

**HARYANA RAIL INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED**

(A Joint Venture Govt. of Haryana and Ministry of Railways)

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**Tender No.:** HORC/HRIDC/C-2/2022

**Date:** 08.08.2022

**Reference:** Specific Procurement Notice dated 18.06.2022.

**CORRIGENDUM NO. 7**

**Name of Work:** C-2: Composite Contract Package in connection with laying of New BG Double Railway Line of HORC project for:

- (i) Design and Construction of Civil Works (Earthwork, Bridges, Station Buildings, Retaining Walls and other miscellaneous Works) from Km 55.60 to Km 61.50 and its connectivities to IR network from New Patli to Patli & New Patli to Sultanpur including modifications in Sultanpur station yard,
- (ii) Design, Supply, Installation, Testing & Commissioning of OHE (1x25 kV) and General Electrical services from Km 49.70 to Km 61.50 and its connectivities to IR network from New Patli to Patli & New Patli to Sultanpur including modifications in Sultanpur station yard and
- (iii) Design, Supply, Installation, Testing & Commissioning of Signalling & Telecommunication from Km 49.70 to Km 61.50 and its connectivities to IR network from Manesar to Patli and New Patli to Patli & New Patli to Sultanpur including modifications in Patli and Sultanpur station yards.

<b>S. No.</b>	<b>Tender Document Part / Section/ Clause No.</b>	<b>Description of Existing Clause</b>	<b>Modified Description of Existing Clause / New Clause</b>
1.	Corrigendum No. 6, Final Tender Document, Part 1, Section IV, Tender Forms, Appendix B to Financial Part: Price Schedule, Schedule 'B'- Retaining wall & other civil works, Column No. 8 of S. No. 8 (i), Thermo-Mechanically Treated bars of grade Fe-500D or more.	Existing estimated amount in INR 15,42,80,455.01	Modified estimated amount in INR 19,56,34,182.92

S. No.	Tender Document Part / Section/ Clause No.	Description of Existing Clause	Modified Description of Existing Clause / New Clause
2.	Corrigendum No. 6, Final Tender Document, Part 1, Section IV, Tender Forms, Appendix B to Financial Part: Price Schedule, Schedule 'B'	Schedule 'B'- Retaining wall & other civil works	The existing Schedule 'B'- Retaining wall & other civil works is replaced with revised Schedule 'B' - Retaining wall & other civil works annexed as <b>Attachment 2</b> of this Corrigendum No. 7.
3.	Corrigendum No. 6, Final Tender Document, Price Schedule, BOQ MS Excel File, BOQ 2 Worksheet, Schedule 'B'- Retaining wall & other civil works, Cell F13	Estimated Rate in Rs. P - <b>INR 55,69,94,486.41</b>	Estimated Rate in Rs. P - <b>59,83,48,214.32*</b>
4.	Corrigendum No. 6, Final Tender Document, Section IV, Tender Forms, Letter of Tender-Financial Part,	-	Summary Sheet of quoted rates against Schedule 'A'. Schedule 'B' and Schedule 'C' is added to Letter of Tender-Financial Part and is annexed as <b>Attachment 1</b> of this Corrigendum No. 7.

**Notes:**

- \*At this stage, BOQ MS Excel file for quoting rates against Schedule 'A', Schedule 'B' and Schedule 'C' uploaded vide Corrigendum No. 6 cannot be replaced. Therefore, Tenderers are advised to quote their percentage rate (Excess/ Less) against Schedule 'B' in BOQ MS Excel sheet (BOQ2) taking into account the revised estimated rate for Schedule 'B' of **INR 59,83,48,214.32**. The arithmetical errors/changes in the worksheet BOQ2 and BOQ3 (Price Schedule: Summary Sheet) of MS-Excel File on account of revised estimated rate for Schedule 'B' shall be corrected by the Employer in accordance with Clause 36 of Instruction to Tenderers (ITT) of Tender Document.
- Revised Schedule 'B' uploaded vide Corrigendum No. 7 supersedes Schedule 'B' of Appendix B to Financial Part: Price Schedules, Section IV, Tender Forms uploaded vide Corrigendum No. 6. Tenderers must submit and upload duly signed revised Schedule 'B' annexed as **Attachment 2** of this Corrigendum No. 7 in pdf file on e-Procurement portal with Financial Part while submitting their Tender on e-Procurement portal.

3. Tenderers must complete **Attachment 1**- “Package C-2: Summary Sheet of quoted rates” against Schedule ‘A’. Schedule ‘B’ and Schedule ‘C’ of this Corrigendum No. 7 and upload duly signed **Attachment 1** in pdf file with Letter of Tender- Financial Part while submitting their Tender on e-Procurement portal. In case of any discrepancy between the Total Tender Price quoted in Attachment 1 and arithmetically corrected Total Tender Price by the Employer, the Arithmetically corrected Total Tender Price by the Employer shall be considered for comparison of Tenders to determine the Tender having the lowest evaluated cost.
  
4. **All other terms and conditions of Final Tender Document issued on 01.08.2022 vide Corrigendum No.6 shall remain unchanged.**

**Attachment 1**  
**to**  
**Corrigendum No. 7**

**Summary Sheet of quoted rates against Schedule 'A'. Schedule 'B' and Schedule 'C'**

### Attachment 1 to Corrigendum No. 7

#### Package C-2: Summary Sheet of quoted rates against Schedule 'A', Schedule 'B' and Schedule 'C'

Schedule Description	A	B	C	D
	Estimated rate in (INR)	Quoted Rate in % Excess (+)/below (-)	Amount with Taxes in Rs. P	Amount in INR (Words)
*Schedule 'A'-Lumpsum component of Works	-	N.A.		
Schedule 'B'- Retaining wall & other civil works	59,83,48,214.32			
Schedule 'C'- Item rate for miscellaneous woks	2,00,00,000.00			
Provisional Sums	100,000,000.00	N.A.	100,000,000.00	<b>INR Ten Crore Only</b>
<b>TOTAL TENDER PRICE (including provisional sum)</b>				

\*Lumpsum rate for Schedule 'A' to be entered in Column 'C'

**Name of the person duly authorized to sign the Tender on behalf of the Tenderer:** \*[insert complete name of person duly authorized to sign the Tender]

**Title of the person signing the Tender:** [insert complete title of the person signing the Tender]

**Signature of the person named above:** [insert signature of person whose name and capacity are shown above]

**Date signed** [insert date of signing] **day of** [insert month], [insert year]

**Note:**

Tenderers must complete "Summary Sheet of quoted rates" against Schedule 'A', Schedule 'B' and Schedule 'C' of this Corrigendum No. 7 and upload it while submitting their tender on e-Procurement portal with Letter of Tender- Financial Part.

# **Attachment 2 to Corrigendum No. 7**

**Appendix B to Financial Part: Price Schedule,  
Schedule 'B'- Retaining wall & other civil works**

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
<b>Schedule B1:- NWR-USSOR 2019 BASED ITEMS</b>							
1	013130	Shoring with 'Z' section MS sheet piles side by side in all kinds of soil mechanically or manually as per approved drawing with contractor's own arrangement complete in all respects and removal of sheet piles after completion of the work as directed by engineer in-charge. {Note - Payment will be made as per actual driven length of pile }	200	Sqm	868.29	5.78%	1,83,696.00
2	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. <b>Note:</b> 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.					
i	022011	All kinds of soils	2100	Cum	195.57	5.78%	4,34,427.00
3	022030	Providing and laying in position Plain cement concrete of specified Nominal Mix for miscellaneous works like side drains, foundation for OHE masts and other miscellaneous structures excluding the cost of Cement, centering and shuttering - All work up to plinth level :					

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
i	022034	1:3:6 (1 Cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size)	2,850	Cum	2,971.37	5.78%	89,57,892.00
4	022040	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete of specified grade ( <b>M-20</b> 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 paid extra. <b>Note</b> -Cement concrete in drainage and other miscellaneous works shall be paid under this item.	350	Cum	2,840.33	5.78%	10,51,575.00
5	025020	Providing and applying two coats of coal tar or bitumen conforming to IS:3117- latest version on the top and sides of RCC box/slabs @ 1.70 kg/sqm after cleaning the surface with all labour and materials complete job as directed by the Engineer	11,000	Sqm	155.67	5.78%	18,11,370.00
6	025030	centering and shuttering including strutting, propping etc. and removal of form for :					
i	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	40,228	Sqm	671.94	5.78%	2,85,93,257.84
ii	025032	All types of bridge super-structures, e.g. slabs, I-girders, T-girders, Box girders etc. upto 5m above ground level	500	Sqm	874.49	5.78%	4,62,520.00



<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
iii	025033	Extra for additional height over item no. 025031 & 025032 wherever required with adequate bracing, propping etc. over initial height of 5 metres for every additional height of 1 metre or part thereof	1,250	Sqm	110.17	5.78%	1,45,675.00
7	025060	Supply and using Cement at Worksite					
i	025062	Ordinary Portland Cement 53 grade	300	MT	7,398.80	7.61%	23,88,555.00
ii	025063	Pozzolana Portland Cement	450	MT	6,905.10	7.61%	33,43,761.00
8	025070	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete					
i	025072	Thermo-Mechanically Treated bars of grade Fe-500D or more.	19,77,701	Kg	78.01	26.81%	19,56,34,182.92
9	031020	Providing and laying in position machine batched, machine mixed and machine vibrated Design Mix Cement Concrete of specified grade using 20mm graded crushed stone aggregate and coarse sand of approved quality for the Precast Prestressed (Post tensioned) concrete girder/Box (spans upto 30.5m) in contractor's casting yard, including finishing, using Admixtures in approved proportions (as per IS:9103), to modify workability & other properties without impairing strength and durability,	54	Cum	2,840.33	5.78%	1,62,243.00

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		complete as per drawings, specifications and direction of the Engineer. Payment for Shuttering, Cement, reinforcement, HTS cables, anchorage cones, stressing of cables and grouting of the ducts will be done extra. Launching of girder/slab in position is not included in this item.					
i	031021	Deduct from 0310220 for casting of Slab in place of Girder/Box	54	Cum	42.48	5.78%	-2,426.76
10	031040	Providing, fabricating & fixing in position to exact design profiles, prestressing H.T.S. cables of all classification made from Low Relaxation strands conforming to IS:14268– latest version in Prestressed (Post tensioned) Concrete girders/slabs etc. including supplying, cutting, making into cables with necessary spacers, colour coding, protecting with water soluble oil at all time, anchoring of cables, supplying and placing spiral corrugated type galvanized metal steel ducts sheathing made up of Cold Rolled Cold Annealed (CRCA) mild steel conforming to IS:513 of required diameter/ thickness, vent pipe, placing, bending, routing, fixing, stressing & grouting of cable ducts with cement grout, Anchorage sets in required number with provision for future prestressing if any including all lead and lift with contractor's own materials, labour, equipment etc. complete as per drawings & specifications. Rate also includes covering anchorage pads with epoxy mortar of approved quality to avoid corrosion. Cement for grouting to be paid separately. Payment shall be made in terms of weight of HTS cables as per drawing.	3	MT	1,79,099.63	26.81%	6,81,348.72

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
11	031140	Providing and fixing in position GI Drainage Spouts of required length with Grating in RCC slab and filling bitumen along kerb as shown in drawing with contractor's pipes, bitumen, tools, equipment, lead, lifts etc. complete as per specifications and as directed by Engineer in-charge					
i	031142	100mm dia. Drainage Spouts	5	Metre	1,202.50	5.78%	6,360.00
12	041330	Launching & fixing in specified Bridge location all types of Steel Plate girders / PSC girders / Slabs including loading/unloading and transport to the site of launching with a lead of five kilometres & lifting to any height as per site requirement, provision of approaches for leading, cleaning of bed block and minor repairs to bed block with epoxy if required, as directed by Engineer in charge with all labour, tools and plant, equipment etc., complete					
i	041331	PSC girders / slabs	140	MT	6,346.14	5.78%	9,39,813.00
13	041390	Supplying fabricating and erecting welded and/or bolted and/or riveted steel work in built up sections, trusses and framed work, staging, racks etc. for Steel Structures other than bridge girders, using RSJ, tees, angles and channels/flats, plates, gussets, round or square bars, cleats, bolts etc., with contractors own steel including cutting, bending, straightening, drilling, riveting, hoisting, fixing, erecting, welding, bolting etc., with Providing stiffeners wherever required as per approved drawing including applying a priming coat of a approved steel primer with all contractor's materials, labour, tools & plants, lead & lift	5	MT	86,019.71	34.05%	5,76,547.10

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		including crossing of tracks if required etc., complete as per specification and as directed by Engineer-in-charge.					
14	052230	Providing cast in situ bridge number plaques as per Railway drawing in cement concrete 1:2:4 mix using 20mm hard stone aggregate embedded in 30mm notch in Bridge parapet coping duly engraving the letter and figures and an arrow indicating the direction of flow and finishing the top exposed surface with cement mortar 1:3, painting letters and figures with two coats of black enamel paint on two coats of white background with all labour, tools, cement, paint etc. with all leads and lifts.	5	Each	801.69	5.78%	4,240.15
15	052240	Providing cast in-situ plaques for bridge foundations details of size 45cmx45cmx5cm in cement concrete 1:2:4 mix using 20mm hard stone aggregate embedded in 30mm deep notch over abutment & piers, engraving the letters & figures with CM 1:3 and finished smooth including painting letters and figures with 2 coats of black enamel and plaque with white enamel with all labour, tools, cement, paint, curing etc. as a complete job.	2	Each	1,049.88	5.78%	2,221.12
<b>Schedule B2:- DSR-2021 BASED ITEMS</b>							

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
16	3.8	1:3 (1 Cement : 3 coarse sand (zone-III)) cement sand levelling mortar. Note:- cost of cement is included in the item.	134	Cum	5,024.15	2.49%	6,89,999.50
17	9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.					
i	9.48.2	Fixed to openings /wooden frames with rawl plugs screws etc.	800	Kg	197.70	2.49%	1,62,096.00
18	10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.					
i	10.16.2	Hot finished seamless type tubes	2,000	Kg	168.95	2.49%	3,46,320.00
19	10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.					
i	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	1,200	Kg	142.30	2.49%	1,75,008.00
20	10.28	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel	500	Kg	612.25	2.49%	3,13,750.00

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
		members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).					
21	11.20	Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).					
i	11.20.1	Light shade pigment using white cement	100	Sqm	1,233.05	2.49%	1,26,375.00
22	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	12	Cum	8,613.55	2.49%	1,05,936.36

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
23	16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).	110	Cum	8,277.55	2.49%	9,33,202.60
24	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge	300	Cum	2,803.65	2.49%	8,62,038.00
25	16.91	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.					

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
i	16.91.2	80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	300	SQM	1,011.20	2.49%	3,10,914.00
26		Items included in Delhi Schedule of Rate-(Horticulture & Landscaping) 2020		LS			10,00,000.00
<b>Schedule B3:- NS BASED ITEMS</b>							
27	NS-1	Earthwork in embankment for 32.5t axle load and as per RDSO specification No. RDSO/2020/GE:004 September 2020 "Comprehensive Guidelines and Specification for Railway Formation" with contractor's own earth from borrow areas including all lead, lift, ascent, descent, royalty, taxes, cess, compensation, crossing of nallahs /stream and other obstructions including mechanical compaction in layers with watering, handling, re-handling, dressing of banks to the final profile with all labour, material, tools, plant, machinery and equipment, taxes, cess etc. as a complete job in accordance with the specification and drawings. Note: 10% of payment shall be withheld till the slopes are dressed to the required profile and compacted mechanically with vibratory rollers as per RDSO guidelines	1,00,000	Cum	309.73	At Par	3,09,73,000.00
28	NS-2	Earthwork in filling with contractor's own earth of approved quality from borrow areas including all lead, lift, ascent, descent, royalty, taxes, cess, compensation, crossing of nallahs /stream and other obstructions including mechanical compaction in layers with watering to 95% of MDD (as per IS 2720 part 8), handling, re-handling, dressing to the final profile with all labour, material, tools, plant, machinery and equipment, taxes, cess etc. as a complete job in accordance with the specification and drawings.	1,000	Cum	271.46	At Par	2,71,460.00



<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
29	<b>NS-3</b>	Supplying and laying in position <b>M-35 RCC</b> as per approved design mix with admixtures and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all lifts & leads, having continuous agitated mixer, pumping concrete from transit mixer to site of laying, compacting, finishing & curing, with all labour, material, tools, plants, machinery and equipment, taxes, cess etc., as a complete job ,but excluding supplying & fixing form work (centring & shuttering),in accordance with the specification and drawings. Note – (i) Cost of cement is included in the above item. (ii) Cost of Reinforcement steel is not included in the above item and will be paid separately under item no.8(i) (USSOR item No. 025072) (iii) Cost of supplying & fixing form work (centring & shuttering) is not included in the above item (except pile cap & open foundation) and will be paid separately under relevant item no. 6(i),(ii),(iii) (USSOR item No. 025030)					
i	<b>NS-3A</b>	In Pile caps, open foundation & RCC Box/Sub way, well steining, well cap	1,100	Cum	7,776.37	At Par	85,54,007.00
ii	<b>NS-3B</b>	In Piers, abutments, box	400	Cum	8,098.18	At Par	32,39,272.00
iii	<b>NS-3C</b>	Abutment cap & Pier Cap, pedestals, approach slab, Deck slab	400	Cum	8,421.36	At Par	33,68,544.00
iv	<b>NS-3D</b>	Retaining walls, wing walls, return walls, drop walls, curtain walls, toe walls etc. of all heights	12,786	Cum	7,888.74	At Par	10,08,65,429.64

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
30	NS-4	<p>Manufacturing, transportation (including loading &amp; unloading) and installation in position(including joining and grouting) M-50 or higher grade precast reinforced cement concrete segmental retaining walls of specified height (height measured from founding level) as per the directions of the Engineer. Precast reinforced retaining walls shall be factory-made and steam cured in a controlled environment with weep holes and in-built inserts for handling/transportation. Dimensional tolerances shall be as per IS: 6408 (part 2) for PC Class 6.</p> <p>Note:-</p> <p>1.This item includes cost of all the materials, labour , machinery, tools &amp; plant etc. complete required for <b>manufacture of precast segments</b> except Steel Reinforcement which shall be paid separately under item no.8(i)(USSOR item No. 025072) of schedule B.</p> <p>2. Boulder Backing and backfilling of filter media behind wall shall be paid separately Item No.32 (NS-6) &amp; Item No.35 (NS-9) respectively of this schedule.</p> <p>3. Excavation of soil for foundation shall be paid separately under item no.2 (USSOR item No. 022010)</p> <p>4. Levelling course of 1:3:6 concrete of 150mm thick should be provided before placing the wall segments. Payment for which shall be made under Item No. 3 (i) (USSOR Item No. 022034).</p> <p>5. A layer of Cement mortar about 20mm thick should be provided over levelling course. Payment for which shall be made under Item No. 16 (DSR Item no. 3.8).</p>	2,084	Cum	28,421.64	At Par	5,92,30,697.76

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
<b>S. No</b>	<b>Item No.</b>	<b>Description of Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Basic Rate in INR</b>	<b>Add % Above for Estimate</b>	<b>Estimated amount in INR</b>
		6. 60% of the rate shall be paid on receipt of the precast retaining wall segments at site and balance 40% will be paid on fixing the same in position in satisfactory condition.					

<b>Revised Schedule 'B'</b> <b>Retaining wall &amp; other civil works</b>							
S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
31	NS-5	<p>Manufacturing, transportation (including loading &amp; unloading) and installation in position(including joining and grouting) M-50 or higher grade precast reinforced cement concrete U-shaped drain with cover as per the directions of the Engineer. Precast reinforced U-shaped drain shall be factory-made and steam cured in a controlled environment with inserts for handling/transportation. Dimensional tolerances shall be as per IS: 6408 (part 2) for PC Class 6.</p> <p>Note:-</p> <p>1.This item includes cost of all the materials, labour , machinery, tools &amp; plant etc. complete required for <b>manufacture of precast segments</b> except Steel Reinforcement which shall be paid separately under item no.8(i)(USSOR item No. 025072) of schedule B.</p> <p>2. Boulder Backing and backfilling of filter media behind wall shall be paid separately Item No.32 (NS-6) &amp; Item No.35( NS-9) respectively of this schedule.</p> <p>3. Excavation of soil for foundation shall be paid separately under item no.2(USSOR item No. 022010)</p> <p>4. Levelling course of 1:3:6 concrete of 150mm thick should be provided before placing the wall segments. Payment for which shall be made under Item No. 3 (i) (USSOR Item No. 022034).</p> <p>5. A layer of Cement mortar about 20mm thick should be provided over levelling course. Payment for which shall be made under Item No. 16 (DSR Item no. 3.8).</p> <p>6. 60% of the rate shall be paid on receipt of the precast retaining wall segments at site and balance 40% will be paid on fixing the same in position in satisfactory condition.</p>	20	Cum	28,421.64	At Par	5,68,432.80

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S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
32	NS-6	Providing Boulder Backing behind wing wall, return wall, retaining wall with hand packed boulders & cobbles not less than 15cm in any direction & not less than 15kg (except smaller boulders required for filling voids) including all lead, lift, labour & other incidental charges as complete work in all respect. Cost of boulder/cobbles is included in this item.	12,604	Cum	1,475.82	At Par	1,86,01,235.28
33	NS-7	Providing and fixing Weep Holes in Abutments, RCC Box, Wing walls and Return walls etc., of new bridges with 110mm dia UPVC pipe (IS :13592) Type A ISI marked with all contractor's men, material, transportation, all taxes as per specifications and as directed by Engineer-in-Charge.	11,028	Running meter	266.91	At Par	29,43,483.48
34	NS-8	Providing and fixing of 75mm dia PVC pipe for weep holes in abutments, Wing Wall, Return Wall, Face wall, retaining wall etc. at suitable intervals as directed by the Engineer-in-charge.	10,550	Rmt	231.00	At Par	24,37,050.00
35	NS-9	Providing and laying of filter media consisting of granular materials of GW, GP, SW groups as per IS:1498 (latest) in required profile behind boulder filling of abutments, wing walls / return walls etc. above bed level with all labour and material complete job as per drawing and technical specification of RDSO Guidelines.	43,847	Cum	2,441.23	At Par	10,70,40,611.81

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S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
36	NS-10	Supplying and laying blanketing material produced through mechanical means using crushers and pug mill for 32.5 T axle load as per RDSO specification No. RDSO/2020/GE:004 September 2020 "Comprehensive Guidelines and Specification for Railway Formation" over the top of subgrade including all lead, lift, ascent, descent, royalty, taxes, cess, crossing of nallahs /stream and other obstructions including mechanical compaction in layers not exceeding 300 mm thick with vibratory rollers, watering, handling, re-handling and dressing of formation to the final profile with all labour, material, tools, plants, machinery and equipment, taxes, cess, etc. as a complete job in accordance with the specification and drawings. Note: 10% of payment shall be withheld till the slopes are dressed to the required profile and compacted mechanically with vibratory rollers as per RDSO guidelines.	500	Cum	2,118.60	At Par	10,59,300.00

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S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
37	NS-11	Casting, supplying and installation of Pre-cast cement concrete blocks of size 25X25 X20cm. or of required size as directed by the Engineer for protective works at bridges & banks like pitching, toe wall, flooring, drains etc. using M20 design concrete mix with 20mm aggregate size including Contractor's shuttering, leading to bridge site from casting depot, including dressing and levelling of surface, providing gravel backing, laying & jointing blocks with cement mortar 1:3 with Contractor's labour and as directed by Engineer-in-charge (All labour and materials including cement by Contractor).Note:i) Payment for gravel backing will be paid under item no. NS-12 of this Bill.ii) 60% Payment shall be made after casting of pre-cast concrete blocks and bringing at work site. The balance 40% will be made on completion of laying and finishing.iii) Measurement is based on quantity calculation of blocks used only (no of blocks x volume of one block).	950	Cum	7,731.14	At Par	73,44,583.00
38	NS-12	Supplying and laying of 150mm thick well graded stones aggregate/gravel as base layer over the slopes of embankment with manual dressing with water compaction including the cost of supply of all material, labour, lead, lift, tools, plants, crossing of tracks etc. complete as per approved drawings and technical specifications.	500	Cum	2,139.90	At Par	10,69,950.00

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S. No	Item No.	Description of Item	Quantity	Unit	Basic Rate in INR	Add % Above for Estimate	Estimated amount in INR
39	NS- 13	Supply & installation of precoated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in charge) 0.50mm +/- 5% total coated thickness (TCT) thick Zinc coating 120gsm as per IS:277 in 240mpa steel grade, 5-7microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling / self tapping screws of size (5.5 x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/vertical or curved surfaces excluding the cost of purlins , rafters and trusses and including cutting to size and shape wherever required.	500	Sqm	756.52	At par	3,78,260.00
Total Estimated Amount of Schedule 'B'							<b>59,83,48,214.32</b>

**Name of the person duly authorized to sign the Tender on behalf of the Tenderer:** \*[insert complete name of person duly authorized to sign the Tender]

**Title of the person signing the Tender:** [insert complete title of the person signing the Tender]

**Signature of the person named above:** [insert signature of person whose name and capacity are shown above]

**Date signed** [insert date of signing] **day of** [insert month], [insert year]

**Note:** Tenderers must submit and upload duly signed revised Schedule 'B' while submitting their Tender on e-Procurement portal with Financial Part