

ECoR RAILWAY
CONSTRUCTION ORGANIZATION
SECTION 1

INTRODUCTION

1.1 Background

1.1.1 The President of India represented by the CE/C/IV/BBS, East Coast Railway (ECoR), Bhubaneswar (the “Authority”), having its principal Office of the CE/C/IV/BBS At/Po- Rail Sadan, 2nd Floor, North Block, Chandrashekharpur, Bhubaneswar, 751017, Odisha , India is engaged in the development of railways and related infrastructure, and as part of this endeavour, the Authority has decided to undertake the Major Upgradation of Railway Station at Sambalpur (the “Project”) through Engineering, Procurement and Construction (the “EPC”) Contract, and has decided to carry out a single stage Bidding process for selection of a Bidder to whom the Project may be awarded.

1.1.2 The brief particulars of the Project and the Bidding Process are as follows in the Key Information Table (KIT):

S No.	Particular	Details
1.	Name of the Work	Request for Proposal (RFP) for Major Upgradation of Railway Station at Sambalpur, on Engineering, Procurement and Construction (EPC) mode.
2.	Estimated Project Cost	INR 329.02 Crore (Rupees Three Forty Seven Point Fifty one Crore)
3.	Construction Period	36 months
4.	Bid Due Date and time	By 12.00 hrs (IST) on 03.07.2024
5.	Physical Submission of all documents listed in clause no. 2.11.2	Upto 12:00 Hrs of (Bid Due Date + 5 days) i.e. 08.07.2024
6.	Date and Time of Opening of Bid	After 12.00 hrs (IST) on 08.07.2024
7.	Mode of tendering	Single stage two packet
8.	Mode of submission of Bids	Online submission on e-Procurement Portal
9.	E-Procurement Portal	www.ireps.gov.in
10.	RFP document Fee	NIL
11.	Bid Security/EMD	Rs. 1,64,51,225 (Rupees One Crore Sixty four Lakh Fifty one Thousand Two Hundred Twenty-five Only)

12.	Bank Account Details of the Authority	Name of Beneficiary: FA & CAO /BBS, EAST COAST RAILWAY Name of the Bank: State Bank of India Account No.: 10872484993 Address of the Branch: Bhubaneswar Main Branch IFSC code: SBIN0000041
13.	Officer and Address to Submit the physical documents as per clause 2.11.4 of RFP	Name of Officer: -- Designation: CE/C/IV/BBS, East Coast Railway (ECoR) office At/Po- Rail Sadan, North Block Chandrashekharpur, Bhubaneswar, Odisha, 751017 Phone: 8455885266 E-mail: chiefengineerbbs4@gmail.com
14.	Validity of the Bid	120 days from the Bid Due Date
15.	Pre-bid Conference Details	Date: 24.05.24 Time: 11:00 hrs Venue: CAO meeting Hall/Rail Sadan/Bhubaneswar
16.	Last date of receiving Queries	24.05.2024
17.	Uploading Replies to Queries if required	To be uploaded before starting date of bidding
18.	Performance Security	5% of Contract Price in terms of Clause 2.21.1
19.	Submission of Performance Security	Within 30 days of issue of Letter of Award (LOA)
20.	Signing of Agreement	Within 15 days of submission of Performance Security.
21.	Documents enclosed with the RFP	a) EPC Request for Proposal (Volume: I) b) Standard EPC Agreement (Volume: II-a) c) Schedules to EPC Agreement (Volume: II-b) d) Schedule DA Standards & Specification e) Schedule DB Outline Design Spec f) Schedule DC Outline Construction Spec g) Detailed Project Report h) List of Drawings i) OHE Modification guidelines j) Geotechnical investigation report k) Public Procurement Policy 2017

22.	Consultant engaged by Authority for this Project	EDMAC Engineering Consultant (India) Pvt. Ltd., G-1/ L.G.F., South Extension-II, New Delhi-110049, India Tel: 011- 46078600, Mobile: 09911089278 Fax: 011- 46078666, E-mail: infodel@edmacconsulting.com
23.	Technical Consultant of the Project	*****
24.	Transaction Advisor for the Project	*****
25.	Legal Consultant for the Project	*****

APPROVED MAKES/ BRANDS

The sanitary fitting shall be of premium quality of approved brand make and manufacture as per approval of Engineer-in-Charge.

All the urinals, taps shall be sensor based.

Specification/brands names of materials to be used as per the scope of work are listed here. The efforts should be made by the agency to use indigenous products. The agency should also consider the availability of spares parts/components for maintenance purposes while proposing any brand/manufacturer. The materials of any other brand/manufacturer may be proposed for use by the agency in case the brands specified below are not available in the market and/or agency intends to use some other brand better than the brands mentioned in this list. The alternate brand can be used only after the approval of Engineer-in-Charge.

1. CIVIL & STRUCTURAL				
Sl. No.	Material	Approved Makes / Brands		
1.	Ordinary Portland Cement / Portland Pozzolona Cement	ACC	Ultratech	J. K Cement
		Birla Cement	Ambuja / Prism	India Cement
2.	White Cement	Birla White	J.K. White	Lafarge, ACC
3.	Ready Mix Concrete	ACC Company	Ultratech	JK Cement
		Lafarge Company	L&T	
4.	Reinforcement Steel (HYSD TMT-Fe 500)	SAIL	Tata Steel	RINL
		JSW Steel Ltd	Electro steel	Vizag
		JSPL	Shyam Steel	APL Apollo
5.	Structural Steel / M.S. Tubes (Pre Galvanized)	TATA	JSW Steel Ltd	SAIL
		Jindal Steel & Power Ltd	Rashtriya Ispat Nigam Ltd	Vizag
		APL Apollo		
6.	Plasticizer, Super Plasticizer, Admixtures, Other construction chemicals	M.C. Bauchemie	Fosroc	Pidilite
		CICO	Sika	Reynoarch
		Asian Laboratories	Ultracon	Kryton
		Berger	MYK Arment	
7.	Waterproofing Compound (Crystalline)	BASF	Sika	Penetron
		Fosroc	Kryton	Fire Stone
		Pidilite	Carlisle	Kryton, Berger

		Tikidan	MYK Arment	Sunanda Chemicals
		MC Bauchemic	Reynoarch	
8.	Waterproofing Self Adhesive (HDPE) membrane	GRACE	Fosroc	Pidilite
		Kintop, Kryton	Keshun	MYK Arment
		Carlisle	Tikidan	STP, Sika
		MC Bauchemic	Sunanda Chemicals	Technicol
		Reynoarch	Mapei, Berger	Asian Paints
9.	EPDM Waterproofing Membrane	Fire Stone	Polygamma, Kryton	Pidilite, Berger
		Reynoarch	DBS, STP	Sunanda Chemicals-Fire Stone
10.	PU Elastomeric Membrane (spray applied for Deck Waterproofing)	BASF	Fosroc, Kryton	Sika, STP
		Reynoarch	Pidilite	MYK Arment
11.	Glasswool Insulation	UP Twica	Poly Glass	Owncorning, Unidus
12.	Insulation	Roxul Rockwool	Unidus	
13.	Swellable Bar	Pidilite	Fosroc	Keshun
		Hayakawa		
14.	Roofing	Kingspan	Kalzip, APL Apollo	Rigidal
15.	Straight walkways	Kingspan	Wulmet	Kartosar
16.	Fall Arrest System	Kingspan	Wulmet	Kartosar
17.	Step Walkways	Kingspan	Wulmet	Latchways
18.	Seam Clamp	Kingspan		
19.	Roof hatch	Kingspan	Nystrom	Babenko

20.	Polycarbonate Sheet	GE Plastic (SABIC)	Gallina	DPI Daylighting
		Lexan	Tuflite	Polygel
21.	Decking Steel Sheet	TATA Steel	Lloyds, RINL	JSW, APL Apollo
22.	Shuttering/ Formwork – Ply / Steel	Ply-Archid	Virgo	For Steel – MS Plate
		Merino	Kitply	Century
23.	Rebarring Chemical	Hilti	3M India	Birla, Wuerth
24.	Fire Sealant	Hilti	3M India	Fischer, Wuerth
25.	Parallel Threaded Couplers (Compliant to IS 16172:2014)	Dextra	Halfen Moment	G-Tech
26.	Extruded Polysterene Board	Penguin	Kiwi	Epack
27.	AAC Block	Aerocon	Builtech	Instablock
		Finecrete	Magicrete	JK
28.	AAC Mortar	Ferrouscrete	Ultratech	JK
29.	Moisture Resistant Board	Saint Gobain	Gyprox	USG Boral
		Greenlam	Duro	Merino
30.	Veneered Particle Board	Merino	Duro	Greenlam
		Kitply	Archid	Jayna
31.	Laminated Particle Board / Laminates / PVC	Merino	Greenlam	Century
		Archid	Duro, Virgo	
32.	Flush door / Laminated Flush Doors	Century	Green	Merino

		Archid	Duro	Century
		Jayna	Kutty	
33.	Toilet Cubicles	Merino	Greenlam	T Line
		Dorma	Green Sturdo	Trespa, Alstone
34.	Hardware for Fire Check Door	Dorma, Pyrotech	AssaAbloy	Hafale, Ozone
35.	Plywood/ Veneer/Laminate	Merino	Greenlam	Century
		Archid	Duro	Jayna
36	Expansion Joint – BEARING	C.S.	Herculus	Z-Tech
		Vexcolt	Devin	Sainfield
		Migua		
37.	Polyster Powder Coating Paints Repellent /Weather Sealant	Nerolac	Berger	Akzonobel
		M.C.Bauchemie	Wacker, Alstone	STP, Acro
38.	Poly-Sulphide Sealant	Fosroc, Dulux	Pidilite	Sika, Reynoarch
		Laticrete	Wacker	Dow Corning
39.	Wall Putty	Birla Wall Care	JK White	Saint Gobain
		Ferroucrete	Berger	Reynoarch
40.	Curing Compound	Fosroc	Sika	Mapei, MYK Arment
		STP	Pidilite	BASF, Reynoarch
41.	Oil Bound Washable Distemper	Asian Paints	Akzonobel, Dulux	Berger
		ICI, Acro	Nerolac, JK Maxx	Ultratech
42.	Acrylic Distemper	Berger	Asian / Acro	JK Maxx, Dulux
43.	Premium Acrylic Emulsion paints	Dulux	Nerolac	Asian Paints
		Berger	Acro	JK Maxx
44.	Cement Primer	BP White (Berger)	Decoprime WT (Asian)	Akzonobel (Dulux)
		Nerolac		
45.	Cement Paint	Snowcem Plus	Berger (Durocem Extra)	Nerolac, (Nerocem with Titanium)
		Asian	Ultratech	Acro
46.	Steel / Wood Primer	Akzonobel (Dulux)	Nerolac	Asian Paints
		Berger	Jenson & Nicholson	JK Maxx, Dulux

47.	soil Textured Exterior Paint	Akzonobel (Dulux)	Asian (Apex Ultima)	Nerolac Kansai (Excel)
		Acro	Spectrum	
48.	Synthetic Enamel Paint	Akzonobel (Dulux)	Asian (Apolite)	Kansai Nerolac (Synthetic Enamel)
		Berger		
49.	Epoxy Paint	Kansai Nerolac	Asian Akzonobel(Dulux)	FOSROC
		ICI		
50.	Epoxy Flooring	Keshun	BASF	FOSROC
		Reynoarch	Berger	
51.	Fire Paint	Asian	Jotun	Akzonobel
52.	Heat Resistant Tiles	Swastik	Thermax	Dalal Tiles
		Unistone		
53.	Gypsum Plaster	Ferrous Crete	Elite (90)	Ultratech
54.	Pre-Cast GRC & GFRC Jaliconcrete	Unistone	Dalal Tiles Industries	Ecovision, Everest Composites
55.	Stainless Steel (Grade-316)	Salem Steel	Jindal Alloys	SAIL
56.	Welding Electrodes	Advani	Oerlikon	Modi
		L & T		
57.	Stainless Steel Hardware (Heavy Duty)	Dorma	Hafale	Geze
		Godrej	KICH	OZONE, Pyrotech
58.	Formwork systems	Peri,	Doka,	Symons
59.	Door Chaukhat (Sal Wood/ WPC)	Rajashree	Jayna	
		Alstone		
60.	Door Teak (Shutter) and Frame	Jayna	Kutty	
61.	Automatic SlidingDoor	Dorma	Ozone	
62.	PVC Door & Frame	Rajashree	Krishna	Jayna
		Alstone		
63..	Kitchen & Wardrob (Modular / Nonmodular)	Sleek	Brown crust	Evoke
		Alstone		
64.	FRP Door & Frame	Jayna	Browncrust	
65.	Drawer Channels	Ozone		
66.	Pot-PTFE bearings	Sanfield	Megaba	
67.	Fire Sealant	Hilti	3M India	Fischer, Wuerth

2. FALSE CEILING				
S. No.	Material	Approved Makes / Brands		
1	False Ceiling – Gypsum	Saint Gobain	India Gypsum	Boral Lafarge
		Armstrong	Eaton	Unidus
2.	False Ceiling – Metal	Saint Gobain	Boral Lafarge	Armstrong
		Saint Gobain	India Gypsum	Eaton
		Unidus	Aerolite	
3.	Gyp Board	Saint Gobain	Boral	Lafarge
4.	Open Cell Ceiling	Armstrong	Durlum	SAS
		New age False ceiling Pvt. Ltd	Hunter Douglas	Unidus, Aerolite
5.	False Ceiling Grid System	Gyproc	Grid System	RK
		Gridline	Armstrong	Boral Lafarge
		Eatone	Unidus	Aerolite
6.	Baffle Ceiling	Hunter Douglas	Durlum	Reynoarch
		New age False ceiling Pvt. Ltd	Armstrong	Unistone
		SAS	Unidus	Aerolite
7.	Accoustical Tile False Ceiling	Armstrong	Lafarge	Himalaya Acoustic
		New age False ceiling Pvt. Ltd	Eaton	Unidus, Aerolite
8.	Acrylic Solid Surfaces	Dupont	L.G-Hymac	Neonex
		Hanex		
3. FLOORINGS				
S. No.	Material	Approved Makes / Brands		
1	Mosaic / Chequered Tiles	Cera	Nitco	Orient Bell
		Dalal Tiles Industries	Unistone	
2.	Ceramic Tiles / Glazed Tiles	Kajaria	Somany	H&R Johnson
		Asian (AGL)	Cera / Nitco	Unistone
3.	Homogenous body Vitrified Tiles (Antiskid / Matt /Glazed)	Somany	Kajaria	Cera
		Asian (AGL)	Nitco	H&R Johnson
		Orient Bell	Unistone	
4.	PVC Flooring	Armstrong	Target	LG

5.	Cement Concrete Tiles (Designer Tiles)	Unistone	Ultra	Eurocon
		Terra Firma	Orient Bell	
6.	Paver Block & Kerb Stone	Nitco	Unitile	Ultra
		Dalal Tiles Industries		
7.	Tile / Stone Adhesive /Tile / Epoxy Grout	Pidilite	Ferrous Crete	MYK Laticrete
		Fosroc	BASF, Unistone	Kryton, Reynoarch
8.	Dash / Anchoring Fasteners	Hilti	Fisher, Wuerth	Bosch
9.	Floor Hardener	Ironite	Fosroc	Hardonite
		Sikka		Koncept
10.	Laminated Floor	Action	Tesa	Pergo
11.	Composite Marble / Granite / Engineered Stone	Asian	Johnson	Kalinga
12.	Water Based Melamine Polish	Asian Paint	Pidilite	ICI Dulux
		Berger	Acro	
13.	Fire Retardant Paint	Asian Paint	Berger Paint	Acro
14.	Clamp System for Dry Stone Cladding	Hilti	Fischer	Bosch
		Rawl Plug	Axel Industries	Koncept, Wuerth
15.	Calcium Silicate False Ceiling	Everest	NCL	Aerolite
16.	Calcium Silicate Ceiling Tile / Board	Gyproc	Boral	Hilux
		Erolite	Armstrong	Aerolite
17.	All Signages	Prolite Autoglow Ltd.	Mr. Illumination Graphics & Safety Pvt. Ltd.	
		Ladwa's	Print Studio International	

4. GLAZINGS				
S. No.	Material	Approved Makes / Brands		
1.	Anodised Aluminum Hardware (Heavy Duty)	Hardima	Indalco	Hindalco
		Everite	Godrej	
2.	Aluminum Structural (Members – Windows, Glazing and Partitions)	Jindal	Indalco	Hindalco
		Nalco	Bhoruka	

3.	Glazing Structural / Suspended / Skylight	Saint Gobain	Pilkington	Glaverbal
4.	Clear / Float / Frosted Glass	Saint Gobain	AIS	Pilkington
		MODI Guard	Atul	
5.	Glass Spider Fittings	Dorma	Hafale	Ozone
6.	Stainless Steel Railing, Accessories etc. in Grade 316	Dorma	D-line	Geze
		Ozone	Dorset	Technorail, Konzept
7.	Hermitically Sealed performance glass Toughened Glass	Saint Gobain	Guardian Glass	Pilkington
		Modiguard		
8.	Fire Rated Vision Panels	Pilkington	Schott	Ferilite
		Saint Gobain	Glaverbel	Pyroguard
9.	Ceramic panel Cladding	Hunter Douglas	Neolith	Terreal
		Unistone		
10.	Aluminum Louvers	Hunter Douglas	Kawneer	Colt
		Unistone	Reynoarch	Alstone
11.	Aluminium Composite Panels	Alstone	Alucobond, Alubond DACS India Pvt..Ltd	Alpolic
		Aludecor Lamination Pvt.Ltd.		Alstrong Enterprises India Pvt. Ltd.
		Virgo	Reynoarch	
12.	Fly Ash	As per approval of competent Authority		
13.	Friction Stay Hinges	Dorma	LG Sysmac	Dorset
14.	EPDM Gasket	Hanu	Anand	Osaka / Alps
15.	Glass Processor for making DGU / Toughing	Art N Glass	GSC (Noida)	Sejal
		ASAHI	Gold Plus	Kaenat Glass
16.	Mirror Glass	Atul Ltd	Modi Guard	Saint Gobain
		Glalverbel	AIS	ASAHI
17.	UPVC Doors & Windows	Fenesta	Wintech	Aluplast
		Windowmagic	Rajshri	Duroplast
18.	Poly Sulphine Sealant	Wacker	Dow Corning	GE
19.	Silicone / Weather Sealant	Wacker	Dow Corning	GE, Alstone
20.	Wooden Door & Frame	Jayna	Kutty	Alstone

5. HARDWARE				
S. No.	Material	Approved Makes / Brands		
1	Nuts / Bolts / Fastners / Screws	GKW	Atul, Wuerth	Hilti
		Rawlplug	Pyrotech	Ozone, Konzept
2.	Door/Window Fittings –Heavy Duty	Godrej	Everite	Dorset
		Hardwyn	Ozone	
3.	Door Closer-Heavy Duty	Dorma	Godrej	Hettich
		Everite	Hardwyn	Ozone
4.	Die Cast Patch Fittings-Heavy Duty	Dorma	Geze	AssaAbloy
		Hettich	Ozone	
5.	Fire Rated Doors & Frame	Iclean	Shakti	Promat
		Navair	Alhada	GMP
		Pyrotech		
6.	Floor Springs-Heavy Duty	Dorma	Geze	Hettich
		Dorset	Everite	Ozone
7.	SS Mortise lock with one dead bolt and pair of SS handles steel grade SS 304	Dorma	Godrej	Hafele
		Dorset	Pyrotech	Ozone
8.	SS Mortise latch & lock with six levers and pair of SS handles steelgrade SS 304	Dorma	Godrej	Hafele
		Dorset	Pyrotech	Ozone
9.	SS Tower bolt-Heavy Duty	Dorma	Godrej	Hafele, Ozone
10.	SS Butt hinges with ball bearing grade SS 316	Dorma, Pyrotech	Godrej, Ozone	Ingersoll Rand
11.	Stainless Steel Sliding Door bolts-Heavy Duty	Ingersoll Rand	Hafele, Ozone	Godrej
12.	Pull handle back to back of length 150mm of Steel Grade SS 304	Godrej	Geze	Ozone
		Pyrotech	Dorset	Dorma
13	Pull handle, single side of length 150mm of Steel Grade SS 304	Godrej	Geze	Ozone
		Pyrotech	Dorset	Dorma
14.	Aluminium lever Handles	Hardima	Godrej	Everite
15.	Magic Eye	Ozone	Dorma, Ingersoll Rand	Godrej
16.	Lever handle in SS 316 finish	Dorma	Hafele	Godrej
		Daikin	Ozone	
17	Covered Shelter	Unistone	Etacon	

18	Modular railing, SS Clamp, SS Dustbin, SS Bench	Ozone, Technoraill, Steelex, Koncept
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6. HVAC / VENTILATION SYSTEM				
S. No.	Material	Approved Makes / Brands		
1	Chillers	York	Carrier	Daikin
		Dunham Bush	Trane	
2	Chilled/ Condenser Pumps:	Kirloskar	Bell & Gossett	Wilo (Mather+Platt)
		Grundfos		
3	Cooling Towers	Mihir	Advance	Paharpur
4	Hot Water Generator	Rapid Cool	Emerald	Sandhu
5	Air Handling Units & TFA:			
5 a.	Air Handling Units (Eurovent certified)	VTS	System Air	Stulz
		Flaktwood	Edgetech	Zeco
5b.	Cooling Coil	As per manufacture standard of AHU		
5c.	Fan	Kruger / Comferi	Airflow	Nikotra
		Rallison		
6	Fan Coil Unit & Cassette Unit	Sinko	Carryaire	Trane
		Rallison		
7	Split AC	Daikin	Hitachi	Toshiba
		Carrier		
8	M.S. Pipes: - Any dia	Tata	Jindal Hissar	Sail, APL Apollo
9	Butterfly Valves	Advance	L&T	Danfoss
		VTM	Axim	Castle
10	Motorized Butterfly Valve	Belimo	Danfoss	Siemens
		Oventrop	Advance	Castle
11	Pressure independent control valve (PICV)	Belimo	Danfoss	Siemens
		Oventrop	Advance	Castle
12	Check Valves	Advance	L&T	Danfoss
		VTM	Axim	Castle
13	Ball valve	Zoloto	Audco	RC
		VTM	Axin	Castle

14	Balancing Valves	Danfoss	Advance	Danfoss
		VTM	Axin	Castle
15	2-way Modulating Valves with Thermostat	Belimo	Honeywell	Siemens
16	2-way on off valve with thermostat for FCU	Belimo	Honeywell	Siemens
17	Expansion Bellows	Resistoflex	Easyflex	Areaflex
		Dunlop	Axin	
18	Pot/Y-Strainers	Sandhu	Rapid Cool	Emerald
		Axin		Castle
19	Suction Guide with Strainer	Anergy	Armstrong	Emerald
		Axin		
20	BTU meter	Belimo	Siemens	Honeywell
		Shenitech		
21	RH Sensor	Belimo	Honeywell	Siemens
		Omnicon		
22	Thermostat	Danfoss	Belimo	Honeywell
		Siemens	Omnicon	
23	Pressure Gauge (Industrial Type)	Feibig	H. Guru	Emerald
		Axin		
24	Differential Pressure Switch	Siemens	Rapid Contro	Anergy
		Sant		
25	Thermometers	Feibig	H.Guru	H.Guru
		Emerald	Axin	
26	Closed Expansion Tank	Anergy	Bell & Gossett	Sandhu
		Emerald		

27	Air Separator	Anergy	Emerald	Sandhu
28	Auto Air Vent	Anergy	Rapid Cool	Oventrop
29	Plug Valve	Anergy	Rapid Cool	Castle
30	G.I. Sheets	Sail	Tata	Jindal, APL Apollo
31	MS. Sheets	Hindalco	Balco	NALCO, APL Apollo
32	Fire Dampers	Systemair	Caryaire	Ruskin
		Greenheck		
33	Damper Actuator	Belimo	Sinider	Sinider
34	Grills/Diffusers	Systemair	Caryaire	Titus
		Trox		
35	Fresh Air Louvers	Systemair	Caryaire	Titus
		Trox		
36	Resinbonded Glass Wool Insulation	UP TWIGA	Owens Corning	Kimmco
		K-flex		
37	Protective Coating over insulation (Lag coating)	Pidilite	Foster	Idendan
		CISBOND		
38	Resinbonded Glass Wool Acoustic Insulation	UP TWIGA	Owens Corning	Kimmco
		K-flex		
39	Insulation Adhesive	Pidilite	Foster	CISBOND
		Henkel		
40	Factory Made ducting	Rolastar	Ductofab	Zeco
		Technofab	Ecoduct	
41	Filters (in Air-conditioning system) Ventilation Fans:	Thermodyne	Purolator	Anfilco
		Mackmark		
42	Tube/Vane Axial	Kruger	System Air	Greenheck
43	Inline (Centrifugal)	Kruger	System Air	Caryaire
		Ostberg		
44	Propellr Fans	Kruger	GE	Crompton
		Rallison		

45	Air Washer/Scrubber	Edgetech	Zeco	System Air
		VTS	Crystal Air	
46	Fan	Kruger	Nikotra	Comferi
		Rallison		
47	Pump	Kirloskar	Beacon	Wilo
48	Filters	As per manufacturer's standard		
49	Heat Recovery Wheel units	DRI	Enventus (Ostberg)	Flakt
50	Heat Pipe	HPT	SPC	VTS
51	Vibration Isolator	Easyflex	Resistoflex	Dunlop
52	Anchor/Fastener	Hilti	Fisher	Gripple
		Rawlplug	Pyrotech	Wuerth
53	Duct Support	GPL	Gripple	Easyflex Zip-Clip
54	PUF Saddles	Lloyds	Beardse II	Malanpur
55	FCU link	ATS (CSI)	Oventrop	CIM
56	Sound Attenuator	Ruskin	Systemair	Trox
57	CO Sensor	Siemens	Omicron	Johnson
58	VFD	Danfoss	ABB	Siemens
		Fuji		
59	CO2 Sensor	Siemens	Omicron	Johnson
60	Demand Ventilation System	Fanair	Asawa	
61	Equipment	Conaire	Glenstorm	Tristar
62	Motorized Assembly	Conaire	Glenstorm	Tristar
63	Integrator	Conaire	Glenstorm	Tristar
64	High Density PVC Pipe	Finolex	Kissan	Prince
		Supreme	APL Apollo	

65	UVC	Universal UV Solutions	UVTronix	Supco
66	Online Scale preventer	Scale Guard	Ristello	Supremo
67	Electronic Air Filtration System	Honeywell	Trion	Trane
68	VRF/VRV Syatem	Daikin	Tosiba	Samsung
		Mitsubishi Electric	Midea	
69	Copper Refrigerant Pipe	Camipro	Rajco	Mandev
70	Chilled Water Hi-Wall & Cassette	Midea	Caryaire	Edgetech
71	AHU / FCU Motor	ABB	Crompton	Siemens
72	PACs	Stuluz	Emerson	BlueBox
73	Flexible Duct	UP Twiga	Caryaire	Atco
74	Aluminium Sheet	Nalco	Hindalco	Balco
		Virgo		

7. PLUMBING & SANITARY				
S. No.	Material	Approved Makes / Brands		
1.	Sanitary Fittings & Accessories	Hindware	Kohler	Cera
		Jaquar	Somany	Roca, Grohe
	Concealed cistern	Hindware	Kohler	Roca
		Geberit	Cera	
	WC connector	Geberit	Kohler	Cera
	Auto Urinal Flush System	Cera	Kohler	Roca
Grohe				
2	CP Brass Fittings	Jaquar	Kohler	Parryware
		Hindware	Grohe	Cera
3	G.I. / M.S. Pipe	Tata	Jindal (Hissar)	Surya Prakash
		APL Apollo		
4	G I Fittings	Unik	KS	Zoloto

		R-Brand	Surya	
5	SS Pipes (316 Grade)	Jindal	Tata	VIGA
6	HDPE Pipes	Reliance	Jain Irrigation	Oriplast
		Vertex	West Well, APL Apollo	Supreme
		Vectus		
7	DI Pipes	Electrosteel	Jindal	Tata Ductura
8	DI Fittings	Kartar	Electrosteel	Kalinga
9	CI Fittings	Neel	Kartar	Electrosteel
10	Float Valve	IVC	Leader	Zoloto
		KSB		
11	UPVC Pipe and Fittings	Astral	Supreme	Finolex
		Prince	AKG	Surya Roshni
		Vectus	PKS Export	APL Apollo
12	PVC Pipe & Fittings	AKG	Supreme	Finolex
		Surya Prakash	Vectus	APL Apollo
13	CPVC Pipes & Fittings	AKG	Astral	Supreme
		Finolex	Surya Prakash	Vectus
		SFMC	APL Apollo	
14	Centrifugally Cast (Spun) Iron Pipes & Fittings	NECO	SKF	Electrosteel
		Saint Gobain	BIC	
15	Centrifugally Cast (Spun) Iron (Class LA) Pipes	NECO	Electro Steel	TATA
		BIC		
16	Centrifugally Cast (Spun) Ductile Iron Pipes & Fittings	Electro Steel	Jindal (Hissar)	Kalinga
17	C.I. Manhole covers, Frames & GI Gratings	NECO	RIF	BIC
		SKF	Jain Spun Pipe Co.	
18	SFRC Manhole covers & gratings	KK	OCR	Pargati
		T-CON		
19	RCC manhole Covers & Frames	KK manhole	Grating Co. Pvt Ltd	
20	D.I. Manhole Covers & Frames	Neco, RPFM		Kartar
21	Gun Metal Valves, Globes	Kartar	Sant, Castles	Zoloto

22	NRV - Ball type - Sewage application	Danfoss	ZALOTO AUDCO	Castle
23	Bellow Type, Pressure Reducing Valve	CIM	Danfoss	Honey well, Castle
24	Floor Taps	Jayna	Chilly	Nirali
25	Water Meter	Prima	Zoloto	Leader
		Capstan		
26	Brass Stop & Bib Cock	Zoloto	Sant	L&K
		Leader	Astral	
27	Non Return Valve (Check valve) 1/2" to 1 1/4"	Zoloto	Sant	Leader
		Kartar	Advance	Castle
28	Brass Ferrules	Dhawan Sanitary Udyog	Kalsi	Annapurna
29	Polythylene water storage tank	Sintex	Polycon	SPL
		Vectus		
30	Insulation for hot water pipes	Kaiflex	Armaflex	Careflex
		Lloyd		
31	Insulation for external/ exposed hot water pipe	Kaiflex	Armaflex	Careflex
		Lloyd		
32	Pipe protection for external water supply pipes	Pypkote	Armaflex	Makpolykote
33	GI/MS Pipe Protection Wrapping & Coating	IWL – Pypkote	Rustech - Coatek	
34	Stainless Steel Sink -316	Neelkanth	Nirali	Jayna
		Cera	Anupam	Franke Fabre
		Franke	Kingston	APL Apollo
35	Stoneware Pipes	Perfect	Hind	Burn
		RK		
36	Gully Traps	Perfect	Hind	Burn
		RK		
37	RCC Pipes (NP-2)	Lakshmi	Sood&Sood	Jain & Co.
		Pragati Concrete		
		STP	HTL	Hydro Tech

38	Atactic Polypropylene	Pidilite		
39	C.P. Waste, Spreaders Urinal Flush Pipes	Jaquar	Hindware	Cera
40	Check Valve - Dual Plate	Advance	Danfoss	Kirloskar, Castle
41	Ball Valves / wafer type Valves	Zoloto	Leader	AIP, Castle
42	Check Valve Forged Screwed	CIM/ Leader	Sant	Castle
43	Ball Cocks	GPA	Sant	L&K
44	Air Release Valves	Exflame	Leader	Zoloto, Castle
45	Pipecoat	IWL Ltd	Pypkote	STP
46	CI Double Flanged Sluice Valve	Kirloskar	IVC	Sondhi
		Kejriwal		
47	Adhesives	Nuwood	Duratuff	Pidilite
48	PE-AL-PE	Kitec	Jindal	Supreme
49	Solar Water Heating System	Tata BP	Honey Well	Solar
50	Water Heater (Geyser)	Venus	Bajaj Spherhot	Photon
		Racold	Havells	
51	Hand Drier	Euronics	Duravit	Grohe Kohler
52	Backflow preventer (Water Hammer)	Normex	Kessel	Lahri
53	Drinking Water Cooler	Blue Star, Usha	Voltas	Oasis
54	Anti-Vibration Mounting & Flexible connections	Resistoflex	Dunlop	Flexionics
55	Electronic Flow Meter	Blue Star	Usha	Voltas
56	Temperature Sensor/ Gauge	Forbes Marshall	Danfoss	Wika
57	Rain Water Harvesting System	Through Reverse boring System		
58	Soil anchor for Diaphragm wall	Tata	Usha Martin	Frayssinet India, Dynamic

8. FIRE FIGHTING				
S. No.	Material	Approved Makes / Brands		
1	M. S Pipe	Tata	Jindal Hissar	Prakash Surya
		SAIL	APL Apollo	
2	G. I Pipes	Jindal Hissar	Prakash Surya	SAIL
		TATA	APL Apollo	
3	Forged Fittings	SS	VS	True Forge
4	ERW / butt Welded Fittings	MEC (Jainsons)	Unik	
5	Groove Fittings (UL listed)	Victaulic	Jainson	New
6	Ball Valve / Gate Valve (Gunmetal)	Sant	Leader	Zoloto
		CIM		Castle
7	Butterfly Valve	Zoloto	Kirloskar	Leader
		Audco		Castle
8	Motorized Butterfly Valve	Advance	AUDCO	L&T
		Zoloto		Castle
9	Balancing Valve	Advance	Utam& VTM	L&T, Castle
10	Non Return Valve	Advance	Utam& VTM	L&T, Castle
11	Y-Strainer	Emerald	AUDCO	kirloskar
		Zoloto		Castle
12	Pot Strainer	Rapidcool	Emerald	Sant
		AUDCO	Zoloto	Castle
13	Thermometer	Emerald	Anergy	Honeywell
14	PICB Valve	Danfoss	Frees	Ovenrop
		Spirotech	Reflex	
15	Control Valve	HD	Viking (VL Listed)	Castle
16	Airvent	Anergy	Siemens	Emerald
		CIM	Advance	Castle
		Honeywell		

17	Expansion Tank	Anergy	Emerald	
18	Hot Water Generator	Sant	Emerald	Rapidcool
19	Air Pressure Valve	Anergy	Flemco	Castle
		Exflame	Leader	
20	C.I. Double flanged sluice valves	Kirloskar	Zoloto	Sant
		IVC		
21	C.I. Double flanged Non-return valves	Kirloskar	Zoloto	Leader
		IVC		Castle
22	Dual Plate / Wafer Type Non-return valves	Kirloskar	Zoloto	Leader
		IVC		Castle
23	Foot valve with Strainer	Kirloskar	Leader	Zoloto
24	Y-Type / Pot / Suction Strainer	Kirloskar	Leader	Zoloto
		Tyco	Advance	Castle
25	Fire Extinguishers	Zenith	Minimax	Exflame
		Ceasefire	Newage	
26	First Aid Hose Reel Drum	Exflame	Newage	Minimax
27	Thermo Plastic Hose Reels for Drums	Exflame	Newage	Minimax
28	R.R.L. Hose & C.P. Hose	Exflame	Newage	Eversafe
29	Branch Pipe, Nozzle, Coupling etc.	Exflame	Newage	Eversafe
		Minimax		
		Safe Fire		
30	Landing Valves	Exflame	Newage	
		Minimax		
31	Fire Brigade Connections	Exflame	Newage	
		Minimax		

32	Fire Fighting Equipment not covered elsewhere	Superex	Newage	Eversafe
33	Hose Box	Exflame	Newage	Minimax
34	Sprinkler & Rosette Plates	Tyco	Viking	HD
		Exflame		
35	Flexible Connector (Drop) for Sprinkler	Exflame	Viking	Newage
36	Flow Switches	System Sensor	Honeywell	Potter
		Tyco		
37	Inspector Test valve	Viking	Tyco	Hd
38	Pre-Fabricated Structural supports and clamps	Chilly	Hitech	Camry
		Easyflex		
39	Pressure Gauge	Emerald	Fiebig	H.Guru
		Danfoss		
40	Alarm Valve	Viking	Tyco	HD
41	Antsuction& delivery flexible pipe connectors	Easyflex	Resistoflex	Dunlop
		SAIL	Tata Steel Ltd	RINL
42	Flexible Duct Connector	Mapro	kanwal Industrial corporation	Resistoflex
43	Stainless Steel Brach Pipe	Exflame	Minimax	Newage
44	Fireman Axe / Installation Control Valve	Exflame	Minimax	Newage
45	2-way / 4-way FBC	Exflame	Newage	Minimax
46	Sprinkler Heads	Tyco	HD	Omax UL
47	Pipe Protection Pypcoat wrapping	IWL	Taxa	Mac-poly coat
48	Rubber Bellow	Kanwal Industrial Corporation	Resistoflex	AIP Valves

49	Deluge Valve	Safex	Tyco	HD
50	Flexible Drop (UL Approved)	Safex	HD	Kofulso
51	Anti Vibration Pad	Cori Dunlop	among Pipe Support	Easyflex
		Flexionics	Resistoflex	Emerald
52	Motors for Fire Pumps	Siemens	Kirloskar	Crompton
		ABB		
53	Fire Pumps	Kirloskar	Mather & Platt	Grundfoss
		Siemens	Schneider	ABB
54	Electrical Switch Gears	Siemens	Schneider	ABB, L&T
55	Power and Control Cables	Universal	Polycab	Havells
		Finolex	Grandlay	
56	Control Panel of Terrace Pumps	SPC Electrotech	Adlec	Tricolite Elect Industry
		RST	Ambit	EVA
		Neptune	Regent Switchgear	
57	Voltmeter & Ammeter	Schneider	Neptune	Rishabh
		Conserve	ABB	
58	Indicating Lamp and Selector Switches	BCH, ABB	Rishabh	Conserve
59	CT	AE	Kappa	Nutech Electrical
60	MCCB / MPCB / MCB/RCCB	Siemens	Schneider	Legrand
		ABB	Indoasian	L&T
61	Contractors / Times, Overload Relays / Starter	L&T, ABB	Siemens	Schneider
62	Annunciation panels	PCD	Agni	Tricolite
		Adlec	Regent Switchgear	
63	Single phase preventor	Minilac	L&T	Siemens
64	Anti Vibration Mounting	Kanwal Industrial Corporation	Resistoflex	Ewren
65	Starter	L&T	Siemens	Crompton
				BCH
		GE	ABB	

66	Current Transformer (Cast Resin)	AE	L& T	Kappa
67	Nuts / bolts	Lakshmi	Unbrako	

9. INSULATION				
S. No.	Material	Approved Makes / Brands		
1	Glass Wool	U.P. Twiga	Owen Corning	Poly Glass
2	Nitrile Rubber	Armacell	K-flex	Aerocell
3	Expanded polystyrene	SHI	Beardshell	Styrene packaging
4	Vibration isolator pads	Resistoflex	Kanwal	
5	Paracoat BPC	Paramount	Pidilite	
6	Stone Wool	Roxul Rockwool	Rock wool IN	Paroc, Lloyd, Shriram
10. PUMPS AND WATER TREATMENT SYSTEM				
S. No.	Material	Approved Makes / Brands		
1	Pumps	CRI		
		Kirloskar	Crompton	
2	Submersible Drainage Pumps	CRI	Kirloskar	Crompton
3	Ball Valves	ARCO	Kirloskar	Zoloto, Castle
4	Butterfly Valve	ARCO	Kirloskar	Zoloto, Castle
5	C.I. double flanged sluice valve	Zoloto	ARCO	
		Kirloskar		
6	Non Return Valve	Zoloto	Sant	Castle
		Kartar	Leader	
7	Y – Strainers	Zoloto	Sant	Castle
		Kartar		

8	Float Switch	Nolta	Danfoss	Honey Well
9	Pressure Gauge	Fiebig	H. Guru	Danfoss
10	Dosing system	Milton Roy	Asialmi	Grundfoss
11	Liquid Level Controllers/ Liquid Level Indicator	Advance	Honey Well	Danfoss
12	Filter / Softener	Ion Exchange	Thermax	Wipro
		Toshiba		
13	Salt Saturator	Ion Exchange	Thermax	Wipro
		Toshiba		
14	Water Meter	Kent	Marshall	Sant
15	Water Treatment Plant	Ion Exchange	Toshiba	VA tech Wabag
		Thermax	Hydro tech Paryavaran	
16	Vessels	Ion Exchange	Thermax	Toshiba
17	Mechanical Seal	Burgmann	Sealol	
18	Grease Trap / Separator	ACO	Wade	Kassel

11. SEWAGE TREATMENT PLANT (STP)				
S. No.	Material	Approved Makes / Brands		
1.	STP System Integrator /OEM	Ion Exchange	Toshiba	VA tech Wabag
2.	C.I. double flanged sluice valve	Kirloskar	Leader	Sant
3.	C.I. Disk Type non return valves (65mm dia and above – Dualplate type)	Kirloskar	Leader	Sant
4.	C.I. Strainer more than 65mm dia	Leader	Sant	Castle
5.	PVC Valves	Cepex	Astral	Audco
6.	C.I./D.I. Manholes cover	NECO	Kartar	SKF
7.	Plastic Encapsulated Foot Rest	KGM	KK	
8.	Filter feed pump	Grundfoss	ITT	WILO / KSB

S. No.	Material	Approved Makes / Brands		
9.	Hydro-Pneumatic Pumping Systems (Flushing, Soft and garden hydrant)	Grundfoss	Kirloskar/ITT	WILO / KSB
10.	Submersible Sump Pumps for collection chamber, qualization tank, Plant room drainage, Filter backwash sump	Kirloskar/KSB	Grundfoss	Crompton
11	Domestic Hydro pneumatic transfer pump	Kirloskar/Grundfoss	DP-Holland	Willo - Mather
12	Pressure Transmitters / Hydrostatic Level Indicators	WIKA	Siemens	Johnson Control
13	Pressure Gauges	Fiebig	H. Guru	WIKA
14	Dosing System	ASIA LMI	Milton Roy	Grundfoss
15	Pump Vibration Pads & Suction & Delivery Flexible Connectors	Easyflex	Resistoflex	Dunlop
16	Pressure Sand & Activated carbon filter	M.S. Prefabricated	BRISANZA	FONTUS
17	Air Blowers	IEI/ Everest	Beta	ABL
18	Ultra Violet Disinfection for Treated Effluent	Alpha UV	Sukrut	Neotec
19	Air Diffusors	BOBKAY	MM Aqua	REHAU
20	MBBR media for Aeration tank	MM Aqua	PP Aqua	Tecpro
21	Dosing Pumps	Milton Roy	Asia LMI	Ion Exchange
22	Sludge Pumps (Centrifugal)	Kirloskar	Grundfoss	ITT Industries
23	Sludge Pumps (Screw)	Roto	UT Pumps	Stork
24	Lamella/Tube Settler media	Ion Exchange	PP Aqua / MM Aqua	Tecpro
25	Centrifuge	Hiller	Alpha	Humboldt Wedag

S. No.	Material	Approved Makes / Brands		
26	UF membrane	Ion Exchange	Suez	Dow
27	MBR membrane	Ion Exchange	Suez	Dow
28	Waste to energy System	Ion Exchange	Thermax	Mitsubishi
29	Pressure Gauge	H. Guru	Fiebeig	WIKA
30	Level Gauge	H. Guru	Fiebeig	WIKA
31	pH Meter	Hach	Toshniwal	Ionix
32	Conductivity Meter	Hach	Toshniwal	Ionix
33	DO Meter	Hach	Toshniwal	Oakton
34	TDS Meter	Hach	Toshniwal	Oakton
35	Ultra Violet Water fier (WTP / STP)	Alfa UV Mumbai	Pentair	Eureka Forbes
36	Syphonic Roof Drainage System	Geberit	Saint Gobain	
37	Ozonisation System	Oraipl	Ozonics	Voltas
38	Geared Motor	Bonfiglioli	Grease Cotton	otova rio
39	Exhausters	Nicotra	Krugger	Green Heck
40	Compost Plant	Excel, Smart Enviro Bombay	Ecoman	Clean India
41	Solid Waste Handling and Conveying	Env Tech (P) Ltd.	Rosa Roca	

12. ELECTRICAL WORKS				
S. No.	Material	Approved Makes / Brands		
1	Air Circuit Breaker	Schneider	Legrand	ABB
		Simens	Mitsubishi Electric	L&T
2	LT Panel / TTA Panel	Indoasian	PEATON Electricals	SPC Electrotech
		ABB	C&S	
3	EV charger	Eaton	Lubi	ABB

4	MCCB	Siemens	Legrand	Schneider
		ABB, C&S	Mitsubishi Electric	L&T, Indoasian
5	MCB/ MPCB/ DB/ RCCB/ SPD	Siemens	Legrand	Schneider
		ABB, C&S	Havells	Phoenix Contact
		Mitsubishi Electric	L&T	Indoasian
6	Modular Type light & power Accessories (Switches, socket etc.)	Legrand	Schneider	ABB
	G.I. Switch Boxes	Havells	L&T, Indoasian	C&S
7	Multifunction Meters	Schneider	Siemens, Secure	Phoenix Contact
		Mitsubishi Electric	ABB, C&S	L&T
8	Power Contactor-AC 3 Rating / Capacitor Duty Contactor / Starter / Thyristor Module	Siemens	L&T	ABB
		Schneider	Mitsubishi Electric	C&S
9	APFC Relay	Epcos	L&T	ABB
		Schneider	Phoenix Contact	C&S
10	Capacitor	Epcos	L&T	Siemens
		ABB	Neptune	Regent Switchgear
11	Electrical Motor / Motor Starter / Contactor / Switches	Siemens	ABB	Crompton
		L&T	Mitsubishi Electric	
12	Bus Ducts / Rising Mains	Schneider	ABB	ECOM
		L&T	SPC Electrotech	C&S
13	FRLS PVC Insulated Copper Wire	Havells	Finolex	Polycab
		Bonton	Batra henlay	
14	Power Cables / Control Cables up to 11 KV	Havells	Finolex	Polycab
		Bonton	Batra henlay	
15	Lugs / Gland	Dowel	Comet	
		AKG	BEC	

16	PVC Conduit	Prince ISI Marked	Norpack	
		Polycab	AKG	BEC
17	MS Conduit ISI Marked	BEC	AKG	NIC
		JPC	APL Apollo	
18	ESE Lightning Protection System / Earthing	Cape Electric	Allied Power Solution	JMV LPS Ltd
19	DLP Trunking	MK Honeywell, Norpack	OBO Betterman	Legrand, Phoenix Contact
20	Floor Trunking / Raceway	PROFAB, AKG	OBO Betterman	SPC Electrotech
21	Cable Tray	PROFAB	Phoenix Contact	SPC Electrotech
		OBO Betterman	AKG	
22	Solar Street Light Fitting with pole	Philips	Bajaj	Havells
		Trilux	Wipro	
23	Ceiling Fan / Exhaust Fan	Crompton Greaves	Havells	
		Orient	Rallison	
24	Octagonal Steel Pole	Bajaj	Transrail	Philips
25	Internal Lighting LED	Philips	Crompton Greaves	Havells
		Wipro		
26	Outdoor Lighting	Havells	Wipro	Philips
27	Automatic Fire System	Honeywell	Rotarex	Agni
28	Solar Panels	Tata Solar Power, BHEL	Photon	Topsun
29	AHF/APPF/ AMF / EPP/ FPP/AVR	Regent Switchgear	EVA	Leopower
30	Automatic Phase Sequence Corrector	Vertiv	Siemens	Leopower
31	Constant Voltage Constant Frequency , Transient	Vertiv	Siemens	Leopower
32	K13 isolation Transformer	Vertiv	Siemens	Leopower

13. SUBSTATION WORKS				
S. No.	Material	Approved Makes / Brands		
1	Transformers	Siemens	Schneider Electric	ABB
		Volt amp		
2	HT Panels	PEATON	SPC Electrotech	ECOM, Regent Switchgear
	VCB HT Panels	Schneider Electric	L&T	ABB
3	H.T. Termination & Joining Kit	Ray Chem	M-Seal	Birla – 3M
4	Cables Glands	Comet	Dowell	Phoenix Contact
		Siemens	Braco	
5	Capacitor bank (ISI Marked)	Epcos	L&T	EVA
		ABB	Siemens	Regent Switchgear
6	Maintenance Free Earthing	Protec	Tercel	JMV LPS Ltd
		Ecosafe		
7	ATS (Automatic Transformer Switch)	ABB	L&T	Schneider Electric
		Vitzrotech		
8	Protection Relays	ABB	Schneider Electric	Siemens
		L&T	Phoenix Contact	
9	Current Transformer (Cast Resin Epoxy Coated)/Potential Transformer	ABB	L&T	Kappa
10	Electrical Digital Meter with LCD Display	ABB, Vallect	Schneider, L&T	Siemens
11	HRC Fuse and Fuse Fitting	ABB	Siemens	L&T, Indoasian
12	Indicating Lamps	L&T, ABB	Siemens	Schneider

14. DG SETS & RELATED ITEMS				
S. No.	Material	Approved Makes / Brands		
1	DG Set	Kirolskar	Sudhir	Jackson
2	Diesel Engine	Cummins	Caterpillar	
		Perkins		
3	Alternator	Cummins	Caterpillar	Stamford
4	Batteries	HBL Power	Exide	Amaron
5	Batteries Charger	HBL Power	Volstat Electronics	Statcon
6	PLC	Schneider	Allen Bradle, Phoenix Contact	Siemens
7	NIS / NGR	Resitech	Essen	RSI Switchgear
		LachhmanElectronics		

15. FIRE DETECTION & ALARM SYSTEM				
S. No.	Material	Approved Makes / Brands		
1	Detectors & Devices – Intelligent multi criteria detector, smoke, heat & duct detectors, control & monitor module, faultisolator, hooters etc. Addressable Main Fire Alarm Panel with Digital Voice Evacuation System	Notifier	Edwards	Siemens
		Honeywell		Apollo
2	Fire Survival Cable	Finolex	Polycab, Bonton	Batra Henlay
3	UPS System	Labotek	Emerson	Schneider
4	Public Address & Back ground music system	Honeywell	Bosch	Bose
		Henrich		
5	Access Control	Bosch	Link	Siemens
			Honeywell	Hikvision
6	Emergency Break Glass Unit	Honeywell	GE	Bosch

16. IP BASED CCTV SYSTEM & SECURITY ITEM				
S. No.	Material	Approved Makes / Brands		
1	NVR & Accessories Encoder Decoder	Honeywell	Bosch	Pelco
		Siemens	Hikvision	Prama
2	CCTV Cameras	Honeywell	Bosch	Pelco
		Siemens	Hikvision	Prama
3	Power Supply	Protec	Semac, Phoenix Contact	Wago
4	Weather proofing housing	Honeywell	Bosch	Pelco
		Siemens	Prama	Hikvision
5	Baggage Scanner	Rapiscan	Smith Detection	Hikvision
		Prama		
6	Door Frame Metal Detector	Hikvision	Prama	Garrett
7	Hand Held Metal Detector	Hikvision	Prama	Garrett

8	Network Switch (L2 / L3)	Cisco	Microsens	HP
		Signamax	Phoenix Contact	Hikvision
9	Multipurpose Poles	KeselecSchreder	Heper	Wipro
10	Digital Lighting	Osram	Heper	Serenity
		Signamax		
11	Boom Barrier	Came	Nice	Beninca
		Godrej	Hikvision	Prama
12	Co-Axial TV Cable	L&T	Havells	Polycab
		Finolex	Skytone	Bonton
13	CAT6 24Port Jack Panel	Tyco	Systemax	Siemens
14	Passive networking – Cat6A cable and accessories	Siemon	Sistemax	Orange Electric
		Hikvision	Prama	Aark
15	Passive networking – Itracks	Siemon	Rittal	Nikon
		Orange Electric		
16	Structured Cabling and components	Schindler	Siemon	Systemax
		Legrand	Tyco	
17	Fire Cable	Finolex	Polycab	Bonton
18	Network Attached Storage	HP, Hikvision	Dell	Lenovo
19	Desktop PC	HP	Dell	Lenovo
20	Professional Display Panel	HP, Dell	Vallect, Hikvision	Lenovo
21	EPABX	NEC	Avaya	Alacatel
17. ELEVATORS & ESCALATORS				
S. No.	Material	Approved Makes / Brands		
1	Elevators/Escalators	Mitsubishi	Kone	Schindler
		OTIS	Johnson	
18. LANDSCAPE WORKS				
S. No.	Material	Approved Makes / Brands		
1	Water Body Vendors/Fountain	Ripple Engineering	Premium Pools	Watcon Water Specialist
		Aqva Star	Certikin	

2	Irrigation Products	Stitchwell Qualite x	Irrigation Products International	Jain Irrigation Systems
19. MISCELLANEOUS / OTHER WORKS				
S. No.	Material	Approved Makes / Brands		
1	Customized Cable tray for multi services, Lighting & LV wiring	BEC, AKG	Leeway Design	OBO Betterman
2	Optical Turnstiles	Boon Edam	Gunnebo	kaba
3	Central Vacuum System	Sistemair	Sachvac	Schonbach
4	Multi Purpose Poles	Keselec	Heper	Wipro
5	Garbage Chute system	Ecotech Chutes	Horizon Chutes	Hardal
6	Waste Compacter bins	Universal e cube	Big Belly Solar	Schonbach
7	Polyurethane Sealent	Choksey	Fosroc	Pidilite
8	Adhesive for Wood Work	Dunlop	Fevicol	Vamicol
		Pidilite		
9	Landscape Furniture	KK Manhole & Grating Co. Pvt. Ltd.	JSL Architecture Ltd	
10	Hdpe Grass Pavers & Hdpe Drain Board	Ovilite	Aceturf	Plydex
11	Ornate Pots (Removable Planters)	Smart Exteriors	Yuccabe	Raunaq Sales
12	Stone slabs – Marble & Granite	R.K.Marble	ArasiEmpexs	Mangla Group
		DBS		
13	Insulated Aluminium Panels	Luxalon	Qbiss	
14	Kids Play Equipment	Koochie	Kompam	
15	Terminal Blocks	Phoenix Contact	Wago	
16	Dustbin	Neelkamal	Supreme	
17	Steel Door Frames	APL Apollo	Jindal, Pyrotech	Navair
18	Flap / Swing Barrier	Prama	Hikvision	Camay
19	Art Work - Sculptures	Kalanishtha Enterprises	Art View Studio	Us India Art & Culture Exchange
		Art Kommune		
20	Furniture's	SFMS Furniture Pvt. Ltd.	Geeken, Rockworth	Godrej, Spacewood office solution
		Featherlite	Herman Miller Geeken	Wipro

20. BMS WORK				
S. No.	Material	Approved Makes / Brands		
1	Standalone DDCs	Honeywell-Comfortpoint	Siemens (PX SERIES)	Johnson Controls Metasys
		Schneider Electric Struxureware	Phoenix Contact	
2	Web Based BMS Software with unlimited license user	Honeywell-EBI	Siemens Desigo	Johnson Controls Metasys
		Schneider Electric Struxureware	Phoenix Contact	ABB
3	Web Based Router / Network Area Controller	Honeywell-Comfortpoint	Siemens Desigo	Johnson Controls Metasys
		Schneider Struxureware	Phoenix Contact	
4	Power & Energy Management Software.	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Phoenix Contact	
5	Duct Temperature Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
6	Immersion Temperature Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
7	Room Temperature Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
8	Duct Humidity Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
9	Room Humidity Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
10	Flow Meter	Schenitech	Honeywell	Kampstrup
		Omicron		
11	Duct Static Pressure Sensor	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
		Veksler	Filpro	Sontay
12	Water Level Switch	Omicron		

13	DP Switch – Water	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
14	DP Switch – Air	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
15	CO2 Sensor / IAQ	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
16	Water Flow Switch	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
17	Pressure Transmitter – Water	Honeywell	Siemens	Johnson Controls
		Schneider Electric	Greystone Energy	Omicron
18	Current Relay	Veris	Seto	Mamac
		Omron	ABB	Omicron, Phoenix Contact
19	Voltage / Current / Power Factor Transducer	SETO	ABB	L&T
		Enercon	SETCO	Situ
		Omicron		
20	Flame Proof Level Switch / Level Transmitter	Veksler	Filpro	Sontay
		Techtrol	Omicron	
21	PH Sensor / TDS Sensor	Honeywell	Hach	Greisinger
		Shenitech	Omicron	
22	Personal Computer and Servers	HP	DELL	LENOVO
		TOSHIBA		
23	Colour Monitor	DELL(ULTRASHARP)	HP(PAVILION)	SAMSUNG (SYNC MASTER)
		ASUS	LG (FLATRON)	Lenovo
24	Printer	HP	EPSON	CANON
25	Copper Conductor Control Cable	Finolex	Skytone	Polycab
		Bonton		
26	Communication Cables / Signal Cable	Finolex	Skytone	Polycab
		Bonton		

27	LAN cables for BMS Network	Belden	Digi-Link	Avaya/Panduit
28	PVC Conduits	BEC	AKG	Norpac
29	Network Switches	Phoenix Contact	HP, Cisco	Extreme