

## NORTHERN RAILWAY

Headquarter office  
Baroda House  
New Delhi

No. 22-W/0/14/2025-26 (E-file no. 17715)

Dated As signed

**Sr. DEN/C**  
**DLI, MB, UMB, LKO, FZR**  
**Northern Railway**

### **Sub: Special Condition for Ballast Supply through commercial Rakes from Commercial Sidings.**

Ballast is an important input for track safety. Over Past few years Ballast procurement over N.R. was lagging behind the targets. To supplement the ballast supply, repeated instructions were issued to Divisions for (i) Opening new Depots, (ii) Augment cess supplies, and (iii) Augment ballast supply through commercial rakes from commercial ballast sidings.

For ballast supply, through commercial rakes from commercial ballast sidings, special condition attached as **Annexure A/1-8** may be followed. Based upon experienced gained, in future these conditions may be suitably amended as per requirement.

As a temporary measure, for Commercial Ballast sidings located in Jhansi area (Bijauli, kabrai etc) and NWR (Nijampur), following SSE/P.Way and ADENs are nominated, who will conduct the checks/test checks at source for all consignee for all Divisions. Permanent SSEs and ADENs will be posted once the volume of ballast procurement through this mode increases.

| Source                               | Nominated SSE/P.ways                                   | Nominated ADENs |
|--------------------------------------|--|-----------------|
| Jhansi Area<br>(Bijauli, Kabrai etc) | SSE/P.Way Ballast Depot/BQP & TQA<br>SSE/P.Way/Plg/LKO | ADEN/ON         |
| NWR Area<br>(Nijampur etc)           | SSE/P.Way/RE   | ADEN/RE         |

This is issued with the approval of Pr. CE/ N.Rly.

**D/A: Annexure A/1-8**

**ALOK MISRA** Digitally signed by ALOK MISRA  
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**Alok Misra**  
**Chief Track Engineer**

**Copy to:**

- 1. PCE/NR for kind information.**
- 2. Dy.CE/TO for information & n.a.**
- 3. Dy.CE/TP for information & n.a.**
- 4. AEN/Mobility for information & n.a.**
- 5. All Sr.DENs.**

**SPECIAL CONDITIONS FOR TRACK BALLAST SUPPLY FROM WAGON**

1. **Scope:** The scope of work involve Supplying and stacking of 65mm gauge machine crushed hard stone track ballast confirming to railway specification (IS/RDSO-GE/0001:2023 February 2023 and latest correction slips as directed. The work also includes mechanized loading on Railway wagons as per specifications given in the tender documents.
2. **Site of Work:** The ballast is to be supplied in various sections of Northern Railway **through rake supply**. Tenderers are advised to visit the site before quoting their rates for assessment of prevailing situation of traffic, law and order and other aspects.
3. **General Specifications**

These specifications will be applicable for stone ballast to be used for all types of sleepers on normal track, turnouts, tunnels and deck slabs etc. on all routes.

  - 3.1. **Basic Quality:** Ballast should be hard durable and as far as possible angular along edges/corners, free from weathered portions of parent rock, organic impurities and inorganic residues.
  - 3.2. **Particle shape:** Ballast should be cubical in shape as far as possible. Individual pieces should not be flaky and should have generally flat faces with not more than two rounded /sub rounded faces.
  - 3.3. **Mode of manufacture:** Ballast shall be machine crushed.
  - 3.4. **Physical Properties:**
    - 3.4.1 Ballast sample should satisfy the following physical properties in accordance with IS: 2386 Pt IV-1963 when tested as per the procedure given in code.

Aggregate abrasion value: 30% max  
Aggregate Impact Value: 20%max.
    - 3.4.2 The water absorption tested as per IS 2386 Pt III-1963 following the procedure given in **Annexure III** of RDSO Specification should not be more than 1%.
  - 3.5. **Size and Gradation:**
    - 3.5.1 Ballast should satisfy the following size and gradation.
      - (a) Retained on 65mm square mesh sieve: 5% maximum.
      - (b) Retained on 40mm square mesh sieve: 40-60%
      - (c) Retained on 20 mm square mesh sieve not less than 98%
    - 3.5.2 **Oversize Ballast:**
      - (i) Retention on 65 mm square mesh sieve. A maximum of 5% ballast retained on 65 mm sieve shall be allowed without deduction in payment. In case ballast retained on 65mm sieve exceed 5% but does not exceed 10%, Payment at 5% reduction in contracted rate shall be made for full stack. Stacks having more than 10% retention of ballast on 65 mm sieve shall be rejected.
      - (ii) In case ballast retained on 40 mm square mesh sieve (machine crushed case only) exceed, 60% limit prescribed in 3.5.1 (b) above payment at the following reduced rate shall be made for the full stack in addition to the reduction worked out at '(i)' above.
        - 5% reduction in contracted rates if retention on 40mm square mash sieve is between 60% (excluding) and 65% (including).
        - 10% reduction in contracted rates if retention on 40 mm square mesh sieve is between 65% (excluding) and 70% (including).
      - (iii) In case retention on 40 mm square mesh sieve exceeds 70%, the stack shall be rejected.
    - 3.5.3 **Under size ballast:**

The ballast shall be treated as under size and shall be rejected if:

      - (i) Retention on 40 mm square mesh sieve is less than 40%
      - (ii) Retention on 20mm square mesh sieve is less than 98%

### 3.6 **Method of sieve analysis**

- (i) Sieve size mentioned in this specification is normal size. The following tolerances in the size of holes for 65,40 and 20mm sieve shall be permitted:

65mm square mesh sieve : Plus mins1.5 mm  
40mm square mesh sieve: Plus mins1.5 mm  
20mm square mesh sieve: Plus mins1.0 mm.

Mesh sizes of the sieves should be checked before actual measurement. The screen for sieving the ballast shall be square mesh and shall not be less than 100 cm in length, 70 cm in breadth and 10 cm in height on sides.

- (ii) While carrying out sieve analysis, the screen shall not be kept inclined, but held horizontally and shaken vigorously. The pieces of ballast retained on the screen can be turned with hand to see if they pass through but should not be pushed through the sieve.
- (iii) The percentage passing through or retained on the sieve shall be determined by weight.

### 4. **Condition of submission of tender:**

- 4.1 Each tenderer at the time of tendering shall submit the test report of Impact Value (based on IS: 2386 Pt-IV-1963), abrasion value (based on IS: 2386 Pt.- III-1963) and water absorption value (based on IS:2386 Pt. III 1963) from the Railway laboratories /Govt. laboratories /Govt. owned Engineering collages/Government polytechnics/IITs and NITs, **failing which the tender will be summarily rejected. The date of test shall be between dates of notification of tender & opening of tender**

- 4.2 The tenderer shall also furnish undertaking that the ballast supply at all times will conform to specifications for track ballast as specified by Railway.

### 5. **Sampling and testing:**

- 5.1 A minimum of three sample of ballast for sieve analysis shall be taken for measurement done on any particular date even if the numbers of stacks to be measured are less than three. This will be done at source by supervisor & ADEN nominated by Division/HQ. Required test check by Sr.DEN for quantity and sieve analysis will be carried out at destination.
- 5.2 The test viz, determination of Abrasion Value, Impact Value and Water Absorption should be got done through the laboratories as approved by railway. Sample collection will be done at source by supervisor & ADEN nominated by Division/HQ.
- 5.3 In order to ensure supply of uniform quality of ballast, the following norms shall be followed in respect of sampling, testing and acceptance.
- 5.4 Due to multiple consignees and end users, for ballast supply through rake, the tests for size, gradation, abrasion value, impact value and water absorption for first 100cum is not required. Along with supply of each rake, the contractor shall furnish an undertaking that ballast being supplied is as per samples submitted along with tender and is confirming to specifications for track ballast as specified by Railway. Subsequent tests on each rake as mentioned in para 5.5 are to be carried out.

### 5.5 **Subsequent tests shall be carried out as follows:**

| Test  | Supply in Rakes                               |
|---|---|
| Size & gradation tests. No of tests Size of one sample.                   | **0.027 cum For every 100cum or Part thereof. |
| Abrasion Value, Impact value & Water Absorption test @ testing frequency. | One test for every 2000cum.                   |

- This sample should be collected using a wooden box of internal dimensions 0.3m x 0.3m x 0.3m from different parts of the stack/wagon.

@ These tests shall be done for the purpose of monitoring quality during supply. In case of the test results not being as per the prescribed specification at any stage, further supplies shall be suspended till suitable corrective action is taken and supplies ensured as per specification.

The above tests may be carried out more frequently if warranted at the discretion of Railway.

- 5.6 All tests for abrasion value, impact value & water absorption conducted subsequently to award of contract shall be done at Railway's cost.

**6. PERT Chart and Schedule of Supply:**

The contractor will submit the PERT chart for completion of work in schedule time before start of the work. The contractor shall maintain a steady and satisfactory progress and shall arrange to supply stone ballast in accordance with the following schedule from the date of issue of acceptance letter.

| S.N | Time from issue of LoA | Rakes to be supplied |
|-----|------------------------|----------------------|
| 1   | 1 <sup>st</sup> Month  |                      |
| 2   | 2 <sup>nd</sup> Month  |                      |
| 3   | 3 <sup>rd</sup> Month  |                      |
| 4   | 4 <sup>th</sup> Month  |                      |

Note: Above programme is subjected to availability and supply of rake by Railway.

6.1 In the event of failure of contractor to supply the stone ballast in accordance with the schedule stipulated in clause (a) above, action under clause 62 (i) VIII of Indian Railway Standard General Conditions of contracts shall be taken.

7. **Modification of Supply Schedule:** If however, the contractor is not able to adhere to the aforesaid schedule due to circumstance entirely beyond his control e.g. act of God, natural calamities, any prohibitory order of the state or central Govt. etc. the authority executing the agreement may, if satisfied, relax the schedule and waive the penalty to the extend considered justified.

**8. TAXES CENTRAL/STATE/LOCAL:**

8.1 All the rates quoted should be deemed to include all taxes, direct, levies under central or state of local bodies' acts or rules octroi, royalties etc. and similar imports that may be prevailing from time to time in respect of land, structures and all material supplied in the performance of this contract.

8.2 Railway will have no responsibility for issue of Form 31 to the contract for transportation of any material whatsoever from outside the state border. All such forms will have to be arranged by the contractor at this own cost/resources.

**9. NOTICES TO PUBLIC BODIES:**

The contractor/s shall give to the Municipality, police and other authorities all notices that may be required by law and certain all requisite licenses for temporary obstructions, enclosures and pay all fees, taxes and charges, which may be liveable on account of his operations in executing the contract. He should make good any damage to adjoining premises whether public or private and supply and maintain any lights etc. required at night.

**10. FIRST AID:**

The contractor shall maintain in a readily accessible site first aid appliances including adequate supply of sterilized cotton wool. The appliances shall be placed under the charge of responsible person who shall be readily available during working hours.

**11. TELEPHONE FACILITIES:**

The contractor shall have to make his own arrangements for providing telephone facilities at the site of work at his own cost. The telephone facilities provided by the contractor shall be allowed to be used by the Railway staff without any charge.

**12. RECORDS AND REGISTERS:**

The contractor shall maintain accurate record, plans and charts showing the dates and progress of all main operations and the Engineer shall have access to this information at all reasonable times, 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/s.

12.1 **SITE ORDER REGISTER:** The contractor shall promptly sign orders given therein by the Engineer or his representative or his superior officers and comply with them. The compliance shall be reported by the contractor to the Engineer in good time so that it can be checked.

**13. MISCELLANEOUS:**

- 13.1 The railway shall not be responsible for any loss or damage to the contractor's men material equipment plants etc. for any cause whatsoever.
- 13.2 If any work (whether temporary or permanent) or other material the value of which has been included in on account bill be destroyed or damaged or for any other reasons to be replaced or restored by the contractor other resource the value of the work or other material so destroyed shall be recovered at any time to contractor as debit due and no payment shall be made by the railways to the contractor after the above amount is recovered from the contractor.
- 13.3 The contractor are required to complete the works within the specified period as provided in agreement He/they is/are/required to submit the planning chart to complete the work within completion period.
- 13.4 Every possible fluctuation in the market rates of labour, material and general conditions and other such possibilities and every kind should be considered before quoting the rates and no claim due to any reasons whatsoever be on this account will be entertained afterwards. Sales tax or any other tax levied or leviable by the Central or Sales tax of any other taxes of State Govt. or local bodies shall be borne by the contractor which should also be kept in view before tendering. No such taxes on contractors labour and materials will be paid by the Railway.
- 13.5 The contractor will be required to give no claim certificate at the time of signing the final bill. Thus no claim certificate furnished by the contractor constitute special agreement under which contractor submits and acknowledged that no money is due to him in connection with executing of the particular contract by him. Thus after the contractor has given no claim certificate and his final bill has been finalized, the contractor cannot ask for anymore payment even if post audit records show that he had been paid less. Hence after no claim certificate is given, the contractor cannot even ask for arbitration.
- 13.6 The contractor shall have to co-ordinate his work with other department i.e. electrical installation/signal interlocking work which may be related to other contractor or done departmentally No claim of any kind whatsoever shall be entertained if the execution of any such work being also done by the department/contractor is held up due to their interference or as a result of delay in any of these works.
- 13.7 If any work (whether temporary or permanent) or other materials, the value of which has been included in on account bills is destroyed or damaged or has/have for any other reasons to be replaced or restored by contractor. the value of the work or other materials destroyed may be recovered at any time from the contractor as debit due provided that no omission to deduct any amount due to the contractor and no payment made by the railway to contractor after the aforesaid amount became due and recoverable shall on any way prejudice or effect the right of the railway to make such deductions at any time or other wise to recover the amount as debit due.
- 13.8 No claim for extra payment shall be entertained on account of the interruption to work due to rain, floods or due to delay in acquisition of land in some portion or any other cause nor will any extra payment be made for the excavation on this account. No claim for earthwork done in low-lying water-logged area, local pits and depressions containing water will be entertained by the railway.
- 13.9 Individual rate for each non schedule items should be for complete finished items, inclusive of all operations and charge and nothing extra will be payable on any account.
- 13.10 The work will be done in close co-operation with other departments/agencies if any.
- 13.11 For day-to-day execution of work, any clarification required by the contractor have to be obtained from the engineer in charge in writing and their decision shall be final and binding on contractor.
- 13.12 In case of any dispute regarding interpretation of any of the above clauses, decision of the Chief Engineer shall be final and binding on the contractor.

**14. PROTECTION AND STEPS TO BE TAKEN IN ORDER TO AVOID DANGERS TO RAILWAY INSTALLATIONS.**

- 14.1 At such of the locations where contractor/s road vehicle are permitted to ply adjacent in the running lines and yard, and experienced gang men shall be deputed as flagman at the cost of the contractor to prevent accidents. This factor should be borne in mind by the contractor/s while formulation the rates.
- 14.2 If the work to be executed in proximity or the running railway track, the contractor will be required to be follow all precautions and carry out all works that may be necessary to ensure the safety of the running track/trains, without imposition of any speed restriction thereon as may be directed by the engineer or his authorized representative. No claim whatsoever will be entertained for either any inconvenience caused to the contractor or for the rescheduling of the operations or for any other reasons on this account.
- 14.3 The contractor shall take all precautionary measures in order to ensure protection of his own personnel moving about or working on the railway premises and shall have to conform to the rules and regulations of Northern Railway. If any unforeseen accident or injury happens while on working, the contractor shall be solely responsible for the same.
- 14.4 Within the station premises, especially on passenger platform, or near the running track, contractor/s shall ensure sufficient free space for movement of passenger traffic. He must cover and protect the excavation carried out in such area with a view to avoid the accident.
- 14.5 The work must be carried out most carefully in such a way that they do not hinder the railway operation except as agreed to by the railway.
- 14.6 The contractor's employees and workers shall not for any reason operate any appliances of installation of the railway concerning the safety of the trains movements but they should whenever necessary notify to the qualified railway staff who will then take necessary steps.
- 14.7 The contractor shall see that no damage is caused to railway signaling and transmission wire. stations, installation, communication lines, electric devices, trains of any kind, fencing as well as any rolling stock and in general to all railway installation and equipment in case of any damage is caused in these due to the fault of the contractor on the part of any one on his behalf all repairs there required will be carried out by the railway at the entire cost of the contractor and amount of expenses thus incurred will be recovered from the payment due to him.
- 14.8 The contractor shall be responsible for safe custody of tools and for the safety of his labour. He should ensure that labour on work removes their tools clear of the track on the approach of any trains. After the day's work, the contractor should ensure that the tools are deposited in proper tool box before the labour proceeds for their homes. Tool issued should not be allowed to fall in and unwanted hand who can tamper with the railway track.
- 14.9 The contractor shall employ one suitable supervisor to supervise the work at site. Through all the work relating to the safety of running trains shall be executed under railway supervisor and presence of qualified supervisor from the contractor's site is a must at the site of work.
- 14.10 Contractor shall provide 150mm thick white line with line at a distance of 3.5m from center to existing track. This white line shall be in the entire length where work is going and/or the vehicle/ machineries plying along the track. Nothing extra shall be paid for this.
- 14.11 Barricading with the help of portable fencing shall be provided in the length where the day work is to be done in close vicinity of the track. The fencing shall consist of self-supporting steel column connected with at least 20mm thick red nylon rope. The column shall be of 1.2m height. This will be placed at a distance of 3.5M from center line of the nearest track.
- 14.12 Asstt. Officer/Sr. Scale officer shall issue competency certificate after checking license and their working to all drivers of nominated vehicles/ machineries. Inspector at site shall ensure that the driver who does not possess competency certificate will not work at site.
- 14.13 The area between running line and white line shall not be permitted to become slushy and adequate drainage must be ensured at all times.
- 14.14 Machine/ vehicle shall ply 6 M clear of track and movement/work at less than 6M and up to 3.5 M of clear track centre, shall be done in the presence of the railway employee authorized by the Engineer/in charge. The railway employee so deputed shall ensure safety of the track, with banner flag, hand signal lamps and detonators.

- 14.15 If vehicle/machinery/materials are to come within 3.5M of existing track, 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 flag, hand signal lamp and detonators.
- 14.16 Normally, night working shall be avoided. A night working shall be permitted by AEN/SEN in writing. One inspector shall be specifically deputed 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.

**15. PENALTIES DUE TO UNSAFE WORK:**

- 15.1 In the event of accident at the work site, a departmental enquiry shall be held and in case it is established that the accident has occurred on account of contractor's negligence or the negligence of his men, penalties up to an upper limit of 10% of the total cost of the work shall be imposed on the contractor.
- 15.2 Railway administration reserves the right to terminate the contract with immediate effect if the contractor is found responsible for causing an accident without giving any further notice/notices to the contractor.
- 15.3 In the event of contractor not completing the work or leaving it unsafe at the end of days work so they may serve speed restrictions if required to be imposed, track shall be attended to by the railway immediately at the contractor's cost without any further notice. In addition the labour cost recoverable from the contractor, supervision charges. @12-1/2% and train detention charges @ Rs.2000/- every half hour or part thereof shall also be recovered.
- 15.4 In the event of contractor starting the job without proper supervision causing an accident, he may be prosecuted under railway act for unlawfully interfering with the railway track in addition to the recovery of Rs.20000/-as penalty of every such case, actual losses, compensation with damages to railway property.

**16. Compliance to Labour Laws:** The principal contractor will be held responsible for the compliance with provision of wages act 1936 and the rules framed there under or even in respect of labour, employee in his/their contractor in the execution of the work contracted by him/them.

16.1 The contractor shall make his/their own arrangements for the provision of sanitary, medical and water supply facilities according to the site nature importance and locations of the labour camp. if the contractor/s fails /fail to provide the requisite medical & sanitary arrangements these will be provided at the contractor's expenses.

17. The contractor/s shall carry out the provision of the regulations that maybe informed in the areas in which works to be done prohibiting the recruitment of the local labour.

18. It will be the responsibility of the contractor/s to intimate direct to the Regional Labour Commissioner or other authorities of the government respective department about the number of men employed by him/them that come under payment of wages Act and have to upload payment details of wages along with details of EPF deposited on Shramik kalyan portal.

19. In case of any dispute regarding interpretation of any of the above quoted clauses, decision of the Chief Engineer will be final and binding on the contractor's.

20. The contractors are required to complete the works within the specified period as provided in agreement /work order. DRM (Engineering) is empowered to grant extension to the specified period provided in the order, failing which the financial limits of the powers during the currency of the contract, if considered the same as justified or with penalty as per Indian Railway Standard General condition of contract.

21. No claim for extra payment shall be entertained on account of the interruption to work due to rain, floods or due to delay in acquisition of land in some portion or any other cause nor will any extra payment be made for the excavation on this account.

**22. MC / Credit note shall be issued to the contractor at approved Quarry:**

22.1 Contractor shall file a monthly return of RMC transaction with status of indent including opening balance and closing balance to keep accountal of delays if any, in rake supply. It is understood that rake supply is not contractor's responsibility and the delay in supply on this account shall not be made contractor's liability.

- 22.2 The contractor has to place the indent for the empty rake of wagons within 7 days (Seven Days) of the receipt of the RMC from the Railway and he/they have to communicate the date of placing of indent priority No.etc. to the Engineer-in-charge. Charges for transportation, as applicable under extant rules of IR, will be borne by Northern Railway (Consignee), chargeable to relevant estimate and contractor is not liable for payment of transportation charges.
- 22.2 Contractor shall be allowed to withdraw the indent for a rake if empty rake is not allotted within a time period after which indent withdrawal with no forfeiture is allowed by Railways. It may be noted that indent withdrawal should be resorted to only rarely and the grounds shall be intimated to Rlys. in writing. No loss of indent amount should occur to railways on this account.
- 22.3 Payment will be based on the wagon measurements.
- 22.4 Measurement will be done at destination only by the Engineer-in-charge or his authorized representative. Payment shall be made for the gross wagon measurements done at destination.
- 22.5 In case of missing wagons from a rake same shall be traced and got back to destination in due course. However, if any leftover /missing wagon is still not traceable even on the date of completion of the work then subject to the missing wagon No. being shown on RR as loaded a payment equivalent to average vol. of wagon in that rake shall be paid for them is missing wagon.

### **23. LOADING OF BALLAST:**

- 23.1 Loading period shall be applicable as per regulations issued by Commercial/ Operating Department of Northern Railway. If the contractor fails to load within allotted time, detention charges in accordance with the commercial rules will be levied from the contractor.
- 23.2 The contractor is responsible to inquire the position of Rake/s and likely time for placement from Traffic Department and arrange for adequate number of labour and necessary arrangements for timely loading of ballast in wagons.
- 23.3 All arrangements for loading of ballast into Rly. Wagons should be provided by the contractors at his /their cost.
- 23.4 Railway Administration will not be responsible and will not accept any claim on account of wastage of labour, idling of pay loader; operator etc, for any reasons whatsoever.
- 23.5 (a) The ballast should be loaded within the range of "up to the brim to 100mm below the brim of wagon". After loading in wagon, the top of ballast will be leveled.
- (b) As per RDSO specification of track ballast IS/RDSO-GE/0001:2023, February 2023, "*When ballast supply is made in wagons, shrinkage upto 8% shall be permitted at destination while verifying the booked quantities by the consignee*". The ballast which has been loaded in BOBYN wagon at the originating station will be subjected to settlement during transportation to the destination station. Therefore, while taking measurement at destination after allowing for the tolerance the top level of the ballast in the BOBYN wagon should not be less than 200 mm below the brim in any case.
- 23.6 **Penalty for under loading:** If the level of ballast at the destination is found more than 200mm, same will be treated as under loading and penalty of Rs. 5000/- per under loaded wagons will be made. This penalty will be in addition to any penalty imposed under commercial rules for under loading/over loading.
- 23.7 As long as ballast is loaded up to the brim or up to 200mm below brim at destination, no overloading/under-loading penalty shall be imposed.
- 23.8 Railway will not be responsible for payment towards royalty, taxes, octroi etc. incurred by the contractor on the materials rejected at the destination point.

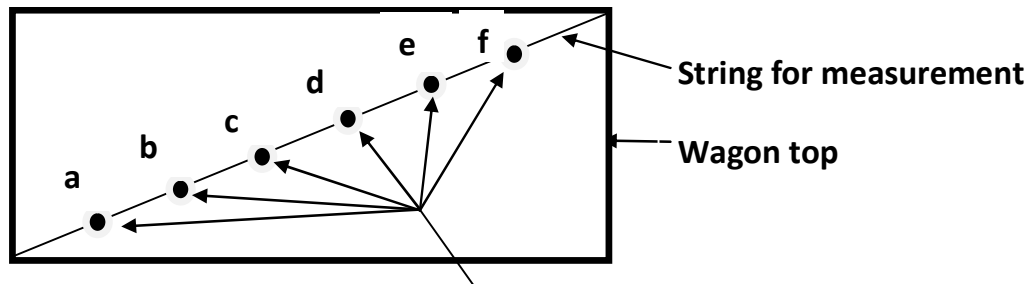
### **24. MEASUREMENT OF BALLAST:**

- 24.1 While tests for size, gradation, abrasion value, impact value and water absorption will be carried out at source by nominated supervisors/officers, measurement of ballast shall be done at destination only.

- 24.2 It must be understood that ballast which conforms to the specifications and special conditions laid down in this contract will only be measured at destination and accepted for payment by the PWI/AEN-in-Charge. Further test checks, if any, may be carried out by Divl. Engineer or Sr. Divl. Engineer concerned. Wagons, not conforming to the above, will not be measured and will not be paid.
- 24.3 If the Engineer-in-Charge or his representative or PWI/AEN-in-charge is satisfied that the ballast supplied in wagons is not clean and is mixed with muck or not compliant to specifications and special conditions, he is at liberty to take either of the following actions:-
- To refuse to measure up such ballast and ask the contractor to remove it from wagons, giving reasons in writing to the contractor. If the contractor does not remove the rejected ballast from wagons, it will be removed by the Railways and the cost of removal of ballast from wagons as well as detention charges of rake/wagons will be deducted from the contractor's dues.
  - To call upon the contractor to screen the muck within 48 hours of notice to this effect.
  - To take action as per the Indian Railway Standard General Conditions of contract - 2022 and Special conditions and Specification of tender.

**25. STEPS FOR MEASUREMENT OF BALLAST:**

- 25.1 Measurement of ballast shall be done at destination only.
- 25.2 The agency shall depute an authorized representative for witnessing the above measurement. For this the agency will follow with traffic department for movement of wagons. If the agency fails to depute an authorized representative for same, measurements made by the Railways will be final.
- 25.2 For measurement of ballast at destination following steps are to be adopted:
- Ballast rake is to be stabled at a suitable line in yard and OHE block is obtained.
  - Before starting measurement, it will be ensured that top of ballast is leveled. If it is got disturbed during transit, same may be leveled before starting measurement.
  - A string is to be stretched on one of the diagonals of the top rectangular frame of the wagon.
  - Depth of top of ballast from wagon top is to be measured at 6 locations from the string.



**Equidistant points for measurement**

**Note: Before measurement, ballast top to be made leveled**

- The average of the above mentioned 6 depths will give the average depth ( $d_{av}$ ) of the top of ballast from top of wagon.
- The depth  $d_{av}$  will be used to identify the supplied quantity of ballast at destination, based upon top area of wagon as per drawing. This quantity will be inclusive of shrinkage allowance and no further deduction will be made to this measured quantity.

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