

**Name of work-Annual Maintenance work for P-Way /Track,Buildings & Bridges for a period of Two Years
(From DDU ERC to CPBH and SEBNL to SEBN (Approx Length-275 TKM))**

Schedule A

Sl.No	USSOR (2019) Item No	Description of Work	Unit	Total Qty.	Rate	Amount
	052070	Grouting of masonry/concrete by injection process duly Sealing of cracks, through nipples complete as per Technical Specification and procedure given in IRBM Para No 209 including necessary admixutre. (Cement wil be paid extra)				
1	052071	Neat Cement Grout with 20% anti shrinkage compound w.r.t. cement.	Kg	1500	296.59	444885
	061020	Removing rail of all types & length from track, laid on any type & density of sleeper by removing fish plates, fastenings & fish bolts and other materials alongwith keeping released rail and all materials safely on cess, as directed by Engineer in-charge. (cutting & drilling of rail shall be paid separately and work to be done under traffic block & Railway's supervision)				
2	061023	BG Track – For Casual/Scattered Renewal work	Running Metre	1500	42.84	64260.00
	061030	Insertion of rails of all types & length in track, laid on any type & density of sleeper to the specified gauge. Rates include fastening of rail with sleepers with standard set of fastenings and fixing of fish plates and bolts or, if required, providing gap for welding. (drilling and cutting of rail to be paid separately)				
3	061033	BG Track – For Casual/Scattered Renewal work	Running Metre	1500	54.40	81600.00
	061090	Replacement of sleepers in track with sleepers lying on cess for casual renewal at isolated locations with all fittings complete to specified gauge & cross level with contractor's tools including packing and dressing of ballast, as directed by Engineer in-charge. Released materials shall be neatly stacked and handed over.				
4	061091	BG Track (PSC to PSC sleepers)	Each	1000	502.70	502700.00
	061200	Cutting / cropping of rail of 60Kg – 90 UTS, manually and perfectly vertical with contractor's labour, hacksaw blade and tools & plants - NOTE: 1.Manual cutting should be used only in emergencies with prior permission of sectional ADEN where machine cutting can not be arranged in time. 2. Cutting of Rails with blade and forcing to part by using other means to break the rails is prohibited. 3.Rails should be cut right through hacksaw blades only.				
5	061201	On Cess	Each	100	351.38	35138.00
6	061202	In-situ situation	Each	300	550.56	165168.00
	061210	Drilling of hole in rail of any section and any UTS, manually (in emergencies only) with contractor's labours, tools & plants, consumables etc. for -				
7	061211	Hole of dia 25mm and above	Each	800	221.61	177288
	061220	Gas cutting of rail of various sections with contractor's tools & plants, as directed by engineer in-charge :				
8	061222	Rail section of 52Kg and above	Each	200	145.49	29098.00
9	061150	Lubrication of Elastic Rail Clips on PSC sleepers with contractor's grease, conforming to Railway's specifications, labour etc. complete as per Para 1411 (5)(b) of IR P.Way Manual	Each	600000	3.20	1920000.00

	091010	<p>Supply of Alumino thermic welding portions 52/60 Kg as approved by RDSO for welding of rails 52/60 kg for 25mm gap by the process of AT welding along with complete accessories confirming to the specification laid down in Indian Railway Standard specification No.IRST-19-2012 up to date correction slips with Single shot crucible fitted with Automatic Tapping Thimble Technology, 3 pieces Mould (Zircon washed) manually pressed for execution of welding of rail joint and compressed air petrol heating techniques including consumable stores complete and as directed by the engineer in charge at site. The following accessories shall be supplied.</p> <p>1.Alumino Thermic welding Portion (60/52 kg)as per IRS T-19-2012 2.3 piece Pre-fabricated Dry Mould (60/52 Kg)as per IRS T-19-2012 3.Luting Sand 4.Ignition Match 5.Single shot Crucible fitted with auto tapping thimble 6. Mould shoes (1 set for 50 weld portions)</p> <p>The following accessories shall be supplied 10% extra by the contractor at free of cost. Single shot Crucible fitted with auto tapping thimble, Three piece pre fabricated dry moulds, Luting sand and Ignition matches.</p> <p>Note: Rate is inclusive of transportation of above to SSE/P.Way stores</p>				
10	091011	For 60 Kg Rail, 3-piece Mould and Compressed Air Petrol heating technique	Each	1000	3127.56	3127560.00
	091040	25mm gap 'in-situ' welding and finishing of rail joints as per IR's AT Welding Manual under traffic block with Railway's welding portion under Railway's supervision by contractor's competent welder and other skilled labour, including consumables tools & equipments. Item includes use of weld trimmer and grinding of weld, finished to meet the weld tolerances . Only welding portion and related consumables, e.g. Single shot crucible/Conventional Crucible, mould shoes, pre-fabricated dry mould, luting sand, closing pin, asbestos powder, igniter, thimble and magnesite powder as per method of welding will be supplied by Railways. All other tools, equipments etc. including fuel for pre-heating will be arranged by contractor. Item also includes anti corrosive painting to weld & marking of weld joint, as directed by engineer in-charge				
11	091041	For 60 Kg Rail, Single shot crucible fitted with Automatic Tapping Thimble Technology, 3 pieces Mould (Zircon washed) and Compressed Air Petrol heating technique	Each	1350	2638.31	3561718.50
12	111080	Earthwork for repairing to cess by cutting or raising of existing cess upto 4 metre from centre of track with Railway's earth including cutting of earth, leading, benching, filling, dressing including cutting of grass / shrubs / trees etc.; watering, compaction by ramming and leveling of earth for required longitudinal & cross-sectional profile, as directed Note: [Rate also includes repairs of trolley refuges including pulling ballast back upto formation level to avoid impounding of ballast and there after putting the pulled ballast back after cess repairs etc.]	Running Metre	2000	97.27	194540.00
13	111090	Repairing of embankment with contractor's own earth including , excavation / loading into contractor's vehicle with soil quality class SQ1 in cess / formation / level crossing, rain cuts etc. in running line to make surface to the desired level and slope to entire satisfaction of Engineer in-charge. Rate shall include sectioning to profile, all lift, descends, ascends, crossing of track / road / nallah etc. including breaking of clods etc. and compaction by rollers / rammers / tamping rods etc.	Cum	1200	364.59	437508.00
	131020	Picking up of slacks in track, as directed by Engineer in-charge without damaging sleepers & fittings, duly opening up ballast, gauging, alignment, correcting longitudinal & cross levels, packing, boxing of ballast and dressing the same under traffic conditions (as per Indian Railways Permanent Way Manual Para-229) :				
14	131021	For PSC Sleeper (BG)	Track Metre	7500	81.37	610275.00

	141020	Carrying out Through USFD testing of running rails & welds (excluding flange testing) including the full head width portion of SEJ, lead portion of points & crossings of all types of rails using 0° (4 MHz) and 70° (2 MHz) central forward & backward, 70° (2 MHz) gauge face corner forward & backward and 70° (2 MHz) field forward & backward probes by NBC (Need Based Concept) method under traffic conditions as per provisions of IR's "Manual Specifications for Ultrasonic Testing of Rails and Welds" & related instructions, duly marking defects, submission of daily reports and storing back-up data, as specified & directed. The rates are inclusive of contractor's men, materials & machines complete unless otherwise specified and as directed				
15		With Contractor's USFD machine	Track Km	100	5351.75	535175.00
		Carrying out USFD testing of Alumino Thermic (AT) welds on all types of rails, using 0° (2 MHz) double crystal; 70° (2 MHz) 20mm x 20mm single crystal probe for head & flange testing; 2 nos. 45° (2 MHz) single crystal with tandom rig for testing from rail top to bottom & for half moon testing and 70° (2 MHz) 20mm x 20mm side looking probe by NBC (Need Based Concept) method under traffic conditions as per provisions of IR's "Manual & Specifications for Ultrasonic Testing of Rails and Welds" & related instructions duly marking the defects, submission of daily reports and storing back-up data as specified & directed. The rates are inclusive of contractor's men, materials & machines complete unless otherwise specified and directed				
16	141032	Track having more than 3 Rail panels	Each	2800	179.22	501816.00
	131200	De-stressing of LWR/CWR with contractor's labours, tools & equipments inclusive of all lead & lift. Activities include cutting of LWR/CWR into convenient panels of specified length, removal of ERCs, liners, greasing of ERCs and liner contact area, lifting rails and keeping them on rollers provided at every 15 sleepers, working out elongation of rail ends depending on prevailing site conditions, pulling rails with the help of Hydraulic Tensor to achieve the desired elongation, cutting rails, as required, removing rollers and placing rail in position, re-fixing ERCs & liners and adjustment of gap at SEJs : Note: (1) Welding of rail joints will be paid separately. 2. Rail cutting and Hole drilling shall be paid separately (3) Opening and closing of LC if required will be paid separately. 4. As per instructions of LWR manual & CE's Circulars for destrssing of LWR/CWR				
17	131202	with Contractor hydraulic Rail tensor	Track Metre	7000	79.47	556290
18	131203	without hydraulic rail tensor	Track Metre	50000	69.81	3490500
19	131270	Maintenance of track on main line & loops, Points & crossings etc. including special attention to section for carrying out various maintenance works listed in Indian Railways P.Way Manual / Bridge Manual / LWR Manual for safe running of goods and passenger trains with contractor's tools / labours etc. complete, as directed by Engineer in-charge. {Note : (1) Contractor shall arrange one gang at any point of time comprising of minimum 20 labours with sufficient experience in P.Way working and one P.Way Supervisor. (2) In case, contractor provides less no. of Labour / Supervisor, payment will be deducted @ 10% of the accepted rate per person}	Day	400	14717.31	5886924.00
20	131410	Cleaning & clearing of side drains including disposing of muck beyond Railway boundary as per instructions of Engineer in-charge to keep drains clean and clear in cuttings etc.	Running Metre	90000	29.27	2634300.00
	131420	Removal of all types of muck / malba and garbage which includes waste material, animal carcass, cow dung, debris, sweepings etc. from track and dumping / throwing, as directed by engineer in-charge following all rules / regulations of State / Central Govt. and Authorised Bodies :				
21	131421	In case payment is based on area cleaned	Sqm	5000	38.38	191900.00
22	131430	De-weeding, uprooting of weeds / jungle etc. and dressing including scarifying ballast in entire profile upto toe of ballast on track	Track Metre	90000	34.45	3100500.00

23	131450	Trimming of tree branches coming within 4m of centre line of track & those obstructing views of Curves/LCs / Signal / Indicator at locations in section & station yard, as specified by Engineer in-charge including disposal of branches, bushes outside cess/yard. (Note : Girth of more than 30 cm will only be considered as tree)	Each	200	148.27	29654.00
	131480	Patrol man for patrolling during cold / hot weather on track for protecting track with all contractor's labour, tools, plants etc. complete as directed by Engineer In charge [NOTE:- 1.The person deployed for patrolling must have the following items: • Valid certificate of competency issued by Railways. • Medical certificate issued by Railway fit for A-3 medical category. 2.The following equipment will be supplied by Railways for each patrolman and same to be handed over back to Railways in good condition: • Detonators – 10 nos. if used, bursted detonators to be handed over back and report with reasons for use. • Tri colour Torch – 1no. • Equipment list to be supplied by railway to be mentioned. • Canne –a - boule.(if required) 3.The following equipment to be arranged by contractor for each patrol man. H.S.Flags green-1 No (Std size),H.S Flags -Red-2 Nos(Std size),Torch light 3 cell-1 no, Staff for flags-1no,Whistle Thunder- 1no,Protective clothing to withstand climate, Gum boots,Haver sack				
24	131481	For a maximum duration of 8 hrs.	Each	8500	646.22	5492870.00
	131490	Patrol man for monsoon / security patrolling whenever required for protection of track with all contractor's labour, tools and plants etc. complete and as directed by Engineer in-charge and as per IRPWM (for a duration of 12 hours) NOTE:- 1.The person deployed for patrolling must have the following items: • Valid certificate of competency issued by Railways. • Medical certificate issued by Railway fit for A-3 medical category. 2.The following equipment will be supplied by Railways per each patrol man and required to be handed over back to Railways in good condition: • Detonators – 10nos.(in a tin case), if used, bursted detonators to be handed over back with reasons for use. • Tri Colour Torch - 1no. • Patrol chart. • Patrol book. 3.The following equipment to be arranged by contractor for each patrol man: • H.S.flags green – 1no.(standard size) • H.S. flags red – 2nos. .(standard size) • Torch (3 cell) – 1no. • Staff for flags – 1no. • Whistle thunder – 1no. protective cloth to withstand the climate Gum boots Haver sack 4. Wherever 2 or more tracks are parallel with in track centres 50m. one patrol man will be sufficient. • Wherever the track centers are more than 50m. Separate patrol man to be deputed for each track & extra payment will be made for such case. 5. Route KM means including both UP & DN.]				
25	131491	For Day shift	Each	2500	646.22	1615550.00
26	131492	For Night shift	Each	2500	802.76	2006900.00
	Item No.	Description	Unit		Rate (Rs)	
		1. USFD Testing of Rails :				

	141020	Carrying out Through USFD testing of running rails & welds (excluding flange testing) including the full head width portion of SEJ, lead portion of points & crossings of all types of rails using 0° (4 MHz) and 70° (2 MHz) central forward & backward, 70° (2 MHz) gauge face corner forward & backward and 70° (2 MHz) field forward & backward probes by NBC (Need Based Concept) method under traffic conditions as per provisions of IR's "Manual & Specifications for Ultrasonic Testing of Rails and Welds" & related instructions, duly marking defects, submission of daily reports and storing back-up data, as specified & directed. The rates are inclusive of contractor's men, materials & machines complete unless otherwise specified and as directed :				
27	141021	With Contractor's USFD machine	Track Kilometer	80	5351.75	428140.00
	141030	Carrying out USFD testing of Alumino Thermic (AT) welds on all types of rails, using 0° (2 MHz) double crystal; 70° (2 MHz) 20mm x 20mm single crystal probe for head & flange testing; 2 nos. 45° (2 MHz) single crystal with tandom rig for testing from rail top to bottom & for half moon testing and 70° (2 MHz) 20mm x 20mm side looking probe by NBC (Need Based Concept) method under traffic conditions as per provisions of IR's "Manual & Specifications for Ultrasonic Testing of Rails and Welds" & related instructions duly marking the defects, submission of daily reports and storing back-up data as specified & directed. The rates are inclusive of contractor's men, materials & machines complete unless otherwise specified and directed :				
		With Contractor's USFD machine :				
28	141032	Track having more than 3 Rail panels	Each	2500	179.22	448050.00
	141050	USFD testing of Switch Expansion Joint (SEJ) by NBC (Need Based Concept) method under traffic conditions as per provisions of "IR's Manual & Specifications for Ultrasonic Testing of Rails and Welds" with latest amendments & related instructions, duly marking the defects, submission of daily reports and storing back-up data, as specified in the special conditions, as applicable to rail testing. The rates are inclusive of contractor's men, materials & machines complete unless otherwise specified and directed :				
29	141051	With Contractor's USFD machine	Set	15	1384.43	20766.45
	151310	Carrying out pre-tamping, during tamping and post-tamping work for tamping track with all types of rails, sleepers & sleeper density by various Track Tamping machines, which include : (1) Re-adjustment of ballast, heaping-up of ballast, filling-up of cavities in tamping zone by picking ballast from stacks / shoulders / crib of adjoining track upto lead of 50 m to ensure effective packing; (2) Clearing of ballast on sleepers to make them visible to operator, (3) Clearing of ballast over rail foot to facilitate holding of rail by rollers of TTM; (4) Digging, screening and replenishment of ballast at mud pumping / rounded ballast in sleeper crib location; (5) Tightening of loose fittings immediately before & after tamping; (6) Replacement of broken / missing fittings supplied by Railway; (7) Correcting displaced sleepers to position alongwith squaring; (8) Re-setting of worked-out / fallen fittings; (9) Removing and re-fixing joggled fish plates & wooden blocks, wherever necessary; (10) Manual consolidation of ballast in crib / shoulders; (11) Removing and re-fixing of traction bonds during the block in electrified sections (12) Dressing of ballast NOTE: 1. Contractor to provide minimum 30 men with 2 supervisors for carrying out above work. 2. Tamping blocks are not identical & it may be given at any time either during day or night. 3. Stages of payment a) 30% of the rate will be paid on completion of pre tamping attention, b) Balance 70% of the rate will be paid on completion of post tamping. 4. Recovery at the rate of twice the above applicable rate will be effected in case contractor fails to carry out pre/during/post operation.				

30	151311	(a) For day time block working	Track Metre	100000	34.06	3406000.00
	151320	Pre, during & post tamping operations, as mentioned in Item no. 151310 at level crossing portion alongwith opening the road, removing and re-fixing of check rails & fittings, renewal of unserviceable sleepers, painting of running rail & check rail, completing road surface to motorable smooth condition after packing is over, as directed for -				
31	151321	(a) Level crossing with CC block surface	No's	10	22727.95	227279.50
	151350	Carrying out pre-tamping, during tamping and post-tamping works for tamping track with all types of rails, sleepers & sleeper density by various Track Tamping machines, which include : (1) Re-adjustment of ballast, heaping-up of ballast, filling-up of cavities in tamping zone by picking ballast from stacks / shoulders / crib of adjoining track upto lead of 50 m to ensure effective packing; (2) Clearing of ballast on sleepers to make them visible to operator; (3) Clearing of ballast over rail foot to facilitate holding of rail by rollers of TTM; (4) Digging, screening and replenishment of ballast at mud pumping / rounded ballast in sleeper crib location; (5) Tightening of loose fittings including check rails immediately before & after tamping; (6) Replacement of broken / missing fittings supplied by Railway; (7) Correcting displaced sleepers to position alongwith squaring; (8) Re-setting worked-out / fallen fittings; (9) Removing and re-fixing joggled fish plates & wooden blocks, OHE bonds & other obstructions, wherever necessary; (10) Removing and re-fixing stretcher bar, as directed; (11) Adjustment in opening and housing of switch for testing operation of points for -				
32	151352	1 in 12 Turnouts	Set	44	16542.26	727859.44
33	151355	Derailing Switch	Set	11	10407.35	114480.85
	171230	Hiring and operating Multi-Utility vehicle of loading capacity one MT with sitting capacity of 4/6 persons, 4 strokes, 4 cylinders engine, factory-built metal body, cargo box type or passenger cabin type or both (with 24 hours availability), including cost of fuel, lubricants, major/minor repairs, salary of driver, toll tax, all other tax complete, operation and maintenance including running upto 1200 km in a month. The vehicle shall run on pucca, kutch road and along the track. The contractor shall arrange road permit for vehicles for all the States of operation, as per instructions of engineer in-charge and vehicle shall not be more than three years old. NOTE: This item to be executed through Special tender.	Month	20	50353.28	1007065.60
	171231	Extra over item No 171230 for every additional Km or part there of over 1200 Km in a month	KM	3709	8.03	29783.27
34	191300	Clearing waterway of major & minor bridges by removing weeds / shrubs / bushes, removing silt deposit, filling scours, if any upto 10 metre from centre of bridge on either side including disposing waste and silt away from waterway (Rates are for a single line and per metre of bridge span	metre	2500	185.34	463350.00
	201110	Manufacturing, fabricating and supplying retro-reflective sign boards, made of 2mm thick aluminum sheet or 3mm thick aluminium composite sheet, face to be fully covered with high intensity encapsulated type heat activated retro-reflective sheeting conforming to type-IV of ASTM-D4956-01 in yellow & black or other colour combination including subject matter, message, symbols, borders etc. as approved by Engineer In-charge or as per IRPWM guidelines, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class-2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back- support frame of M.S. angle iron of size 25mm x 25mm x 3mm alongwith theft resistant measures, mounted and fixed with 2 nos. M.S. angles of size 35mm x 35mm x 5mm to a vertical post made up of M.S. Tee section ISMT 50mm x 50mm x 6mm, back side of board shall be with non-peelable weather-proof paint, consisting of one coat of zinc chromate primer and two coats of epoxy paint. Vertical post shall have black & white anti-corrosive paint or powder coating complete, as directed				

35	201112	Speed Breaker / Rumble Strips Board	Each	40	4168.91	166756.40
36	201114	Manned Level Crossing Indicator Board	Each	20	4812.39	96247.80
37	201116	Caution Indicator Board	Each	20	4774.93	95498.60
38	201117	Speed Indicator Board	Each	20	4078.30	81566.00
39	201119	Termination Indicator Board	Each	20	6140.20	122804.00
Total:-						44829765.41
Total Amount after DFCCIL updated rates (3.37% below)						43319002.32

Schedule B					
Annual Maintenance work for All buildings and structure for a period of Two Year (From DDU to CPBN & SEBL to SEBN)					
Sl.No	Schedule	Ref. of Chapter CPWD Schedule of Rates 2018	Unit	Approximate cost as per CPWD-DSR 2018(Rs)	Amount Rs
1	a.	Chapter1-Carriage of Materials	1.00 (Lumpsum)	200000	200000
2	b.	Chapter 6-masonry Work	1.00 (Lumpsum)	700000	700000
3	c.	Chapter 9-Wood & PVC work	1.00 (Lumpsum)	500000	500000
4	d.	Chapter-10- Steel	1.00 (Lumpsum)	400000	400000
5	e.	Chapter-21-Aluminum Work	1.00 (Lumpsum)	300000	300000
6	f.	Chapter-11-Finishing	1.00 (Lumpsum)	100000	100000
7	g.	Chapter-17-Sanitary Installation	1.00 (Lumpsum)	400000	400000
8	h.	Chapter-18- Water Supply	1.00 (Lumpsum)	200000	200000
9	i.	Chapter-19-Drainage & sewage	1.00 (Lumpsum)	100000	100000
10	j.	All others chapter not included above Chapter-2,3,4,5,7,8,12,13,14,15, 16,20,22,23,24,25& 26	1.00 (Lumpsum)	400000	400000
Total					3300000
Total Amount after DFCCIL updated rates (2.56% below)					3215520

Schedule C(NS Miscellenous work)						
Bridge Maintenance work (From DDU to CPBN & SEBL to SEBN)						
Sl.No	Description of Work	Scope of Work	Unit	Rate(Rs)	Amount	Remarks
1	Dewatering of Natural or accumulated water from from any location.Payment to be done for Horse power of Pump multiplied by Pumping hours	22472	HP Hours	44.5	1000000	As per LOA No-DDU-EN-RUB Dewatering-344-2021 dated 24-06-21
Total:-					1000000	
Total Amount after DFCCIL updated rates (10.26% below)					897400	

Schedule D(NS Manpower Supply)**Annual Maintenance work for All buildings and structure for a period of Two Year
(From DDU to CPBN & SEBL to SEBN)**

			unit	Rate	AMOUNT
1	Safai wala cum maali cum pump operator	Man Month	36	16226	₹ 584,136
2	Carpenter	Man Month	24	19568	₹ 469,632
3	Plumber	Man Month	24	19568	₹ 469,632
4	Electrician	Man Month	24	19568	₹ 469,632
Total:-					₹ 1,993,032
Total Amount after DFCCIL updated rates (1.89% below)					₹ 1,955,364

Summary of Estimate of Track Maintenance in b/w DDU ERC to CPBN and from SEBL to SEBN

Sl. No	Description of Work	Estimated Cost (Including GST) As Per USSOR-2019	DFCCIL Rate updation		Amount
			% age	Above/ Below	
1	Schedule-A (P-Way work as per USSOR-2019)	₹ 44,829,765	3.37 %	Below	₹ 43,319,002
2	Schedule-B (CPWD-DSR 2018) Buildings & Structure)	₹ 3,300,000	2.56 %	Below	₹ 3,215,520
3	Schedule-C (NS-Miscellaneous Work)	₹ 1,000,000	10.26 %	Below	₹ 897,400
4	Schedule-D (NS-Manpower supply)	₹ 1,993,032	1.89 %	Below	₹ 1,955,364
	Total Amount	₹ 51,122,797			₹ 49,387,286
(i)	The Tenderer shall quote single percentage for each Schedule. If the tenderer quotes different percentage (%) above / below againsts each items of any schedule (i.e. A), 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.				