

**EASTERN RAILWAY
HOWRAH DIVISION**

SPECIAL CONDITIONS FOR EXECUTION OF FOOT OVER BRIDGES

1.	The work has to be completed within 12 (twelve) Months and handed over to the Railways in all respects from date of issuance of acceptance letter .Maintenance Period:- Contractor shall maintain the work for a period of 9 (nine) months from the certified date of completion as certified by the Engineer-in-charge, at his own cost.
2.	Power and traffic blocks of sufficient duration will be sanctioned by the Railways. The tenderer shall submit a detailed plan for completion of the work in that sanctioned block period.
3.	The tenderer must have the capacity to launch at least 4 numbers of FOB girder simultaneously in a single day. The location for the same will be provided by the Railway sin advance.
4.	The railway has the discretion to stop the tenderer from availing the block for launching as it deems fit.
5.	Before the block the tender must submit the quantity/quantum of machineries that will be deployed in the site during block in writing.
6.	<p>The successful bidder/tenderer must ensure the following:</p> <ol style="list-style-type: none"> The load chart of the crane should be submitted to the Railways. Notice will be given before the scheduled date of power and traffic block, the cranes (main and backup) along with counter weights should reach the site at least 2 days in advance. Sheet piling is mandatorily to be done before availing the block unless specifically instructed by the Railways. The contractor must submit the design of the sheet pile at his own expense. CCTV cameras should be installed at the concrete casting sites for monitoring of the quality. The contractor must provide and maintain a first aid box at the sites of work, along with provision of PPE Kits in terms of safety jackets, helmets, harnesses, etc to all labour/personnel engaged in the work.
7.	The tenderers must visit the sites before quoting the rates.

8.	The work has to be completed within the completion period. Tenderer will submit the Gant for Bar chart for monitoring various activities within 15 days of award of the work.
9.	The tenderer has to submit a launching drawing for launching of girders in a format suggested by railway at least 30 days in advance before the launching traffic block at their own cost.
10.	The work is required to be carried out during night time round traffic blocks. Rates quoted must be inclusive of this aspect. No claim will be entertained by Railways, if a traffic block is not granted on the stipulated date or is cancelled early due to unavoidable circumstances.
11.	A temporary site office with attached w/c, furnished table & chairs to be provided at his cost for railway representatives. The tenderer will make arrangements for transport of inspecting railway officials to the site throughout the duration of the work.
12.	Cement for use should not be older than 3 months from the date of manufacture. Each lot to be accompanied by Manufacturers Test Certificate indicating the Week/Month & Year of Manufacture.
13.	<p>All reinforcement steel (TMT Bars) and Structural Steel shall be procured as per specifications mentioned in BIS's documents- IS:1786 and IS:2062 respectively. Independent tests shall be conducted, wherever required, to ensure that the materials procured conform to the specifications.</p> <p>Steel shall be procured only from those firms, which are established, reliable, indigenous and 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 and crude steel, as per Ministry of Steel's guidelines.</p> <p>The contractor shall produce the certificate issued by plant manufacturer/Plant consultant (with documentary proof of process) establishing process being used at plant is either of DRI- EAF, BF-BOF and Corex-BOF route only, for manufacturing TMT reinforcement bar using iron ore as basic raw materials.</p> <p>Each lot of reinforcement is to be accompanied by a Manufacturers Test Certificate (MTC).</p> <p>The Railway reserves the right to take the samples of the material supplied by the contractor and to get the same tested at approved/recognized laboratories at the cost of the contractor and the results thereof shall be binding on the contractor</p>
14.	A means of communication/car at site will have to be provided throughout the duration of the project at sites by the tenderer free of cost.

15.	Concrete mix design and testing of concrete etc shall be done as per relevant IS Specifications by the tenderer from Government Universities/Institutions as per the discretion of engineer-in-charge. Cost for carrying out the same will be borne by the contractor, no extra payment will be made for the same. During execution if there is a change in the aggregate, source of cement, type of cement, admixture etc, design mix is to be prepared before the aggregates/cement are used for the work.
16.	Curing of concrete shall be ensured as per IS 456(Latest).Curing compounds can also be used with the prior approval of railway engineer.
17.	Only potable water (Conforming to Cl. 5.4 of IS:456) should be used for concreting work with all lead, lift, etc required for the work and curing, etc shall be arranged by the contractor at his own cost. Regular testing of water Will be carried out by the tenderer with his own cost.
18.	The rates quoted by the tenderer is inclusive of testing charges as per the relevant IS Code etc for quality of water, cement, steel, reinforcement, sand aggregates, admixture etc. The frequency of testing will be as per relevant IS Code and/or supply of lots.
19.	All contractors' engineers deployed to execute/design concrete structure shall be trained by a consultant approved by the railways in the aspects of (I) Durability, (II) Corrosion, (III) Mix Design, (IV) Blended Cement, (V) Concreting in Hot/Cold weather, (VI) Quality control techniques, (VII) Permeability, (VIII) High performance concrete. Railway officers and supervisors will also attend this training. Railways will fix this training if it is deemed fit.
20.	No repairs/plastering to the concrete surface shall be allowed. Poorly executed Concrete shall be demolished by the contractor at their own cost.
21.	Vehicles/Equipment shall ply 6m clear of the running track. Any movement/work to be done at less than 6 m and up to minimum 3.5 m clear of track center shall be done only in the presence of railway employees authorized by the Engineer-in-charge. No part of the road vehicle will be allowed at less than 3.5 m from the track centre. Suitable barricading of such sites should be ensured before execution of work in the proximity of the running track.
22.	Only river sand of approved quality will be permitted for the work.
23.	Only aggregates conforming to IS-383(Latest) shall be used in concrete work.
24.	Aggregates for concrete shall be obtained from an approved source and shall conform to the grading and the requirements of the relevant Indian Standard Code.
25.	The maximum water cement ratio shall be 0.40 Suitable admixture to be used with Prior approval of railways or as per approved mix design.
26.	The use of admixture for concrete to be done as per approved mix-design to ensure the required work ability. The rate inclusive the cost of admixture of the aspects.

27.	Formwork shall be of very high quality made of plywood or steel plates so that the finished concrete surface is smooth. Formwork shall be leak proof. Foam/sponge/gaskets at shuttering joints should be provided to prevent leakage of slurry. Shutter release agents, i.e. shuttering oil must be used and under no circumstances will black oil be allowed. Formwork/Shuttering should be approved by Engineer-In-Charge or his representative before casting.
28.	Concrete for all the works to be executed under this contract, shall be weigh batched and machine mixed only. Hand mixing shall not be permitted.
29.	Concrete mix design will be reviewed in the event of change in the source of cement, admixture, sand and aggregate and for any other reasons and when required by Railways.
30.	The tenderer should compact the concrete with 40/60mm needle vibrators. In addition to this shutter/formwork vibrators may be used wherever required. Adequate nos. of vibrators in working conditions to be available with stand by arrangements before commencement of any concrete operation.
31.	Materials as per requirement shall be brought to site and kept under Contractor's custody at their own cost and risk, without damage/deterioration like setting of cement/rusting of steel etc.
32.	Payment of the materials will be made through running and final bills, as per actual consumption in the work and whatever wastage taken place i.e. cut pieces, empty cement bags, etc. will be the contractor's property and the same shall be removed from the site at the contractor's own cost
33.	Cement bags should be as following information illegible marking: (i) Manufacturer's name : (ii) Regd. Trademark of manufacturer, if any (iii) Type of Cement (iv) Wt. of each bag in Kg. or No. of bags/Tonne: (v) Date of manufacture (vi) ISI Certification mark
34.	The contractor should submit digital photographs & videos in 3 nos. of pen drive media of all major activities carried out at site.
35.	Contractor shall establish a laboratory at site of work at this cost with necessary facilities for performing routine type tests such as physical properties of cement, aggregate, water, physical properties of concrete, including its crushing/compressive strength etc. to the satisfaction of the Engineer-in-Charge. The laboratory shall have minimum equipment listed below:

	SN	Equipment	Qty. (nos.)
	1	Compression Testing Machine, 2000KN capacity, motorized with 2 nos. of pressure gauges (2000KN & 500KN) with digital interface for real time recording of testing results. The system should have sufficient memory to store data of one year production with reporting facility in hard copy as per format mutually agreed.	1
	2	15 cm cube moulds conforming to IS:516	30
	3	Slump Tester/Vee Bee Testing Machine	2
	4	Electronic balance with 1gm least count (10 / 20 Kg. capacity) including weights.	1
	5	Blain's air permeability apparatus	1
	6	Vicat apparatus with dash pot and various needles	1
	7	Stop watch	2
	8	Le Chatelier mould for soundness test of cement	1
	9	Steel trowels for mixing cement paste	2
	10	Metallic scoop, pan type container and china tray etc.	2 set
	11	Aggregate Impact testing machine	1
	12	Aggregate crushing testing machine	1
	13	Aggregate Abrasion testing machine	1
	14	Electric thermostatic oven with display of temperature	1
	15	Set of IS Sieves 40 mm and below up to 75 micron	1
	16	Automatic electric sieve shaker	1
	17	Glass cylinders and Beakers 50 - 500 cc capacity	1 set
	18	Miscellaneous measuring gadgets like steel tape, Vernier, Screw gauge, filler gauge etc.	2 set
	19	Magnifying glass	1
	20	pH meter & TDS meter (Digital)	1
	21	Any other equipment/testing machine as directed by Engineer In-charge	
	Contractor shall ensure that equipments provided are of late specification, in good working condition and properly calibrated. Contractor shall also provide properly calibrated Re-bound hammer at site for conducting non-destructive confirmatory testing for compressive strength of finished component/work.		
	Contractor shall also provide total station survey setup with all accessories for checking and establishing alignment, location of various elements of the structure.		
	Contractor shall arrange for the testing of physical/ chemical properties of reinforcement steel used by him from Govt. labs./approved Engineering College as directed by Engineer-in-charge to establish the Quality of steel bar used.		
	During execution of work, contractor shall also get the samples of materials tested at approved laboratories as may be directed by the Engineer-in-Charge, as confirmatory tests at his own cost.		
36.	Adequate lighting arrangement will be made by the tenderer for night working.		
37.	Temporary site offices must be working and complete set up of Computer including peripherals like- Scanner and printer. The Computer setup will be handed over to Railways after completion of work.		
38.	The Railways in case of emergencies like accidents, natural calamities involving Human lives etc.may draft vehicles and equipment of the successful tenderer.		
39.	Supplying Cement conforming to IS-8112/12269, OPC-43/53 grade. Cement produced by reputed manufacturers approved by the Engineer – In – Charge shall be supplied by the Contractor and used for construction. Decision of Engineer regarding reputed firms shall be final and binding on the contractor.		
40.	The tenderer while quoting his rates shall take into account the possible fluctuations in the market rate in respect of Labour, materials, taxes etc. during currency of the contract. In case of such charges Railways responsibility be limited to the extension of the time, that may be granted under Clause-17 of the General Conditions of Contract.		

41.	The Railway Administration may extend the period of contract work order for period whatsoever by given notices to the contractor and the contractor shall be bound to complete the work within the period so extended and the terms
	and conditions of the original contract work orders will also be operative during the extended period
42.	Eligibility of tenderer shall be decided solely on the basis of the documents submitted along with the tender offers and any subsequent document whatsoever submitted in this connection would not be given any cognizance on any account, and will not be evaluated.
43.	<p>Condition of GST/2017law</p> <p>All bidders should ensure that they are GST compliant and their quoted tax structure/rates should be as per GST LAW. Regarding input tax credit for which following essential information is required to be submitted by the contractors-</p> <ul style="list-style-type: none"> (i) Name and Address (ii) GSTIN no. (iii) HSN code(for goods or accounting code of service) (iv) Rateof tax(CGST,SGST,IGST,UTGSTorCESS) <p>With regard to quoting GST rate every care is to be taken by the contractor and supporting document/reference to the relevant clause of GST is to be mentioned. However, in case of any incorrect information regarding rate, Railway's decision will be final</p>
44.	GST is applicable from 01.07.2017 and it shall be ensured that the contract is signed with the applicable rates as decided by Govt. Of India
45.	<p>(i) Before submitting a tender, tenderer will be deemed to have satisfied himself by actual Inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the work are taken into account and that the rates he enters in the tender for mare adequate and all-inclusive to accord with the provision in Clause no.37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Railways.</p> <p>(ii) Tenderer will examine the various provisions of the central Goods and Service tax act/2017 (CGST)/Integrated Goods and Service Tax Act/2017 (IGST)/Union Territory Goods and Service Tax/2017 (UTGST)/Respective States "State Goods and Service Tax Act/2017 (SGST) also as notified by Central/State Govt. and as mentioned from time to time and applicable taxes before bidding. Tenderers will ensure that full benefits of Input Tax Credit(ITC) likely to be availed by them is duly considered while quoting rates.</p> <p>(iii) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to Railway immediately after the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to the concerned authority.</p> <p>(iv) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the Railways shall deduct the applicable GST from his/their bills under reverse charge mechanism(RCM) and deposit the same to the concerned authority.</p>

46.	<p>FORCE MAJEURE CLAUSE & SETTLEMENT OF DISPUTES INDIAN RAILWAY ARBITRATION RULES</p> <p>Force Majeure Clause : If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics, strikes, lock outs or acts of God</p>
	<p>(hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.</p>
47.	<p>SETTLEMENT OF DISPUTES – INDIAN RAILWAY ARBITRATION RULES</p> <p>Matters Finally Determined By The Railway : All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract, shall be referred by the contractor to the GM and the GM shall, within 120 days after receipt of the contractor's representation, make and notify decisions on all matters referred to by the contractor in writing provided that matters for which provision has been made in Clauses 8, 18, 22(5), 39, 43(2), 45(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1) to (xiii)(B) of Standard General Conditions of Contract or in any Clause of the Special Conditions of the Contract shall be deemed as 'excepted matters' (matters not arbitrable) and decisions of the Railway authority, thereon shall be final and binding on the contractor; provided further that 'excepted matters' shall stand specifically excluded from the purview of the Arbitration Clause.</p>
<p><u>SPECIAL CONDITIONS FOR PAYMENT</u></p>	
48.	Contractor is bound to achieve physical progress of work as per following schedule for completion period of work from date of issue of letter of acceptance:
49.	Fabrication of girders, trestles and other parts are to be carried out within 3 months of issuance of LoA, and they should be ready for availing block.
50.	Construction of FOB slab along with Cover Shed are to be completed within a period of 2.5 Months of launching of girders.
51.	The review of physical progress of work will be done at first 15 days and thereafter at every 15 days starting from the date of issue of letter of acceptance of work.

53.	All incidental works in connection with the subject work shall be carried out by the tenderer at their own cost. Railway reserves the authority to define the incidental works.
<u>SPECIAL CONDITIONS FOR RCC</u>	
REINFORCEMENT:	
54.	<p>All reinforcement steel (TMT Bars) shall be procured as per specifications mentioned in BIS's documents- IS:1786. Independent tests shall be conducted, wherever required, to ensure that the materials procured conform to the specifications.</p> <p>Steel shall be procured only from those firms, which are established, reliable, indigenous and primary producers of steel, having integrated steel plants (ISP), using iron core as the basic raw material and having in-house iron rolling facilities, followed by production of liquid steel and crude steel, as per Ministry of Steel's guidelines.</p> <p>The contractor shall produce the certificate issued by plant manufacturer/Plant consultant (with documentary proof of process) establishing process being used at plant is either of DRI- EAF, BF-BOF and Corex-BOF route only, for manufacturing TMT reinforcement bar using iron ore as basic raw materials.</p>
55.	It shall be the responsibility of the contractor to clean the reinforcement bars with dry gunny bags, if they are coated with rust or impurities and nothing extra shall be paid for the same.
56.	The rate for reinforcement cement concrete including strengthening and uncoiling of rolls of reinforcement. No extra payment for strengthening and/or uncoiling of reinforcement shall be payable by the Railway.
CONCRETING:	
57.	<p>Mixing of cement for concrete, mortar etc. shall be done by Mechanical Mixer and concrete should be vibrated by vibrator of appropriate design. All charges for working of machines viz. fuels, drivers, repairs, etc. will have to be borne by the contractor. No extra payment will be made on this account. Weigh Batching must be ensured, no volumetric mix will be allowed.</p> <p>The proper consistency shall be determined by the Engineer-in-charge by a slump test, which shall be carried out. Cost of moulds, labour, tool sand plants etc. for slumps tests of concrete shall be borne by the contractor.</p>
58.	<p>Concrete should be mechanically compacted by using the appropriate type of vibrators to suit the location & type of structural components. Adequate nos. of Shutter vibrators, Needle vibrators, Surface vibrators (Plate vibrators) etc. shall be arranged by the contractor for mechanical compaction of the concrete to dense mass. There should not be any honey combing in the finished concrete surface. The concrete shall be compacted immediately after placing by means of mechanical vibrator of suitable design for continuous operation.</p>
59.	Contractor shall make necessary drainage arrangement and dewatering etc. at Low lying/water logged areas for making the site feasible for construction of FOB.
60.	Ready Made Cover blocks of specified thickness and same grade as of the concrete to be utilized for ensuring specified cover to all RCC works for which

	no
	separate payment shall be payable, as the rates of all RCC work shall be inclusive of it.
61.	Standard quality binding wire (Galvanized) of 16 SWG diameter shall only be used on the work. All end soft binding wire shall be turned inwards so they do not project out of concrete to start rusting action.
62.	In case a contractor executes a work, which is below the specified structural strength, the work shall be dismantled and re-executed at contractor's cost at the sole discretion of the Engineer at Site.
63.	Testing of Permeability of Concrete is to be carried out as per IS:3085(Latest) from National Test House and/or Government Institute/University (preferably an IIT/NIT). This will include the testing of specimens obtained during casting of concrete as well as those obtained by cutting out cores from structure after casting. All the testing charges will be borne by the contractor.
	MEASUREMENT:
64.	All work will be paid for at the tendered rates on the basis of actual measurements at site. No account will be taken for heights and thickness over those shown in the plans, unless they are authorized by Engineer-in-charge, in writing.
65.	Measurement shall be made according to the tenders schedule.
	SPECIAL CONDITIONS FOR QUALITY CONTROL.
	QUALITY CONTROL:
66.	<p>Quality Assurance Plan (QAP) is to be prepared and approved before execution to ensure that quality is maintained.</p> <p>The Contractor is to establish a field laboratory with complete equipment at the site of work which will enable carrying out of standard tests of the quality of water, sand and aggregate etc. The rates should so provide for equipment for casting, curing and testing of sufficient numbers of 6" cubes.</p> <p>Testing of the cubes should be done through National Test House or any other approved Government Testing Laboratory as and when necessary. Periodical Testing of water may also be done through National Test house or any other approved Government Testing Laboratory if asked for by Engineer-in-Charge. All testing charges will be borne by the contractor.</p> <p>The contractor should arrange a site laboratory for determination of grading of aggregate, specific gravity, water absorption, cube testing machine and periodical testing of water and other testing facilities as required.</p> <p>Suitable site would be given to the contractor if available, free of cost. But on completion of work, the site should be restored to normal condition at the contractor's own cost.</p> <p>Contractor's laboratory shall remain accessible to any authorized representative of the Railway Administration. Engineer-in-Charge will depute his supervisory staff to supervise the work in the field laboratory.</p> <p>Additionally, the contractor has to install at least two nos of good quality CCTV cameras in each work site to record and live stream the concreting work which can be accessible through App/Website. The feeds and recordings are to be preserved till the release of performance guarantee.</p>

67.	The concrete work shall be done in accordance with Indian Railway Standard Code of practice for plain, reinforced and pre stressed concrete for general bridge construction (Concrete Bridge code) or IS-456 (latest) or relevant IRS codes as applicable.
68.	All concrete items will be measured without any reduction for the volume of reinforcement as and steel structural.
69.	Concrete will be as per IS Code (IS-456). All concrete should be vibrated except for concrete placed in water for the bottom plug. Strength specified for various concrete in the Schedule of items is for 28 days strength.
70.	The mix of all controlled concrete to be used shall be designed suitably as per IS-10262-2019 to meet requirements of strength and economy. Number of cubes may be made by trial mixes and tested to ensure the proper strength of The concrete.
71.	The mixture of all controlled concrete should be done by automatic Batching plant with pan mixture/portable batching plant or with ready mix concrete brought by transit mixture at site, and placement of concrete by concrete pumps.
	<u>AGGREGATE AND SAND:</u>
72.	Periodical sieve analysis of the aggregate and sand will be carried out as necessary to ensure that the percentage of different sizes of aggregate and sand do not vary from the worked out during designing the concrete Mix.
	<u>WORK TESTS AND STANDARD OF ACCEPTANCE:</u>
73.	Number of cubes to be taken and tested should be in accordance with the provisions made in IS code 456 (Latest) and the results should satisfy the minimum requirements given therein.
74.	The work under Railway Traffic temporarily or by blocking Railway Traffic, should be carried out under the supervision of Engineers/Supervisors of the contractor who have adequate experience of carrying out such works.
75.	The contractor should carry out the work in such a way that would ensure safety to Railway Traffic and Railway properties. The works who see execution is having safety implications, work should be carried out only under the direct supervision of competent Supervisors from the Railway.
76.	Contractor shall submit to the Railway the equipment and testing apparatus that will be used in the field laboratory after the completion of the project.
77.	For steel fabrication The contractor shall submit a detailed Quality Assurance Plan (QAP) for approval of the Engineer/Inspecting Authority before commencement of fabrication. The QAP shall include stage-wise inspection, hold points, witness points, testing procedures, acceptance criteria, and documentation formats. No fabrication activity shall commence without approved QAP. All inspections shall be carried out as per approved QAP and recorded systematically.
78.	The contractor shall submit Welding procedure specification sheet (WPSS) along with supporting Welding procedure qualification record (WPQR) for all categories of welds proposed in the work, for approval prior to commencement. Welding shall be carried out only after approval of WPS/WPSS by competent authority. Welders shall be qualified and certified as per relevant IS/IRS standards. Periodic validation of welding procedures shall be carried out as specified.
79.	Inspection shall be carried out by the Engineer/Authorised Agency as per

	approved QAP. Non-Destructive Testing (NDT) shall be conducted for welds as specified. Dimensional checks, fit-up inspection, welding inspection, and final inspection shall be mandatory. The contractor shall provide all necessary facilities for inspection and testing.
<i>Special Condition of Contract on Safety aspects:</i>	
<u>ACTIVITIES TO BE FOLLOWED BY CONTRACTOR ON SAFETY AT WORK SITES</u>	
80.	The contractor is not allowed any road vehicle belonging to him or his suppliers etc to ply in railway land next to the running line. If for execution of certain works viz. earth work for parallel railway line and supply of ballast for new or existing rail line gauge conversion etc, road vehicles are necessary to be used in railway land next to the railway line, the contractor shall apply to the Engineer-in-Charge for permission giving the type and no. Of individual vehicles, names and license particulars of the drivers, locations, duration and timings for such work/movement. The engineer in charge or his authorized representative will personally counsel, examine and certify the road vehicle drivers, contractor's flagman and supervisor and will give written permission giving names of road vehicles drivers, contractor's flagman and supervisor to be deployed on the work, location, period and timing of the work. This permission will be subject to the following obligatory conditions.
81.	The road vehicles will ply only between sunrise and sunset.
82.	The vehicles shall ply 6m clear of track. Any movement/work at less than 6m and upto minimum 3.5m clear of track center shall be done only in the
	presence of railway employees authorized by the Engineer in Charge. No part of the road vehicle will be allowed at less than 3.5m from the track center.
83.	The contractor shall remain fully responsible for ensuring safety and in case of any accident shall bear the cost of all damages to his equipment & men and also damages to railway & its passengers.
84.	Contractor shall provide a 150mm thick white line with lime at a distance of 3.5m from the center of the existing track. This white line shall be in the entire length where work is going on and/or the vehicles/machinery are playing along the track. Nothing extra shall be paid for this.
85.	Barricading with the help of portable fencing shall be provided in the length where the day's work is to be done in close vicinity of the track. The fencing shall consist of self-supporting steel columns of 1.2m heights. This will be placed at a distance of 3.5 from the centerline of the nearest track..
86.	During execution of foundation work nearby track or platform area special care is to be taken with proper signage for better communication of common passenger.
87.	Railway representatives not less than that of a junior engineer shall issue competency certificates after checking license and their working to all drivers of nominated vehicles/machinery. Inspector at site shall ensure that the driver who does not possess competency certificate will not work at site.
88.	The area between running line and white line shall not be permitted to become slushy and adequate drainage must be ensured at all times.
89.	If vehicle/machinery/materials are to work within 3.5m of the existing track, the work must be done under the presence of an inspector authorized to do safety works. A caution order shall be issued and track will be protected with The banner flags, hand signal lamps and detonators.

90.	Normally, night working shall be avoided. However, in certain areas like Suburban Sections, night working is unavoidable. The night working shall be permitted by AEN or DEN in writing. One inspector shall be specifically deputy to supervise the night working. The site/area where night working is to be done shall be adequately lit. Nothing extra shall be paid for this.
91.	An authorized OHE staff should invariably be present, when relaying work or any major work in track is carried out, in order to ensure the following points.
92.	Traffic block of Power Block is correctly taken and "Permit to work" (PTW) is issued.
93.	The structure bonds, track bonds, cross bonds, longitudinal rail bonds etc. Are not disturbed and if disconnected for the work, they are reconnected properly when the work is completed.
94.	The return feeder connections to the rails at the feeding posts are proper and not disturbed.
95.	The setting distance of the structure is not disturbed affected during the slowing.
96.	The track level is not raised beyond the permissible limits during the work.
97.	Excavation of digging near a mast foundation is done in such a manner that the foundation is not exposed.
98.	The clearance particularly at over line structure is maintained to the required standards.
99.	Precautions for the safety of staff working under the OHE are taken correctly.
100.	All staff should be warned that contact within 2 mtrs.(unless protected by the screen to live portion of 25KV traction OHE is dangerous and shall be strictly avoided.
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102.	All staff should be warned that contact within 2 mtrs.(unless protected by the screen to live portion of 25KV traction OHE is dangerous and shall be strictly avoided.
103.	No, work on overhead lines or in the Zone within two meters of any line equipment, shall be carried out unless a regular "Permit To Work" is obtained from the authorized traction staff and line is made dead and carted.
104.	During the execution of works, unless otherwise specified the contractor shall at his own cost provide materials for an execute all shorting, timbering and strutting works as is necessary for the stability and safety of all structures, excavations and works and shall ensure that no damage, injury or loss is caused or likely to be caused to any person or property.
105.	Existing roads or water courses shall not be blocked, cut through, altered, diverted or obstructed in any way by the contractor, except with the permission of the Engineer. All compensation claimed for any unauthorized closure, cutting through, alternation, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the contractor by deduction from any sums which may be come due to in Terms of the contract , or otherwise according to law.

106.	During progress of work in any street or through farm, the contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or through fare and for any drainage, water supply or means of lighting which may be interrupted by reason of the execution of the works and shall correct and maintain at his own cost barriers lights and other safeguards as prescribed by the Engineer for the regulation of traffic, and provide watchmen necessary to prevent accidents. The works shall in such cases be executed night and day if so ordered by the Engineer and with such vigor so that the traffic way be impeded for as short a time as possible.
107.	The contractor shall be responsible to take all precautions to ensure the safety of the water supply pipelines, electric cables, etc on public or railway property and shall post such lookout men as may in the opinion of the Engineer be required to comply with regulations appertaining to the work.
108.	The Contractor shall not assign or sublet the contract or any part thereof or allow any person to become interested therein in any manner whatsoever, save as mentioned in Clause-7 of the General Conditions of Contract. Any breach of this condition shall entitle the Railway to rescind the contract under Clause 62 of the General Conditions of Contract and also render the Contractor liable for payment to the Railway in respect of any loss or damage arising or ensuing from such cancellation; provided always that execution of the details of the work by petty Contractor under the direct and personal supervision of the Contractor or his agent shall not be deemed to be sub-letting under this clause.
109.	The contractor shall be responsible for the safety of all employees directly or Through petty contractors or sub-contractor employed by him on the work and shall report serious accidents to any of them however and whenever occurring on the work to the Engineer or the Engineer's Representative and shall make every arrangement to tender all possible assistance.
110.	JPO regarding the procedure for undertaking digging work, in the vicinity of signaling, Electrical and Telecommunication cable based on, Telecom Circular No.9/2023 will be followed in this contract. The copy of the JPO is attached in documents of this tender for ready reference.

111.	The Contractor shall be responsible for all risk to the works and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the Railway and this although all reasonable and proper precautions may have been taken by the Contractor and in case the Railway shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the contractor the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway may incur in reference thereto, shall be charged to the Contractor. The Railway shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid, any sum or sums of money which may be paid any expenses whether of any such payment, defense or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.
112.	The area of work should be demarcated by providing barricades and signboard, which will enable the workmen posted at site and also the lorry drivers to have clear guidelines of movement of vehicles.
113.	All the work inside a tunnel, deep cuttings, on bridges, constricted areas etc. Should be carried out in accordance with the provisions of IRPWM and Bridge Manual and preferably under block protection.
114.	<p>The Contractor shall maintain accurate records, plans and charts showing the dates and progress of all main activities and the same shall be produced as and when asked/demanded by Engineer-in-charge or his representative. Records of tests made shall be handed over to the Engineer's representative after carrying out the tests. The following registers will be maintained at site by the Contractor -</p> <p>(i) Site Order Register, (ii) Cement Register, (iii) Steel Register, (iv) Aggregate and other materials register, (v) Labour Register, (vi) Logbook of events, (vii) Inspection Register, (viii) Quality Control Register, (ix) Programme and Progress Register etc., and all these registers shall be signed by the representative of the Engineer and the contractor/s.</p> <p>Any other register considered necessary by the Engineer, shall also be maintained at site duly signed by the Railway and Contractors representative. The registers, Proforma, charts etc. will be property of the Railway.</p>

Signature of the Tenderer