



**Tender No. TDL/EN/BHU-KRJ-LXING/EC/ROB4**

**For**

Construction of 1 no. ROB (excluding approaches) in lieu of level crossings No. 67C at IR chainage 1239/21-23, between **TDL-FZD** stations of MGS-GZB Section of Allahabad Division of North Central Zonal Railway.

**E-TENDER DOCUMENT  
FINANCIAL BID  
(PACKET-B)  
September-2017**

**Employer:  
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED  
(A GOVERNMENT OF INDIA ENTERPRISE)  
Under  
MINISTRY OF RAILWAYS**

**AGRA OFFICE:-**

Chief Project Manager/Tundla/DFCCIL  
3/20, 3rd Floor, KPS Tower, Mayur Complex, Nagla Padi Near Tulsi  
Cinema, NH-02, Agra -282002

**CORPORATE OFFICE:-**

DFCCIL, 5TH Floor, Pragati Maidan, Metro Station Building Complex,  
New Delhi-110001.

**GENERAL INFORMATION / DATA SHEET**

<b>TENDER NOTICE NO</b>	<b>TDL/EN/BHU-KRJ-LXING/EC/ROB4 dated 17.08.2017</b>
<b>Name of the work</b>	Construction of 1 no. ROB (excluding approaches) in lieu of level crossings No. 67C at IR chainage 1239/21-23, between <b>TDL-FZD</b> stations of MGS-GZB Section of Allahabad Division of North Central Zonal Railway.
(a) Tender Value	Rs. 11,02,60,107.0/-
(b) Completion Period	12 months
(c) Earnest Money	Rs 22,05,202.0/-
(d) Date of Issue of Tender	From 26.09.2017 on E-Tendering website( <a href="http://www.tenderwizard.com/DFCCIL">www.tenderwizard.com/DFCCIL</a> )
(e) Last date and Time of submission of Tender	31.10.2017 upto 15:00 hrs
(f) Date and Time of Opening of Tender (Technical bids -Packet A)	On 31.10.2017 at 15:30 hrs
(g) Validity of offer	120 days
(h) Retention Money / Security Deposit	5 % of Contract Value
(i) Performance Bank Guarantee	Performance Guarantee (PG) have to submit 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

**Name of work:-** Construction of 1 no. ROB (excluding approaches) in lieu of level crossings No. 67C at IR chainage 1239/21-23, between TDL-FZD stations of MGS-GZB Section of Allahabad Division of North Central Zonal Railway.

Sl. No.	Description of works	Cost as per USSOR 2010 of NC Rly	DFCCIL updated %	DFCCIL updated cost in Rs (including GST)	Rates to be quoted in figures & words (Clearly mention above / below / at par on updated DFCCIL Rate / cost given in column 4/5)
1	2	3	4	5	6
1.	Execution of all works as per Schedule "A" (items as per USSOR 2010 of NC Rly for Bridge Chapter No. 19, 20, 21 & 22)	91,91,008	+31.63%	1,20,98,048	..... % age (in figures) ..... (In words)
2.	Execution of all works as per Schedule "B" (items as per USSOR 2010 of NC Rly for chapters other than bridge Chapters and S.N. 4 & 5 below)	9,57,996	15.15%	11,03,115	..... % age (in figures) ..... (In words)
3.	Execution of all works as per Schedule "C" (NS Items)	-	-	7,52,99,747	..... % age (in figures) ..... (In words)
4.	Execution of all works as per Schedule "D" (items as per USSOR 2010 of	58,06,580	+ 30.64%	75,85,753	..... % age (in figures) ..... (In words)

	NC Rly for supply of Cement)				
5.	Execution of all works as per Schedule "E" <b>(Items as per USSOR 2010 of NC Rly for supply of Steel Reinforcement including straightening, cutting etc.)</b>	1,14,61,489	<b>+ 23.66%</b>	1,41,73,444	..... % age (in figures) ..... (In words)
	<b>Grand Total</b>			11,02,60,107	

Notes:

- 1) The above prices are inclusive of GST as prevailing.
- 2) The tenderer should quote single percentage above / par / below for each schedule.
- 3) 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.
- 4) If the contractor different percentage (%) above /below against each items of any schedule (i.e. A,B,C,D,E), then his offer will be summarily rejected.

**SCHEDULE -1**  
**SCHEDULE OF PRICES & TOTAL PRICES**

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	DFCCIL's Rate (Rs)	Amount (Rs)
<b>SCHEDULE 'A' - (ITEMS AS PER USSOR 2010 OF NC RLY FOR BRIDGE CHAPTERS)</b>						
1	192010	Earthwork in excavation 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 specifications as directed by Engineer				
(a)	192011	All kinds of soils	cum	1000	295.36	295,360.00
(b)	192012	Ordinary rock	cum	25	349.15	8728.84
2	192030	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.	cum	40	3093.14	123,725.60
3	192040	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M35 grade (Cast in-Situ) using 20mm graded crushed stone aggregate and coarse sand of approved quality in RCC raft	cum	260	3,132.75	814515.00

Signature of tenderer (s)  
with seal

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	DFCCIL's Rate (Rs)	Amount (Rs)
		foundation & Pile cap including finishing, using Admixtures in recommended proportions (as per IS:9103), if approved in Mix design to accelerate or retard setting of concrete and/or improve workability without impairing strength and durability complete as per specifications and direction of the Engineer. Payment for cement, reinforcement and shuttering shall be paid extra.				
4	192070	Providing, driving and installing Bored cast in-situ Reinforced Cement Concrete piles of specified diameter and length below pile cap in M-35 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 casing pipe but including the cost of shoe and length of pile to be embedded in pile cap etc. complete, concreting by machine batching, machine mixing, scaffolding, using Admixture in recommended proportion (as per IS:9103), if approved in design Mix, 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. Length of the pile for payment shall be measured upto the bottom of pile cap excluding the mud mat. Payment for cement, casing pipe & reinforcement shall be paid extra.				

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	DFCCIL's Rate (Rs)	Amount (Rs)
(a)	192073	1000mm diameter	meter	840	7005.88	5,884,939.20
5	192060	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M35 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 10m from foundation top level, including finishing, using Admixtures in recommended proportions (as per IS:9103), if approved in Mix design to accelerate or retard setting of concrete and/or improve workability without impairing strength and durability complete as per specifications and direction of the Engineer. Payment for cement, reinforcement & shuttering shall be paid extra.	cum			
(a)	192061	Abutment & Pier	cum	295	3289.40	970373.00
(b)	192063	Abutment cap, Pier Cap, Inspection Platform & Pedestal over Pier cap, Fender wall, Diaphragm wall etc.	cum	155	3602.66	558412.30
(c)	192064	Approach slab at formation level, Dirt wall/ ballast wall at formation level	cum	40	3604.91	144196.24
(d)	192065	Extra for every increase of 1m or part thereof in the height above 10m & 20m	cum / m height	20	49.95	998.95
6	195030	Centring and shuttering including strutting, propping etc. and removal of form for :				
(a)	195031	RCC Raft Foundation & Pile cap	sqm	160	233.66	37385.60
(b)	195032	Abutment, pier, wing walls and return walls	sqm	570	392.88	223941.60

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	DFCCIL's Rate (Rs)	Amount (Rs)
(c)	195033	Abutment cap, Pier Cap, Inspection Platform & Pedestal over Pier cap, Fender wall, Diaphragm wall etc.	sqm	120	389.93	46791.60
(d)	195034	Approach slab at formation level, Dirt wall / ballast wall at formation level	sqm	155	226.60	35122.81
7	192080	Providing, fabricating and installing casing pipe for bored piles for all diameters with specified thickness of steel plate including all labour, materials, pumping and bailing out water wherever required, complete as per technical specifications as directed by Engineer. This will include the weight of plate only and no cognizance will be given for the fittings, i.e. rivets and welding etc.	MT	12.5	89549.50	1119368.76
8	192100	Conducting load testing of a single pile upto following capacity in accordance with IS:2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. with all labour, material, tool & plants, equipment, machinery, etc. complete as per drawing and specification, as directed by the Engineer				
(a)	192103	Initial load test above 100 ton capacity upto 250 ton capacity pile	each	1	84053.72	84053.72
(b)	192104	Extra for every increase of 50 T in pile capacity or part thereof over 250 T	each	1	14189.71	14189.71
(c)	192107	Routine Load Test above 100 ton capacity upto 250 ton capacity pile	each	1	129985.01	129985.01
9	192110	Lateral load testing of single pile in accordance with "IS Code of practice IS:2911 (Part-IV) for determining safe allowable lateral load of pile"				



Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	DFCCIL's Rate (Rs)	Amount (Rs)
		with all labour, material, tool & plants, equipment, machinery, etc complete as per drawing and specification as directed by the Engineer				
(a)	192112	Piles with lateral load capacity of above 10 ton & upto 20 ton	each	1	34392.73	34392.73
10	201050	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 preparations, complete				
(a)	201051	For 80mm expansion	meter	36	29938.52	1077786.72
11	201060	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, based on design load & not span				
(a)	201061	For Span design load upto 100 MT	Each	1	118392.77	118392.77

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Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	DFCCIL's Rate (Rs)	Amount (Rs)
(b)	201062	Extra for every increase of 100 MT or part thereof in the span load capacity upto 800 MT	Each 100 MT	1	116221.63	116221.63
12	211070	Supplying and fixing anti-slip M.S. Angles/nosing 65mmx 65mm x 8mm or any other size confirming to IS:2062 fixing 10mm dia, anchor bar 600mm c/c and fixing with main girder with M.S. flat on top of step of stair case, making anti-slip grooves 7 nos. arrangement for keeping and maintaining in position as per approved plan with all labour and material as a complete job	kg	2870	90.30	259166.02
		<b>TOTAL COST OF SCHEDULE 'A' ITEMS</b>				<b>12,098,047.81</b>

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	Rate as per NCR USSOR-2010 (Rs)	Amount (Rs)
<b>SCHEDULE 'B' - (ITEMS AS PER USSOR 2010 OF NC RLY OTHER THAN BRIDGE CHAPTERS)</b>						
13	042010	Centring 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	40.00	181.79	7271.60
(b)	042013	Suspended floors, roofs, landings, balconies, FOB slabs, walkway slabs and access platform	sqm	115.00	247.04	28409.47
(c)	042014	Lintels, beams, plinth beams, bed blocks, girders, bressumers and cantilevers	sqm	235.00	214.14	50322.30
(d)	042015	Columns, pillars, posts and struts	sqm	380.00	313.25	119034.04
(e)	042016	Stairs (excluding landings) except spiral-staircases	sqm	50.50	286.70	14478.30
14	014110	Providing and removing barricading with the help of portable fencing along the running track where the work is to be done in close vicinity of the track. Fencing shall consist of self supporting steel angles of size 50x50x6mm, 1.5m long provided with hooks etc. and embedded in CC 1:2:4 block of size 0.23x0.23x0.23m placed at c/c distance of 2m along the track. 12mm dia rods in three horizontal layers tack welded with the angle posts including providing retro-reflective tapes in Horizontal & vertical direction. Note: Released material will be the property of the contractor after the completion of work. Cost of cement to be paid separately.	metre	40.00	150.71	6028.40
15	081410	Steel work welded in built-up sections / framed work including cutting, hoisting, fixing in position				

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	Rate as per NCR USSOR-2010 (Rs)	Amount (Rs)
		and applying a priming coat of approved steel primer using structural steel etc. as required				
(a)	081412	In gratings, frames, guard bar, ladders, railings, brackets, gates and similar works	kg	985.00	84.09	82823.99
16	237010	Providing and fixing Cat's Eye (Glow studs) heavy integral stem, reflective, aluminium die cast with elegant finish of size 100mmx100mm and 20mm high having a stem of 50mm (or 12mm dia. 90mm long) screwed and nailed to fix into the road surface or at the nosing of the central verge. The road studs should have reflectors fitted on one side of the studs (3 nos. 7 element or 1 no. 29 element reflector) complete	each	87.00	622.51	54158.10
17	236070	Painting road surface marking with adequate number of coats to give uniform finish with ready mixed road marking paint conforming to IS:164, on bituminous surface in white/yellow shade including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete				
(a)	236071	New work (minimum two coats)	sqm	34.2	93.79	3207.58
18	094040	Precast Chequered factory made terrazzo tiles 22mm thick with graded marble chips size upto 6mm in floors jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing of cement slurry complete on 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand)				
(a)	094042	with ordinary cement with pigment	sqm	40	682.34	27293.45
19	121060	Painting with synthetic enamel paint				

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Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	Rate as per NCR USSOR-2010 (Rs)	Amount (Rs)
		of approved brand and manufacture of required colour to give an even shade				
(a)	121061	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	sqm	55.00	76.61	4213.42
20	081420	Providing and fixing hand rail by welding etc. to steel ladders railing, balcony railing and staircase railing including applying a priming coat of approved steel primer				
(a)	081423	G.I. pipes 40mm nominal bore (class B)	kg	1180	113.51	133940.30
21	131156	Providing & fixing drainage spout of 50mm dia GI pipe of grade-B quality with all contractor's labour, tools & plants, material, fuel, consumables, machinery, loading, unloading, lead & lift complete in all respect as a complete job as per specification & as directed by Engineer	metre	144	451.25	64980.00
22	41010	Providing and laying in position M 20 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 retarded 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	45.00	2402.10	108094.46

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Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	Rate as per NCR USSOR-2010 (Rs)	Amount (Rs)
(b)	041012	All work in buildings above plinth level upto floor two level.	cum	40.00	2641.66	105666.40
(c)	041012+46010	All works in buildings Floor 2 level (3.60) upto floor three level (+7.20 m)	cum	40.00	2980.02	119200.93
(d)	041012+2*(46010)	All works in buildings Floor 3 level (7.20) upto floor four level (+10.80 m)	cum	40.00	3318.83	132753.31
(e)	041015	In kerbs, steps and the likes etc.	cum	16.57	2488.39	41239.16
		NOTES - (i) Payment for cement, reinforcement and shuttering shall be paid extra.				
		<b>TOTAL COST OF SCHEDULE 'B' ITEMS</b>				<b>1103115.21</b>

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
<b>SCHEDULE 'C' - NON SCHEDULED ITEMS</b>						
23	NS-1	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete M-40 grade (Cast in situ) using 20 mm graded crushed stone aggregate and coarse sand of approved quality in RCC deck slab laid to required camber including end cantilever, RCC crash barrier, RCC railing, etc. including pumping of concrete to site of laying, finishing, using admixtures in recommended proportions (as per IS: 9103), if approved in mix design to accelerate or retard setting of concrete, improve workability without impairing strength and durability with all contractor's labour, tools & plants, material (excluding cost of cement, reinforcement and shuttering) ,fuel, consumables, machinery, loading, unloading, lead and lift complete in all respect as a complete job as per specifications & as directed by Engineer.	cum	380.00	8,382.71	3,185,431.02
	NOTES:-					
	(i)	Payment for cement, reinforcement and shuttering shall be paid extra as per relevant USSOR item included in the relevant schedule.				
	(ii)	The concrete is to be poured at the approved safe height and distance from live OHE wires carrying 25KV AC traction (on IR Track) to cast monolithically to the required level as per approved drawing over already launched main steel girder with proper joining arrangement through shear connector.				
	(iii)	The necessary shuttering arrangement has to be planned				

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Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
	(iv)	<p>using already launched main steel girder. No support from ground will be allowed for this purpose. The rates includes for working under running traffic condition, all leads, lifts, ascents, descents, all other obstructions etc.</p> <p>The contractor shall make adequate arrangement below the girders to avoid falling of anything over the track during concreting of the slab. The rate also includes design and provision of all temporary arrangement for casting, erection, scaffolding and submission of detailed design and drawing for temporary works and to ensure safety of running traffic at all times.</p>				
24	NS-2	<p>Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete M-40 grade (Cast in situ) using 20 mm crushed stone aggregate and coarse sand of approved quality in wearing coat including pumping of concrete to site of laying, finishing, using admixtures in recommended proportions (as per IS: 9103), if approved in mix design to accelerate or retard setting of concrete, improve workability without impairing strength and durability with all contractor's labour, tools &amp; plants, material (excluding cost of cement, reinforcement and shuttering) , fuel, consumables, machinery, loading, unloading, lead &amp; lift complete in all respect as a complete job as per specification &amp; as directed by Engineer.</p>	cum	135.00	4,499.74	607,465.22
	NOTES:- (i)	<p>Payment for cement, reinforcement and shuttering shall be paid extra as</p>				



Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
		per relevant USSOR item included in the relevant schedule.				
25	NS-3	Providing and fixing 70mm thick Precast reinforced cement concrete panels of required size with design mix cement concrete of grade M40 using 20 mm graded crushed stone aggregate and coarse sand of approved quality on bottom cross beam of bow string girder as shuttering of deck slab including pumping of concrete to site of laying, finishing, using admixtures in recommended proportions (as per IS: 9103), if approved in mix design to accelerate or retard setting of concrete, improve workability without impairing strength and durability with all contractor's labour, tools & plants, material, shuttering, fuel, consumables, machinery, loading, unloading, lead and lift complete in all respects as a complete job as per drawings, specification & as directed by Engineer.	sqm	1296	483.29	626,338.77

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
	NOTES:-					
	(i)	Payment for cement and reinforcement shall be paid extra as per relevant USSOR item included in the relevant schedule.				
	(ii)	The pre cast reinforced cement concrete panels are to be fixed at the approved safe height and distance from live OHE wires carrying 25KV AC traction (on IR Track) on already launched main steel girder. No support from ground will be allowed for this purpose. The rates includes for working under running traffic condition, all leads, lifts, ascents, descents, all other obstructions etc.				
	(iii)	The contractor shall make adequate arrangement below the girders to avoid falling of anything / precast panels over the track during fixing of precast reinforced cement concrete panels. The rate also includes design and provision of all temporary arrangement and submission of detailed design and drawing for temporary works and to ensure safety of running traffic at all times.				
26	NS - 4	Supply, fabrication and erection of Welded type BOW STRING girders of required span for IRC loading at site as per approved drawings, Indian Railway Unified Standard Specifications (W&M) - 2010 (amended up to date) and Indian Railways standard specification for fabrication and erection of steel girder bridges and locomotive turntables (Fabrication				

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
		Specifications) Serial No B1-2001 (amended up to date) including all incidental works etc., supplying and fixing in position of shop welding / shop bolting with nuts and washers, field bolts, etc. required for complete fabrication of the girders and transportation of the fabricated materials at site and stacking of the same at places as directed by Engineer including metalizing as per clause No 39.2.1 of B1-2001 over the structural members with all contractor's labour, fuel, consumables, machinery, loading, unloading, tools & plants, material, lead and lift complete in all respect, as a complete job as per specifications and as directed by Engineer.				
	(a)	Grade E250	MT	90.00	106746.67	9607200.18
	(b)	Grade E350	MT	535.00	110746.67	59249467.74
	NOTES:-					
	(i)	Steel (Plates and Rolled sections) should conform to IS: 2062-2011. It shall have Sub quality 'B0' & Grade E250 (Fe 410) for rolled sections and E350 (Fe 490) for plates. 12 mm thick & above plates shall be fully killed and fully normalized / controlled cooled.				
	(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 basic raw material and having in house iron rolling facilities, followed by production of liquid steel & crude steel.				

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
	(iii) (a)	40 % of rate payment shall be made after steel material required for fabrication (as per drawing) is received at site.				
	(iii) (b)	15 % of rate payment shall be made on acceptance of fabricated components at site.				
	(iii) (c)	20 % of rate payment shall be made after erection & launching				
	(iii) (d)	25 % of rate payment shall be made after final approval of DFCCIL and successful completion of all works (ROB wise) included in this item including metallising and finishing complete.				
	(iv)	No deduction for holes and no addition for rivets / bolts / welds etc. shall be made				
	(v)	The contractor shall submit the detailed erection drawing and Launching scheme along with necessary design calculations for approval from RITES Ltd before erection and launching of girder.				
	(vi)	Temporary supports if any required for the erection / launching shall be erected after the approval of Engineer. Nothing extra shall be payable on this account.				
	(vii)	The contractor shall take all safety precautions that will be necessary in consultation with Engineer as per extant rules / guidelines. Nothing extra shall be payable on this account.				
	(viii)	Notwithstanding above, the contractor shall be fully responsible for any mishap that may occur as a result of negligent working.				
	(ix)	Contractor has to take every				

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
	(x)	precautionary measure for safety of running train during and after launching of girder. The rate includes launching under traffic blocks wherever required. However, the rate does not include the cost of possession of traffic / OHE block.				
	(xi)	The Block required shall be arranged by DFCCIL at the request of contractor. The duration of the block shall be as approved by Engineer. If the Block granted is not made available due to unavoidable reasons, nothing extra / no compensation shall be paid.				
	(xii)	However penalties, if any, levied by Indian Railways caused due to any careless working or otherwise of violation of the Terms and Conditions of the track /OHE block, shall be payable by the contractor.				
	(xiii)	The cost of all test as per prevailing code for acceptance shall be born by contractor. "				
27	NS-5	Supplying, fabrication & fixing in position BRC protection screen with MS angle frame, expanded metal (XPM), GI Sheet of 16 gauge, J Bolts etc of approved Railway design with two coats of aluminium paints of approved manufacturer as per drawing no. RDSO/ETI/C/0068 with all contractor's labour, tools & plants, material, fuel, consumables, machinery, loading, unloading, lead & lift complete in all respect as a complete job as per specification & as directed by Engineer.	Kg	1200	118.13	141,761.39

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
28	NS-6	Integrity testing of Pile using Low Strain/ Sonic Integrity Test/ Sonic Echo Test method in accordance with IS 14893 including surface preparation of pile top by removing soil, mud, dust & chipping lean concrete lumps etc. and use of computerised equipment and high skill trained personal for conducting the test & submission of results, with all contractor's labour, tools & plants, material, fuel, consumables, machinery, loading, unloading, lead & lift complete in all respect as a complete job as per specification & as directed by Engineer.	Per test	30	750.45	22513.50
29	NS-7	Design, obtaining approval, Manufacturing, Supplying and fixing of POT / POT-PTFE bearings for the following skew spans for bow string girder ( up to 20 degree) as per drawing no. RITES/RCED/ROB/SUPER-STRUCTURE/ BEARING LOAD /48M/1and RITES/RCED/ROB/SUPER-STRUCTURE / BEARING LOAD /60M/1 at site including fitting and fixing in position true to line and level with all contractor's materials, labour, tools and plants, loading, unloading and stacking at site as per specification/drawing or as directed by engineer as a complete job				
	(a)	48.00 m span Welded Type bow string girder	sets	1	1,90,495.19	190,495.19
	(b)	60.00 m span Welded bow string girder	sets	1	3,18,968.69	318,968.69

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
	Notes:-					
	(i)	The drawing up to last alteration / revision/amendment shall be followed.				
	(ii)	Cast steel of grade 280 - 520 W or 340 - 570 W of IS 1030 shall be used.				
	(iii)	Each set of bearing shall include 4 nos of bearings (1 POT bearing and <b>3 POT - PTFE bearings</b> ) and all bolts and all other components connected with bearings as shown in respective drawings.				
	(iv)	The supply of POT / POT- PTFE bearing shall include all materials shown in the drawings. The supply also includes supply of all holding down bolts to fix the bearings at the bottom on pedestal and all bolts to fix the bearings to the bottom of girder.				
	(v)	75% payment shall be made after supply of each set at site on submission of indemnity bond and balance 25% shall be made after fixing of bearings.				
30	NS-8	Providing and fixing handrail made up of 5 rows of 50 mm dia m s pipe (1mm thick) passing through steel ISMC 100 @ 1.5m c/c as verical support including providing, fixing and welding hard drawn steel wire fabric 75 x 25 mm mesh of weight not less than 7.75 kg per sq m to ms flat welded to ISMC 100 including welding of ISMC 100 to steel base plate and providing and fixing m s holding down bolts for fixing the base plate in required place including two or more coats of synthetic enamel	m	400	2,759.76	1,103,905.63

Sl. No.	Item no.	Description of items	Unit	Qty.	Rate (Rs)	Amount (Rs)
		paint of required shade over a priming coat of zinc chromate primer with all contractor's materials, labour, tools and plants, machinery, loading, unloading and stacking material at site as per specification, drawing and as directed by engineer as a complete job.				
31	NS-09	Providing and fixing 65mm dia GI Pipe of medium class on the top of RCC crash barrier as a railing with supports of 12 mm thick m s plate cut to shape as vertical along with 50 x 10mm thick m s plate all round welded to vertical including 25 mm wide and 3 mm thick collar plate, verticals welded on base plate of size 120 x 120 x 16 mm, 4 nos 10 dia galvanized m s holding down bolts with nuts and washers, 4 nos 10 dia MS rod of 48mm long welded to m s holding down bolts, verticals shall be @ 1.50 m C / C including two or more coats of synthetic enamel paint of required shade over one coat of zinc chromate primer with all contractor's materials, labour, tools and plants, loading, unloading and stacking at site as per specification/drawing and as directed by engineer as a complete job.	m	220	1119.09	246,200.06
		<b>TOTAL COST OF SCHEDULE 'C' ITEMS</b>				75299747.39



Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	Rate as per NCR USSOR-2010 (Rs)	Amount (Rs)
<b>SCHEDULE 'D' - SUPPLY OF CEMENT</b>						
32	033060	Supply and using cement at worksite:				
(a)	033061	OPC 43 Grade	MT	971	7812.31	7585753.01
		<b>TOTAL COST OF SCHEDULE 'D' ITEMS</b>				7585753.01

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	Rate as per NCR USSOR-2010 (Rs)	Amount (Rs)
<b>SCHEDULE 'E' - SUPPLY OF REINFORCEMENT</b>						
33	045010	Supplying reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete -				
(a)	045016	Thermo-Mechanically Treated bars	kg	210883	67.21	14173443.61
	Notes:- (i)	The contractor shall quote the rate for Thermo-Mechanically Treated bars of Grade Fe 500 D.				
		<b>TOTAL COST OF SCHEDULE 'E' ITEMS</b>				14173443.61

Sl. No.	Item no. of NCR USSOR -2010	Description of items	Unit	Qty.	Rate as per NCR USSOR-2010 (Rs)	Amount (Rs)

### Explanatory Notes for BOQ:

- (i) Contractor shall quote rates of shuttering and curing for all heights.
- (ii) The rates of reinforcement item mentioned in the above schedule include placing of reinforcement under running traffic conditions.
- (iii) All NCR USSOR items contain item nos., if any discrepancy is found in nomenclature, schedule nomenclature will prevail.
- (iv) Tenderer must quote their rates for supply and erection of fabricated girders with their own material including loading, transportation and unloading at site. DFCCIL shall not provide any assistance for procurement of raw material for manufacturing the girders tendered for.
- (v) The rates shall also be inclusive of all taxes legally leviable and / or any other taxes, license fee and royalty charges etc. if any.
- (vi) The above quantity is approximate:-The DFCCIL reserve the right to increase / decrease the same.
- (vii) The contractor has to submit launching scheme and detailed drawing of each component of the Railway safety and nothing extra shall be paid for this activity.