

Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL)

Government of India, Ministry of Railways

Tender No.

for

Name of Work: Design and Construction of new Broad Gauge (B.G.) Track connecting Sasaram (SSM) yard with Ara Line over newly Constructed Rail FlyOver (RFO), over IR and DFC Tracks in East Central Railway in the state of Bihar in Connection with construction of EDFC.

E-TENDER DOCUMENT FINANCIAL BID (PACKET-B)

Dec-2022

Employer:

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED (A GOVERNMENT OF INDIA ENTERPRISE)

Under MINISTRY OF RAILWAYS

CGM OFFICE General Manager/Coordination, DDU DFCCIL

Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai) Chandauli -232101, Uttar Pradesh, India

CORPORATE OFFICE

DFCCIL, 5TH Floor, Supreme Court Metro Station Building, New Delhi-110001

GENERAL INFORMATION / DATA SHEET

TENDER NOTICE NO	DDU-EN-SSM-RFO-Track-371
Name of the work	Design and Construction of new Broad Gauge (B.G.) Track connecting Sasaram (SSM) yard with Ara Line over newly Constructed Rail FlyOver (RFO) , over IR and DFC Tracks in East Central Railway in the state of Bihar in Connection with construction of EDFC
(a) Tender Value (in Rs.)	₹ 7,61,74,923
(b) Completion Period	12 months
(d) Date and Time of start and submission of filled Tender Document	NIT and Tender Document can be viewed from 09.12.2022 and Bidding can be started from 20.12.2022 and can be submitted upto 15.00 Hrs of 03.01.2023 through www.ireps.gov.in
(e) Date and Time of Opening of Tender (Technical bids -Packet A)	On 03.01.2023 at 15:30 hrs Opening date of Financial Bid will be Notified later
(f) Validity of offer	120 days from the date of opening of Technical Bid
(g) Retention Money / Security Deposit	5 % of Contract Value
(h) Performance Bank Guarantee	Performance Guarantee (PG) have to be submitted within 30(thirty) days from the date of issue of Letter Of Acceptance (LOA), amounting to 5% of the contract value in the form as give in clause 16.4 of GCC

Summary of Prices

<u>Name of Work:</u> Design and Construction of new Broad Gauge (B.G.) Track connecting Sasaram (SSM) yard with Ara Line over newly Constructed Rail FlyOver (RFO), over IR and DFC Tracks in East Central Railway in the state of Bihar in Connection with construction of EDFC

S. No.	Description of works	Estimated Cost as per USSOR (Rs.)	DFCCIL Updated Cost %	DFCCIL Estimated Cost (Rs.)
1	2	3	4	5
3	Execution of all works as per Schedule "A - I" (NS Item- P.Way)	5,47,61,930.10		5,47,61,930.10
4	Execution of all works as per Schedule "A - II" (NS Item- P.Way Drawing and Design)	15,94,864.86		15,94,864.86
5	Execution of all works as per Schedule "B - I " (Item as per IR USSOR 2019-P.Way)	1,98,18,128.08		1,98,18,128.08
	Total	7,61,74,923.04		7,61,74,923.04

NOTES:

- (i) The Tenderer shall quote single percentage for each Schedule. If the tenderer quotes different percentage (%) above / below againts each items of any schedule (i.e. A-I ,A-II & B-I), his offer will be summarily rejected.
- (ii) The above prices are inclusive of all taxes (GST, Works Contract Tax etc.), Octroi or Local levies
- (iii) If the uniform percentage quoted by the Tenderer does not clearly indicate whether the rates are above/at par/below the estimated rates then through sign convention it will be considered to be on plus side and evaluated accordingly.
- (iv) Rate of item payable to Contractor shall be as per following example:-
 - 1) For Schedule B-I (Updation factor is 1.00, since, above is the rate of DFCCIL over USSOR 2019 of EC Railway). If the rate of any item of USSOR 2019 of EC Railway/Schedule B-I is "X" and
 - a) If percentage quoted by the contractor is 5% above (\pm 5%). Rate payable to contractor = (X) x 1.0 x 1.05
 - b) If percentage quoted by the contractor is 5% below (-5%). Rate payable to contractor = (X) x 1.0x 0.95
 - c) If percentage quoted by the contractor is at par, Rate payable to contractor = $(X) \times 1.0$
 - 3) In case of NS items i.e. Schedule A-I the updation factor shall be 1.0
- The Payment for Rails shall be made by DFCCIL and Transportation of Rails to site will be done by Contractor.

 (v) Transportation Charges may be claimed upon submission of transport challans and certificate from Engineer or its representative at site.

Name of V	Work:- Design and Construction of new Broad Gauge (B.G.) Track connecting Sasaram (SSM) yard	l with Ara L	ine over new	ly Constructed Rail	FlyOver (RFO) ,
	Schedule-A-I TRACK WORKS				
Sr.	Description	Unit	Qty	Rate	Amount (₹)
No.	Description	Cint	Qiy	Kate	riniount (t)
NS-1	Leading miscellaneous materials such as iron work, rails, pipes, wooden logs, stones over pitching stone size, RCC/PCC beams/slabs etc. and all similar articles (each individual article or bundle being more than 3.5m long in the longest direction) by truck, trailor etc. including all loading, unloading and stacking, lead over 500m and upto 10 km. Note: Lead under this item is payable when the same exceeds 500m.	МТ	2000.00	207.63	4,15,260.00
NS-2	Additional lead for every subsequent km or part thereof, over 400 km and upto 1000 km over item nos. 021170 , $021171 \& 021172$ Extra Lead 710 km Bhilai to Sasaram	MT/KM	2000.00	4891.91	97,83,820.00
NS-3	Supply of 60 Kg PSC sleeper(Oridinary sleeper and Bridge sleeper) at 1660 Nos./ Km with all fittings etc. complete for BG main line.(Metal Liners)	No.	12000.00	2017.80	2,42,13,600.00
NS-4	Leading miscellaneous materials such as iron work, rails, pipes, wooden logs, stones over pitching stone size, RCC/PCC beams/slabs, PSC Sleeper etc. and all similar articles (each individual article or bundle being more than 3.5m long in the longest direction) by truck, trailor etc. including all loading, unloading and stacking, lead over 500m and upto 10 km. Note: Lead under this item is payable when the same exceeds 500m.	МТ	3150.00	207.63	6,54,034.50
NS-5	Additional lead for every subsequent km or part thereof, over 400 km and upto 1000 km over item nos. 021170, 021171 & 021172 Extra Lead 350 km Anara to Sasaram	MT/KM	3150.00	2674.27	84,23,950.50
NS-6	Supply of PSC sleepers for bridge approaches with provision for guard rails as per RDSO Drawing No. T-4089 to T-4097 for 60 KG rail.	Set	2.00	41510.00	83,020.00
NS-7	Supply of PSC sleepers for SEJ as per RDSO Drawing No. T-4149 for 60 KG rail.	Set	4.00	26711.00	1,06,844.00
NS-8	Cost of Improved SEJ 60 KG (Complete Set)	Set	4	336864.34	13,47,457.36
NS-9	Cost of Plate screws 24X140 mm as per RDSO Drg no. T3911	No	33000	31.27	10,31,910.00
NS-10	Cost of 10 mm composite GR pad	No	24136	50.715	12,24,057.24
NS-11	GFN Liner for PSC & rail	Set	48272	28.5	13,75,752.00
NS-12	ERC	Each	48272	82	39,58,304.00
	Manufacturing and supplying Fish Plate of different sizes as per specification IRS/T-1 from RDSO approved sources with all contractor's material, labour, tools, all lead & lift etc. and as directed by the Engineer-in-charge:				-
NS-13	Fish Plate 60 Kg (1000mm long & 610 mm long for Guard rail) to RDSO Drg. No. T-5916	Set	350	3942.2	13,79,770.00
	Manufacturing and supplying Glued Joint as per specifications with all contractor's material, labour, tools, all lead & lift etc. and as directed by Engineer in-charge (Rails will be supplied free by Railways):				-
NS-14	Glued Joint of 60 Kg rail to RDSO Drg. no. T-5843	Set	20	9890	1,97,800.00
	Manufacturing and supplying Fish Bolts with Nuts of different sizes as per specifications etc. with all contractor's material, labour, tools & plants and machinery, all lead & lift etc. and as directed by the Engineer in-charge:				-
NS-15	b) Size 25mm x 140mm with nut to RDSO Drg. No. T-1899, conforming to latest IRS specification & alteration	Each	2000	54.63	1,09,260.00
	Manufacture & supply of Grooved Rubber Sole Pad (GRSP) as per RDSO Drg. from RDSO approved sources, as directed by the Engineer in-charge:				-
NS-16	(b) GRSP as per Drg. No. RDSO/T-3703	Each	13249.00	34.5	4,57,090.50
				Total	5,47,61,930.10

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III Comilec	tion with construction of EDFC Schedule-A-I	1			
	DESIGN AND DRAWNG WO		P WAY		
Sr. No.	Description Description	Unit	Qtty.	Rate	Amount (₹)
	Preliminary Design				
	i. Track alignment showing location of gradient post, start and end of transition and circular curve, location of detonator marker, location of whistle Board, location of fouling marks, etc.	Full Job	1	1,59,486.49	1,59,486.49
NS-1	ii. Yard Plans	Full Job	1	31897.2972	31897.2972
	iii. Layout Calculations	Full Job	1	15948.6486	15948.6486
	iv. LWR/CWR plans showing location of SEJs, central pillars	Full Job	1	79743.243	79743.243
	v.Canted Points and crossing with Thick web switches and DS	Full Job	1	79743.243	79743.243
	Definitive Design				
	i.Track alignment showing location of gradient post, start and end of transition and circular curve, location of detonator marker, location of whistle Board, location of fouling marks, etc.		1	1,59,486.49	1,59,486.49
	ii. Yard Plans	Full Job	1	31897.2972	31897.2972
NS-2	iii. Layout Calculations	Full Job	1	47845.9458	47845.9458
N3-2	iv. Sand Humps/ Dead End	Full Job	1	15948.6486	15948.6486
	v. LWR/CWR plans showing location of SEJs, central pillars	Full Job	1	79743.243	79743.243
	vi.Canted Points and crossing with Thick web switches and DS	Full Job	1	95691.8916	95691.8916
	vii.Validation of Track design, drawing components supplied by RDSO	Full Job	1	159486.486	159486.486
NS-3	Setting Out of final alignment with location of all structures	Full Job	1	4,78,459.46	4,78,459.46
NS-4	As Build Drawings	Full Job	1	1,59,486.49	1,59,486.49
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Total

15,94,864.86

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	Schedule-B-I TRACK WORKS							
Sr. No.	Ref. Item no. of US SOR 2019	Description	Unit	Qty	Rate	Amount (₹)		
1	121160	Manual linking of BG track over bridges & its approaches with rails / rail panels of any length and guard rails including leading of Wooden / PSC sleepers and rails from stacks available alongside the alignment to site of work with fixing of all fittings, aligning & levelling correctly to make track fit for normal sectional speed:						
	121162	b) With PSC Sleeper	Track Metre	4100.00	488.38	20,02,358.00		
2	91090	Flash Butt Welding of 90 UTS rails, conforming to IR's Manual for Flash Butt Welding of Rail, using contractor's self-propelled rail cum road / Mobile FBW Plants, tools, equipments and consumables. Item also includes painting and marking of welded joints, pre-straightening & post-straightening of panels and USFD testing of finished weld as directed by engineer incharge for						
	91092	60 Kg on Cess	Each	1000.00	3705.74	37,05,740.00		
3	091010	Supplying Alumino Thermic (SKV) welding portions from RDSO approved sources as per latest RDSO specifications for 25mm gap welding of rail joints including all related consumables, e.g. prefabricated dry mould, luting sand, closing pin, asbestos powder, igniter, thimble, magnesite powder etc						
	091011	(a) For 60 Kg Rail, 3-piece Mould and Compressed Air Petrol heating technique	Each	34.38	3127.56	1,07,525.51		
4	091030	25mm gap 'in-situ' welding and finishing of rail joints as per IR's AT Welding Manual with RDSO approved welding portion and competent welder, labour, tools, equipments complete during traffic block {Item also includes painting & marking of welded joint, as directed} -						
	091031	a) For 60 Kg Rail, 3-piece Mould and Compressed Air Petrol heating technique	Each	70	6371.29	4,45,990.30		
5	121130	Linking of BG track on prepared formation to correct gauge & alignment with Railway's track materials including spreading sleepers at specified spacing, squaring, pairing & fixing rails to sleepers with all types of rail fittings & fastenings including their lubrication as per IRPWM standards. Rate is inclusive of kutcha packing to make track fit for 20 kmph speed:						
	121131	(a) For sleeper density of 1660 sleepers per km	Track Metre	2200	251.23	5,52,706.00		
	121140	Laying of BG new IRS SEJ (Switch Expansion Joint) on PSC / Wooden sleepers with cutting of rails, as required and lubrication including gauging, aligning rails, providing temporary connection with adequate welding gap with adjoining rail and ensuring proper track geometry for 30 kmph speed	Set	4	6250.84	25,003.36		

	I	First or Second Through Packing of track for all				
6		sleeper density including giving a general lift, as				
	131030	desired to eliminate sag after deep screening				
		work, as described in Para-238 of Indian				
		Railways Permanent Way Manual. For PSC sleeper Track (BG) :1660 sleeper				
	131031(1)	Idensity	Track Metre	6109	113.92	6,95,937.28
7		Third or subsequent Through Packing of track				
		for all sleeper density including picking of				
	131040	slacks, as required after second through packing, subsequent to deep screening work, as				
		described in Para-238 of Indian Railways				
		Permanent Way Manual.				
	131041 (1)	a) For PSC sleeper Track (BG) :1660 sleeper	Track Metre	6711	87.63	5,88,084.93
8	()	density De-stressing of LWR/CWR with contractor's				-,,
		labours, tools & equipments inclusive of all lead				
		& lift. Activities include cutting of LWR/CWR into				
		convenient panels of specified length, removal				
		of ERCs, liners, greasing of ERCs and liner contact area, lifting rails and keeping them on				
		rollers provided at every 15 sleepers, working				
	131200	out elongation of rail ends depending on				
		prevailing site conditions, pulling rails with the				
		help of Hydraulic Tensor to achieve the desired				
		elongation, cutting rails, as required, removing rollers and placing rail in position, re-fixing ERCs				
		& liners and adjustment of gap at SEJs :				
		, 31				
	131202	With Contractor's Hydraulic Rail tensor	Track Metre	3500	79.47	2,78,145.00
	131203	Without Rail tensor	Track Meter	3500	69.81	2,44,335.00
9		Carrying out USFD testing of Alumino Thermic				
		(AT) welds on all types of rails, using 0° (2 MHz) double crystal; 70° (2 MHz) 20mm x 20mm				
		single crystal probe for head & flange testing; 2				
		nos. 45° (2 MHz) single crystal with tandom rig				
		for testing from rail top to bottom & for half				
		moon testing and 70° (2 MHz) 20mm x 20mm				
	141030	side looking probe by NBC (NeedBased Concept) method under traffic conditions as per				
	141000	provisions of IR's "Manual & Specifications for				
		Ultrasonic Testing of Rails and Welds" & related				
		instructions duly marking the defects,				
		submission of daily reports and storing back-up data as specified & directed. The rates are				
		inclusive of contractor's men, materials &				
		machines complete unless otherwise specified				
		and directed :				
		With Contractor's USFD machine :				
10	141032	(b) Track having more than 3 rail panels	Each	1200	179.22	2,15,064.00
10		Linking of track on Bridge on Steel Channel sleepers as per approved drawings alongwith				
		fittings, fixing running rails & guard rails				
	191130	including required notching, drilling of holes etc.,				
		as directed and making track structure fit for				
		normal speed. (Rails, steel channel sleeper and				
		all fitting will be supplied by Railways) Broad Gauge Track				
	191131	Drodd Gadgo Mack	Track Metre	100	1023.59	1,02,359.00
		Manufacture of flared portion of Guard Rail by				
		cutting and bending to required shape &				
1	191170	RDSO's approved drawings (Note: (1) Rails	Each Set	2	7591.46	15,182.92
		shall be supplied by Railways; (2) Rate is for one set, i.e. bending of two rails - left and right}				,
		Sing sor, its. soriality of two rails - lott and right;				

191180	Fixing of flared portion of guard rail including fixing of rail screws, fish plates, rubber or MS packing plate, as directed complete as per RDSO's approved drawing. (Rail screw, plate screw, fish plates etc. will be supplied by Railways) Drilling holes 25mm to 40mm dia. with drill twist	Each Set	2	4085.39	8,170.78
191190	in the foot of guard rails for fixing guard rails on bridge	Each	35000	123.22	43,12,700.00
191230	Fabrication & supply of Galvanized Steel Channel Sleepers made from ISMC 150mm x75mm/175mmx75mm/200mmx75mm standard rolled section conforming to IS:2062 as per RDSO approved drawing No 1636/R1/R2 with latest correction slips complete and as directed by Engineer Incharge NOTE: Cost of Steel fittings and GRSP shall be paid separately	MT	60	108647.1	65,18,826.00
				Total	1,98,18,128.08