

SPECIAL CONDITION OF CONTRACT FOR CIVIL WORKS

1. Procurement of all necessary plants, equipment, pumps, or any other machinery required for the work etc. should be done by the contractor at this own cost and no extra payment will be made.
2. The resultant debris from various executed work by contractor to be disposed off at proper/nominated place as directed by Rly's representative. The additional lead beyond free lead will be payable only.
3. Materials should be supplied strictly as per standard specification and of approved quality. Contractor should get approval of the materials from the Engineer-in- Charge before supply and use.
4. All the materials supplied by the contractor for use in work may be sent for testing to any approved laboratory. The cost of testing will be born by contractor. No payment will made for the materials used in testing.
5. Concreting without mixture and vibrator will not be permitted. For unimportant work hand mixing of concrete or compaction/consolidation by manual means can be permitted with prior written approval of the Engineer-in-Charge.
6. Before starting concreting work, the contractor shall submit design mix for various grades of concrete to be used from Govt. approved Institute/Laboratory at his own cost. The same shall be approved by Engineer & only then the work shall commence.
7. Contractor has to arrange his own cement & steel as per Railway's specification and necessary Test certificate from the supplier is to be submitted for the cement and steel to be used on the work. If required by Engineer in charge an additional testing from Govt. approved laboratory or Institute is to be arranged by the contractor at his own cost.
8. Testing of steel shall be carried out from Govt. Engg. College /Govt. Approved labs at contractors cost, well before commencing of work, as per IS specifications. Relevant bills for steel & Cement procured for the work shall be submitted by the contractor to the railway.
9. Whenever Engineer-in-Charge desires, even during progress of work, contractor shall be bound to re-arrange design mixes from Govt. approved Institute/ Laboratory at his own cost.
10. Initial & final level of earth work to be recorded for cess repair work or bank protection work etc using theodolite/auto level. The measurement should be recorded in the presence of competent railway representative. Initial and final levels recorded should be submitted during billing duly calculating RL (Reduce Level) along with calculation sheet. The levels are to be taken in order to draw complete cross section profile at the end of the work. The interval of level in a particular cross section should be 1.0 meter to 2.0 meter. The interval of cross section to be taken should not be more than 10 meter.
11. Railway's track man will be provided for protection of work site as per IRPWM if required in vicinity of track, in lieu of which, contractor will have

to provide equal number of male labour to the incharge PWI for various P Way maintenance works. For the man-power supplied by Railway daily log book will be maintained which will be signed by the authorized representative of railway and the contractor.

12. In case the contractor fails to provide equal number of labours within a reasonable time a penalty of Rs.700/- per man-day shall be imposed. For supply of this man-power the contractor shall be given a notice 7 days in advance.
13. Contractor has to arrange safety jacket and helmet of approved quality for labours while execution of work
14. In case of any breach in track safety a penalty of Rs.50,000/- and cost of liquidated damages will be imposed.
15. When the work is required to be done along or near existing Railway track, the contractor shall take steps as are necessary for the safety of the track, labour working at site. He/they will also be required to program his/their working so as not to interfere with movement of trains. No extra payment shall be allowed for these precautions. It should be ensured that the ballast of the track is not spoiled or mixed with earth.
16. Railway administration can supply water to contractors if available for execution of work and the cost of water will be deducted from running bill of contractor @ 1% of the cost of water related items (i.e.C.C., R.C.C., Brickwork, Plaster, Painting with cement paint, earth work in filling etc.). However, it will not be obligatory on part of Railway to supply water to the contractor for execution of the work
17. Wooden centering will not be permitted, shuttering made of steel plates and or of ply boards only shall be allowed.
18. For the purpose of calculating weight of reinforcement steel consumed for the work, standard weight of reinforcement bar or the actual weight whichever is less will be multiplied by the total length of the bar used for the work.
19. As per Railway board letter no.2022/TK-II/22/7/1; dated:-09.02.2022 TMT Reinforcement Bars is decontrolled by RDSO. All reinforcement steel (TMT Bars) and Structural Steel shall be procured by the contractor from main producers/authorized dealers/authorized stock holders and shall conform to the specifications mentioned in updated version of BIS's documents IS:1786 and IS:2062 respectively. Independent tests shall be conducted, wherever required, to ensure that the materials procured confirms to the specifications at the cost of the contractor.
20. As far as possible, materials should be tested at Government lab/Government approved lab. If Government approved lab is not available in nearby locality, required testing may be done from the reputed/NABL approved lab with the approval of an officer not below JAG. However, in agreement, where setting up of Laboratory is not mandatory for contractors, for ensuring quality control of the works regular testing should

be done as per codal provisions/Specifications/CE's circular.

21. If the contractor does not start the works as per work order and complete the same, 10% of the work order value shall be recovered from the pending dues of the contractor as penalty and shall be forfeited by Railway.
22. Railway reserves the right to get the work executed any where in the entire jurisdiction of Engineer-in-Charge with the prior written orders of the Sr.DEN(Co)/Raipur whenever the work is required to be executed outside the jurisdiction specified in the tender.
23. For various work orders, different dates of completion will be given by the Railway Administration within period of that particular zonal contracts depending upon the type, nature and scope, urgency etc., of the work.
24. Some of the essential works are to be executed in night time and stipulated period with proper safety precautions for which no extra payment will be made.
25. Contractor should have an own water tanker fitted with pump & watering arrangement for proper curing of work. Without proper curing, no payment will be made for the work done.
26. Contractor should have a store with proper record quantities of material stored in the jurisdiction of SE(works), under whom work is being executed so that the same can be inspected any time by Railway officials for which contractor has to be taken permission of land as per rule.
27. The work is primarily of maintenance nature, which requires frequent instructions to the contractor from Railway side. The contractor or his authorized representative should be readily available to the Railway Administration for receiving instructions in writing through site order book and for compliance of the same.
28. The contractor shall responsible for anti-larval work at his own cost during progress of works as may be prescribed by the Engineer on the advised of the Railway medical authority and where use of insecticides is involved, it shall be done in accordance with the provision of the act and rules in this behalf at the cost of contractor, who shall also be solely responsible for any act of commissions under the provisions of the aforesaid rules.
29. For all the work orders irrespective of their value only first and final bill will be paid i.e. no on account running bill will be paid for any work order. Work order of tender value if required can be prepared only with the approval of Engineer-incharge.
30. Imposition of token penalty for delay in the completion of work:- the competent authority while granting extension to the currency of contract under clause 17(B) of GCC may also consider levy of token penalty as deemed fit based on the merit of the cases.

SPECIAL CONDITION FOR ROAD WOK

1.0 Major quantum of work shall be carried out by mechanical paver finisher and mixing shall be done in hot mix plant. Vibrator roller shall be used for compaction. The quantum of various ingredients of the mix to be prepared in the hot mix plant will be as per the quantities of various ingredients, described in concerned item of schedules of rates. For ensuring this, the contractor will have to arrange/provide full access to Railway's Supervisor/officer in the hot mix plant for ensuring quality control. Contractor will also have to arrange for the necessary tests/testing arrangements of the hot mix/ various ingredients as desired by the Engineer-in-Charge or his authorized representative. Such testings will have to be arranged by the contractor without any extra charges.

2.0 During the execution of work, every effort will be made by the contractor to correct the existing irregularities in the surface, depressions in the road, camber of the road etc.

3.0 Materials should be supplied strictly as per standard IRC specification and approved quality. Contractor should get approval of the materials from the Engineer-in-Charge or his authorized representative at site before use.

4.0 Bitumen carpet shall be compacted with 22T Vibratory Roller.

5.0 The bituminous aggregate should be obtained from mechanical automatic hot mix plant of adequate capacity.

6.0 Aggregate to be used should be from hard stone crusher broken aggregate confirming to IS-383.

7.0 Shoulders and Cess

When carrying out repairs to roads, any deficiency in the shoulders (or earth berms) along both edges shall be made up properly, whether by earthwork or by dressing. These will be paid for separately only if the quantum of work involved is considered by the Engineer to be substantial.

In case of new roads, and platforms, the shoulders and cess shall invariably be cleared of all surplus materials, excess earth or other debris and dressed to the proper profiles, as directed, so as to ensure that there is no stagnation of water on or alongside the newly laid surface. No extra payment will be admissible for such clearance and dressing, except for any substantial quantity of earthwork involved.

8.0 Rolling

a Where the use of a power roller of a certain weight is specified, the Engineer may, at his discretion, permit the use of lighter roller or a hand roller, taking into account the magnitude of the work or other local circumstances, provided he is satisfied that the usefulness or the durability of the work is not affected to any appreciable extent.

b. Along kerbs, manholes, etc. and any other place where proper consolidation by rolling is not practicable, alternative means such as steel rammers shall simultaneously be used to secure adequate consolidation.

9. Rates

Unless otherwise specified, the rates shall be all-inclusive, covering the cost of all materials, labour and equipment involved in the respective items of work. Earthwork in formation of new roads or platforms will, however, be paid for separately, as also any special work of improving the subgrade as per sub-para (Rolling).

10. Camber : The camber shall be 1 in 48 or as directed by the Engineer or otherwise specified.

SPECIAL CONDITION STEEL STRUCTURE WORK

1. The Railway will at its discretion and for the duration of contract make available free of charge land at site for the construction of contractor's site office, stores etc. required for the execution of contract. Cleaning and leveling of the ground, construction of the temporary roads, stores, offices etc. as required shall be done by the contractor at his own cost to the satisfaction of the Engineer-in-Charge. No land for accommodation for his staff and labour shall be made available by the railway. In regard to the land made available to the contractor for the office, stores; the site shall, on completion of the work, be restored to reasonably the same condition as they were originally handed over to the contractor.
2. The railway will not arrange the supply of electric energy. The contractor shall make his own arrangement for electric energy necessary for the works. The system shall conform to Indian Electricity Act and shall be approved by the Railway.
3. Foundation work : The quantity payable for earthwork shall be for the contents based on the length, breadth of the bottom most footing and vertical depth from ground level and no extra for side slopes, slips etc. will be taken.
4. Fabrication assembly and erection of steel work:
 - a. The steel that will be supplied by the contractor should IS-2062 for mild steel and IS-1148 for rivets.
 - b. All fabrication and erection shall be done in accordance with IS-800-62 as per approved design.

The contractor shall afford to the Engineer-in-Charge or his authorised representative all reasonable facilities as may be necessary for satisfying the Engineer that the structural steel is being and or has been fabricated in accordance with the specification and drawings. The fabrication shall be riveting and/or welding. The contractor has to submit cash receipt after purchase of raw steel and should bear the IS specification to which steel is rolled.
5. Riveting/welding shall not be started until such time the Engineer has personally satisfied himself that the alignment of the structure is correct.
 - a. The welding shall be uniform and shall not contain any slag or blowholes. There should be no undercutting of parent metal or over lapping. Electrodes used for welding shall be approved by the Engineer before use. Welding shall conform to IS-816.
 - b. All riveting shall be done by the pneumatic or hydraulic riveters.
 - c. Rivets, when driven, shall fill the holes completely, have full dimensions heads, and concentric with the shank of the rivet and shall be full contact with the surface or be countersunk when so required.
6. Permanent bolts, nuts, washers, rivets, welds, rail clips etc. required for complete fabrication and erection of various structures shall be provided by the contractor, the cost of which is already included in the rates for fabrication and erection.
7. The contractor shall arrange for service bolts and nuts, drifts, compressed air, oxygen and acetylene gases required for the fabrication and erection and also trailers/tractors with necessary tools & plants for loading, unloading, handling and transport to erection site from stores.

8. Where only bolting is specified in the drawing, it should be tightened to the maximum limit. The bolts used should be long enough so that atleast 3 threads protrude when the nut is fully tightened and no gap should be allowed to clean the members to be joined on permanent bolts, one washer should be provided for the bolts head and one for the nut.
9. Particular care should be taken to ensure free expansion and contraction wherever provided.
10. Wooden ram on mallet shall be used in forging members into position, in order to protect the metal from injury shock.
11. While assembling and erecting, the contractor shall arrange to straighten any bends, twists etc., if any in the fabrication. The contractor shall at his own cost rectify any defect minor in the opinion of Engineer in fabrication and also carry out any alteration as considered by Engineer that may be found necessary. Such minor works shall include cutting of rivets, drilling of holes, reaming and jointing structural members by riveting, bolting, welding.
12. Instrumental checking for correctness of setting up of structures as also the final adjustments or leveling and aligning should be carried out immediately after completion of assembling in the sequence determined by the design.
13. The erection of the steel structure shall be carried out in correct sequence ensuring the stability of structures at all stages of erection. All structures placed in position must have strong supports until they are properly joined with the allied structures, so that they may not fall down or be blown off. The contractor failing to take such precaution shall make good the damages sustained to these structures and other properties of the railways found damaged causing from such incidence as considered necessary by the Engineer.
14. The erection of all steel structure should be carried out in accordance with the specification, approved drawings and conditions supplied and subject to alteration and amendment as may be ordered from time to time during the progress of the work. Any departure from plans, specifications etc. should be reported to the Engineer.
15. Assemblies of structures may be made on ground.
16. Inspections: Inspection of fabrication, erection, and other works will be at any time be carried out by Engineer.
17. The contractor shall be responsible for any damages occurring while keeping them stacking under their custody till the materials are erected by him and work is finally accepted by Railway.
18. All testing as considered necessary by Engineer will be carried out at contractor's cost.
19. The Engineer may order the materials in the works to be cutting out where he considers it necessary to test workmanship and quantity and if the work be found satisfactory, the cutting out and replacing of the materials will be paid for by the Railway. But if in the opinion of the Engineer such work opened up shall have been executed either unsound, imperfect or unskillful workmanship or with materials of inferior quality or not in accordance with the conditions, the contractor shall forth with at his own cost and to the entire satisfaction of the engineer rectify, reconstruct or replace the same either in whole or in parts as he may directed by the Engineer, whether or not the value of any such work or material shall have been included in any payment made to the contractor.
20. The contractor shall inform the Engineer in writing when work/portion of the work is ready for

inspection, giving his sufficient notice to enable him inspect the same without retarding the further progress of work. No portion of work shall be considered completed in accordance with the terms until the Engineer shall have certified in writing that it has been inspected and approved by him.

21. The contractor shall design, manufacture, erect and dismantle any release work, staging, temporary supports etc. required for the safe and accurate erection of the structure steel and shall be responsible for the adequacy of the same. The cost of such works shall be deemed to be included in the rates of the erection of structures for which such false work, staging and temporary supports etc. are required. The contractor may get his drawing and design of such false work, staging etc. approved the Engineer, but such approval by the Engineer shall not relieve him of any responsibility for the safety of such works.
22. The contractor shall be responsible for the transportation at his work cost from the contractor's a works site to the site of work before erection besides being responsible for any damage occurring in transit and while keeping them stacking till the materials are erected by him and work is finally accepted by the Railway.
23. Erection of steel structure over concrete structure will start only on receipt of instruction from the engineer to the effect that all inserts embodied in concrete are in correct times and level as shown in the drawings and that deviations, if any are within permissible limits.
24. The contractor shall provide adequate supervision at all stages of work and examine in parts for accuracy before erection is commenced. He shall also provide facilities and space satisfactorily to the Engineer for inspection of any parts to be used in the work of such stages, as he may be directed. Irrespective of any inspection and test made by the engineer, the contractor shall be entirely responsible for proper execution of the contract not with standing any approval, which may have been given by the Engineer of the work or of test carried out either by the engineer or the contractor. Any fittings of accessories which any not be specifically mentioned in the specification or which are used or necessary for erection are to be provided by the contractor without extra charges, so that the erected structures may be completed in all respects.
25. The contractor should bring his own erection plants and equipment, tools and tackles, scaffolding, trestles etc. and other accessories.
26. The contractor shall provide for the conveyance of inspection/testing adequate temporary access ladders, gangway, tools, tackles instruments and all the facilities required by the Engineer for the purpose.
27. The holes for erection joints riveted or bolted (with machine bolts) should be fitted with temporary bolts and plugs after mounting the structures. The number of bolts and plugs is determined by design but should not be less than $\frac{1}{3}$ of the total number of holes. In joints where the number of holes is equal 5 or less, than 2 holes should be filled. The number of plug should be about 30% of the number of bolts.
28. The weight of materials for which payment has to be made for fabrication and erection shall be that which is computed on the basis of nominal weight of the steel section of the finished product. Gussets will be paid as per the overall finished dimensions. In computing the weight of finished steel no deduction will be made for rivet holes or bolts holes or any other holes, skew cut, notches. The weight will not include the weight of rivets, weld, bolts, nuts, washers supplied by the contractor.

29. The paints used in the work shall be from reputed manufactures and conform to IS specification and shall be approved by the Engineer. The testing charges of the paints should be borne by the contractor.
30. The contractor should maintain the works executed for a period of six months from the date of completion of the entire work and any defects that are found during this period shall have to be replaced/rectified by him at his own cost.
31. The rates should take into account all the above special conditions and no extra payment will be admissible on any of this account under any circumstances.
32. The primary paint is to be applied after the fabrication, assemble erection.
33. Only after the entire coat of paint is dried up, the next coat of paint will be applied after obtaining clearance to do so from site in-charge.
34. Before starting the work Contractor should provide complete barricade with G.I.Sheet, rod and pipe etc. to safe guard the passengers on the platforms and site for which no extra payment will be made.
35. Work to be done very close to OHE lines and running track, Contractor should take all safety precautions during the work without any infringing the traffic. Contractor shall be fully responsible for any accident or mis-happenings on running track due to infringements while execution of work.
36. **Note for item No.081030:-** Mode of payment and additional special conditions:
 - i) 50% payment shall be made for the materials brought to site for use in works and fabricated as per approved drawing with initial welding.
 - ii) 10% payment on the quantity of the fabricated material in full welding as per specification and primer coat painting as per schedule and specification.
 - iii) 20% becomes payable on the Quantity of materials erected.
 - iv) 10% payment on the quantity of the erected steel structure after aligning of shed & complete welding.
 - v) The balance 10% is admissible only after painting and completion of works in all respect.
 - vi) If painting is not required to be done to the Railway fabricated material, Rs.1,000/- plus tender premium accepted per MT will be deducted.
 - vii) The Contractor shall execute an Indemnity Bond in approved Performa, indemnifying the railway against all losses against the steel materials etc, whether theft, damage, wastage or any other causes whatsoever, and shall be bound to refund to the Railway all the outstanding values of payment made the Railway.
 - viii) The Contractor shall bound to store the materials at the site of work earmarked for the purpose by the Engineer-in-Charge and shall not remove from the site nor use of any other purpose than exclusively for execution of the work for which the materials are intended for. The safeguards of the materials are the responsibility of Contractors.
 - ix) Note No.i) above is applicable only when Engineer-in-charge certified that in his opinion that the

materials are actually required in accordance with the contract and safe guard theft, loss or damage due to any cause whatsoever.

- x) Payment is admissible only for the quantity of materials used in work in accordance with IS Code measurement. No payment is allowable for the scrap materials, wastage and materials remained unused/unutilized in the work. The scrap materials if any shall be the property of the contractors and final payment will be based on measurement of finished work.
- xi) Any payment found to be made against the materials brought to the site in excess over the actual materials consumed in works shall be recoverable to the extent the materials thrown out of use at the stage of payment after erection.

37. Special condition for USSOR item No.121091

- 1 The rates are inclusive of supply at contractor's cost of all brushes of approved pattern and the tools, and equipment for mixing, applying the paints as required for proper execution of the work.
- 2 The contractor should arrange to supply at his own cost, protection goggles, face masks, gloves etc., to his workmen.
- 3 On working on higher steel structure where there is a risk of persons falling and drawing, necessary equipment such as life buoys etc. should be kept ready by the contractor.
- 4 A fully equipped first aid box shall be maintained at the site by the contractor with a person fully trained to give first aid. The contractor should also provide accident insurance cover to the labour employed by him for the work.
- 5 The rates are inclusive of thorough cleaning of steel works as specified.
- 6 The surface to be painted should be free from oil, dust, grease, smoke, rust, mill scale, old deteriorated paint and foreign matter.
- 7 Cleaning can be done by sand blowers/air compressors as may be obtained by the contractor at his own cost, duly approved by the Engineer-in-charge or his representative wherever blowing is done. The paint should be applied within 3 to 5 hours of the scrapping of the surface.
- 8 No chemical and/or burning by any process, to be used for cleaning or for removal of old paint in the steel works.
- 9 In all the cases and circumstances, special care must be taken not to damage steel works.
- 10 All regulations of Central and State Governments and local bodies shall be fully followed by the contractor.
- 11 Scaffolding and staging shall sufficiently strong to take the weight of the men and material required to execute and inspect the works.
- 12 The paint drums must be well rolled and shaken, made up side down for few times before opening and the paint must be thoroughly stirred in the drum before it is applied to work.
- 13 Paint manufactured by the reputed firm shall only be used.
- 14 Paint for both prime and finishing coats may preferably procured from the same firm for achieving better results.

- 15 The contractor paint to be used shall confirm to ISI specifications given below:-
- (a) Red oxide zinc chromate as per conforming to IS specification No.2074 of latest revision.
 - (b) Aluminum paint as per conforming to IS specification No.2339 of latest revision.
- 16 In addition to the information on the levels/markings on the containers, the contractor should furnish the railway with the date of manufacture of the paint as certified by the manufacturer. The contractors should also produce the vouchers in respect of the paint purchased by them.
- 17 After the paint used up, the empty paint drum shall be handed over to the Railway free of charge in BRI's/IOW's godowns.

SPECIAL CONDITIONS OF CONTRACT – II (Civil Work)

2.1 Special condition of Cement for providing, consumption & payment :

2.1.1 Contractor should procure cement from IS approved Firms or from their authorized distributors only. Proof of procurement i.e. vouchers etc will be submitted by the contractor.

2.1.2 For cement the quantities of finished work only will be paid as per Indian Railways unified standard Specifications for Works & Materials-2010, 2021 & DSR-CPWD-2021 or as per the mix design as directed by Engineer-in-charge. For cement, PSC or OPC will be used wherever required as per direction of Engineer-in-Charge. The rate payable will be same as accepted for PPC and nothing extra will be paid. Approval of Engineer-in-charge will be required for cement to be used in specific work.

2.1.3 The manufacture's test certificate containing the batch, date of manufacturing etc. must be submitted by the Contractor at the time of supply.

2.1.4 Test Certificate for Cement used should be produced which should conform to **IS: 1489** for PPC and IS12226 for OPC- 53 grade, as the case may be.

2.2 Special condition of TMT Bars for providing, consumption & payment:-

2.2.1 Special condition for procurement of all reinforcement steel(TMT Bars) and Structural Steel items refer attached list at document. The firm of Reinforcement steel(TMT Bars) should be approved by RDSO.

2.2.2 The contractor shall disclose the source from where supplies of Steel is received by him and maintain a detailed record of receipt of steel from different sources and shall keep the challan, Railway receipts number of lorry number, etc. and store balance in a register as directed by the Engineer-in-charge and produce the same to the Engineer as and when demanded. A copy of purchase document shall have to be submitted along the bill for claiming payment against these items. Railway reserves the right to inspect contractor at any point of time.

2.2.3 Payment towards Steel will be made on the basis of actual consumption (including overlaps, chairs) and no wastage on any of the materials supplied and used in the work by the contractor including steel is payable by the Railway. The contractor shall make his own arrangement for storing Steel.

2.2.4 In case of any doubts regarding quality of Steel, the Railway may order it to be tested and acceptance of the supplied steel shall be subject to such test results and cost of testing will have to be borne by the contractor.

2.2.5 For the purpose of calculating weight of reinforcement steel consumed for the work, standard weight of reinforcement bar or the actual weight whichever is less will be multiplied by the total length of the bar used for the work. It shall be noted that for the purpose of payment, only authorized overlaps will be accounted for (As per IS:456-latest revision), unauthorized overlaps, wastage, excess consumption etc , will not be paid for to the contractor. The quantity of chairs shall be payable as per

drawing showing layout of chair locations duly approved in advance by the Engineer-in- charge. The payment for the reinforcement steel consumed for the work will be made to the contractor for the work successfully executed and certified by the Engineer-in- charge for payment and the same will be calculated as mentioned above.

2.2.6 Manufacturer's Test certificate for steel used should be produced and the same should conform to updated versions of IS:1786-2008. Railway may order testing of supplied steel periodically and cost of testing will have to be borne by the Contractor.

2.2.7 All reinforcement used should be free from loose Mill scale, loose rust, paints and oil coating etc.

2.2.8 No payment is to be done for SWG binding wire used for reinforcement.

2.3 Wooden centering will not be permitted, shuttering made of steel plates and or of ply boards only shall be allowed.

2.4 Concreting without mixture and vibrator will not be permitted. For unimportant work hand mixing of concrete and or compaction/consolidation by manual means can be permitted with the prior written approval of the Divl. Engineer/Sr. Divl. Engineer.