

**Schedule-B**

**Name of work: Two Years Maintenance Contract for railway track leading to Tuna from 0 to 11 km KPT LINE (Take off point at 2.573km at GIM Yard to 13.54km) including LC-1, LC-2.**

T.I.No.	Description	Total Qty	Rate	Unit	Amount
1	<p>Carrying out pre-tamping, during tamping and post-tamping work for tamping track with all types of rails, sleepers &amp; sleeper density by various Track Tamping machines, which include :</p> <p>(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;</p> <p>(2) Clearing of ballast on sleepers to make them visible to operator,</p> <p>(3) Clearing of ballast over rail foot to facilitate holding of rail by rollers of TTM;</p> <p>(4) Digging, screening and replenishment of ballast at mud pumping / rounded ballast in sleeper crib location;</p> <p>(5) Tightening of loose fittings immediately before &amp; after tamping;</p> <p>(6) Replacement of broken / missing fittings supplied by Railway;</p> <p>(7) Correcting displaced sleepers to position alongwith squaring;</p> <p>(8) Re-setting of worked-out / fallen fittings;</p> <p>(9) Removing and re-fixing joggled fish plates &amp; wooden blocks, wherever necessary;</p> <p>(10) Manual consolidation of ballast in crib / shoulders;</p> <p>(11) Removing and refixing of traction bonds during the block in electrified sections</p> <p>(12) Dressing of ballast</p> <p>NOTE:</p> <p>1. Contractor to provide minimum 30 men with 2 supervisors for carrying out above work.</p> <p>2. Tamping blocks are not identical &amp; it may be given at any time either during day or night.</p> <p>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.</p> <p>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.</p> <p>For day time block working (The rates are inclusive of Hire charges of tamping Machine. Contractor shall arrange the hiring of tamping machine from Railways at his own risk and cost, however all the administrative assistant will be provided by DPT.)</p> <p>Total length of track= 13540-2573 =10967 m</p>	11	175700.00	KM	1932700.00
2	<p>Working of the Contractor's Push Trolley by arranging required semi-skilledmanpower as per Railway's rules and stipulations for conducting inspectionsby Railway/DPT officials and as directed by Engineer in-charge : For Half day(upto 6 hours).</p> <p>Consider trolley inspection at every Months interval=12 X 2 = 24 times</p>	24.00	1510.53	Each	36253.00
3	<p>Supply and stacking hard durable crush metal of size 65mm for tracks as per latest railway specification and stacking as near as possible to the track including royalty, quarrying, breaking, loading, unloading, transport screening etc. as directed. Stack measurement.</p> <p>LS for various requirements for maintenance</p>	750.00	1250.00	M3	937500.00
4	<p>Picking up of slacks in track, as directed by Engineer in-charge without damaging sleepers &amp; fittings, duly opening up ballast, gauging, alignment, correcting longitudinal &amp; cross levels, 3 round of through packing, boxing of ballast and dressing the same under traffic conditions (as per Indian Railways Permanent Way Manual Para-229) : For PSC Sleeper (BG)</p> <p>Total length of track= 13540-2573 =10967 m</p> <p>Consider 10% of track length for two years period= 1097m say 1100m</p>	1100	81.37	Track Metre	89507.00

T.I.No.	Description	Total Qty	Rate	Unit	Amount
5	Slewing and realigning of curves on existing Broad Gauge track under running traffic condition, as directed by Engineer incharge with contractor labour, tools & plants, as required with general lift upto 25mm including one round of through packing, loosening/tightening of P.Way fittings, if required and other incidental works : PSC Sleeper track -				
a	Maximum slew upto 50mm Total length of curve no. 1 to 8 as per Item no. =3296m considering 50% length needs slewing= 3296x50%=1648  consider 30% length for slew upto 50mm = 1648x30% = 495m	495	117.86	Track Metre	58341.00
b	Maximum slew more than 50mm and upto 100mm consider 30% length for slew more than 50mm upto 100mm = 1648 x 30% = 495m	495	144.78	Track Metre	71667.00
c	Maximum slew more than 100mm and upto 150mm consider 40% length for slew more than 100mm upto 150mm = 1648x40% = 659m	659	166.90	Track Metre	109988.00
6	Lubrication of ERCs and its liner contact area by removal of ERCs and Metal / GFN liners in rail panel, cleaning of rust / scale of ERC, Metal / GFN liners & SGCI insert by using wire brush, scrapper / sand emery paper etc., supply & provision of anti-corrosive treatment by application of graphite grease, as prescribed by Railway under side of liners & corresponding area of rail foot & SGCI insert with ERCs and re-fixing the same as per Para-1411(5) of Indian Railways Permanent Way Manual.  total length of track=11 km sleepers 1660 per km, total Nos of sleepers= 11*1660 = 18260 per year Total Quantity for Two Years= 16940*2 =36520	36520	23.21	per sleeper	847630.00
7	Scattered replacement of Grooved Rubber Pads on PSC / ST sleepers, as directed by Engineer in-charge  Total Nos. of Rubberr Pad= 18260*2 =36520 considering replacement of 1% of Pad= 36520*1% = 365 per year Total Quantity for Two Years= 365*2 = 730	730	55.00	Each rubber pad	40150.00
8	Removing seized ERC from SGCI inserts of existing track by using suitable approved chemicals and / or heavy duty extractor and re-fixing it with lubrication of insert eye and ERC, as directed by engineer in-charge (due care shall be taken to avoid any damage to the sleeper)  Total Nos. Of ERC= 18260*4 =73040 considering relacement of 1% of ERC per year= 73040*1% = 730 Total Quantity for Two Years= 730*2 = 1460	1460	115.00	Each ERC	167900.00
9	Lubrication of gauge face of rail on sharp curves, cross overs, points & crossings and turn-in curves with contractor's grease graphite of approved quality	13185	4.72	Running Meter	62234.00

T.I.No.	Description	Total Qty	Rate	Unit	Amount
10	Patrolling during cold / hot weather on track for protecting track with all contractor's labour, tools, plants etc. Complete For a maximum duration of 8 hrs  Two persons per Day for Two Years= 2*365*2=	1460	646.22	per Person	943482.00
11	Painting of rail on running track on rail, web, foot including liner contact area (excluding bottom of foot) and fishing plane as per requirement with one coat of red oxide primer to IS : 2074 of reputed make including surface preparation, i.e. cleaning with wire brush / sand paper as a complete job (removal of rust and scaling)  Total length of Railway track=13.54-2.573= 10.967 Km	21934	54.86	Running Meter	1203300.00
12	Anti-corrosive painting of rail on running track on web, foot etc. Including liner contact area (excluding bottom of foot) and fishing plane as per requirement with two coats of bituminous emulsion without mica (IP No. 56192 and RDSO Specification No. IRS-P-30-1996) of reputed make including surface preparation, i.e. cleaning with wire brush / sand paper as a complete job as per Para 250 of Indian Railways Permanent Way Manual  Total length of Railway track=13.54-2.573= 10.967 Km	21934	125.17	Running Meter	2745479.00
13	Painting of P.Way Reference Post, Structures etc. with enamel paint of approved make with different colours & letters, as directed by Engineer in-charge : (including 2 coat of SE paint background and 2 coat of letter writting )				
a	Kilometre & Gradient post	36	77.87	Each	2804.00
b	Hectometer Post	109	87.23	Each	9509.00
c	LWR / SEJ Board	8	132.59	Each	1061.00
d	Level Crossing Boards including Road Sign Boards	8	149.98	Each	1200.00
e	Level Crossing Post	4	151.27	Each	606.00
f	Curve Post	16	86.92	Each	1391.00
g	Curve Board	16	132.59	Each	2122.00
14	Painting of Bridge Reference / Boards, Structures etc. along track with enamel paint of approved make with different colours & letters, as directed by Engineer in-charge ((including 2 coat of SE paint background and 2 coat of letter writting)				
a	Bridge Board	16	132.59	Each	2122.00
b	HFL, FSL & DL on Bridge Pier / Abutment	16	604.30	Each	9669.00

T.I.No.	Description	Total Qty	Rate	Unit	Amount
15	<p>Carrying out Through USFD testing of running rails &amp; welds (excluding flange testing) including the full head width portion of SEJ, lead portion of points &amp; crossings of all types of rails using 0° (4 MHz) and 70° (2 MHz) central forward &amp; backward, 70° (2 MHz) gauge face corner forward &amp; backward and 70° (2 MHz) field forward &amp; backward probes by NBC (Need Based Concept) method under traffic conditions as per provisions of IR's "Manual &amp; Specifications for Ultrasonic Testing of Rails and Welds" &amp; related instructions, duly marking defects, submission of daily reports and storing back-up data, as specified &amp; directed. The rates are inclusive of contractor's men, materials &amp; machines complete unless otherwise specified and as directed (report)</p> <p>(a) With Contractor's USFD machine considering once in two years period Total length of track= 13540-2573 =10967 m say 11 Km.</p>	11	5351.75	Track Kilometer	58870.00
16	<p>Annual maintenance of various assets at level crossing, e.g. lifting barrier assembly, boom locking arrangement with ground lever frame, winch etc., as directed by engineer in-charge. Scope of work includes – (1) Adjustment of adjusters; (2) Cleaning &amp; oiling greasing of dust/rust of pulleys and levers; (3) Cleaning of check rail clearance and rope channels; (4) Repairing of pot holes of road surface (Contractor has to maintain the assets throughout the year and also repair the same if any accidental damage occurs)</p> <p>Annual maintenance of two LCs for two Years =2 LCs X 2 Years =4 LCs</p>	4	29732.99	each	118932.00
17	<p>Providing and applying 2.5 mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&amp;P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.</p> <p>Painting of speed breaker at LC-1 Painting of speed breaker at LC-2 considering once in a year Quantity for twoyears period</p>	17	436.6	sq. M	7423.00
18	<p>Dismantling damaged rail hurdle fencing including removal of base concrete and stacking released materials in a neat and countable manner clear of infringements from the track, removing debris clear of site alongwith disposing debris, as directed by engineer in-charge within free lead of 250 metre &amp; lift upto 5 metre complete with all labour, tools &amp; plants.</p> <p>removing damaged hurdle fencing at LCs</p>	100	87	RMT	8700.00

T.I.No.	Description	Total Qty	Rate	Unit	Amount
19	<p>Providing rail hurdle fencing on all four sides of level crossing approaches / platforms for a length of 15 m (approx.) on each side with vertical rails fixed duly embedded in Cement Concrete foundation at 3 metre interval and two horizontal rails {overall height of fencing being at 1.0 metre (approx.) above ground level}. Item includes cutting rails and drilling holes as required, assembling necessary accessories to required length, painting fencing with two coats over one coat of primer with paint of approved quality &amp; colour with all leads &amp; lifts etc. complete and as directed. {Note : (1) All labour, materials and tools &amp; plants to be arranged by contractor; (2) Rails of required section and overall length will be supplied by Railway within free lead of 250 metre. (3) Excavation and concrete work for foundation will be paid separately}</p> <p>fixing of damaged hurdle fencing at LCs</p>	100	158.44	RMT	15844.00
20	<p>Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.</p> <p>Excavation for vertical members of herdle fencing For other Misseccelenious works</p>	11	200.8	Cum	2209.00
21	<p>Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering : "1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).</p> <p>for verticle members of Hurdle fencing For other Misseccelenious works</p>	6	5155.61	Cum	30934.00
22	<p>Fabrication, supplying and fixing Stop Boards of 600mm dia. to lifting barriers approved drawing, made of 3mm thick plate, using MS clamps, providing 6 nos. of 50mm dia. red reflector on stop board, painting iron works with two coats of synthetic enamel paint over one coat of red lead primer of approved qualitiv &amp; colour and writina STOP mark over the board</p>	6	1826.62	Each	10960.00
23	<p>Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps, trolley refuges, rain bunds, if provided, platforms etc. with earth excavated from outside railway boundary entirely arranged by the contractor at his own cost as per RDSO's latest guidelines and specifications and special condition of contract including all leads, royalty, lifts, ascents, descents, crossing of nallahs or any other obstructions. The rates shall include all dressing of bank to final profile, demarcation and setting out of profile, site clearance, removing of shrubs, roots of vegetations growth, heavy grass, benching of existing slope of old bank, all handling/re-handling, taxes, octroi and royalty etc. as a complete job. Cut trees shall be property of railways and to be deposited in the railway godown unless specified otherwise in the Special Conditions of Contract.Types of good quality soil, as acceptable to Engineer-in-Charge.</p> <p>L.S.</p>	500	296.55	M3	148275.00

T.I.No.	Description	Total Qty	Rate	Unit	Amount
24	Repairs to Rough stone pitching with trap stones ( 22.5 cm thick) set in cement mortar 1:6 for toe walls & pevetment as per profile including curing etc. complete as directed. Lump sum qty required for maintenance	750	661.00	m2	495750.00
25	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-In-Charge. With cement mortar 1:4 (1 cement : 4 fine sand)  Lump sum qty required for maintenance of bridges etc.	200	323.61	m2	64722.00
26	Finishing walls with water proofing cement paint of required shade : Old work (two coats ) complete including preparing the surface by cleaning, scrubbing and curing etc. complete.  Lump sum qty required for maintenance of gate cabin	200.00	83.20	m2	16640.00
27	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand and manufacture	100.00	98.04	m2	9804.00
28	Lump sum qty required for maintenance of guard rail, sign board, etc. Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/10 sqm of approved brand and manufacture Lump sum qty required for maintenance of gate cabin	50.00	101.43	m2	5072.00
29	Providing competative manpower for the smooth operation of LC gates round the clock as per Railway norms				
a	Trained competative Gateman 2 LCs X 3 Shifts X 365 days X 2 Years= 4380 Nos.	4380	603	Each	2641140.00
b	Unskilled 1 LCs X 3 Shifts X 365 days X 2 Years= 4380 Nos.	2190	427	Each	935130.00
30	Manufacturing, supply and replacement of Railway's fragmented lifting barrier up to 10 m length at interlocked LC (Electrically operated) as per RDSO specifications and fixing it on boom supports, painting with two coats of synthetic enamel paints over one coat of red lead primer of approved quality & colour and setting lifting barrier for smooth operation complete and as directed.	4	21800	Each	87200.00
TOTAL OF PART-A					13934220.00

T.I.No.	Description	Total Qty	Rate	Unit	Amount
<b><u>PART-B:- SPECIAL JOBS AS &amp; WHEN REQUIRED.</u></b>					
<b>1</b>	Supply of man powerMachinery / in addition to regular maintenance work team in case of emergency on as and when required basis				
<b>a</b>	Gangman	150	<b>427.00</b>	day	<b>64050.00</b>
<b>b</b>	Fitter Class-I	10	<b>603.00</b>	day	<b>6030.00</b>
<b>c</b>	Welder class-I	10	<b>603.00</b>	day	<b>6030.00</b>
<b>d</b>	Gangmate/ Mukadam	10	<b>500.00</b>	day	<b>5000.00</b>
<b>e</b>	Hire charges forGenerator 250 KVA	80	<b>400.00</b>	Hour	<b>32000.00</b>
<b>f</b>	Hire charges for Generator set 125 KVA	80	<b>300.00</b>	Hour	<b>24000.00</b>
<b>g</b>	Hire charges for Hydraulic Excavator (3D) with driver and fuel	80	<b>7000.00</b>	day	<b>560000.00</b>
<b>h</b>	Hire charges for Tractor including Trolley of loading capacity upto 5 MT including wages for driver, cleaner and cost of fuel for 8 Hours day.	10	<b>1200.00</b>	day	<b>12000.00</b>
<b>i</b>	Hire and running charges of light crane	5	<b>3500.00</b>	day	<b>17500.00</b>
<b>TOTAL OF PART-B</b>					<b>726610.00</b>
<b>TOTAL OF PART-A</b>					<b>13934220.00</b>
<b>TOTAL OF PART-B</b>					<b>726610.00</b>
<b>GRAND TOTAL</b>					<b>14660830.00</b>

I/we am/are willing to carry out this work at \_\_\_\_\_% in word ( \_\_\_\_\_%)  
above/ below (percentage should be written in figure & words). The tendered rates mentioned above amount of my/our  
tender are put as under.

Estimated amount put to tender Rs. \_\_\_\_\_  
Deduct \_\_\_\_\_% below (-) Rs. \_\_\_\_\_  
Net Amount Rs. \_\_\_\_\_  
In words. (Rupees \_\_\_\_\_)

**Contractor**

**Executive Engineer (Harbour)  
DEENDAYAL PORT AUTHORITY**