

GENERAL INFORMATION / DATA SHEET

TENDER NOTICE NO	DDU/EN/RFO/DDU/322/2020
Name of the work	Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc in connection with construction of EDFC
(a) Tender Value (in Rs.)	₹ 2,96,08,57,295.13
(b) Completion Period	24 months
(d) Date and Time of start and submission of filled Tender Document	NIT and Tender Document can be viewed after 00.00 Hrs of 15.01.2021 and Bidding can be started after 00.00 Hrs of 10.02.2021 and can be submitted upto 15.00 Hrs of 26.02.2021 through www.ireps.gov.in
(e) Date and Time of Opening of Tender (Technical bids -Packet A)	On 26.02.2021 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 3% of the contract value in the form as give in clause 16.4 of GCC

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Summary of Prices

Name of Work: Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc 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
2	Execution of all works as per Schedule "A - I" (NS Item)	15,27,30,303.38		15,27,30,303.38
3	Execution of all works as per Schedule "A - II" (NS Item)	5,35,37,355.40		5,35,37,355.40
4	Execution of all works as per Schedule "A - III" (NS Item)	3,69,629.32		3,69,629.32
5	Execution of all works as per Schedule "A - IV" (NS Item)	78,78,877.86		78,78,877.86
6	Execution of all works as per Schedule "B - I" (Item as per IR USSOR 2019)	6,50,28,670.15		6,50,28,670.15
7	Execution of all works as per Schedule "B - II" (Item as per IR USSOR 2019)	62,44,93,290.43		62,44,93,290.43
8	Execution of all works as per Schedule "B - III" (Item as per IR USSOR 2019)	33,80,460.00		33,80,460.00
9	Execution of all works as per Schedule "B - IV" (Item as per IR US SOR 2012)	6,97,62,785.60	9.56	7,64,32,107.90
10	Execution of all works as per Schedule "B - V" (Item as per IR US SOR 2012)	25,21,383.46	12.92	28,47,146.20
11	Execution of all works as per Schedule "B - VI" (Item as per IR US SOR 2012)	71,57,422.27	9.77	78,56,702.43
12	Execution of all works as per Schedule "B - VII "	50,00,000.00		50,00,000.00
13	Execution of all works as per Schedule "C - I"(NS Item)	32,86,71,977.31		32,86,71,977.31
14	Execution of all works as per Schedule "C - II" (NS Item for Reinforcement Steel FE500D only)	1,63,26,30,774.75		1,63,26,30,774.75
	Total	2,95,31,62,929.93		2,96,08,57,295.13

NOTES:

- (i) The Tenderer shall quote single percentage for each Schedule. If the tenderer quotes different percentage (%) above / below against each items of any schedule (i.e. A-I, A-II, A-III, A-IV, B-I, B-II, B-III, B-IV, B-V, B-VI, B-VII, C-I & C-II), 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-IV (Updation factor is 1.0956, since 9.56% above is the rate of DFCCIL over USSOR 2012 of EC Railway).
If the rate of any item of USSOR - 2012 of EC Railway/Schedule B-I is "X" and
 - a) If percentage quoted by the contractor is 5% above (+5%). Rate payable to contractor = $(X) \times 1.0956 \times 1.05$
 - b) If percentage quoted by the contractor is 5% below (-5%). Rate payable to contractor = $(X) \times 1.0956 \times 0.95$
 - c) If percentage quoted by the contractor is at par, Rate payable to contractor = $(X) \times 1.2230$
 - 2) Similarly updation factor for Schedule B-V and B-VI is 1.1292 and 1.0977 respectively and for rest schedules updation factor will be 1.
 - 3) In case of NS items i.e. Schedule A-I, A-II, A-III, A-IV, C-I and C-II the updation factor shall be 1.0

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Sch - A-I Non-Schedule Item						
SN	Ref. Item no.	Description	Unit	Qty	Rate	Estimated Amount
1	NS - 1	<p>Supply, fabrication, erection and launching (within traffic block hours in IR portion) of welded type open web girders of span 76.2 m or as per design as per RDSO standard drg / approved drawing and as per Indian Railway Standard specification for supply, fabrication and erection of steel girder bridges and locomotive turnable (Fabrication Specification) etc Serial No B1 - 2001 (amended up to date) including all incident works etc, Supplying and fixing in position of shop welding/shop bolting with nuts and washers, field bolts, required for complete fabrication of the girders and transportation of the fabricated material at site and erection of the same at place as directed by engineer including metalizing as per Clause No. 39.2.1 of B1- 2001 and launching with all contractor's labour , fuel , consumable, machinery, loading, unloading, tools and plants, material, lead and lift complete job as per specifications and as directed by Engineer.</p> <p>Notes</p> <p>(i) Steel (Plates and Rolled section) shall conform to IS: 2062- 2011. It shall have Sub quality 'BO' & Grade E250 (FE 410) for rolled sections and E350 (FE 490) for plates shall be fully killed and fully controlled cooled. The grade of steel E250/E350 shall be as per standard RDSO drawing and rate shall be inclusive of relevant grade of steel as per Drawing.</p> <p>(ii) The steel Shall be procured only from those firms, which are Established, Reliable, Indigenous & Primary Producers of Steel, having Integrated Steel Plants (ISP), using iron ore as the basis raw material and having in house iron rolling facilities, followed by production of liquid steel and crude Steel.</p> <p>(iii) 40% of rate payment shall be made after Steel material required for fabrication (as per drawing) is received at site</p> <p>(iv) 15% of rate payment shall be made on acceptance of fabricated components at site</p> <p>(v) 20% of rate payment shall be made after erection & launching</p> <p>(vi) (a) 10% of rate payment shall be made after metalizing / Painting (b) 15% of rate payment shall be made after final approval of DFCCIL and successful completion of all works included in this item including metalizing and finishing complete.</p> <p>(vii) No deduction for holes and no addition for riverts / bolts/ welds etc Shall be made</p> <p>(viii) The contractor shall submit the detailed erection drawing and Launching Scheme along with necessary design calculation for approval to DFCCIL /Railway/ CRS before erection and launching of Girder. The Launching Scheme shall be such that it requires minimum duration of Speed Restriction and Traffic Block</p> <p>(ix) Cost of temporary supports/arrangement required for the erection / launching as per Launching Scheme approved by IR/CRS is included in above rates. Nothing extra shall be payable on this account</p> <p>(x) The contractor shall take all safety precautions during execution as per extant rules/ guidelines nothing extra shall be payable on this account</p> <p>(xi) Notwithstanding above, the contractor shall be fully responsible for any mishap that make occur as a result of negligent working. Contractor has to take every precautionary measure for safety of running train during and after launching of Girder.</p> <p>(xii) The rate includes launching under traffic blocks wherever required. However, the rate does not include the cost of possession of traffic / OHE block.</p>	MT	1000	1,39,972.80	13,99,72,800.00

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Sch - A-II Non-Schedule Item

SN	Ref. Item no.	Description	Unit	Qty	Rate	Amount	
1	NS-1	<p>Supplying, stacking, spreading in 200 mm (compacted thickness) and compacting with about 04 passes of 10-12 ton capacity roller, machine crushed track Ballast as per specifications in RDSO IRS-GE-1, June' 2004 with up to date correction slips, if any, and from approved quarry/source, Stacking in trapezoidal shape as per standard profile- complete in all respect. The rate includes levelling/surface preparation of track-bed /stacking-ground, transportation, taxes, royalties etc. with all contractor's labour, fuel, consumables, materials, lead and lift, loading, unloading, tools & plants as a complete job and as per direction of Engineer.</p> <p>Notes-1: (a) 70% of the quoted rate will be after supplying and stacking of ballast at the location approved by Engineer based on the quantity measured in stack. (b) The balance 30% of the payment will be paid after spreading, compacting of ballast over formation including all lead, lift, rehandling complete in all respect.</p> <p>Note-2: Quantity of 200 mm thick (Difference of Initial level and final level) compacted ballast will be calculated by multiplying with length and width of spreaded and compacted ballast and if there is difference noticed in quantity supplied in stack and quantity calculated after spreading and compaction, payment will be made for minimum of the two measurements.</p> <p>Note-3: The final payment against this item properly completed as per description shall be limited to the compacted quantity over the formation, irrespective of any stage payment released as per Note-1 above.</p>	1	cum	8564.40	3,400.00	2,91,18,960.00
2	NS-2	<p>Supplying and stacking, machine crushed track Ballast as per specifications in RDSO IRS-GE-1, June' 2004 with up to date correction slips, if any, and from approved quarry/source, Stacking in trapezoidal shape as per standard profile- complete in all respect. The rate includes levelling/surface preparation of stacking-ground, transportation taxes, royalties etc. with all contractor's labour, fuel, consumables, materials, lead and lift, loading, unloading, tools & plants as a complete job and as per direction of Engineer.</p>	1	cum	10259.83	2,380.00	2,44,18,395.40
Total Amount						5,35,37,355.40	

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Sch - A-III Non-Schedule Item							
SN	Ref. Item no.	Description	Unit		Qty	Rate	DFCCIL Estimated Amount
1	NS - 1	Reinforced Cement Concrete M-30 / M-35 / M-40 grade for RCC deck slab on Steel 'I' girder cast-in-situ, using controlled concrete by weigh batching / using RMC at any height above ground level as per design with contractor's materials, admixture, providing and removing steel shuttering, centring, staging, scaffolding, supports, all labour, tools, plant & machinery, curing, transportation and handling of all lead and lift, taxes, royalties etc complete in all respect and as per direction of Engineer including leaving necessary reinforcement rods for providing parapet, cable duct as per approved drawings and RDSO standard drawings & specifications, as directed by Engineer in-charge but excluding cost of cement & reinforcement steel {cost of cement & steel will be paid as per items under respective schedule items}	1	cum	92	4,017.71	3,69,629.32
		Notes: 1. The rate is inclusive of Centring and shuttering including strutting, propping etc. and removal of form for shuttering and formwork as required for bridge deck-slab. 2. The quantity of cement and reinforcement steel shall be calculated based on approved Design Mix and Structural Drawings which shall be paid separately under respective Schedule items. 3. The quality of concrete shall conform to relevant IS and IR Codes.					
Total Amount							3,69,629.32

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Schedule A-IV ELECTRICAL WORK

S. N.	Description of Item	Unit	Qty	Rate	Amount (Rs.)
1	Concealed wiring of light point / Fan point / exhaust fan/call bell point in heavy gauge PVC conduit pipe as per IS 9537 with PVC insulated single core 1.5 sqmm multistrand copper conductor wire in voltage grade 1100 volt as per IS 694 with ECC of 1/18 SWG Copper wire. Make: Polycab, Anchor, Finolex.	Each	1298.0	254.0	3,29,692.00
2	Concealed wiring of 5 Amp plug point in heavy gauge PVC conduit pipe as per IS 9537 with PVC insulated single core 1.5 sqmm multistrand copper conductor wire in voltage grade 1100 volt as per IS 694 with ECC of 1/18 SWG Copper wire. Make: Polycab, hor, Finolex.	Each	354.0	160.0	56,640.00
3	Supply, Fixing, testing and commissioning of 15/5Amp 5 in 1 combined switch, socket, fuse units duly ISI Approved as per IS: 6538/1971 make: Anchor, EPP. JJ	Each	336.0	126.0	42,336.00
4	Consealed Wiring of main from main distribution board to sub board in heavy gauge PVC conduit Pipe as per IS : 9537 with PVC multistrand copper conductor of size 2 x2.5 sqmm in voltagegrade 1100 volt as per IS: 694 with ECC of 1/18 SWG copper wire, make of re: Finolex, Plaza, Polycab etc.	Mtr	8950.0	87.0	7,78,650.00
5	Concealed Wiring of main from main distribution board to sub board in heavy gauge PVC conduit Pipe as per IS : 9537 with PVC multistrand copper conductor of size 2 x 4 sqmm in voltagegrade 1100 volt as per IS: 694 with ECC of 1/18 SWG copper wire, make of wire: Finolex, Plaza, Polycab.	Mtr	5900.0	126.0	7,43,400.00
6	Concealed Wiring of main from main distribution board to sub board in heavy gauge PVC conduit Pipe as per IS : 9537 with PVC multistrand copper conductor of size 2 x 6 sqmm in voltagegrade 1100 volt as per IS: 694 with ECC of 1/18 SWG copper wire, make of wire : Finolex, Plaza, Polycab.	Mtr	3540.0	137.0	4,84,980.00
7	Concealed Wiring of main from main distribution board to sub board in heavy gauge PVC conduit Pipe as per IS : 9537 with PVC multistrand copper conductor of size 2 x 10 sqmm in voltagegrade 1100 volt as per IS: 694 with ECC of 1/18 SWG copper wire, make of wire: Finolex, Plaza, Polycab etc.	Mtr	2360.0	205.0	4,83,800.00
8	Supply & erection of earthpit as per IS 3043 GI pipe used in size of 50 mm dia x 3 mtrs long medium gauge with alternate layer of charcoal and salt as per Sr. DEE(G) drg no MGS/EL/G/Drg/01/08-09 dt 08.08.08 make of GI pipe: Tata, Jindal, Bansal	Each	60.0	1495.0	89,700.00
9	Fixing, testing and commissioning of ceiling fans with suitable clamps	Each	183.0	68.0	12,444.00
10	Fixing, testing and commissioning of Exhaust fans with suitable clampos (Supplied by Rly.)	Each	61.0	195.5	11,925.50
11	Supply of LED street light luminaires wattage 25 W pressure die cast Aluminium housing with heat resistant toughened glass and IP 65 protection. Make - CG , Philips , bajaj, Surya	Each	30.0	2150.0	64,500.00
12	Fixing of above street light fittings with suitable clamps.	Each	30.0	127.8	3,834.90

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13	Supply of LED light 18 watt K Make : HPL , Havells, Surya	Each	122.0	450.0	54,900.00
14	Fixing of above light fittings with suitable clamps.	Each	122.0	115.0	14,030.00
15	Supply, fixing, testing and commissioning of 32 Amp. DP Main switch. Make - Anchor, havells, Standard.	Each	61.0	167.0	10,187.00
16	Supply, fixing, testing and commissioning of Earth Leakage Circuit Breakers of capacity 25 Amp with sensitivity 300 mA as per IS:8828/IEC898, Make - HAVELLS, SIEMENS, L&T.	Each	61.0	1446.0	88,206.00
17	Supply, fixing, testing and commissioning of 4 Pole 63 Amp MCCB/440 V AC with sheet steel encloser Make: Seimens, L&T, havells.	set	20.0	5225.0	1,04,500.00
18	Providing and fixing medium grade GI pipes of 80 mm dia complete with GI fittings including trenching and refilling etc. for external work Make of GI pipe : Tata, Jindal, Bansal	Mtr	60.0	760.4	45,621.00
19	Supply, fixing, testing and commissioning of 3 way DB with 03 Nos. SP MCB 16 Amp. / 240 V as per IS 11039/ 83 (Reaffirm 2005) - 8828 / IEC 898. Make - Siemens, Standard, Havells, Hagers .	Each	61.0	552.0	33,672.00
20	Erection of 2nd hand Rail pole/Tubular Pole 20 feet Long in trnch 8'x3'x5' mm in the ratio 1:3:6 of cement, sand, stone chip	Each	30.0	238.2	7,145.10
21	Foundation of pole in with PCC concrete M-10 size 90x 90x 150 cm	cum	33.9	1475.3	50,013.69
22	Muffing from ground level to 18" height with cement sand and stone chips of 12mm to 20mm in ratio of 1:2:4.	cum	0.9	1474.6	1,327.16
23	Scrapping, cleaning, painting of rail pole after cleaning the pole including bracket with red oxide paints from top to the ground level and 2nd coat of black enamelled paints finish upto height of 5' long from ground level on all the side of the pole and 2nd coat of aluminium paint of remaining portion of the poles is to be painted. .	Each	30.0	164.5	4,933.50
24	Wall clamping of cable on wall /bridge through suitable clamp of size 50 x 6 mm of MS flat or catenary of cable through 8 SWG GI Wire with suitable clamps (As per site requirement)	Mtrs	400.0	33.0	13,200.00
25	Digging of trenches 1 mtrs deep x 60 cm wide in all types of soil such as ordinary soil, hard soil, mixed with morum, hard clay, soft & hard rock etc.	Mtrs	1200.0	21.7	26,004.00
26	To pack soft soil and sand below and above after laying single cable and 2nd class of 12 cm (4.5") above and right angle to trench laying the bricks 6 Cm (2.5") longitudinally all along the trenches over the cable to protect the cable from the external injury.	Mtrs	1200.0	31.3	37,596.00
27	Laying of the above cable in the trench as per IS: 1255/1983(latest version).	Mtrs	1150.0	10.0	11,500.00
28	Back filling of the trench and ramming the earth all along the trench.	Mtrs	1150.0	10.0	11,500.00
29	Supply, fixing, Testing and commissioning of MS Bracket of size 65 x65 x6 mm with suitable clamps made of MS Flat of size 65 x6 mm	Each	26.0	120.0	3,120.00
30	Supply of 3 Core x 95 Sq. mm HT Cable duly ISI approved of reputed make suitable for 11 kV . Make - Havells, Gloster , NICCO, Polycab	Mtr	600.0	854.0	5,12,400.00
31	Supply of Armoured XLPE LT Cable of size 3.5 x 120 Sq. mm.	Mtr	1000.0	345.6	3,45,570.00

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32	Supply of electric fan capacitor type sweep size 1200 mm, type of regulator fitted in ceiling fan, electronics ISI marking, BEE star rating suitable for operation on single phase AC, 230V, 50Hz:- ISI approved Usha, Havells, Kaitan, Bajaj Make	Each	183.0	1188.0	2,17,404.00
33	Supply of single phase Propeller type Ventilating 04 Poles Exhaust fan of 300 mm. Sweep with louver shutter. Make - Madhuban EX 4-15	Each	61.0	1698.8	1,03,623.75
34	Supply of 11nd hand Rail Pole	Each	30.0	2000.0	60,000.00
35	Fixing testing and commissioning of electronic energy meter	Each	61.0	36.0	2,196.00
36	Single phase energy meter Class 1, 10-40A, 240V	Each	61.0	490.0	29,890.00
37	Supply, Installation, Fabrication, testing and commissioning of LT cubical panel Board comprising with following items (dimension of panel 4.2 x 2.1 x 1 mtr approx) Incoming (i) ACB -02 nos, type MDO 4 pole, Rated current 800 Amp as per Siemens cat no. 3WT 80851AA04AB2, Make L&T, Siemens or similar. (ii) voltmeter with selector withch-2 nos., make AE or similar. (iii) LED phase indicator lamp-06 nos make L&T, Siemens or similar. Outgoing: (i) switch disconnector units -01 nos rated current 1000 Amp as per Siemens type 3 KA 1030-01YA00 make : L&T, Siemens or similar (ii) ACB- 2 Nos type MDO 4 Pole, rated current 630 Amp as per Siemens cat no. 3WT 8065- 01AA045AB2 make L&T , Siemens or similar . (iii) MCCB - 05 No, rated current 140-200 amps, Breacking capacity: 35 KA, As per Siemens cat no. 3 VT 8320- 0B040A-2, make - L&T, Siemens or similar. (iv) MCCB-03 Nos, rated current 280-400 Amps , Breacking capacity: 35 KA, as per Siemens cat no. 3 VT8440 1BA040a-02, make -L&T, Siemens or similar (v) Ammeter with selector switch and CT- 12 sets, make of Ammeter- AE or similar and make of CT - Kappa or similar (v) Copper Bus Bar 3 phase.	Set	1.0	1207250.0	12,07,250.00
38	Supply , fixing , testing and commissoing of LT Cubical Panel board of size 135 x195 x45 Cm. and thickness 2 mm. comprising of the followings : (1)- For INCOMING 4 Pole 800 Amp. Cap. /415 V A.C. MCCB =02 Nos. , Make - ABB, GE, Siemens, L&T, Havells, Standard, For Outgoing: (1)- 4 Pole , 200 Amp. Cap. / 415 V A.C. MCCB: 04 Nos. Make - ABB, GE, Siemens, L&T, Havells, Standard (2)- 4 Pole, 125 Amp. Cap. 415 V A.C. MCCB = 02 Nos. make: Make - ABB, GE, Siemens, L&T , Havells, Standard (3)- 4 Pole , 63 Amp. Cap. 415 V A.C. MCCB = 02 Nos. make : Make - ABB , GE , Siemens , L&T , Havells, Standard (4)- Voltmeter (0- 500 V) with selector switch , Ammeter with selector switch Make - Kaycee, AE with CT 800/5, Make - Kappa and Copper Bus bar 800 Amp. of requisite size as per Panel size of 3 Phase and Neutral with other accessories complete in all respect.	Set	1.0	367000.0	3,67,000.00

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39	Supply (except rail pole), fabrication, & erection of 'H' Pole structure bracing with angle iron 50 X 50 X 6 mm & 75 X 40 X 6 mm channel nut bolt, rail pole length exceeding 10 m but not exceeding 13 mtr direct in ground including excavation refilling with cement concrete 1:3:6 (Cement, concourse sand, 40 mm graded stone nominal size) made of foundation 20 mm X 20 mm continued upto 30 cm above ground level etc. as per required.	Set	2.0	170000.0 0	3,40,000.00
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40	Supply, making, testing & commissioning of Maintenance Free earthing Electrode as per RDSO Specification No. RDSO / PE / SPEC / PS / 0109 (Rev-0) 2008 (Unit Capacity 3 KA Primary Conductor, Earth Soul make or similar. Earthing Electrode for earthing in Power supply upto 33 KV Model G 503 length = 3000 mm , Outer Shell dia. 50 mm. Outer shell thickness = 3.25 mm. , Inner Shell dia. 25 mm. , Inner Shell thickness 3.25 mm , Terminal size 30 x 10/12 x 12 Galvanisation outer shell 80-100 Micron , Inner Shell 200-300 micron, Diameter 25 mm. and Electrode diameter - 50 mm. x2000 mm as per Sl. No. 01 of Item No. 8-1-2-7 of RDSO Specification) and connecting to the equipment with 40 x 6 mm GI strip 10 mtrs with chamber complete in all respect as per direction of site engineer . Earthing Electrode compound both should be tested by CPRI. Make Required	Each	6.0	22378.0	1,34,268.00
41	Supply, fixing, testing and commissioning of triple pole GOS suitable to operated on 3 phase 11 KV AC supply of 400 Amp. Cap. 4 insulator type with DO fuse unit and operating rod with locking arrangement etc. ISI approved Make - Rastriya Electrical & Engg, National, Jaipuria Brothers	Each	2.0	17133.0	34,266.00
42	Supply , fixing , testing and commissioning of 11 KV Indoor type heat shrinkable type cable end sealing box suitable to 3 x 70/95/120 Sq. mm. duly ISI approved complete in all respect Make- Denson, Raychem, RPEG	Each	4.0	10100.0	40,400.00
43	Supply,fixing,testing and commissioning of 11 KV indoor type heat shrinkable type cable end sealing box suitable to 3 x 120-185 sqmm duly ISI approved complete in all respect Make - Denson, Raychem, RPEG	Each	4.0	10100.0	40,400.00
44	Supply, fixing, testing and commissioning of 11 KV outdoor type heat shrinkable type cable end sealing box suitable to 3 x 120- 185 sqmm duly ISI approved complete in all respect Make - Denson, Raychem, RPEG	Each	4.0	13800.0	55,200.00
45	Supply, fixing , testing and commissioning of 500 KVA, 11000/ 415 volts step down distribution transformer 3 phase 50 cycles oil immersed naturally cooled (ONAN) core type double wound with cooper conductor having +/- 2.5% to 5.0 % off circuit tapping on HV to vary HV 50/55 degree centigrade temperature rise in oil and winding respectively, high voltage side connected in delta whereas low voltage side connected in star having vector group reference DYN11 with neutral of the secondary winding brought out for earthing pole mounted outdoor type having porcelain bushings on HV and LV sides complete with first filling of oil as per ISS:355 and other fittings and accessories as per ISS:2026 Make:ABB	Each	1.0	675000.0	6,75,000.00
46	Supply of XLPE LT Armoured aluminium cable 4x 25 sqmm	Mtrs	1000.0	89.0	89,000.00
47	Supply of Ding-Dong Call Bell. Make-Anchor,EPP,JJ,Arkaylite	Each	61.0	83.4	5,086.79
48	Fixing, Testing and Commissioning of Ding- Dong Call Bell	Each	61.0	9.3	565.47
TOTAL					78,78,877.86

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Annexure of Sch B-I						
SN	Ref. Item no. of US SOR 2019	Description	Unit	Qty	Rate	Amount
1	011011	<p>Earthwork in cutting (classified) in formation, trolley refuges, side drains, level crossing approaches, platforms, catch water drains, diversion of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, machine & materials and removing & leading all cut spoils either to make spoil dumps beyond 10m from cutting edge or for filling in embankment with leads within 2 km on either side of cutting edge, lifts, ascent, descent, loading, unloading, all taxes / royalty, clearance of site and all incidental charges, bailing & pumping out water, if required, etc. complete as per directions of the Engineer-in-Charge. The work is to be executed as per latest / updated edition of "Guidelines for Earthwork in Railway Projects" issued by RDSO, Lucknow. Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the Special Conditions of Contract.</p> <p>[Note - (i) All usable earth arising from cut spoils shall be led into bank formation and Unusable spoils shall be dumped / stacked (ii) All hard rock /and boulders not fit for filling will be stacked by the contractor and will be property of the Railways.]</p>				
(a)	011011	In all conditions and classifications of soil except rock	1 Cum.	85296.26	137.57	11734206.49
2	012010	<p>Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps, trolley refuges, rain bunds, if provided, platforms etc. with earth, suitable for embankment as per RDSO latest Specifications and guidelines GE: G-14 of Soil Quality Class SQ2, excavated from outside railway boundary entirely arranged by the contractor at his own cost including all leads, lifts, ascents, descents, crossing of nallahs or any other obstructions. The item shall include demarcation and setting out of profile, site clearance, removing of shrubs, roots of vegetations growth, heavy grass, benching of existing slope of old bank, all handling /re-handling, spreading in layers with motor grader, bringing the moisture content to OMC, mechanical compaction to specified density and dressing of bank to final profile as a complete job. The payment shall be made as per finished profile and the rate shall include all costs including taxes, octroi, royalty etc. except for mechanical compaction which shall be paid extra under relevant item. Cut trees shall be property of railways and to be deposited in the railway godown unless specified otherwise in the</p> <p>Note: Payment under this item shall be made only upto the thickness as approved by Engineer-in-Charge. Any additional thickness executed shall be paid under the item of Earthwork in filling in embankment for Soil Quality Class SQ1.</p>	1 Cum.	26933.00	296.55	7986981.15
3	012040	Extra for mechanical compaction of soil in embankment with contractor's rollers of suitable capacity, type and size to achieve specified density as per specification, testing as per IS codes including cost of water, T&P, consumable and all labour as a complete job. The work is to be executed as per Latest edition of "Guidelines for Earthwork in Railway Projects" issued by RDSO, Lucknow.	1 Cum.	71821.00	18.12	1301396.52
4	12010	<p>Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps, trolley refuges, rain bunds, if provided, platforms etc. with earth, suitable for embankment as per RDSO latest Specifications and guidelines GE: G-14 of Soil Quality Class SQ1, excavated from outside railway boundary entirely arranged by the contractor at his own cost including all leads, lifts, ascents, descents, crossing of nallahs or any other obstructions. The item shall include demarcation and setting out of profile, site clearance, removing of shrubs, roots of vegetations growth, heavy grass, benching of existing slope of old bank, all handling /re-handling, spreading in layers with motor grader, bringing the moisture content to OMC, mechanical compaction to specified density and dressing of bank to final profile as a complete job. The payment shall be made as per finished profile and the rate shall include all costs including taxes, octroi, royalty etc. except</p> <p>for mechanical compaction which shall be paid extra under relevant item. Cut trees shall be property of railways and to be deposited in the railway godown unless specified otherwise in the Special Conditions of Contract.</p>	1 Cum.	44888.00	275.11	12349137.68
5	013050	Turfing / planting, including all lead & lift and watering as required until properly rooted with. Note - Initially payment of only 40% will be made. Balance 60% will be paid only after 3 months of maintenance period, if the turfing is properly rooted.				

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(a)	013051	Turfing with sods, 10cm thick and 20cm square closely laid	1	Sqm	205.12	5872.21	1204507.72
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6	012050	<p>Providing of Blanketing over finished formation as per latest RDSO specifications and procedures by supplying materials of approved quality, spreading in layers not exceeding in 30cm in thickness in loose conditions and leveling by motor grader and compacting by vibro roller of required capacity upto desired degree of compaction, finishing to correct profile with all lead and lift, complete in all respect to the satisfaction of the Engineers-in-Charge. Rate includes all labour, material, tools, plants, machinery, testing equipment, testing charges, taxes, Royalties, Octroi etc. and all other incidental charges including compaction.</p> <p>Note: (i) The work shall be carried out as per RDSO Guidelines and specifications for Design of Formation for Heavy Axle Load (Report No. RDSO/2007/GE: 0014 of November, 2009) for mechanically produced blanketing material for Railway Formation.</p>					
		<p>(ii) The Quality Control tests as prescribed vide RDSO/2007/ GE:0014 with up to date amendment shall be arranged at site by the Contractor, for which no separate payment will be made. (iii) The tenderer is requested to go through specifications of blanketing material as per GE-0014 RDSO specifications. The blanketing material is expected to be manufactured in quarry/ site with pug mill type blender from stone crushed material of required quality as per specification with the grading falling in the enveloping curve. The rate includes the CBR tests, Los Angels Abrasion test, Impact tests, Atterberg limits, Grain size analysis, MDD and all quality tests as per specifications to be carried as per the laid down frequency on blanketing material/ compacted finished blanket surface (iv) Measurement will be made on finished profile after compaction.</p>	1	cum	17420	1730.93	30152800.60
7	121070	<p>Provision of barricading with contractor's bamboos / balli vertical post of 75 to 100mm dia. planted at every 2m interval, projecting at least 1.5m above ground level and driven firmly (minimum 0.5m) inside ground and including painting verticals & horizontals with red luminous paints /strips at alternative bay on barricade. Barricades shall be completely removed when no longer required by engineer in-charge. (60% payment shall be made on provision of barricading at work-site)</p>					
(a)	121071	<p>With 3 horizontal bamboo / balli members of minimum 50mm dia. spaced equally</p>	1	RMtr	2000	149.82	299640.00
				Total			65028670.15

Name of Work: Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc in connection with construction of EDFC

Annexure of Sch B-II

SN	Ref. Item no. of US SOR 2019	Description	Unit	Qty	Rate	Amount
1	022060	Providing and laying Plain Cement Concrete 1:3:6 with graded stone aggregate of 40mm nominal size, in foundation and floors, retaining walls of bridges including mechanical mixing, vibrating, pumping and bailing out water where ever required with all materials and labour complete but excluding the cost of cement and shuttering as per drawings and technical specifications as directed by Engineer	1 Cum	5823.80	2455.77	1,43,01,913.33
2	022040	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete of specified grade (Cast in- Situ) using 20mm graded crushed stone aggregate and coarse sand of approved quality in RCC raft foundation & Pile cap including finishing, using Admixtures in approved proportions (as per IS:9103), to modify workability & other properties without impairing strength and durability complete as per specifications and direction of the Engineer in charge. Payment for cement, reinforcement and shuttering shall be	1 Cum	51026.49	2472.32	12,61,53,811.76
3	022050	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete of specified grade (Cast in- Situ) using 20mm graded crushed stone aggregate and coarse sand of approved quality for the following Reinforced cement concrete structural elements up to height of 10 m from foundation top level, including finishing, using Admixtures in approved proportions (as per IS:9103), to modify workability & other properties without impairing strength and durability complete as per specifications and direction of the Engineer in charge. Payment for cement, reinforcement, shuttering shall be paid extra.				-
(a)	022051	Abutment & Pier	1 Cum	39274.00	2719.55	10,68,07,606.70
(b)	022053	Abutment cap, Pier Cap, Inspection Platform & Pedestal over Pier cap, Fender wall, Diaphragm wall etc.	1 Cum	46552.35	2843.17	13,23,56,244.95

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4	022090	Providing, driving and installing Bored cast in-situ Reinforced Cement Concrete piles using Hydraulic piling Rig of specified diameter and length below pile cap of specified grade Design Mix Cement Concrete, using 20mm graded crushed stone aggregate and coarse sand of approved quality, to carry a safe working load not less than specified, excluding the cost of permanent casing pipe and length of pile to be embedded in pile cap etc. complete, concreting by machine batching, machine mixing, scaffolding, using Admixture in approved proportion (as per IS:9103), placing with tremie pipe, chipping off of pile top to remove laitance concrete above cut off level etc., pumping and bailing out water with all labour material complete including crossing of tracks if required, as per approved drawing, specification and direction of the Engineer in charge. Length of the pile for payment shall be measured upto the bottom of pile cap excluding the mud mat. Payment for cement, permanent casing pipe (if any) & reinforcement shall be paid extra.					
(a)	022092	1200mm diameter	1	M	20076.00	9002.76	18,07,39,409.76
5	022010	Earthwork in excavation by mechanical means (Hydraulic Excavator)/Manual Means for foundations and floors of the bridges, retaining walls etc. including setting out, dressing of sides, ramming of bottom, getting out the excavated material, back filling in layers with approved material and consolidation of the layers by ramming and watering etc. including all lift, disposal of surplus soil upto a lead of 300m, all types of shoring and strutting with all labour and material complete as per drawing and technical specification as directed by Engineer in charge. Note: This item will be used for excavation work in connection with other miscellaneous works also. like side drains, foundation for OHE masts and other miscellaneous structures in connection with Gauge Conversion, Doubling, New lines					
(a)	022011	All kinds of soils	1	cum	44255.84	174.58	77,26,184.55
6	022140	Pulse Echo Test (PET) for integrity testing of piles with contractor's men, materials and machines. The rate includes cost of Inspection of site, preparation of pile head and any other unforeseen cost required for the test, submission of reports in triplicate as per satisfaction of the Engineer in Charge at site.	1	Each	36.00	3037.12	1,09,336.32
7	031100	Providing and fixing in position of standard preformed sealed and slab type or strip seal elastomeric type expansion joints for Railway bridge or Road Over Bridges as per approved drawings and latest MOST/IRC specifications. The rates are inclusive of supplying, fixing with contractor's own materials, e.g. inserts, bolts, socket tubes, Neoprene sheet/cap etc., equipments, machineries, labour, all taxes, royalty, all lead & lifts, transport, testing, surface					
(a)	031101	Providing and laying 40 MM expansion joint as per RDSO drawing No. B-1757R.	1	M	1163.00	6144.97	71,46,600.11

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8	031110	Load testing of one or more spans of bridge as selected by the Engineer as per approved load test procedure following relevant IS/IRC/Railway codes with contractor's labour, deflection measuring instruments, loading materials, recoding and analyzing the load testing results including all lead & lift, etc. complete as required. The rates are all inclusive and will be paid after load test is finished and girder is cleared of the kentledges/loading material etc. The load shall be 1.25 times the stipulated design load.					
(a)	031111	For Span design load upto 100 MT	1	Each	6.00	76146.71	4,56,880.26
(b)	031112	Extra for every increase of 1 MT or part thereof in the span load capacity upto 800 MT	1	MT	10164.00	750.93	76,32,452.52
9	051060	Providing and laying Pitching with Stone Boulders, weighing not less than 35kg each with voids filled with spalls on slopes, laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical Specifications (filter media to be paid separately under the relevant item)	1	Cum	132.23	2114.26	2,79,568.60
10	051080	Providing and laying Filter Material as per RDSO Specifications underneath pitching in slopes complete as per drawing and Technical Specification	1	Cum	94.73	2769.26	2,62,318.15
11	052020	Providing and laying 300mm thick (average) Dry Stone flooring with boulders of not less than 35kg each in weight, hand packed with surface levelled off to the correct section with hammer dressing as necessary on the ground including filling the gaps with quarry spalls and ordinary sand complete including cost of supply of all materials, labour, lead, lift, tools, plants, crossing of tracks and the like as per drawing and technical specification as directed by Engineer in charge	1	Cum	57.21	1860.51	1,06,430.47
12	052150	Providing weep holes by making suitable opening or drilling in existing Brick Masonry / Plain / Reinforced Concrete abutment, wing wall/return wall with 110 mm dia UPVC pipe (working pressure 4kg/sqcm) extending through the full width of the structure complete and repairing the same with cement mortar 1:2 (1 cement : 2 coarse sand). Rate is excluding the cost of cement which shall be paid extra.	1	RM	12048.49	505.21	60,87,017.63
13	052270	Providing Boulder Backing behind wing wall, return wall, retaining wall with hand packed boulders & cobbles with smaller size boulders toward the back including all lead, lift, labour & other incidental charges as complete work in all respect. Payment for boulder/cobbles will be done extra	1	Cum	689.64	454.35	3,13,336.57
14	025030	Centering and shuttering including strutting, propping etc. and removal of form for :					
(a)	025031	All types of bridge sub-structures, e.g. pier, abutment, wing wall, retaining wall, RCC box type foundations, Abutment cap, Pier Cap, Inspection Platform & Pedestal over Pier cap, Fender wall, Diaphragm wall etc. upto 5m above ground level	1	sqm	25927.00	602.78	1,56,28,277.06

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15	041060	Providing and fixing railing used in rows for footpath or anti-crash barrier railing with B class G.I. pipe 65/50 mm nominal dia including cost of M.S. angle and channels in vertical posts, welding / bolting, priming painting with one coat ready mix Zinc Chromate conforming to IS:104 with DFT of 25- 30 Microns, followed by one coat of Zinc Chrome red oxide conforming to IS:2074 with DFT of 25 Microns with all material, labour, T&P as a complete job.	1	kg	212039.00	86.71	1,83,85,901.69
			Total Amount				62,44,93,290.43

Amit

Name of Work: Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc in connection with construction of EDFC

Annexure of Sch B-III

SN	Ref. Item no. of US SOR 2019	Description	Unit	Qty	Rate	Amount
1	041100	Supplying, fitting and fixing in position true to line and level cast steel rocker bearing of different load bearing capacity conforming to IS :7666, IS:9565, IS:1030, IS:919, IS:3073 and IRS Bridge Code including all accessories as per drawing and Technical Specifications with all material, labour, T&P as a complete job. The payment shall be made for the load bearing capacity in Metric Tonne as per approved drawing.	1 MT	2400	633.23	15,19,752.00
2	041110	Supplying, fitting and fixing in position true to line and level forged steel roller bearing of different load bearing capacity conforming to IS :7666, IS:9565, IS:1030, IS:919, IS:3073 and IRS Bridge Code including all accessories as per drawing and Technical Specifications with all material, labour, T&P as a complete job. The payment shall be made for the load bearing capacity in Metric Tonne as per approved drawing.	1 MT	2400	689.3	16,54,320.00
3	031090	Design, manufacturing, supplying and fixing in position elastomeric bearing true to line and level conforming to IS:3400, IS:226, BS-5400 under prestressed concrete girders/ Steel Girders, for Pre-cast as well as cast-in-situ girders as per approved drawing. The rate shall include cost of load test of one no. bearing from Railway approved firms and all fixing materials, equipments, machineries, labour, taxes, loading, unloading, leading, lifting etc. complete. Rates include getting the drawing approved from Railway and cost of inspection during manufacturing from railway approved organization. (Note : 1. The rate is for finished item complete and paid only after fixing in position below the girder. 2. The volume shall be given in the drawing and no deduction shall be made for inserted steel plates etc.)	1 cum	140400	1.47	2,06,388.00
Total Amount						33,80,460.00

Amit

Name of work: Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc in connection with construction of EDFC

Annexure of Sch B-IV

S N	USSOR 2012 of E.C. Rly.	Item Description	Unit	Quantity	Rate (Rs.)	Total amount
1	011010	Earth work in excavation as per approved drawings and dumping at embankment site or spoil heap, within railway land, including 50m lead and 1.5m lift, the lead to be measured from the centre of gravity of excavation to centre of gravity of spoil heap: the lift to be measured from natural ground level and paid for in layers of 1.5m each, including incidental work, as per specifications-in				
(a)	011011	All kinds of soils	cum	2945.8	93.54	2,75,550.13
2	12010	Dressing to neat dimension and plumbing sides for Excavation in foundation.	cum	168.3	10.20	1,716.66
3	12040	Filling, watering, ramming earth in foundation.	cum	449.61	21.90	9,846.46
4	13111	Earth work in cutting In all conditions and classifications of soil except rock	cum	20.25	163.81	3,317.15

5	013120	Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps, trolley refuges, rain bunds, if provided, platforms etc. with earth excavated from outside railway boundary entirely arranged by the contractor at his own cost as per RDSO's latest guidelines and specifications and special condition of contract including all leads, royalty, lifts, ascents, descents, crossing of nallahs or any other obstructions. The rates shall include all dressing of bank to final profile, demarcation and setting out of profile, site clearance, removing of shrubs, roots of vegetation's growth, heavy grass, benching of existing slope of old bank, all handling/re-handling, taxes, octroi and royalty etc. as a complete job. Cut trees shall be property of railways and to be deposited in the railway godown unless specified otherwise in the Special Conditions of Contract	cum	3240.38	139.23	4,51,158.11
6	012050	Supplying and filling sand in plinth and under floors including watering, ramming, consolidating and dressing complete	Cum	1671.67	602.73	10,07,565.66
7	13140	Preparation and surface treatment of excavated area by removing extra material, watering to the extent needed to maintain the desired moisture content, dressing to the required level and compacting to requirement.	Cum	1671.67	137.35	2,29,603.87
8	031010	Providing and laying in position cement concrete of specified proportion excluding cost of cement, centering and shuttering - All works upto Plinth level:				
a)	031014	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	453.22	2348.16	10,64,233.08

9	031020	Providing and laying cement concrete, up to plinth in retaining walls, walls (any thickness) including attached plasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc, excluding the cost of cement and of shuttering, centering.				
(a)	031023	1:2:4 (1 cement: 2 sand: 4 graded stone aggregate 20mm nominal size)	cum	126.14	2911.03	3,67,197.32
10	032080	Providing Precast plain cement concrete jali 1:2:4 (1 cement : 2 sand : 4 stone chips 12.5mm nominal size) including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand) including the cost of centering, shuttering and finishing complete including the cost of cement and of plastering of jambs, sills and soffits.				
(a)	32082	50 mm thick	Sqm	237.57	388.94	92,400.48
11	041010	Providing and laying in position M 30 and M25 Grade concrete for reinforced concrete structural elements but excluding cost of centering, shuttering, reinforcement and Admixtures in recommended proportion (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer in charge				
(a)	041011	All work upto plinth level, including raft foundation of washable aprons, HS tank, pile cap, footings of FOB, and Platform shelter etc.	Cum	6783	3341.6	2,26,66,072.80
12	051030	Brick work with machine moulded perforated bricks of class designation 12.5 conforming to IS:2222-1991 in superstructure from beyond plinth level upto 6m above plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)				
(a)	051031	With non-modular (FPS) bricks	cum	785.5	3385.55	26,59,349.53

13	041012	All work in buildings above plinth level upto floor two level.	Cum	6201.19	3619.33	2,24,44,153.00
14	042010	Centering and shuttering including strutting, propping etc. and removal of form for :				
(a)	042011	Foundations, footings, bases of columns, raft foundation of washable aprons, Pile caps, Footings of FOB etc.	Sqm	2557.1	138.3	3,53,646.93
(b)	042013	Suspended floors, roofs, landings, balconies, FOB slabs, walkway slabs and access platform	Sqm	13660	230.28	31,45,624.80
15	081100	Providing and fixing MS round or square bars/flats or grills in frames in window and clerestory windows	Kg	8851.5	62.47	5,52,953.21
16	098080	Providing and laying vitrified tiles conforming to Group B-II, Clause 5.1 (for abrasion resistance) of IS : 15622 of manufacturers approved by railway in all colours, shades and design as approved by the Engineer-in-Charge in floors and landings over 20mm thick bed of cement mortar 1:4 (1cement : 4 coarse sand) including pointing with polymer based grout of matching shade complete of size :				
(a)	98083	600x600x10mm	Sqm	4327.4	1235.34	53,45,810.32
17	095010	Providing and laying ceramic tiles conforming to Group B-II, Clause 5.1 (for abrasion resistance) of IS : 15622 of manufacturers approved by railway in all colours, shades and design as approved by the Engineer-in-Charge in floors and landings over 20mm thick bed of cement mortar 1:4 (1cement : 4 coarse sand) including pointing with polymer based grout of matching shade complete of size				
(a)	95013	300x 450 mm and above	Sqm	535.5	826.31	4,42,489.01
(b)	95012	200x300	Sqm	314.72	615.26	1,93,634.63
18	096060	Kota stone slab flooring of size up to 30x30cm over 20mm (average) thick base of 1:4 cement mortar (1 cement: 4 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete				
(a)	96062	25mm thick	Sqm	786.8	1002.9	7,89,081.72

19	096080	Kota stone slabs 25mm thick in risers of steps, skirting, dado and pillars laid on 12mm (average) thick cement mortar 1:3 (1cement: 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete :	Sqm	393.4	859.42	3,38,095.83
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20	099030	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels				
(a)	099035	Granite Black. Area of slab over 1.0 Sqm but upto 2.0 Sqm or larger	Sqm	393.4	3615.48	14,22,329.83
21	104140	Making khurras 45x45cm with average minimum thickness of 5cm cement concrete 1:2:4 (1cement: 2coarse sand: 4graded stone aggregate of 20mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1cement: 3coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete	each	118.02	110.76	13,071.90
22	108160	Providing and fixing on wall face unplasticised Rigid PVC single socketed rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10mm gap for thermal expansion.				
a)	108162	110mm dia	RM	1022.84	232.98	2,38,301.26
23	111010	12 mm cement plaster of mix -				-
(a)	111011	1:4 (1cement: 4 fine sand)	Sqm	37227	62.5	23,26,687.50
24	111150	Cement plaster to external of mix -				
(a)	111151	20 mm thick 1:4 (1cement: 4 fine sand)	Sqm	17112.9	53.56	9,16,566.92
25	115050	Distempering two or more coats on new work with 1st quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete as per manufacturer's specification	Sqm	36046.5	38.02	13,70,487.93

26	115110	Finishing walls with water proofing cement paint of required shade two or more coats on new work applied @ 3.84 Kg/10 sqm	Sqm	19737	40.96	8,08,427.52
27	121030	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coats applied @ 0.90ltr/ 10sqm over an under coat of primer applied @ 0.80ltr/ 10sqm of approved brand or manufacture	Sqm	1123.55	65.69	73,806.00
28	121050	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade				
(a)	121051	Two or more coats	Sqm	3249.31	49.12	1,59,606.06
		Total				6,97,62,785.60

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Annexure of Sch B-V Sanitary and pipe line works

S N	USSOR 2012 of E.C. Rly.	Item Description	Unit	Quantity	Rate (Rs)	Total amount
1		Providing and fixing brass bib cock of approved quality :				
2	132180	Providing and fixing C.P. brass bib cock, 15mm nominal bore, of approved quality conforming to IS:8931	each	470.08	409.49	1,92,493.06
3	131080	Providing and fixing GI (GI) pipes, having thermal stability for hot & cold water supply including all GI plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step GI solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Internal work - exposed on wall				
a)	131081	15mm nominal outer dia. Pipes	RM	3540.6	130.52	4,62,119.11
b)	131082	20mm nominal outer dia. Pipes	RM	1573.6	155.81	2,45,182.62
c)	131083	25mm nominal outer dia. Pipes	RM	1671.95	194.02	3,24,391.74
d)	131084	32mm nominal outer dia. Pipes	RM	2065.35	253.43	5,23,421.65
4	151010	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast iron P or S trap, 10litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required				-
(a)	151011	White Vitreous China Orissa pattern W.C. pan of size 580x440- mm with integral type foot rests	each	118.02	3253.4	3,83,966.27
5	152030	Providing and fixing Stainless Steel AISI- 304 (18/8) kitchen sink without drain board as per IS: 13983 with C.I. brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making good the walls wherever required				-
(a)	152033	470X420mm bowl depth 178mm	each	118.02	2719.79	3,20,989.62
6	154010	Providing and fixing 110mm dia PVC soil, waste and vent pipes including jointing and cost of spun yarn and sand etc. complete	mtr.	260.00	264.69	68,819.40
Total						25,21,383.46

Name of work: Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc in connection with construction of EDFC

Annexure of Sch B-VI wood work

S N	USSOR 2012 of E.C. Rly.	Item Description	Unit	Quantity	Rate (Rs)	Total amount
1	071010	Providing wood work in frames of doors, windows, clerestory windows and other frames and trusses, wrought, framed and fixed in position :				
(a)	071012	Sal wood	Cudm	29996.8	78.37	23,50,845.30
2	072150	Providing and fixing flush door shutters to IS: 2202 Part-I non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3ply veneering with vertical grains or cross bands and face veneers on both faces of shutters				
(a)	072152	Flush doors	Sqm	673.2	1161.2	7,81,719.84
3	072090	Providing and fixing wire gauge shutter using galvanized M.S. wire gauge of average width of aperture 1.4mm with wire of dia 0.63mm for doors, windows and clerestory windows including ISI marked bright finished or black enameled M.S. butt hinges with necessary screws				
(a)	072091	2nd class teak wood 35mm thick	Sqm	635.54	2765.07	17,57,312.59

4	072020	Providing and fixing panelling/glazing or panelling and glazing in panelled/ glazed or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling/glazing for panelled/ glazed or panelled and glazed shutters 25mm to 40mm thick				
(a)	072021	2nd class teak wood.15mm thick	Sqm	708.12	1987.59	14,07,452.23
(b)	072037	Glazing with float glass panes 4mm thick (10kg/sqm)	Sqm	668.78	352.99	2,36,072.65
5	075050	Providing and fixing M.S. sliding door bolts generally conforming to IS: 281, bright satin finish or black stone enameled with nuts and screws etc. complete of size	Nos			
(a)	075051	300x16 mm		2871.82	149.89	4,30,457.10
6	075060	Providing and fixing M.S. tower bolts generally conforming to IS:204 (Part I) with necessary screws etc. complete of size.				
(a)	075063	150x10 mm	Nos	2557.1	32.79	83,847.31
6	075070	Providing and fixing M.S. door handles with necessary screws etc. complete.				
(a)	075071	125mm	Nos	3304.36	16.12	53,266.28
7	078070	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws etc. complete				
(a)	078072	Twin rubber stopper	Nos	590.1	95.66	56,448.97
		Total				71,57,422.27

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Annexure of Sch B-VII

SN	Item	Description	Unit	Rate	Amount
1	1	Unforeseen items not cover in items in schedule of B-I, II and III of IR USSOR 2019 and Schedule B-V, B-VI and B-VII of IR USSOR 2012	LS	50,00,000.00	50,00,000.00
			Total Amount		50,00,000.00

Amit

Name of Work: Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc in connection with construction of EDFC

Annexure of Sch C-I

SN		Description	Unit	Qty	Rate	Amount
1	NS	Supply of 43 grade cement OPC conforming to IS: 8112 : 1989 / IS:269: 2015 with latest amendments and using the same in the work as per approved mix design as per prescribed rates of consumption including all material, lead and lift, labour, loading unloading, ascent, descent, crossing of Railway lines(s), royalty, taxes, transport (contractor's own), tools and plant complete job as per specification and as per direction of Engineer. In case of non-availability of 43 Garde OPC, higher 53 Grade OPC as per IS:12269:1987 / IS:269: 2015 may be used as per direction of Engineer without any additional cost to DFCCIL	1 MT	45021.77	7300.29	32,86,71,977.31
Total Amount						32,86,71,977.31

Note: Cement has to be supplied as per requirement of the work in terms of standard specifications. Payment against supply will be made only after consumption of cement in the relevant items of work.

Note for Stage Payment:

- i) The material shall be delivered at site and properly stored under covered sheds in measurable stacks.
- ii) The quantities of materials shall be brought to the site only in such installments that would facilitate smooth progress of work and consumed **within 3 months**. Next stage payment will be allowed only after consumption of the earlier quantity for which stage payment has been released.
- iii) Proper accountal in the material register to be maintained in the prescribed format at the site for the receipt and use of the material.
- iv) Ownership of such material shall be deemed to vest with the DFCCIL for which the contractor should submit an indemnity bond in prescribed format.
- v) Before releasing the stage payment, the contractor shall insure the material at his own cost in favour of DFCCIL against theft, damages, fire etc.
- vi) Stage payment in all such cases not be more than 75% of the rate of cement awarded in the contract. The balance payment shall be released only after the material is actually consumed in the work.
- vii) The price variation claim for steel would continue to be governed as per extant PV clause and with reference to delivery at site.

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Name of Work: Construction of Rail Flyover and its approaches on Viaducts, Formation in Embankments/Cuttings including Blanketing, Supply and Spreading of Ballast and related works for single track bi-directional electrified railway track on Item-Rate Basis for DDU B-route RFO connecting DFCCIL DDU yard with Vyasnagar station of Northern Railway and other related works such as Quarters, Water Tank, Drainage etc in connection with construction of EDFC

Annexure of Sch C-II

SN	Item	Description	Unit		Qty	Rate	Amount
1	NS	Supplying reinforcement steel conforming to IS:1786-2008 including decoiling, straightening, cutting, bending, placing in position, binding with 1MM dia GI binding wire including all material, lead and lift, labour, loading unloading, ascent, descent, crossing of Railway lines(s), royalty, taxes, transport (contractor's own), tools and plant complete job as per specification and as per					
		Thermo-Mechanically Treated bars Grade 500D	1	Kg	2,17,68,410	75	1,63,26,30,774.75
					Total Amount		1,63,26,30,774.75

Note: 1. Reinforcement, shall be measured in length for different diameters used in the works and then paid as per standard weights as per IS 1732. Wastages, overlaps, coupling, welded joints, space bars, chairs and binding wire shall not be measured and cost of these items shall be deemed to be included in the rates.

Note for Stage Payment:

- i) The material shall be delivered at site and properly stored under covered sheds in measurable stacks.
- ii) The quantities of materials shall be brought to the site only in such installments that would facilitate smooth progress of work and consumed in reasonable time.
- iii) Proper accountal in the material register to be maintained in the prescribed format at the site for the receipt and use of the material.
- iv) Ownership of such material shall be deemed to vest with the DFCCIL for which the contractor should submit an indemnity bond in prescribed format.
- v) Before releasing the stage payment, the contractor shall insure the material at his own cost in favour of DFCCIL against theft, damages, fire etc.
- vi) Stage payment in all such cases not be more than 75% of the rate of steel awarded in the contract. The balance payment shall be released only after the material is actually consumed in the work.
- vii) The price variation claim for steel would continue to be governed as per extant PV clause and with reference to delivery at site.

Amit