem/ Jaquar / Marc/ ASIAN .
59.	Valve: Mainline Isolation	Sant /Leader /Zoloto,
60.	Valve: Pressure Relief	Sant/Leader/ Zolato / Audco
61.	Valve: Sluice / NRV	Kirloskar/IVC/Kilburn /Zoloto/Castle/ Leader / L&T/ Audco/ Honeywell / RB / SANT/ AIP
62.	Valve: Solenoid	Rain Bird, USA/Toro/Nelson,
63.	Valves: Gunmetal / C.P brass angle	Zoloto/ Leader/ Kilburn/ Sant/ Kartar/ AIP/ Audco/ Kirloskar/ Jaquar
64.	VFD Pump	Crompton/ Kirloskar/ KSB/ Grundfos/ Wilo -Mather & Platt / DP/ ITT
65.	Vibration Eliminator Resisto-flex Pads & Connections	Relay Corpn./ Kanwal/ Dunlop/ Resistoflex/ Easyflex
66.	Vitreous China Sanitary wares & White Glazed Fire Clay Sink	Hindware / Parryware/ Cera / Kohler/ Kajaria Sanitary Ware/ Somany/ RAK/ ASIAN ./ Jaquar/ Queo
67.	Water Cooler	Blue Star/ Voltas/ Usha/ Godrej/ Aquaguard/ Ion- Exchange/ AO Smith
68.	Water Meter	Capstan / Kranti/ Anand/ Kant/ Aristo/ Dasmesh/ Chambal
69.	Water supply pumps	KSB/ Grundfos/ Kirloskar/ Crompton/ Wilo-Mather & Platt/DP/ITT

LIST OF MAKES FOR E & M WORKS

DRINKING WATER PUMPING SYSTEMS /WATER TREATMENT PLANT / REVERSE OSMOSIS ETC.		
1.	Anti-Vibration Mounting & Flexible Connections	Dunlop/Flexionics/Kanwal/Industrial Corporation/ Resistoflex
2.	Butterfly Valve	Zoloto/Audco/Kirloskar/AIP/Advance/ L&T
3.	Cartridge Filter	Milton Roy/ Grundfos/ Big Blue
4.	Centralized RO Plant	Ion Exchange/ Thermax/ Pentair/ Eureka Forbes
5.	Chain Pulley Block	Indef/ Ardee/ J.K. Morris
6.	Check Valve – Dual Plate	Advance/Honeywell/Audco/Zoloto/ L&T/ Castle
7.	Check Valve – Wafer Type	Advance/Danfoss/Zoloto/Honeywell
8.	Conductivity Meter	Fox/Rosemount/ Aster/Digital/ Honeywell/ Thermax/ Krohne
9.	Couplings	Lovejoy/Dunlop/Burgmann
10.	Dosing Pumps	LMI/Pulser Feeder/Toschon/Grundfos/ Kirloskar
11.	Drain Valve	Leader / Kirloskar / SKF / Zoloto / Sant / Castle
12.	Electronic Flow Meter	Krohne / Forbes Marshall/ Rockwin/ Cirrus India/ Honeywell/ Thermax
13.	Fastener	Hilti/ Fischer / Wuerth/ Bosch/ 3M
14.	Filter	Ion Exchange/ Thermax/ Pentair
15.	Flow Meter	Anergy/Honeywell/Cirrus India/ Thermax/ Krohne/ Forbes Marshall
16.	GI / MS Pipes	As per List of Approved Makes Civil & Plumbing
17.	GI Pipe fittings	As per List of Approved Makes Civil & Plumbing
18.	GM / Forged Brass Ball Valves	Zoloto/ Honeywell/Castle/Audco/ L&T
19.	HDPE Tanks	As per List of Approved Makes Civil & Plumbing

20.	High Pressure Pumps	DP/Grundfos/ITT/Wilo-Mather Platt Kirloskar/ KSB
21.	Hydro-pneumatic System	Grundfoss / Kirloskar/ DP Holland / Wilo/ Xylem/ KSB
22.	Level Controller & Indicator (Water)	L&T/ Auto Pump/Cirrus India/Teknika/ Techtrol/ Minilec
23.	Mechanical Seal	Eagle Burgmann/ John Crane/ Dunlop/ Leakpack/ Flow Serve/ Sealmatic
24.	Non Return Valve	Zoloto/ Honeywell/ L&T/ Castle/Sant / Leader/ Audco
25.	ORP (Oxidation reduction potential) Meter	Fox Scientific/ Rosemount-Emerson/ Rapid Control/ Maharaja / Valtronics
26.	Paints	As per List of Approved Makes Civil & Plumbing
27.	pH Meter	Fox/ Rosemount/ Aster/ Digital
28.	Pipe Clamp & Supports	Chilly/Euroclamp/Kanwal/ Gripple
29.	Portable RO Plant	Bluestar/Usha/Eureka Forbes/ Kent/ Voltas/ AO Smith/ Thermax
30.	Pressure Gauge	Fiebig/ Emerald/ H. Guru/ Baumer
31.	Pressure Switch	Switzer/ Honeywell/ Indfoss
32.	Pressure Reducing Valve	Leader/Kirloskar/ SKF/ Zolto/ Sant/ Castle
33.	Raw Water Pump Set/ Treated Water pump set/ Drainage Pump Set or any other type of pump sets.	DP/Grundfos/ITT/ Wilo-Mather Platt/ KSB/ Kirloskar/ Xylem
34.	Resin	Ion Exchange/Thermax/3M/Pentair
35.	RO Membrane with Housing	Dow/Hydranautics/Tricep/G.E/Mitsubishi
36.	Sluice Valves	IVC/Kirloskar/ Zoloto/ Castle
37.	Sodium Hypochlorite Dosing System	Asia LMI/ Grundfos/ Seiko/ E - Dose
38.	Softener Vessel	Ion Exchange/ Thermax/ Pentair
39.	SS Pipes & Fittings	SAIL/ Jindal/ Viega/ Sumitomo/ Apollo
40.	SS Strainers & Valves	Audco/ Zoloto /Leader/Walson/ Normex/ Worth / Apollo
41.	Storm Water Drainage & Sewage Sump Pumps (Submersible)	DP/ Xylem-ITT/ Wilo-Mather Platt / Kirloskar/ KSB

42.	Water Transfer Pumps	DP/Grundfos/Xylem/ ITT/Willo-Mather Platt/ Kirloskar/ KSB
43.	Water Meter (Mechanical Type)	As per Plumbing make list
44.	Welding Rods	Adorr/ Esab/ Advani/ Victor
45.	Y Strainer	Emerald/Zoloto /Sant/ Castle/ Leader
HOT WATER GENERATOR SYSTEM		
1.	Air release valve/ Insulation/ Thermometer/ Pressure Gauge	As per Approved makes for Plumbing/ HVAC Works/ Fire Fighting Works
2.	Ball valve /Check valve/ Y – Strainer/ GI/MS pipes	As per Approved makes for Plumbing/ HVAC Works/ Fire Fighting Works
3.	Hot Water Generators	Enmax/ Sunmax/ Goodsun / TATA Power Solar/ Thermax/ Rapid Control
4.	Recirculating Pumps	Grundfos/ DP /Mather Platt – Wilo/KSB/ Kirloskar/ Xylem/ KSB/ ITT
SOLAR PV/ SOLAR HOT WATER SYSTEM		
1.	Solar PV System	Tata Power Solar / Havells / Schneider/ Socomec/ Emmvee/ Thermax / Jackson Solar/ Adani Solar/ Intersolar
2.	Solar Hot Water System	Solahart / Sol Power/ Tata Power Solar/ Solimpeks/ Intersolar/ Greentek
3.	Butterfly Valve	Audco/Danfoss/Honeywell/ Zoloto/ Castle/ L&T/ Castle
4.	Check Valve – Dual Plate	Advance/Honeywell/Audco/Zoloto/ Castle/ L&T/ Castle
5.	Check Valve – Wafer Type	Advance/Danfoss/Zoloto/Honeywell/ Castle/ L&T/ Castle
6.	CPVC pipes	As per List of Approved Makes for Civil & Plumbing
7.	GI Pipes	
8.	GM / Forged Brass Ball Valves	Danfoss/Honeywell/Zoloto
9.	Heat Exchanger	GEA Eco flex/ Alfa Laval / Danfoss
10.	Hot Water Re-circulation or other Pumps	DP – Holland/Grundfos /Xylem/ ITT/ Wilo – Mather Platt/ Kirloskar/ KSB
11.	HDPE Storage Tanks	As per List of Approved Makes for Civil & Plumbing

12.	Insulation for Hot Water Pipes	Armacell – Armaflex/Eurobatex – Union Foam/ K-Flex/ Thermaflex/ Aeroflex/ Supreme
13.	Level Controller & Indicator (Water)	Auto Pump/Cirrus Engineering/Technika /Techtrol/ Minilec
14.	Pipe clamp & supports	Chilly/ Euroclamp/ Kanwal
15.	Sluice Valves	IVC/ Kirloskar/ Advance / zoloto/ Castle/ Audco
16.	Solenoid Valve	Danfoss/ Avcon/ Honey well/ Emerson
17.	Water Meter	As per List of Approved Makes for Civil & Plumbing
18.	Y-Strainer	Leader/ Zoloto/ Audco/ Castle/ Emerald/ Rapid cool/ Advance
19.	Heat Pumps (Air to Water)	Carrier/ Daikin/ Blue Box/ Suntec/ Emerson/ Climaveneta/ Intersolar
ELECTRICAL WORKS		
1.	11 KV HT Panel/ RMU with 11kV Vacuum Circuit Breaker (VCB) / SF6 Breaker	L&T/ ABB / Schneider/ Siemens/ Megawin/ Unitech Electrical/ Eaton or their authorized System Integrator/ Channel Partner
2.	33 kV HT Panel/RMU with 33 kV Vacuum Circuit Breaker (VCB) / SF6 Breaker	L&T/ ABB / Schneider/ Siemens/ Eaton or their authorized System Integrator/ Channel Partner
3.	ACB (TP,4P) with variable microprocessor	L&T (U-Power Omega)/ Siemens (3 WL)/ Schneider (NW) / ABB (Emax2)/ Legrand (DMX ³)/ Eaton (IZMX Series)
4.	Automatic Transfer Switch (ATS)	L&T/ ABB/ Siemens/ Schneider / Socomec/ Hager/ Legrand/ HPL
5.	Auto Changeover & Current Limiter (ACCL)	Indo Asian/ Havells/ Salzer/ Elmeasure/ L&T/ ABB / Siemens/ Schneider/ Legrand / Hager/ Eaton/ HPL

S.No.	Details of equipment/ material	Make/Manufacturer
6.	Alarm Annunciators/ Auxiliary relays compatible with PLC etc.	Siemens/ L&T/ ABB/ Areva/ Schnieder/ Minilec
7.	Air Curtain	Euronics/Almonard/ Mitsubishi/ VTS Wings
8.	Batteries	Hitachi/Panasonic/ Yuasa/ Exide/ Amco/ Amaraja-Amaron/ Tata
9.	Battery Charger	Amaraja/ Volstat/Chloride Power System/ Expo-Fyn/HBL /Sabnife/ Statcon/Max Power (Mahamai)
10.	Boom Barrier	FAAC/ Godrej Vigiguard/ Somfy/Gunnebo
11.	Bus bar	Jindal/ Hindalco/ Sterlite/ Valco/ as per approved by EIC
12.	Bus Ducts & Rising Mains (Sandwich Type) Bus Trunking, End Feed Unit, Tap-off box (plug-in type)	L&T/ Schneider/ C&S/ Godrej/ Legrand/ EAE
13.	Cable Jointing/ Termination Kit	Raychem/ Xicon/ 3M
14.	Cable Trays & its accessories	MEM/ BEC/ OBO Bettermann/ Airef/ AKG /Indiana/ Legrand/ RMCON/ Honeywell / Fixotech / RR Ispat
15.	Race ways / Floor trunking / wall channels	Legrand/ Honeywell MK/ Schnieder/ AKG / OBO Bettermann
16.	Call Bell / Door Bell switches & Buzzers	Havells/ Anchor/ Schneider/ ABB/ Siemens/ Indo Asian/ Panasonic
17.	Call Bell with Video Door Phone	Honeywell/ Hikvision/ Godrej/ Panasonic/ Crabtree/ CP Plus/ Wipro
18.	Capacitor Banks	L&T/ Siemens / Schneider/ ABB/ Ducati/ Neptune/ Meher/ EPCOS/ Shreem
19.	Ceiling /Exhaust/ Wall fans	Crompton/ Usha/Orient/ Bajaj Electrical/ Havells/ Panasonic
20.	Coaxial Wires	Finolex/ Delton/ Skytone/ L&T/ KEI/ Bonton/ Gloster/ Polycab/ Belden/ Legrand/ Havells/ Anchor
21.	Colour Monitor	Samsung/ LG/ Sony/ Philips/ Panasonic
22.	Current Transformer/ Potential Transformer	L&T/ Kappa/ AE / Meco/ Gilbert/ Maxwell/Megawin
23.	Cubicle Type Fuse Unit/ RMU	Siemens/ L&T/ ABB/ Schneider/ Eaton/ Megawin

S.No.	Details of equipment/ material	Make/Manufacturer
24.	Distribution Boards (DB)	Hager/ Havells/ Legrand/ L&T/ABB/ HPL/ Schneider / Siemens/ Eaton/ Anchor/ Polycab/ C&S/ Indoasian
25.	DG Set - Assembler	Jakson & Company / Jakson Ltd/ Sterling Generators / Sudhir Gensets/ Powerica/ Kirloskar (KOEL authorized OEM) / TIPL (Gainwell) / Greaves Cotton/ Captiva Energy Solutions Pvt. Ltd.
26.	DG Set - Alternator	Stamford/ Leroy Somer/ Toyo Denki/ AVK- SEG/ Kirloskar (KOEL Green)/ Crompton Greaves
27.	DG Set - Engine	Cummins/ Mitsubishi/ Perkins/ Volvo/ Caterpillar/ Kirloskar (KOEL Green)/ Baudouin / Greaves Cotton
28.	DG Synchronizing Controller	Woodward/ Dief/ Deep sea
29.	Door Frame Metal Detectors	Metscan/ Trust Security System/ ID Tech Solutions/ Smith Detection/ Rapiscan
30.	DWC (Double Walled Corrugated) Pipe	Duraline / Rex / Carlon/ Emtelle/ Astral/ Gemini/ Supreme/ Polypack/ Finolex
31.	Earthing System	LPI/ Indelec/ APS/OBO Bettermann/ JMV/ as per approved by EIC
32.	Electrical Motors	ABB/ Siemens/ Kirloskar/ Bharat Bijlee / Crompton Greaves
33.	Electric Vehicles Charging Stations	ABB/ Siemens/ Schneider/ Tata Power/ P2 Power/ Eaton/ Panasonic/ Legrand/ Okaya/ Kazam/ Delta/ Gogoro
34.	Expansion Bellows for DG Exhaust Pipes	Dunlop/ Easyflex/ Kanwal/ Resistoflex/ Dwren
35.	Fiber Optical Cable	Sterlite/ Finolex/ Belden/ Delton/ Skytone/ Legrand/ RPG/ Corning/ R&M/ Commscope
36.	Fire Survival Cables	Bonton/ Skytone/ Fusion Polymers/ KEI/ Havells/ Polycab / Wrexham/ Finolex/ RR Kable/ Lapp India
37.	Glands and Lugs	Dowel/ Comet/ Gripwell/ Hex/ HMI/ Raychem/ Jainson/ Skytone

38.	Hand Gloves & Rubber Mats	Premier Polyfim Ltd/ Polyelectrosafe/ Challenger/ Electromat/ Safe Hold
39.	High Mast Poles	Valmount/ Bajaj/ Transrail/ Salasar/ RR Ispat
40.	HRC Fuse	L&T/ Siemens/ ABB/ Legrand/ Eaton Schnieder/ Hager
41.	HT Cables & LT Cables (Power & Control Cables, Solar Cables, Submersible flat cables)	Gloster/ Havells/ Nicco/ Finolex/ KEI/ Polycab/ Bonton/ Rallison/ RR Kable
42.	Hybrid Capacitor Panel – IGBT Based	P2 Power/ ABB/ Neptune/ L&T/ Siemens/ Schneider/ Legrand/ Shrem
43.	Indicating Lamps	AE/ Kaycee/ Vaishnav/ L&T/ Siemens/ Schnieder/ Teknik/ ABB/ Legrand/ Panasonic
44.	Industrial Plug & Socket Outlets	ABB/ L&T/ Legrand/ Siemens/ Hager/ Schnieder/ Neptune/ Eaton/ Phoenix
45.	Insulated Rubber Mat	Premier Polyfilm Ltd/ Polyelectrosafe/ Challenger/ Electro Mat/ Safe Hold / Aeroflex
46.	Inverter	Microtek / Luminous / Su-Kam/ Eaton/Hykon
47.	Isolators	Siemens/ L&T/ ABB/Socomec/ Schnieder
48.	Isolation Panels for Modular OT	Pieco/ Schnieder/ Socomec/ ABB/ Siemens/ Hakel
49.	LED Light Fixtures and Lamps	Philips/ Wipro/ Havells/ Bajaj/ Panasonic/ Surya Roshni/ Lighting Technologies/ Trilux/ Crompton/ Halonix/ Orient Electric/ HPL/ Jaquar
50.	LED Lighting for Facade	Philips/ Wipro/ Trilux / Allurays/ RZB/ BEGA/ Havells/ Bajaj/ Surya Roshni / Lighting Technologies/ Crompton/ Halonix/ Orient Electric/ HPL/ Jaquar

51.	Lighting Automation & Control System	Wipro/ Siemens/ Philips/ Schneider/ ABB/ L&T/ Lutron/ Crestron/ Legrand/ Havells/ Honeywell/ Crompton/ Halonix/ Orient Electric/ Trilux/ Panasonic/ Jaquar
52.	Lightening Protection System & Earthing System	L&P ELECTRO/ LPI/ Indelec/ APS/OBO Bettermann/ Hakel/ JMV/ ABB/ Dehn / Cape
53.	LT Panels / DG Synchronizing Panels/ Capacitor Panels	L&T/ ABB / Schneider/ Siemens/ Legrand/ Eaton or their authorized System Integrator/ Channel Partner
54.	MCBs / RCCB/Isolators / RCBO / Change over switch/ Time Switch	Hager/ Havells/ Legrand/ L&T/ Schneider/ ABB/ Siemens/ Eaton/ Anchor/ Polycab / HPL/ C&S/ Indoasian
55.	MCCB with Variable Microprocessor based (O/C, S/C, E/F) / Thermo magnetic releases	L&T (D-Sine)/ Schneider (CVS)/ ABB (Tmax)/ Siemens (3VA)/ Legrand (DPX ³)/ Eaton (NZM Series)
56.	Measuring Instruments (Analog Meter)	L&T/ AE/ MECO/ Rishabh/ Schnieder/ Eaton
57.	Measuring Instruments (Digital Type) – Multifunction Meter (MFM)/ KWH Meter/ Voltmeter/ Ammeter/ Dual Source Energy Meter/ Powerline Transducers	L&T/ Ducati/ Conzerv/ Secure/ Siemens/ Schnieder/ ABB/ Eaton/ Socomec/ Elmeasure/ Minilec/ Rishabh/ Neptune / HPL
58.	Modular Switches, Socket Outlets, USB Charger Sockets, Fan Regulators, Dimmers and moulded cover plates for switchboards having anti-bacterial/ anti-fungal properties	Havells (Crabtree-Murano)/ Schnieder (Zencelo)/ Wipro (North West- Platia)/ ABB (Ivie) / Anchor (Roma Plus)/ Honeywell (Blenze Plus)/ Legrand (Myrius)/ Panasonic (Europa)/ L&T (Englaze)/ Indoasian (Shynora)
59.	Motor Protection Circuit Breaker (MPCB)	L&T/ Siemens/ ABB/ Schnieder/ Eaton/ Hager/ Legrand
60.	MS Conduit & Accessories	BEC/ AKG/ Steel Kraft/ RMCON/ JPC Pipes/ Anchor

61.	NIFPES (Nitrogen Injection Fire Prevention cum Extinguishing System)	CTR/ Vendere Sales Services (I) Pvt. Ltd/ Tectonicus Services (India)Pvt. Ltd.
62.	Nurse Call System	Schrack Seconet/ Honeywell/ ZKR/ Rauland-Borg
63.	Occupancy Sensors	Phillips/ Schneider/ Legrand/ Wipro/ L&T/ Havells/ ABB/ Siemens/ Panasonic/ Surya Roshni
64.	On Load Tap Charger	CTR/ OLG/ EASUN MR
65.	Package/ Unitised Substation	ABB/ Siemens/ Schnieder/ C&S / Ambit/ Megawin / Intrans/ Unipower/ Resitech/ KEL
66.	Push Buttons	Siemens/ L&T/ ABB/ Schneider/ Teknik/ Legrand/ Eaton
67.	PVC insulated FRLS – Copper, 1.1 KV grade flexible wires	Gloster/ Havells/ Batra Henlay/ KEI / Polycab / Finolex/ Rallison/ RR Kable/ Bonton/ NEC/ AKG/ Anchor
68.	PVC Conduit, PVC Raceways, PVC Casing/capping, uPVC Wall Trunking & their accessories	Clipsal/ Polypack/ BEC/ Norpack/ JPC Pipes/ Hensel/ Honeywell/ OBO Bettermann/ Legrand/ Anchor / Balco / Precision
69.	Relays /Contactors/Timers/ Single Phase Preventer/ Starters	Siemens/ L&T/ Schneider/ ABB/ Legrand/ Eaton
70.	Rotary Gear Pumps	Rotodel/ Kirloskar/ KSB
71.	Selector Switch	Siemens/ L&T/ Teknik/ Salzer/ ABB Schnieder/ Legrand/ Eaton
72.	Street Light Poles/ Post Top Lanterns/ Bollards/ Gate Lights with Light Fixtures	Philips/ Wipro/ Havells/ Bajaj / Panasonic/ Surya Roshni / Lighting Technologies/ Crompton/ Orient Electric / RR Ispat
73.	Solar Street Light Poles with Fixtures & all accessories (All in One)	Philips/ Wipro/ Havells/ Bajaj / Panasonic/ Surya Roshni / Lighting Technologies/ Crompton/ Orient Electric
74.	Surge Protection Device (SPD) & Surge Arrester /Diverter, Surge Suppressor	Tercel/ ABB/ Siemens/ Hager/ Eaton/ Phoenix/ Legrand/ L&T/Schneider/ OBO- Bettermann

75.	SCADA & BMS System	Schneider/ L&T/ Honeywell / Siemens/ ABB/ Legrand/ Panasonic
76.	TV Splitter Box/ Tap-off	Zinwell/ Novatron/ Catvision
77.	TV Socket Outlets	Systemax/ Belden/ Simone/ Honeywell/ Legrand/ Havells/ Hager/ Panasonic/ ABB/ Schnieder/ Siemens/ R&M
78.	Terminal Block/ Connectors	Dowells/ Elemex/ Wago/ Phoenix Connectwell
79.	Transformer (Oil Type/ Dry Type)	ABB/ Siemens/ Kirloskar/ Voltamp/ Schneider/ Crompton/Unitech Electrical industries / Universal/ Megawin/ Intrans/ KEL/ Resitech/ Unipower/ Esennar/ Emco
80.	Trivector - Meter (Digital type)	L&T/ Siemens/ Socomec/ Schnieder/ HPL/ ABB
81.	Uninterruptible Power Supply (UPS)	Emerson (Vertiv)/ Schnieder (APC)/ Eaton/ Socomec/ Toshiba Mitsubishi (TMEIC)/ Riello
82.	Variable Frequency Drive (VFD)	L&T/ Siemens/ Danfoss/ ABB/ Schneider

LIST OF APPROVED MAKES FOR 66/11 KV SUBSTATION

S. No	Equipment/ Material	Approved Manufacturer Name
1.	72.5 kV SF6 Circuit Breaker	ABB/ Crompton Greaves/ Alstom/ Siemens/ Schnieder
2.	66 kV Isolators	Siemens/ ABB/GR Power/ CGL
3.	66 /11 kV Power Transformer with OLTC	Crompton Greaves/ Schneider/ ABB/ Bharat Bijlee/ Siemens/ Voltamp
4.	66 kV CT	Mehru/ CGL/ Kappa/ Vishal
5.	66 kV PT	Mehru/ CGL/ Kappa/ Vishal
6.	60 kV, 10 kA (Class III) Gapless Lightning Arrestor with surge counter & insulating base.	Oblum/ Elpro/ CGL/ Lamco
7.	66 kV Control relay panel	ABB/ Schneider/ Siemens/ Crompton Greaves/ Alstom

8.	Insulators	Aditya Birla/ Suvarna/ JSI/ IEC HV Insulators
9.	ACSR Conductor	Sterlite/ Diamond/ Hindustan/ Mahavir Apar
10.	Clamp and Connectors	Klemenn/ Rashtriya Udyog Ltd.

FIRE FIGHTING WORKS

1.	Air Release Valve/Air Cushion Tank	Zoloto/ Advance/ Leader/ Audco/ Castle
2.	Alarm Valve & Hydraulic (Alarm motor with coupling)	HD fire protect/Tyco/ Viking/ Newage
3.	Ammeter/ Voltmeter/ PF/ kW/ Hz/ Meter /Energy Meter/ Multimeter	As per respective electrical make list
4.	Anchor Fastener	HILTI / Fischer / Wuerth/ Bosch/ 3M
5.	Ball Valves	L&T/ Audco /Zoloto/ Advance/Emerald/ KSB/ Sant/ Castle
6.	Battery	As per respective electrical make list
7.	Butt welded fitting (UL Listed) & accessories	Bharat Forge/ VS Forge/True Forge / DRP- M/ Metline Industries/ United Forge Industries
8.	Butterfly Valves	L&T/ Audco/ Zoloto / Advance/ KSB/ Castle/ Viking
9.	Cable lugs and glands	As per electrical make list
10.	Cables	As per electrical make list
11.	Check Valve/Foot Valve/Sluice Valve/ NRV	L&T/Audco / Zoloto/ Advance/KSB/ Sant/ Leader/ Castle/ Viking/ Honeywell
12.	Control / Potential / Current Transformer	As per respective electrical make list
13.	Deluge valve/ Solenoid valve/ Spray nozzle	HD / Tyco/ Viking
14.	Diesel Engine	Cummins/ Mitsubishi/ Perkins/ Volvo/ Caterpillar/ Kirloskar (KOEL Green)/ Baudouin / Greaves Cotton/ Eicher
15.	ELCB	As per electrical make list
16.	Epoxy Paint	As per Civil Works make list

17.	Fire Buckets	Safex/ Minimax/ Cease Fire/ Peter Autokits/ ASES / Padmini
18.	Fire Stopper/ Sealant	Hilti/ 3M/ OBO-Bettermann
19.	Fire Extinguishers	Minimax / Newage/ Eversafe/ Tyco – Johnsons Control/ Ceasefire/ Exflame/Life Guard/ Safex/ Padmini/ Peter Autokits/ ASES
20.	Fire Hydrant Valves/ Fire RRL Hose Pipes / Fire Hose Reels/ Fire Man's Axe/ Gun metal short branch pipe/ 2/ 3/4 FB inlet/ draw Out connection/Hose Box/ Hose reel drum /Nozzle/ blank Caps & Chains / Coupling	Ceasefire / Newage /Minimax/ HD/ Tyco/ Exflame / Padmini/ ASES/ Aag/ Safeguard
21.	Fire Pumps	Mather & Platt (WILO)/ Grundfoss/ KSB/ Kirloskar/ Xylem/ITT/ Armstrong Fluid Technology/ Lubi
22.	Electrical Motors	ABB/ Siemens/ Kirloskar/ Crompton Greaves/ Bharat Bijlee
23.	Flow Meter	System Sensor/ Anergy/ Emerald/ Rapid Cool/ Omicron
24.	Flow Switch	Potter / Rapid flow/ Danfoss/ Viking/ Belimo/ Honeywell/ Anergy/ Omicron
25.	Foot Valve (Cast Iron/ Gunmetal)	Kirloskar / Zoloto/Advance/L&T/ Sant/ Leader
26.	Forged Steel Fitting & accessories	Bharat Forge/ V.S. Forge/True Forge / DRP-M/ Metline Industries/ United Forge Industries
27.	GI Clamps	Hilti/ Gripple/ HIRA-Walraven/ Mupro/ OBO Bettermann
28.	GI / MS Pipes	TATA/ Jindal/ SAIL/ Maharashtra Seamless Ltd/ Prakask
29.	Globe Valves - Gunmetal	Audco / Zoloto/ Advance/ L&T/ Sant/ Leader
30.	Over Load Relays	As per electrical make list
31.	Pipe coat material (pipe protection)	Pypcoat / Makphalt / Safex

32.	Modular Pipe Supports, Brackets, Hanging System for HVAC, MEP, Plumbing & Roof Top Equipment	Hilti/ Gripple/ HIRA-Walraven/ Mupro/ Cooper Corporation
33.	Power/ Auxiliary Contactors	As per electrical make list
34.	Pressure Gauge	Fiebig/ H. Guru/ HD/ BRC/ Waree/ Emerald/ Wika
35.	Pressure Switch	Indfoss/ Switzer/ Danfoss/ Honeywell
36.	Push Buttons/ Indicating Lamps LED	As per electrical make list
37.	Single Phase Preventer	As per electrical make list
38.	Solenoid Valve/ Spray nozzle	HD / Tyco/Danfoss/ Honeywell
39.	Structural Steel for Supports	As per Civil Works make list
40.	Sprinkler Heads (Sidewall/ Upright/ Pendant)	Grinnel-Tyco / Viking / HD/ Victaulic/ Reliable/ Newage/ HD/ Sharp
41.	Steel flexible extension	Eversafe / Newage/ Tyco/ Viking/ Victaulic
42.	Vibration Eliminator Mounting Pads & Pipe Connections	Resistoflex / Dwren / Kanwal/ HIRA-Walraven/ Dunlop/ Easyflex
43.	Weld Electrodes	Advani/ ESAB/ Victor/ Adorr
44.	Pot Strainer	Emerald/ VTM/ Rapid Cool/ Zoloto/ Castle
45.	Y- Strainer	Zoloto/Audco/Emerald/Advance/Leader/ Castle
46.	Expansion Rubber Bellows	Resistoflex/ Easyflex/ Kanwal/ Dunlop/ Dwren
47.	Gas Flooding Sytem for Fire Suppression in Data/ LV Rooms	Tyco/Newage/Minimax/Viking/ Firetrex/ Firetrace/ Kidde/ Jactone/ Honeywell/ Siemens/ HD/ ASES
48.	Linear Pnuematic Heat Detection Tube System for Panels	Firetrex/ UTC/ Tracefire/ Jactone/ ASES/ Rotarex/ SVS Buildwell/ Firetrace/ Kidde/ Tyco/ Siemens/ HD
49.	Clean Agent Fire Extinguisher	Kanex/Tyco/Newage/SVS Buildwell/ Minimax/ Lifeguard/Ceasefire/ Kidde/ Siemens/ HD / ASES

FIRE ALARM SYSTEM

1.	Intelligent Addressable Fire Alarm System - Panel /Detectors/ Hooters/ Manual Call Point UL Listed/ Control Module/ Monitor Module/ Control Relay Module/ Short Ckt. Isolator/ Fire Annunciation Panel / Response Indicator	Honeywell/ Bosch/ TYCO/ Siemens / Schrack
2.	Telephone Talkback for Fire Alarm System	Honeywell/ Bosch/ TYCO/ Siemens / Schrack/ ASES/ CPS
3.	Fire Survival Cables	Bonton/ Skytone/ Fusion Polymers/ KEI/ Havells/ Polycab / Wrexham/ Finolex/ RR Kable / Lapp India
4.	Terminal Strips	Dowell's/ Elemex/ Wago/ Phoenix Connectwell
5.	MS Conduits & accessories	Same as respective electrical make list
LIFTS		
1.	Lifts	OTIS/ Kone / Mitsubishi/ Schindler/ Johnson / Thyssenkrupp (TK Elevatoar)
2.	Dumb Waiter Lifts	OTIS/ Kone/ Johnson/ Schindler/ Sigma/ East India/ TKE
LV System/ PA System/ CCTV System/ Access Control System/ Door Interlocking System/ MATV System/ Information Display System		
1.	Door Controller, Card Reader, Biometric Reader, Access Control Server Software, Smart card	Honeywell/Bosch/HID/Spectra/ Idemia- Morpho / Viridi/ Lenel/ Siemens / Dormakaba
2.	Electro Magnetic Lock	Cisa/ Faraday/Trimec/ Honeywell/ Bosch/ HID/Spectra/ Idemia-Morpho/ Viridi/ Lenel/ Dormakaba/ Siemens
4.	CAT 6/6a Wire/Accessories – Jack / Panel	Belden/ Simone/ Panduit/ Commscope/ Cisco/ Legrand/TADIRAN/ Finolex/ Delton/ Skytone/ KEI/ Bonton/ R&M
5.	CCTV Camera/ NVR/Central Monitoring Software / Other Items	Honeywell / Pelco /Cisco /Bosch/ Axis/ Sony/Tyco
6.	CD / DVD Player	Bosch/ Honeywell/ Bose / Sony/ LG Panasonic/ Samsung

7.	Door Interlocking System	NRH/ Eltech/ Avon
8.	PA System, Amplifier, PA Speaker, Voice Controller, Paging Station, Microphone	Bosch/ Honeywell/ Bose/ Beyerdynamic /Clear One /Clock Audio/ Sony/ AKG-Harman/ Shure/ Schrack/ Aties/Apart
9.	RG-6, RG-11Wire/ Coaxial Cables	Finolex/ Delton/ Skytone/ L&T/ KEI/ Bonton/ Gloster/ Polycab/ Belden/ Legrand/ Havells/ Commscope
10.	Speaker Wire	Bonton/Delton/Polycab/KEI/ Legrand / Kramer/ Belden/ Commscope
11.	LED Video Wall/ Flat Panel Display	LG/ Samsung/ Christie/ NEC/ Planar/ Sony/ Philips/ Panasonic
12.	Active components	Cisco – SG Series / Netgear / D link / Zyxel
13.	Network rack	Legrand / D Link / Netrack / Wal Rack
14.	Server PC	DELL / HP / Lenovo
15.	Hard Disk	Seagate / LG / Thoshiba / DELL / Sandisk
HVAC SYSTEM		
1.	Adhesives for Insulation	Pidilite/ Superlon / Armacell
2.	Adjustable Frequency Drive/ Automatic AFD Bypass/ Pump Controller/ Differential Pressure Sensor/ Transmitter	Xylem-ITT/ Grundfos/Armstrong/ Anergy or as per OEM for Water Pumps
3.	Air Cooled Package Units	Voltas/ Bluestar/ Hitach/ Daikin/ Carrier
4.	Air Curtains	Euronics/ Almonard/ Mitsubishi/ VTS Wings
5.	Air & Dirt Separator/ Dirt Separator	Spirotech/ Optivent / Flamco/ Armstrong/ Anergy/ Emerald/ Calefi
6.	Air Distribution (Ducting) -GI/GSS Sheets	SAIL / TATA Steel/ Jindal
7.	Air Handling Units with Coils	Zeco/ Edgetech/ VTS/ Waves/ Flaktwood/ Balance Air/ System Air
8.	Air Louvers – Fresh/ Exhaust	Titus/ Trox/ Systemair/Caryaire/ Mapro/ Airflow
9.	Air Washer	Zeco/ Waves/ Edgetech/ VTS/ Humidin

10.	Air Bi-polar Ionizers / Air Purification System/ Air Quality Monitor Instrument/ Air Ion Meter	Plasma Air/ Aerisa/ Bentaxna/ RGF/ Global Plasma Solutions
11.	Aluminium Sheet for Ducts	Jindal/ Hindalco/ Sterlite
12.	Automatic Air Vent	Anergy / Rapid Cool/Emerald/CIM/ Castle/ RB
13.	Axial Flow Fans	Kruger / Systemair /Greenheck/ Wolter / Nicotra / Airflow / Maico Ventilation (Dynair)
14.	Balancing Valves (Water Duty)	Advance / Audco/ L&T/ Honeywell/ Danfoss/ Belimo/ Castle
15.	Ball Valves (With & W/O Strainers)	Audco /KSB/Advance/ L&T /Zoloto / Castle/ Danfoss
16.	Butterfly Valves (Water Duty)	Advance / Audco/ L&T/Zoloto/KSB/ Castle/ Danfoss
17.	Cable Lugs/Thimbles/Glands	As per Approved Makes of Electrical Works
18.	Cable Tray	As per Approved Makes of Electrical Works
19.	CAV Box/ VAV Box	Trox/ System Air / Ruskin Titus /Honeywell / Johnson's Control/ Belimo/ Danfoss/ L&T
20.	Centrifugal Fans/Fan Section/Plug Fans	Kruger / Greenheck /Comefri/ Wolter/ Nicotra/ Systemair/ Airflow/ Maico Ventilation (Dynair)
21.	Check Valve/ Foot Valve/ Sluice Valve/ NRV	Advance / Audco/ L&T/Zoloto/ KSB/ Sant/ Leader/ Castle
22.	Chillers	Daikin / Carrier / Trane / York/ Dunham- Bush/ Voltas/ Blue Star/ Hitachi
23.	Chilled Water Pump (Primary/Secondary)/ Condenser/Hot Water Pumps etc.	Armstrong / Grundfoss/ Xylem/ ITT/ KSB/ Kirloskar/ Wilo-Mather & Platt
24.	Chilled Water Cassette Unit	Carrier/ Trane/ Daikin/ Johnson Controls/ Midea
25.	Control Cables	As per Electrical Makes
26.	Cooling Tower	Bell / Paharpur/ Flowtech/ Maltimore/ Mihir/ Advance
27.	CPRX Compound/ Tar felt	Shalimar tar product / Asian / Pidilite
28.	Dehumidifiers	Bryair/ Origin/ Condair/ Dehumidifier India/ DRI

29.	Dry Scrubber / Wet Scrubber	Rydair/ Trion/ Honeywell/ Waves/ Zeco/ Edgetech/ Espair
30.	Duct Dampers/ Grills/ Diffuser/ VCD/ Collar Damper etc.	Caryaire/Systemair/ Dynacraft /Airflow (Mapro)/ Air Master
31.	Electric Motor	ABB/ Siemens/ Crompton Greaves / Baldor/ Kirloskar/ Bharat Bijlee/ Marathon
32.	Electric Motor (Fire Rated)	Marathon/ Havells/ Baldor / Rotomotive/ ABB/ Kirloskar
33.	Expansion Tank	Xylem-ITT/ Armstrong/ Grundfos /Flamco/ Anergy
34.	Factory Fabricated Duct & Flanges	Rolastar / Zeco / Ductofab / Technofab/ GPS Spiro/ Multiline/ Seven Star
35.	Fan Coil Units with Fans	VTS/Flaktwood/Daikin/Carrier/Johnson Control/ Caryaire/ Midea/ Zeco
36.	Fasteners	Hilti / Fischer / Wuerth/ Bosch/ 3M
37.	FCU Copper Connection Set/ FCU Link	ATS/ Oventrop/ CSI/ Anergy
38.	Filters - Pre/ Fine/ Hepa	Thermadyne / Spectrum/ Camfil/ American Air Filter/ Aerofil/ Pyramid
39.	Fire Damper Actuator	Belimo/ Siemens/ Danfoss/ Honeywell/ Johnson
40.	Fire Dampers / Smoke Dampers	Trox/ Greenheck/ Ruskin/ Titus/ Systemair/ Caryaire/ AirFlow
41.	Flame Free Jointing of copper pipes	Rapid Locking System/ Maxi Pro
42.	Flexible Duct Connection	Airflow/ Pyroguard / Rolastar/ UP Twiga
43.	Flexible Pipe Connection	Resistoflex/ Easyflex/ Diamond/ Dunlop
44.	FRP lining for condenser piping	Owen-corning/ UP Twiga/ Binani
45.	GI/ MS Piping (chilled/condenser/drain/hot)	Jindal / Tata / SAIL/ Maharashtra Seamless Ltd
46.	Globe/ Gate Valve	Audco / Advance / Danfoss/ L&T/ KSB/ Zoloto/ Castle
47.	Heat Recovery Exchanger/ Ventilator/ Wheel	Ostberg/ DRI / Flaktwoods/ Heatex/ BryAir
48.	Hot Water Generators	KEPL / Rapid cool/ Emerald/ Enmax

49.	Humidifier	KEPL / Rapid cool/ Emerald / Enmax
50.	Inline Fans	Kruger / Nicotra/ Greenheck/ Ostberg/ Airflow
51.	Insulation Materials	
52.	a) Fiber Glass – Aluminium faced Insulation	UP Twiga / Owens Corning/ Kimmco
53.	b) Polyurethane Foam (PUF) Insulation	Styrene Packaging & Insulations/Lloyd Insulations/ Supreme
54.	c) Nitrile Rubber Insulation with antimicrobial properties	K-Flex/ Superlon/Armacell/ Supreme/ Aeroflex/ Aerocell/ Aerofoam (Hira)
55.	d) XLPE Insulation	Supreme/ Vidoflex/ Trocellene/ Aerofoam (Hira)
56.	e) Expanded Polystyrene Insulation	Styrene Packing/Mettur/ Beardsell
57.	Laminar Flow HEPA Tent	Systemair/TROX/American Air Filter/ Conaire/ Thermadyne/ Airtech
58.	Magnehelic Gauges	Mitbraus Instruments/ Dwyer / Omicron
59.	Motorized Butterfly Valve	Honeywell/Belimo/Danfoss/Siemens
60.	Modular Pipe Supports, Brackets, Hanging System for HVAC, Roof Top VRV/ VRF Equipment	Hilti/ Gripple/ HIRA-Walraven/ Mupro
61.	Paints	As per Civil Works Makes
62.	Pre insulated Ducts	Pal/Zeco/ ALP/ Kingspan/ Spiro / UP Twiga
63.	Pipe Clamps, Hangers, Suspension Supports etc	Easyflex/Resistoflex/Diamond/ Hira-Walraven
64.	Pipe Supports-PUF	Llyod insulation/ Melanpur/ Beardsell
65.	Power & Control Cables	As per Electrical Makes List
66.	Pressure / Temperature Gauges	H. Guru / Feibig / Warree/ H.D./ Omicron
67.	Propeller Fans	Crompton/ Khaitan/ Alstom/ Bajaj/GE/ Havells/ Maico Ventilation (Dynair)/ Marathon
68.	Pressure Independent Balancing & Control Valve – 2 Way	Siemens/ Danfoss/Oventrop /Belimo/ Castle/ Anergy/ Honeywell/ Johnson Controls/ Advance

69.	Precision AC Units	Schneider/ Vertive/ Stulz/ Carrier/ Daikin/ Blue Star/ Hitachi/ Mitsubishi
70.	Purge Valve/ Drain Valve	Audco/ Advance / Anergy/ Zoloto/ Castle/ Advance
71.	PVC /uPVC Pipes	Polypack/ Supreme/ Astral/ Finolex/ AKG
72.	Pot Strainer	Emerald/ VTM/ Rapid Cool/ Castle/ Advance
73.	Red Oxide/ Zinc Chromate Primer	As per Civil Works Makes
74.	Refrigerant Copper Pipes	Mandev Tubes/Rajco Metal/Mehta Tubes (Max Flow)/ Kwalitiy Tubes (Raj State)/ Totaline
75.	Room Thermostat	Honeywell/ Johnson/ Siemens/ Danfoss Schneider
76.	RP Tissue	UP Twiga/ Styrene Packing/ National Industrial Co.
77.	Split AC Units	Toshiba/ Daikin/ Hitachi/ Carrier/ Voltas/ Blue Star/ Lloyd (Havells)/ LG
78.	Starters/ Change over switch/ Push Buttons/ Relays/ Indication Lamps/ Rotary switches/ 1-phase preventor/ Soft starter/ MCB/ MCCB/ ACB/ Contactor etc.	As per respective Electrical Makes
79.	Strip Heater	Das Pass/ Escorts/ KEPL
80.	Structural Steel for Supports	As per Civil Works make list
81.	Thermostat / Humidistat	Honeywell / Johnson / Siemens / Schneider/ Omicron
82.	UV & Weather protective Coating	Pidilite/ Foster/ Amicon
83.	UVGI System (Ultra-Violet Germicidal Irradiation System)	Ruks/ Alfa UV/ Sterile Air/ American Ultra Violet/ Philips
84.	V-Belt	Dunlop/ Fenner/ Hilton
85.	Vacuum Degasser	Spirotech/ Optivent / Flamco/ Anergy/ Emerald/ Calefi
86.	Variable Frequency Drive	Siemens/ Danfoss/ABB/ Schneider/ L&T/ Armstrong

87.	VRV/ VRF System	Mitsubishi Electric/ Daikin/ Toshiba/ Panasonic/ Carrier/ Voltas/ Blue Star/ Hitachi/ LG/ Samsung
88.	Vibration Eliminator Mounting Pads & Pipe Connectors	Resistoflex / Dwren / Kanwal/ Hira- Walraven/ Dunlop/ Easyflex
89.	Water Flow Switch	Honeywell/ Danfoss/ Belimo/ Emerald/ Rapid Cool / Anergy/ Omicron/ Seimens
90.	Y- Strainer	Zoloto/Audco /Emerald/ Rapid Cool/ Advance/ Castle/ Sant
IBMS SYSTEM		
1.	IBMS System & Software/ Capacitive Touch Panel/ Direct Digital Controller	Siemens (WinCC)/ Schneider (EcoStruxureTM)/ L&T (iVisionmax)/ Honeywell (Experion PKS)/ ABB (AbilityTM)/ Phoenix/ Johnson Controls
2.	Operator Workstation	Dell/ Lenovo/ HP/ IBM
3.	Printers/ Photocopy machine	Canon/ Xerox/ HP/ Epson
4.	Network Switch	Cisco/ HP/ Juniper/ Dell/ Ruckus
5.	Temperature Sensors & Transmitters	Greystone / Honeywell / Siemens / Schneider / Danfoss/ L&T/ Omicron
6.	Outside Air Temperature + Humidity Sensors	Greystone / Honeywell / Siemens / Schneider /L&T/ Omicron
7.	Ultrasonic Water Flow Meter	Kampstrup/Landis+Gyr/Shenitech/Siemen s/ Honeywell/ Krohne/ Thermax/ Omicron
8.	Differential Pressure Switches & Transmitters for Air/ Water/Filter status	Greystone / Honeywell / Siemens / Schneider / L&T/Kele/ Danfoss/ ABB/ Omicron
9.	Water Flow Switch	Greystone / Honeywell / Siemens / Schneider / L&T/Weksler/Danfoss/ Omicron
10.	Water Quality Sensors	Honeywell / Siemens / Schneider / L&T/ Danfoss/ Omicron
11.	pH / TDS Analyser	Hach/Omicron/ Forbes Marshall/ Thermax/ Krohne

12.	Air/ Water Sensors & Switches / Pressure Transmitters/Differential Pressure Switches & Transmitter	Greystone / Honeywell / Siemens / Schneider / Danfoss/ L&T / ABB/ Omicron
13.	Colour Monitor	LG/ Samsung/ Sony/ Phillips/ Panasonic
14.	Communication Cables / Signal Cable	Delton/Fusion Polymer/Skytone/Finolex/ Simone/ Commscope/ Bonton/ Polycab / KEI
15.	Copper Conductor Control Cable	Same as per Electrical make list
16.	Current Relay	Same as per Electrical make list
17.	Duct Mounted Temperature + RH sensor/ Duct Temperature Sensor	Greystone / Honeywell / Siemens / Schneider / Danfoss/ L&T/ Omicron
18.	Level Switch / Level Transmitter	Honeywell / Dwyer/ Radix/ Weksler/ L&T/ Minilec/ Omicron
19.	Flow & BTU Meters & Transmitters	Schenitech / Honeywell / Kampstrup/ Anergy/ Omicron
20.	GI Conduits	Same as per Electrical make list
21.	LAN cables for BMS Network	Same as per Electrical/LV make list
22.	MS Conduits & accessories	Same as per Electrical make list
23.	Sensor - CO ₂ / CO / pH / TDS	Honeywell / Hach / Greisinger/ Danfoss
24.	PVC Conduits	Same as per Electrical make list
25.	Voltage / Current / Power Factor Transducer	L&T / Siemens / Schneider/ ABB/ Minilec

SEWAGE / EFFLUENT TREATMENT PLANT

1.	Air Blowers	Beta/ Everest/ Kulkarni / TMVT
2.	Air Diffusion System	Airfin/Usha Ruba/Rehau
3.	Air Vent Valve	Oven trop (Germany) / CIM / Rapid Control/ Castle
4.	Anti Corrosive Tape for Pipe protection	Pypcoat / Marphalt / Cotek/STP
5.	Ball Valve	Zoloto/Honeywell/ RB/ Castle/ Audco
6.	Bar Screen	KSP/AWMS/PAMM or equivalent
7.	Blowers	Kay / Airvac /Everest
8.	Butterfly valves	Zoloto/Audco/Kirloskar/AIP/Advance/ Castle
9.	Centrifuge	Apollo/United/B.A Engineering

10.	Check Valve – Dual Plate	Advance/Honeywell/Audco/Zoloto/ Castle
11.	Check Valve – Wafer Type	Advance/Danfoss/Zoloto/Honeywell/ Castle
12.	Chemical Cleaning Pump	WILO / DP/ Grundfos/ Xylem
13.	Chemical Cleaning Tank	Polycon / Sintex/ Vectus
14.	Chemical Dosing system	Asia LMI/ Seiko/ E – Dose/ Grundfoss
15.	Dosing Pump	Grundfos / Asia LMI / E-dose / Prominent
16.	Electrical Panel	As per electrical Make List
17.	Epoxy Paint & Paint	As per List of Approved Makes for Civil & Plumbing
18.	F.R.P Vessel	Pentair / Aventura / Thermax/ Ion Exchange
19.	Flow Meters & Flow Transmitters (Digital)	Aster / VATS / Honeywell/ Krohne/ Forbes Marshall/ Thermax/ Omicron
20.	Flow Rota Meter for Suction Pump	UKL / Aster /Scientific
21.	Foot Valve	Kirloskar/ Kalpana / Leader/ BDK / Sant/ Zoloto/ Castle
22.	G.I. fittings (malleable cast iron)	As per List of Approved Makes for Civil & Plumbing
23.	G.I. Pipes/ M.S. Pipe	
24.	High Pressure Feed Pump	WILO / DP/Grundfos/ Xylem
25.	Level Controller/ Level Indicator/ Level Switch	Aster/Cirrus India/Rockwell Automation/ Minilec/ L&T/ Omicron
26.	MBR Module	GE/ Siemens/ Mitsubishi/ Ion Exchange/ Koch/ Thermax
27.	MBR Permeate Suction Pump	Wilo / DP/Grundfos/ Xylem/ Kirloskar
28.	Media	Ion Exchange/ Thermax/ Cooldeck/ Usha Ruba/ MM Aqua/ Pharmatech
29.	Motor	Siemens/ Crompton & Greaves/ ABB/ Kirloskar/ Bharat Bijlee
30.	MSEP Vessel	Ion Exchange/ Thermax or equivalent as per manufacturer's standard
31.	Multiport Valve	Thermax/ Pentair/ ORG/ Astral/ Praher Aquafiltration
32.	Non Return Valve	Zoloto/Honeywell/ RB/ Castle/ Audco/ Danfoss
33.	PH Meter	VATS / Hanna/Aster/Digital/ Honeywell/ Thermax/ Krohne/ Forbes Marshall/ Omicron

34.	Pipe clamp & supports	Chilly/Euroclamp/Kanwal/ HIRA-Walraven
35.	PLC / HMI	Schneider / Allenbradley /Mitsubishi/ Minilec/ ABB/ Siemens/ Schneider/ L&T
36.	Pressure Gauges	Waree / H Guru / Fiebig/ HD/ Omicron
37.	Pressure Switch	Danfoss / Indfoss / Switzer/ Omicron
38.	Pump Sets i/c Water transfer and sludge disposal/ transfer pump	WILO / DP/ Grundfos/ Xylem/ KSB/ Kirloskar
39.	Resin	Thermax / Ion Exchange/ Auchtel
40.	Semi Auto Fine Screen	Toro/ KSP / AWMS/ PAMM
41.	Sewage Feed pump/ Drainage / Submersible Pumps	WILO / DP/ Grundfos/ Xylem
42.	Strainers	Emerald / Zoloto / Maharaja/ Castle/ Audco/ L&T/ Sant/ Leader/ Rapid cool
43.	Transfer Pumps	WILO / DP/Grundfos/ Xylem/ KSB/ Kirloskar
44.	Tube Settler/ Lamella plates	Thermax/ Ion Exchange/ Sema
45.	UV Systems	Alpha UV/ Creative UV/ Pentair/Eureka Forbes/ Philips/ Ruks
46.	Variable Frequency Drives	Danfoss/Schneider/Siemens/ABB/ L&T
47.	Vibration Eliminator / Anti- Vibration Mounting pads	Resistoflex / Kanwal /Banco/Dunlop/ Easyflex/ Hira-Walraven
48.	Water Meter	As per Plumbing make list
IPABX/ EPABX & TELEPHONE SYSTEMS		
1.	Telephone cable (2/4 /10 / 20/ 50/ 100 PAIR CABLES) / RJ -11 wires	Belden/ Simone/ Panduit/ Commscope/ Cisco/ Legrand/Tadiran/ Finolex/ Delton/ Skytone/ KEI/ Bonton/ Gloster/ Polycab/ Havells/ Molex
2.	Digital/ANALOG PHONES/ Handsets/IP	Beetel /Panasonic /Siemens / Alcatel/ Cisco / Coral
3.	IPABX / EPABX System	Alcatel/ Avaya/ Cisco/ Siemens/ Nortel/ Matrix/ Panasonic/ Coral
4.	MDF/ IDF	Krone/ TVS/ Finolex
5.	Telephone Tag Block/ Jack Panel	Krone/ Phoenix/ Wago/ Belden/ Panduit/ Huwai/ Legrand/ Commscope

6.	Socket, Keystone Module & Face Plate	Havells (Crabtree-Murano)/ Schnieder (Zencelo)/ Wipro (North West- Platia)/ ABB (Ivie) / Anchor (Roma Plus)/ Honeywell (Blenze Plus)/ Legrand (Myrius)/ Panasonic (Europa)/ L&T (Englaze)/ Indoasian (Shynora)
7.	MS/ PVC Conduit	Same as electrical make list
DATA NETWORKING & WIFI SYSTEM		
1.	Active Components – Core and Edge Switch, Indoor/ Outdoor access Points, Wireless Controllers & all other active components	Cisco/ Juniper/ HP/ Dell / Alcatel/ Ruckus/ Extreme/ D-Link
2.	Distribution rack and server rack	Rittal/ Netrack/ Cisco/MTS/ APW/ Legrand - Valrack / Chief/ Middle Atlantica/ Schneider
3.	Ethernet Switch / Indoor & Outdoor Wi-Fi device/ Trans-receivers	Cisco/ Juniper/ HP/ Dell/ Alcatel/ Ruckus/ D-Link
4.	Routers	Alcatel/ Avaya/ Cisco/HP/ Juniper/ Ruckus
5.	Server	IBM / Dell/ HP/ Cisco/ Alcatel
6.	Firewall	Cisco/ Juniper/ HP/ Fortinet/ Palo Alto/ Check Point
7.	Passive Components – Cat 6/Cat 6a/ Patch Panel/ Patch Cord/ Optical Fiber Cable/ Fiber patch cord/ Pigtails/ LIU/ Adapters/ Connectors	Belden/ Simone/ Panduit/ Commscope/ Cisco/ Legrand/ Delton/ Skytone/ Bonton/ R&M/ Molex/ Schneider
8.	Socket, Keystone Module & Face Plate	Havells (Crabtree-Murano)/ Schnieder (Zencelo)/ Wipro (North West- Platia)/ ABB (Ivie) / Anchor (Roma Plus)/ Honeywell (Blenze Plus)/ Legrand (Myrius)/ Panasonic (Europa)/ L&T (Englaze)/ Indoasian (Shynora)
Audio Visual System & Stage Lighting System for Auditorium & Conference Rooms		
1.	Symmetrical Line Array Speakers, Flying Subwoofers, Loudspeakers, Power Amplifier, Digital Sound Processor, Digital Mixing Console, Microphone, Loudspeaker Cables	L-Acoustics/ Bose/ Martin-Audio/ Labgruppen/ Powersoft/ Harman/ d&b audio technica/ Bosch/ Apart
2.	USB Player	Sony/ Philips/ Samsung/ Bose

3.	Audio Conference System/ Delegate and chairman Microphones/ Wireless Handheld and Lapel Microphones/ Wired Handheld/ Gooseneck Microphone	Beyerdynamic/Clear One /Clock Audio/ Sony/ AKG-Harman/ Telvic/ Bosch/ Audio technica
4.	Digital Signal Processor	Bose / Symetrix / Bi-Amp/ Extron
5.	Audio Mixer	Allen & Heath/ Behringer/ RCF
6.	Equipment Rack	Rittal/ Netrack/ Cisco/ MTS/ APW/ Legrand/ Valrack / Chief/ Middle Atlantica
7.	PVC Conduits & Raceways	AKG/BEC/ Hensal/ Clipsal/ Polypack/ Precision/ Norpack
8.	Lighting Controllers & LED Dimmable Lights	Philips/ Wipro/ Havells / Lutron/Trilux/ ERCO/ Zumtobel
9.	LED Signage Board	Wipro/ Philips/ Bajaj/Instapower/Decon/ Eaton
10.	Video Projector	Christie/ Sony/ Panasonic/ Philips/ Epson/ Barco/ Digital Projection
11.	Projection Screen	Draper/ Da-Lite/ Grandview/ Harkness/ Suvira/ Stewart
12.	LED Display Monitors	LG/ Sony/ Panasonic/ Samsung
13.	Video Wall/ Flat Panel Display	Christie/ NEC/ Planar/ Sony/ Philips/ Panasonic/ Samsung/ LG
14.	Document Camera	Lumens/ Elmo/ Wolf Vision/ Sony
15.	Video Conferencing System & Secondary Camera	Sony/ Polycom/ Pelco/ Cisco/ Lumens
16.	HD PTZ Camera & Joystick	Sony/ Panasonic/ Pelco/Cisco/Bosch/ Lumens
17.	Recorder/ Streamer	Lumens/ Mediasite/ Mediapointe
18.	Cable Manager/ HD BaseT Transmitters/ HD BaseT receivers/ Scaler Extender/ Modular Matrix Switcher/ Multi Format Presentation Switcher/ HDMI Switcher/ HDMI Distribution Amplifier/ HD BaseT Distribution Amplifier/ Control System/ Wireless/Wired Touch Panel with accessories/ Button Control Panel with Accessories	Kramer/ Extron/ Lightware/ Crestron

19.	Optical Fibre Cable	Extron/ Crestron/ Kramer/ Belden/ Legrand/ Havells/ Commscope
20.	Cat 6/6a Cable & Patch cords, connectors, adaptors	Belden/ Simone/ Panduit/ Commscope/ Cisco/ Legrand/Tadiran/ Crestron/ Molex
21.	Network switch & Wifi access points	Netgear/ HPE/ Juniper/ Cisco/ Dell/ Alcatel/ Avaya/ D-Link
22.	HDMI / VGA Cable, Microphone cable, control cable, HDMI/ VGA patch cable, Speaker & Microphone cable	Kramer/ Belden/ Klotz/ Extron/ Lightware/ Crestron/ Crystal
23.	Stage Lighting – Spot Light, Par Light, Flood Light, Dimmer Pack, Lighting Console, Splitter, Lamp prism with moving head	Canara Lighting/ Effectron/ Stage Technologies/ Harman/ Philips/ ETC/ LEKSA/ Shenoy/ Lutron
24.	Junction Box	ABB/L&T/Havells/Schneider/Legrand/ Hager/ OBO Bettermann/ Siemens/ Neptune
25.	Accessories for Lighting Fixtures like C-Clamp, Safety bond & Name plates etc	Canara Lighting/Doughty/Manfrotto / Avenger/ Leksa Lighting
26.	Curtain Control Panels/ Remote Control/ Motorized Curtains/ Motorised Light Bars / Wings / Cyclorama frame	Canara Lighting/ Effectron/ Stage Technologies/ Shenoy Lighting/ Waagner- Biro/ Leksa Lighting
27.	RGY Laser	CT Lasers/ Canara Lighting/ Laser World
28.	Fog Machine & Metal Gobos	Antari/ Canara Lighting/ Robe/ Effectron/ Stage Technologies
29.	Fire Retardant Curtain, Plastic cyclorama screen	Ompile/ Raymond/ Mayur
30.	Lamps	Osram/ Philips/ Wipro/ Bajaj/ Havells
31.	DMX Signal Cable for DMX Network	Falcon/ Beldon/ Polycab/ Finolex/ Beldon/ Canara/ Leksa Lighting
32.	DMX Lighting Controller & DMX Splitter	Avolites/Lite-Puter/Zero 88/ Canara Lighting/ Leksa Lighting
33.	Smart Podium	Univeso / AHA / Tech Comm

34.	Interactive White Board	Promethean / HiteVision / Smart
Solid Waste Management System		
1.	Sterilizer/ Autoclave for Bio Medical Waste	Envicare Soln. Pvt. Ltd / Celitron / Ecodas / Cisa / Cecon Pollutech Systems / Excel Industries Ltd
2.	Organic Waste Converter	Envicare Soln. Pvt. Ltd/ Excel Industries Ltd/ Cecon Pollutech Systems
Mechanized Car Parking		
1.	Mechanized Car Parking	RR Parkon/ Klaus/ Newturn/ Dantel

General Note:	
1.	The contractor will use one of the approved makes as mentioned above with prior approval in writing from Engineer-in-charge.
2.	In case of different quality / pattern of same make, the pattern/ quality shall be approved Engineer – in – charge.
3.	For materials/equipment to be used in items of work for which approved makes are not given herein above, the makes & models of such materials /equipment shall be as approved by Engineer –in-charge.
4.	If any major equipment is using a small component of make other than that given as a standard component with the equipment, the same shall be accepted subject to approval of Engineer –in-charge.
5.	In case of non-availability of the approved Make specified as above, alternate equivalent make of the item/ material may be used subject to submission of documentary evidence of non-availability of such specified make and prior approval of Engineer-In-Charge.

Note: The tenderer shall quote his rates on the basis of the price of the brand/make stipulated in the item of works as described in BOQ and specification as well as in the approved makes. The owner reserves the right to select any of the brands indicated in the “List of Approved Makes/Agency” in case of delay in delivery of ordered “make of item”. The contractor cannot claim anything extra for the same.