

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, Chandrashekharapur, 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)

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	Ownsorning, 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	Babenco

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	Builttech	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

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

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	Beardseil	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, RPMF		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

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		