

ANNEXURE-A**SOUTHERN RAILWAY/SALEM DIVISION****SPECIAL CONDITIONS OF CONTRACT FOR TRACK WORKS (GENERAL)**

1. The contract shall be governed by the Southern Railway General conditions of Contract April 2022 (GCC), Indian Railways Permanent Way Manual.(IRPWM) Indian Railway Track Manual, Schedule of Dimensions, Standard Specifications for track works and GRS. In case of contradictions, the clauses under these special conditions shall prevail.

NOTE:

(i) All the Codes/Manuals mentioned above should be followed with latest edition/latest correction slips issued, if any.

(ii) All the specifications of IRS Codes will govern. In case, some specifications are not available in IRS Code, IS Code can be referred, for that with the approval of Engineer.

2. The contractor shall not start any track work under traffic conditions without the permission to do so and without the presence of the Railway's competent personnel at site. In case the contractor or his representative starts the work in the absence of the supervisor, it shall be treated as unauthorized and illegal tampering with track and shall be liable for action, under relevant clauses of the Indian Railways Act.

3. In case any train is detained at a station in the section, in which the work spot falls on the account of its passage being considered unsafe by Railway supervisor or on account of bad workmanship by the contractor or the track parameters being unsatisfactory for safe passage of trains, or due to the contractor leaving the work unfinished or due to work being delayed by the contractor, the Railway shall be entitled to recover detention charges at the rate of Rs.5000/- per hour of detention or part thereof from contractor's bills or security deposit or any other dues.

4. Notwithstanding the provisions of clauses 62 of General Conditions of contract, the Railway reserves the right to terminate the contract without giving any notice with immediate effect if the contractor is found responsible for any breach of rule, which affects the safe running of trains.

5. In case an accident occurs at the work spot, the findings of the inquiry committee set up by the Railway to investigate the cause of the accident shall be final and binding on the contractor. If the contractor/his workmen/workmanship is held responsible for the accident the contract is liable to be terminated without giving any notice forthwith not with standing the provision of clause 62 of the GCC besides suitable action would be taken based on the recommendations/findings of the committee.

6. Irrespective of the provisions of clause 62 of GCC or other wise, penalty up to an upper limit of 10% of the total cost of work may be imposed in case an accident occurs due to contractor's negligence as decided by the Railways and Railway's decision shall be final and binding on the contractor. The contractor is also liable for prosecution if loss of life is involved.

7. Traffic blocks wherever required to carry out track works will be arranged by the Railways. Actual availability of block would depend upon flow of traffic and there may be variations in availability of block vis-à-vis those planned. The wastage of labour if any occurring of account of non-availability of block would not be paid for. No claims on such account shall be considered.

8. The contractor shall proceed with the work in systematic manner so as to ensure that the stretch of track under speed restriction and its duration are kept to a minimum and for minimum period. The decision of the Engineer in this respect shall be final and binding. To monitor this, the contractor shall record the daily availability of the labour for different activities at site and the daily progress of different activities achieved in a register. The same along with the Hindrance register shall accompany the application for the extension of time limit for completion, which shall be considered only with these documents.

9. On deep screening sites, the contractor may be required to handle additional ballast, which might have been put on during the intervening period. Nothing extra shall be paid for handling the additional ballast in all such cases.

10. The work shall be so carryout that there is no infringement to the Railway's schedule of dimensions.

11. The Railway shall arrange for protection of Track(s) by their staff. In addition, the contractor may arrange for 'Lookout man' for protection to warn his workers of any approaching train. The Railway in case of injury or death to the contractor's labour will pay no compensation and the contractor shall indemnify the Railways of any responsibility in this regard. The contractor may obtain Group Insurance in respect of his workers.

12. For executing the works the contractor has to arrange his own tools, plant and equipment, unless otherwise stated in the schedule Railway shall provide equipment which are specifically mentioned in the description/specification of items in the schedule. In all the other cases, hire charges for the tools, plants and sleepers will be recovered from his bills/security deposit as per extant rules or any other dues.

13. The contractor shall arrange for safe custody of the materials supplied/hired to him. In case of loss/damage of Railway materials, the Railway will recover the cost as per extant rules.

14. (a) The site order, progress registers and materials issue registers shall be maintained at site and entries shall be made on day-to-day basis in the registers and signed jointly by Railway's supervisor and by the contractor or his authorized representative. All details of various stages of work imposition and removal of speed restrictions, measurements of track parameters, account of released materials, etc. shall be entered herein.

(b) The hindrance register in which all the reasons viz. heavy rain, local agitations, festival, flood, etc. which contributed for non-execution of work for a day, or more number of days, to be maintained by the contractor and abstract to be sent along with request for extension of currency.

15. In case of loading/unloading from the Railway wagons, all commercial formalities shall be observed. All demurrage/wharfage charges occurring due to neglect of contractor will be recovered from his bills.

16. The contractor may be required to suspend deep screening work during rain and no compensation shall be payable.

17. Portable ballast cleaners/inclined screens shall be needed screening ballast at deep screening sites. Use of wire baskets is not permissible for screening ballast. The contractor shall make own arrangements for portable ballast cleaners/inclined screens.

18. No ballast shall be waste on the slips of banks or in cutting while carrying out unloading of ballast/ deep screening works.

19. Provision of temporary speed restriction boards and their lighting, etc. will be arranged by the Railway.

20. All the instructions/orders of all the concerned Railway Personnel shall be made through site order book maintained at site, which shall be acknowledged by the contractor and the same is binding on him. No separate written letter/ communication is required for such order/instructions made.

21. The tenderer in his own interest should visit the site of work with the concerned Junior Engineer, (JE)/Senior Section Engineer, (SSE(P.Way))/ADEN or with their authorized representative, after fixing up an appointment with them in advance and ascertain the nature and quantum of work, site conditions, availability of approach road, availability of labour, water, electricity, land for labour camps, etc.

22. At each site of work, the contractor shall employ and post one Technical Supervisor who should have adequate experience in execution of track works. The name, technical qualification and details of experience of the technical supervisor as employed shall be advised to the Engineer. If in the opinion of the Engineer, this supervisor is not fit to be in-charge of the work, he shall be forthwith replaced. In this matter, the decision of the Engineer- in- charge shall be final and binding on the contractor.

23. The contractor's technical supervisor shall be present at the site at all times when the work is being executed. The contractor shall employ adequate number of workers to give consistent and desired progress every day.

24. PERSISTENT NON COMPLIANCE WITH INSTRUCTIONS/DIRECTIVES OF THE ENGINEER'S REPRESENTATIVE:

a) If the contractor does not comply with the instructions/directives of the Engineer's representative, apart from and in addition to the remedies available to the Railway as specified herein above without prejudice to Railways rights in this regard, the Engineer's representative which for the purpose of this clause shall include the Senior Section Engineer/Junior Engineer of Civil Engg. Dept. appointed by the Railway can suspend the

contractor's works, till the Engineer's representative is satisfied that the contractor has taken necessary steps to comply with the instructions/directives issued by the Engineer's representative.

b) The decision of the Engineer's representative in this regard shall be final/conclusive and binding on the contractor. The contractor shall not have any claim whatsoever against the Railway for such suspension of work.

c) During such period of suspension of work, the contractor shall not in any manner attempt to carry out any work at the work site. Any such attempt on the part of the contractor shall amount to tampering of the Railway track for which the contractor shall be liable for appropriate action under the relevant provisions of the Indian Railways Act.

25. If the fittings, viz. ERC, liners, etc are found seized due to corrosion, the contractor shall make arrangements for removal of these without damaging the sleepers, by heating and/or using de-rusting solutions of approved brand and make, for which no extra payment will be admissible.

26. Tools and plants: All permanent way tools as required for execution of the works will have to be arranged by the contractor. Few of the essentially required tools are given below:

- a) Crow bars.
- b) Shovels
- c) Beater
- d) Keying hammers
- e) Spiking hammers
- f) Track gauge
- g) Spirit levels
- h) Mortar pans
- i) Long lines and template
- j) Spanner, etc.

27. Dip lorry for trucking out shall be made available by the Railways. The labour for working dip lorry shall be made available by the contractor. The dip lorry work shall be done under the supervision of Railway supervisor, with line block only.

b) In addition to the above, other equipment like leveling equipment, theodolite, thermometer, Abrasive rail cutter, Drilling machine, scales etc. shall be arranged by the contractor from approved suppliers. These equipment shall be checked and approved by the Engineer In charge.

c) After completion of the work, the contractor shall take back these tools.

28. Initial packing will be deemed to be completed only when the track parameters conform to the following tolerance:

Gauge: (-) 2 mm to (+) 2 mm on straight, (+) means slack and (-) means tight.

Variation of only 2 mm permitted between 2 adjoining sleepers. If due to age and condition of P.way materials existing on the track, the gauge cannot be set to the tolerance limits, the

matter will be considered by the Engineer in-charge and such directions as he gives should be followed. His decision in the matter shall be final and binding on the contractor.

Spacing of sleepers: With respect to the theoretical spacing ± 20 mm.

Cross levels: Not more than ± 3 mm (to be recorded on every 4th sleeper).

Alignment: ± 2 mm

a) Not more than ± 2 mm on 10 m chord on straights.

b) Variations over theoretical versines: (i) not more than 5 mm on curves of radius more than 600 m, on 20 m chord length; (ii) not more than 10 mm on curves of radius less than 600 m, on 20 m chord lengths. Longitudinal levels: Variation in longitudinal levels with reference to approved longitudinal sections not more than 50 mm.

Packing: Not more than 4 sleepers should be found loosely packed when tested in lots of 20 at a time. No two consecutive sleepers should remain loosely packed.

29. All materials like rails, sleepers, fittings, grease, paint bituminous black, etc. shall be supplied by Railways unless provided otherwise in the tender schedule.

30. Railway does not undertake to provide any service roads for the movement of the contractor's vehicles. The contractor can however make use of the service roads where they exist free of charge. However, the Railway shall not undertake to maintain them and the contractor shall maintain them at his own cost. In other places, the contractor should make his own arrangements for the movement of the vehicles and no extra rates shall be paid for this. The Railway reserves the right to make use of the roads formed and maintained by the contractor, as and when necessary, without any payment to the contractor. In the event of the contractor forming the service roads where railway land is not available or cannot be given by the railway, it shall be clearly noted that the contractor shall make his own arrangements for obtaining the required land and Railway shall not take any responsibility in this regard.

31. The contractor shall be responsible for anti larval work at his cost during the progress of work, as may be prescribed by the Engineer in charge on the advice of the Railway Medical authorities and where the use of insecticides is involved, it shall be made in accordance with the provision of the Act and Rules in this behalf, at the cost of the contractor, who shall also be solely responsible for any acts of omission under the provisions of the aforesaid rules.

32. The Contractor shall abide by the provision of the prevailing Laws, Acts & Rules, as amended from time to time.

33. Hiring of Railway's plant, machinery, etc: The Railway not being bound to supply any plant/machinery to the contractor, may, if the circumstances permit, give to the contractor on hire such plant/machinery as are available, provided the contractor applies for them and gives in writing his acceptance of the rates and terms of hire charges. Where the Railway is satisfied that the contractor has got the requisite organization for operation and maintenance of these plant/machinery, the hire terms would exclude consumable stores, operation charges, etc in which case the contractor shall undertake to do these things himself at his own cost outside the rates and terms of hire. Where the Railway is not

satisfied with the Contractor's ability to maintain and operate the plant/machinery, the hire terms shall include in the hire charges, the cost of consumable stores and operation charges, etc. The plant and machinery will be normally made over at the nearest stores depot and they will have to be transported at the contractor's cost to the works pot and return the same to the depot after the work is over. The period of hire of the plant and machinery will be from the date of their handing over to the contractor to the date of their return by the contractor, both days inclusive except for the days the plant/machinery remains out of order for reasons beyond the control of the contractor or stops for periodical overhauling as certified by the Engineer in charge, in both the cases. The contractor is entirely responsible for the safe and proper upkeep of such plant/machinery while in his custody. The cost of the plant/machinery not returned to the depot in good order, fair wear & tear excepted, shall be recovered at the market rate of the plant and machinery from the running bills.

34. The Railway may give on hire to the contractor such materials as rails, steel cribs and released BG/MG wooden sleepers, if available, for use in execution of the work from the nearest stores depot. The contractor shall take over and transport the same to the site of work at his own cost and also take all reasonable care of such materials and shall be responsible for all damage/loss. The contractor shall sign accountable receipt for such materials made over to him by the Engineer and on completion of the work shall hand over the same to the Engineer at the same depot in good order, fair wear & tear excepted. The cost of any material not returned to the depot will be recovered at the market rate of the materials from the running bills of the contractor. The extent of recovery towards compensation for the loss or wear or damage to the materials other than fair wear & tear shall be decided upon by the Railway depending upon the merits of each case and the decision of the Engineer shall be final. The period of hire of the materials will be from the date the materials are issued to the contractor till the date they are returned to the stores depot.

35. The contractor shall be responsible for any loss/damage to Railway and public property or third party's property if it occurs during the course of execution and the Railway reserves its right to have the damages made good by the contractor.

36. Railway does not guarantee supply of electricity to any of the contractor's works. The contractor shall make his own arrangements at his cost, for the supply of electricity for the various works.

37. Setting out works: The contractor shall be responsible for the true and proper setting out of the works for correctness of the position, levels, dimensions and alignment of all parts of the work and for provisions of all necessary pegs, reference pillars, instrument, equipment and appliances and labour in connection therewith. If at any time during the progress of the work any error shall appear or arise in the position of levels, dimensions or alignments at any part of the work, the contractor on being required to do so by the Engineer in charge, shall at his own expense rectify such errors to the satisfaction of the Engineer in charge and he shall carefully protect, preserve, secure all bench marks, site rails, pegs, reference pillars and other things used in setting out of the work.

38. Released materials and other debris of dismantling should be removed and stacked at places as directed by the Engineer in charge and no extra lead or lift shall be paid on this account.

39. Issue of materials to the contractor or his authorized representative will be on vouchers and the materials thus issued are to be accounted for by the contractor either in the track as fitted or as surplus material having been returned to the Railway and he shall be held responsible for any shortage/breakage till the track is taken over by the Engineer in charge.

40. For drilling holes in rails and cutting rails the contractor should make his own arrangements for using the drilling and cutting machines, rail cutting blades, drill bits, etc. Railway will not supply these items. However, it can be issued on hire if available under usual terms and conditions of the relevant clause of these special conditions. Cutting of rails by gas or by jim crow is not permitted.

41. No extra payment will be made for crossing the tracks, lift/descend while unloading, leading and stacking of the materials.

42. Permanent Way materials should be handled carefully without causing any damage. If any damage is caused making these materials unfit for use on track or for shortages, the cost thereof will be recovered from the contractor at book rates plus 19.5%. The decision of the Engineer in charge regarding the damage or shortage and amount of recovery shall be final and binding on the contractor.

43. The cost of permanent way materials when got broken in handling/transport except for negligence of contractor will not be recovered but broken one should be handed over to the Railway depot as nominated already or as may be directed. Whether the breakages have occurred due to negligence of the contractor or not will be decided by the Engineer In charge and his decision is final and binding on the contractor.

44. Materials liable to breakage or damage by being dropped or thrown, shall be unloaded carefully by hand or suitable means. All materials shall after unloading, be stacked sufficiently clear of the track or the road, as the case may be and in the former case, shall remain without any possibility of infringing the minimum fixed structures dimensions when work is done near open yards/lines.

45. Materials shall also not be unloaded or stacked over signal wires, cables or gear or any such items to avoid interference to the existing running lines.

46. STATUTORY DEDUCTIONS / TAXES / LEVIES :

Statutory deductions in payments will be made as per clause 3(1), 3(2) and 4 of part – II of standard General Conditions of Contract April 2022.

(i). Tax: Income tax will be deducted at source including the surcharge, if any, at the rates notified by the Income Tax Department from time to time and TDS certificate will be issued in form No. 16 for such deductions with each bill.

(ii). Conservancy Charges: Conservancy charges as per rates in force during the period of work will be recovered from the contractor through running /final bills.

(iii). Other Taxes/Levies: All rates quoted in the tender shall be deemed to be inclusive of all taxes, duties, royalties, octroi, cess, etc., payable by the contractor to the Govt. or any

public body and no additional amount/rate or claim will be entertained on this account by the Railways. Also no claim whatsoever will be accepted by Railways on account of revision of tax rates, new taxes of statutory nature by State/Central Govt. The various provisions given in part II of Standard General Conditions of Contract are applicable.

47. The tenderer is expected to quote the rates duly inspecting the physical site conditions of the jurisdiction covered in the section, nature of the various works involved and various provisions given in the tender document.

ANNEXURE –B

SPECIAL CONDITIONS FOR DEEP SCREENING WORKS/LIFTING OF TRACK
(Including for associated works of Packing, spreading of ballast ,etc.)

1. The work should be done in accordance with the provision made in latest Indian Railways Permanent Way Manual, Indian Railway Standard Track Manual (Vol.I & II) or other relevant manuals/specifications for these works with all correction slips/amendments/reprint, up to the date of opening of tender.

2. The deep screening work shall be carried out as detailed below: -

2.1 . The manual deep screening work should be carried out as per procedure given in latest Indian Railway Permanent Way Manual.

2.2. The details of existing rail levels, proposed rail levels, existing formation levels and proposed formation levels will be made available to the contractor before start of the work.

2.3. The existing rail level at every 10m will be marked on the reference pegs (by Railway) before starting the deep screening work. The depth of ballast to be screened (from rail level) will be the difference between existing rail level and proposed formation level (as provided to the contractor). This depth will be available for every 10m locations and for sleepers in between these stations, the depth shall be linearised. The entire stone ballast including muck lying in the track between and under the sleepers upto the proposed excavation depth and completely on the shoulders, shall be removed and screened.

2.4. Screens of size 30mm square mesh should be used for screening. This should be placed on the cess at an angle of about 60 degree to the vertical, supported firmly at the back to enable the muck being thrown out on the cess or the bank slope automatically. The clean ballast after screening should be removed at frequent intervals and put back in the track.

2.5. Wherever feasible, muck shall be used for repairing the cess and slopes of the bank.

2.6. In cuttings, the muck should always be led outside the cutting and disposed off. In no case the muck should be dumped in side drain or on the slopes of cutting. On the top of cutting the muck should be stacked/spread in such a way that it does not get washed back to track, during rains or otherwise also.

2.7. Adequate number of wooden blocks shall be arranged by the contractor to support the rails for safe passage of trains while the work is in progress. At the end of days work the rails

shall be spiked with wooden blocks with bearing plate and keys, for the last bay deep screened, duly supporting the wooden blocks on ballast filled up-to bottom of sleeper level or higher. The required wooden blocks shall be brought by contractor themselves of size 0.60x0.25x0.15 m, in sufficient numbers.

2.8. During the progress of work screened ballast should be put back in the track and rough packing should be given underneath the ballast adequately so as to pass trains safely at a speed of 20 kmph . This work should be done simultaneously along with deep screening. Wherever required correction to gauge, cross level/super elevation & alignment/versines should also be done along with this work.

2.9. Unserviceable sleepers if any and as identified by the Railways representative should be removed and new sleepers inserted in their place and properly fixed. This item will be paid separately as given in the schedule of the work.

3.0. The rear packing work should be carried out by contractor as detailed below.

3.1. During the rear packing the track should be lifted in such a way that finally the rail level reaches the proposed rail level. The lift required at stations 10m apart shall be worked out by deducting the rail level as existing before lifting, from the proposed rail level. The lift for intermediate sleepers shall be worked out by linearising the lift value at two adjacent stations. The lift required shall be marked on every alternate sleeper. Where the lifting work merges with unlifted portion this marking will have to be done duly working out a ramp.

3.2. The track should then be lifted wherever required in stages, each involving a lift of not more than 50mm. The lifting work shall be done along with rear packing and all lifting should be completed before second rear packing. Where jacks are required for lifting, only non-infringing type hydraulic jacks shall be used. The jacks shall be placed on both the rails and operated simultaneously. When the track is being lifted, no train should be allowed to pass over the spot until the lift is ramped out on either side to a slope of 1 in 500 on both the rails..Contractor shall bring necessary such hydraulic jacks and spare jacks, required for the work.

3.3. Wherever alignment or versine correction is required, as instructed by site in charge, this should also be done during first and second rear packing, duly giving the slew as marked by Engineer in charge or his representative.

3.4. After each stage of lifting of track, packing with ballast should be done under all the sleepers to uniform standards and the track compacted adequately to pass trains at a speed of 20 kmph . The process should be continued stage by stage, till the track is brought to prescribed longitudinal profile.

3.5. Following items should also get covered under rear packing work:

3.5.1. Replacing of sleepers to uniform spacing as specified and squaring all the sleepers.

3.5.2. Tightening all the fittings and fastenings after making good the deficiency.

3.5.3. Slewing of curve/attending alignment defects in straight, as instructed by Engineer in charge or his representative.

3.5.4. During each round of packing the gauge, alignment, longitudinal levels and cross levels should be progressively brought to standards. Ballast recoument to the required profile shall be completed before final packing.

3.6. In between the rounds of packing, slacks should be picked up as required to ensure safety of traffic passing over the track, which will not attract separate payment

3.7. Sequence of packing should be as under for compacting the track and to bring the track to the required standard to relax the speed progressively to the sectional speed where manual packing is resorted to and to relax up-to the speed as directed by the Engineer in charge, for Machine packing.

3.7.1. Initial manual packing on the day of screening {immediately following the deep screening} with a permissible speed of 20 kmph..

3.7.2. First rear packing on 2nd day with a permissible speed of 20 Kmph.

3.7.3. Second rear packing on the next day after the first packing is completed so as to relax the speed ,restriction from 20 kmph to 45 kmph, day after 2nd rear packing so as to relax speed restriction from 45kmph to 75kmph.

3.7.4.Third rear packing on the 10th day after deep screening or 7th day after 2nd rear packing, so as to relax speed restriction from 45Kmph to 75Kmph.

3.7.5. Fourth and final rear packing on the 20th day after deep screening or 10th day after third packing, so as to relax the speed restriction from 75Kmph to sectional speed.

3.8.In case of machine packing the relaxation of speed restriction will be as follows:

3.8.1. Initial manual packing on the day of screening with a permissible speed of 20 kmph:

3.8.2. First machine packing on 2nd day with a permissible speed of 45 kmph on 3rd Day

3.8.3. Second machine packing on 6th day with a permissible speed of 75 kmph on 7th day.

3.8.4. Third and the final machine packing on the 9th day with a normal sectional speed On 10th day .

3.9 . Depending on availability of machine, at the discretion of Engineer in charge, machine can be used for second, third or fourth packing. In such cases the payment to contractor will be made only for the rear packings actually done by him/her.

3.10 Rear packing and consolidation will be deemed to be completed only when the track parameters are within the following tolerances and boxing of ballast is done to the standard profile as given in IRPWM.

3.10.1. Gauge: Sleeper to sleeper variation 2mm.

3.10.2. Spacing of sleepers: With respect to theoretical spacing +/-20mm

3.10.3. Cross level: To be recorded on every 4th sleeper.Maximum variation +/-3mm

3.10.4. Alignment

(a) On straight on 10m chord...+/- 2mm

(b) On curves of radius more than 600m On 20m chord...Variation over theoretical versine, 5mm.

© On curves of radius less than 600m on 20m chord –Variation over theoretical versine, 10mm.

3.10.5. Longitudinal levels: Permitted variation from approved longitudinal profile, 10mm.

3.10.6. Packing: Not more than 4 sleeper should be found loosely packed, when tested in lot of 20 at a time. No two consecutive sleepers should remain loosely packed.

3.11. The track parameters after final packing should be maintained for a minimum period of one month after the track is certified fit for sectional speed.

4. When lifting of track is envisaged in the tender schedule for getting the required cushion, following work will be done by the contractor:

4.1. The track should be lifted in stages as described in para 3.2, duly following each lifting by packing. The amount of total lift will be equal to difference of proposed and existing rail level. All the lifting should be completed before 2nd rear packing.

4.2. The payment of achieving total lift stipulated and for each rear packing will be made separately as given in schedule of work.

4.3. After lifting and packing is completed, screening of shoulders/crib should be done. This item will be paid separately as per schedule of work.

4.4. All stipulation as given in Para 3.1, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10 & 3.11 above shall be invariably followed.

5. Dumping/ Spreading and boxing of ballast will include following items of work:

5.1. Putting all clean ballast available alongside the track on to the track is to be carried out by using ballast rakes and boxing should be done to standard profile as given in IRPWM. Proper templates and log lines should be used for this.

5.2. The width at the shoulders should be in conformity with the profile for particular track structure as given in IRPWM.

5.3. While dumping/spreading ballast from the stack collected alongside the track ballast should be dumped carefully using ballast rake, to avoid mixing with earth.

5.4. The ballast should be dumped/spread depending on the requirement of ballast for each round of packing/lifting.

5.5. No ballast should be wasted on the slope of banks or in the cuttings and all the ballast scattered should be put back into the track.

6. Tools & Plants:

6.1. All tools and plants required for the works associated with deep screening shall be brought by the contractor. In addition to normal tools and plants for screening work such as beaters, crow bars, shovels, ballast rakes, keying hammers, screens etc, small track machines of approved suppliers shall also be arranged by the contractor for executing the work. These are abrasive rail cutters, drilling machines, rail tensors, rail dolly, welding equipment, profile grinders, weld trimmers, off track tie tampers, de-stressing rollers, etc.

6.2. All measuring equipments such as track gauge cum level, squares, levelling equipment, theodolite, thermometer, scales, etc. shall be arranged by the contractor. These equipments shall be checked and approved by Engineer in charge.

6.3. Rail cutting shall be done using abrasive rail cutter only.

6.4. After completion of work, contractor shall take back his tools.

7.0. Deleted

8. Quality Control:

8.1. The record of daily work done, labour strength, track geometry and any instruction given to contractor through site order book should be as given in Annexure II to V. All the records shall have one original + two copies for each page. The contractor shall be issued first copy with acknowledgement. The second copy shall be sent along with the bill.

8.2. The final track profile will be surveyed and compared with the proposed rail levels and will be certified by concerned SSE/P.Way and ADEN. The final bill shall be passed only after DEN/Sr.DEN verifies the cushion, track geometry and longitudinal profile by doing a random check at some of the locations, if required.

8.3. Rails levels shall be checked one month after track is restored to normal speed. Variation if any, should be rectified by contractor at no extra cost. The security deposit will be released only after this activity is completed.

8.4. No work on track should be done unless and until contractor's Technical Supervisor is present at site. This Technical supervisor should possess diploma/degree in Engineering{depending on Agreement value, and preferably a diploma in P.Way engineering issued by IPWE [I]. The ADEN will issue a competency certificate to such of those supervisor's not possessing adequate knowledge in P.way Engineering, duly counselling them in Railway's safety rules.

ANNEXURE – I Deep Screening Details

Date	Location	Length deep screened {m}	No.of men for deep screening	Cumulative for the month {m}	Supervisor		Remarks & Instructions issued
					Railways	Contractor	

ANNEXURE- C**SPECIAL CONDITIONS FOR CTR / TSR / TRR WORKS BY MANUAL LAYING**

1. Materials like rails, sleepers, fittings, etc. will be supplied by Railway.
2. All other tools and plants, equipments and consumables, etc. required for the work are to be arranged by the contractor.
3. Contractor must ensure deploying enough labour to attain minimum progress stipulated for each day continuously till the completion of the work.

4. TSR works

4.1 Wherever Deep Screening is associated with TSR, the conditions for deep screening should also be followed (as given in Annexure B)

4.2 Deleted**4.4 The TSR work shall be carried out as detailed below:**

4.4.1 The existing sleeper shall be removed duly removing/loosening the fastenings.

4.4.2 The ballast at this place should be levelled duly providing space for insertion of sleepers.

4.4.3 Insert new sleeper with all fittings and fastenings complete. Kutcha packing should be done for newly inserted sleepers.

4.4.4 If train is to be allowed before insertion of sleeper, the rails should be supported on wooden blocks with ACB plate and keys.

4.4.5 Consecutive two sleepers shall not be removed at any time.

4.4.6 In PSC sleepers, inside of MCI insert and leg of ERC shall be cleaned and greased.

4.4.7 Sleeper spacings, including joint spacing, should be marked in advance on rail by paint marks.

4.4.8 At the end of day's work, a suitable ramp shall be provided to meet with the levels of existing track.

4.5 The rear packing shall be carried out as per para 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4 & 5 of "ANNEXURE B -SPECIAL CONDITION FOR DEEP SCREENING WORKS/LIFTING OF TRACK" with difference that in place of word "deep screening", the word " sleeper renewal" is to be substituted.

TRR Work (Primary/Secondary)

SCOPE OF WORK – THROUGH RAIL RENEWAL

1. The work shall be carried out only under traffic block after protecting the track as per the General rules and only in the presence of a competent person not below the rank of a Junior Engineer/P.Way. New Rails shall be Class-I or Class-II, depending upon the type of renewals.

2. Cutting of rails

The work involves cutting of the new 52 kg or 60kg , single/three/ten/twenty rail panels unloaded alongside the track at site to facilitate renewal. Cutting will be required for inner rails on curves and also to suit the exact length between points and crossings and other fixed points. The rails have to be cut with abrasive rail cutting machine only. The cut should be truly vertical and square and smooth on the cut surface. No cut shall be made by gas or any other unapproved means.

2.1 Drilling of holes on rails

The work involves drilling prescribed dia fish bolt holes on 52kg/60Kg, single/three/ten/twenty rail panels unloaded alongside the track. The holes are to be drilled at exact points marked by the JE/SSE/P.way-in-charge of the work on the web portion of the rail. The holes should be exactly square to the rail and of correct in diameter and finished smooth. The holes are to be drilled using drill bits, either by hand operated ratchets or suitable drilling machines. No holes shall be made by gas or any other unapproved means. All holes should be chamfered by chamfering machine and tools are to be brought by contractor.

3. Through Rail Renewals of the existing track consists of the following works.

Removal of the existing 90'R'/52kg/60kg Rails

The existing 90R/52kg/60Kg rails from track are to be removed by removing the fish bolts and plates at joints or by making cut at nominated locations by approved means and all rail to sleeper fastenings carefully, without damage to the fittings/sleepers/Rails. The fastenings may be required to be used with new Rails. The rails are then to be taken out and kept clear of the track on the cess. Only the required number of rails to accommodate a new 52kg/60Kg rail should be taken at a time and removal of rails continued only after placing the new rail in position or in other words removal of the existing rails and placing of the new rails are to be carried out simultaneously. Only such length of Rail to be removed so that new rail can be laid and connected within the available traffic block.

Placing of the new 52 kg or 60Kg rails on track.

After removal of the existing 90R/52kg/60Kg rails from track to such lengths so as to accommodate a new 52kg/60kg rails, the new rail should be placed in position on track and fitted with fish plates, sleeper fittings etc. to uniform gauge and alignment. Any missing fittings will have to be recouped as supplied by the JE/SSE (P.way) of the work. The new rail for renewal have been unloaded along the cess at approximate locations where it has to be renewed and any dragging of the rail longitudinally as required will have to be done and the rails brought to position, before commencement of the work by the contractor. Correct

gap at joints according to the temperature while carrying out the work as specified by the JE/SSE (P.Way) of the work has to be kept while placing the new rails and if for any reason while placing the other rails the gap has varied, the rails thus placed will have to be pulled/pushed to obtain the correct gap on completion of the days works. Necessary speed restriction for the work and protecting of track during the course of the work will be arranged by Railway.

4.Tools and Plants.

4.1 Dip lorry for trucking out shall be made available by Railway. The labour for working dip lorry shall be made available by contractor. The dip lorry work shall be done, under supervision of Railway Engineers.

4.2 All tools and plants required for the work shall be brought by the contractor. These include crow bars, shovels, beaters, keying hammer, spiking hammer, track gauge, level, level boards, spirit level, cotter splitting tool, cant boards, square, spanners, etc.

4.3 In addition to this, other equipments like levelling equipment, theodolite, thermometer, abrasive rail cutters, scales etc. shall be arranged by contractor from approved suppliers. These equipments shall be checked and approved by Engineer-in-charge.

4.4 Rail cutting shall be done using abrasive rail cutters only.

4.5 After completion of the work, contractor shall take back his tools.

4.6 In case of machinery working like JCB/poclain, showels, etc. care should be taken and works are to be carried out in the presence of concerned departmental staff supervision. In case of violation resulting in damage of cable, water pipe line, sewage line, etc, necessary penalty will be imposed on the contractor by Engineer-in-charge.