

EAST CENTRAL RAILWAY



SONPUR DIVISION

ENGINEERING DEPARTMENT

E-TENDER DOCUMENT 2026-27

Tender No.	:	SEE26-27-73
Name of work	:	Barauni - Katihar - Cess Repair (6m) - 83.31 Tkm & Barauni - Rajendrapul - Cess Repair (3m) – 2.80 Tkm.
Approx. Cost (In Rs.)	:	37,34,01,835.75
Earnest Money (In Rs.)	:	74,68,000.00
Cost of Tender Document	:	NIL
Date & Time of Closing of tender	: (As on IREPS Portal)
Date & Time of Opening of tender	: (As on IREPS Portal)

Note :- In case of any anomaly in above details, IREPS Portal data will prevail.

Sr. DEN/II/SEE

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TENDER FORM (First Sheet)

E-Open Tender No.: SEE26-27-73

Name of work: : Barauni - Katihar - Cess Repair (6m) - 83.31 Tkm & Barauni - Rajendrapul - Cess Repair (3m) – 2.80 Tkm.

To,
The President of India
Acting through the Divisional Railway Manager (Engineering),
East Central Railway, Sonpur.

1. I/We _____ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of **60 days (Sixty days)** days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our “Earnest Money/Bid Security”. I/We offer to do the work for East Central Railway, at the rates quoted in the attached schedule and hereby bind myself/ ourselves to complete the work in all respects within(*As on NIT Head Tab of IREPS Portal*) from the date of issue of letter of acceptance of the tender.
2. I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.
3. A Bid Security of(*As on NIT Head Tab of IREPS Portal*) has already been deposited online / submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:
 - (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
 - (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the Railway that such documents are ready; and
 - (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.
4. (a) I/We am/are a Startup firm registered by.....Department of Industrial Policy and Promotion (DIPP) and my registration number is valid upto..... (Copy enclosed) and hence exempted from submission of Bid Security.
5. We are a Labour Cooperative Society and our Registration No. is with..... and hence required to deposit only 50% of Bid Security.
6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Tenderer(s)

Date:

Address of the Tenderer(s)

EAST CENTRAL RAILWAY

Part - I

INSTRUCTIONS TO TENDERERS AND CONDITIONS OF TENDER:-

Tender will be dealt based on GCC-April/2022 and upto date correction slip No. 11)

1. **E-tender will be opened at 13:00 hours on the same date of closing of tender in the office of the Divisional Railway Manager, E.C. Railway, Sonpur (Civil Engg. Deptt). If the office is closed on the stipulated date and time due to some unaccounted holiday or bandh etc. the tender will be opened on the next working day at the same time.**
2. Payment of Bid Security: Payment of Bid Security in respect of e-tendering should be accepted through Net Banking or payment gateway or Bank Guarantee Bond only. Tender received without the prescribed amount of Bid Security Deposit and through other than Net Banking or payment gateway or Bank Guarantee Bond are liable to be summarily rejected.
3. A copy of Documents against eligibility criteria must be submitted along with the E-tender. No any documents against the same will be entertained in the office of Divisional Railway Manager, Sonpur or anywhere else at any time. Tender will be decided purely on the basis of documents available/attached with the E-tender no matter whether tenderer is working contractor or new. However Railway may ask clarification with respect to document available/attached with the E-tender, if required.
4. Tenderer(s) is/are agreed to abide by the Indian Railways Standard General Conditions of Contract- April/2022 with all correction slip up to date and to carry out the work according to the Special Conditions of contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Schedule of Rates with all correction slips up to date for the present contract.
5. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.
6. In case of ambiguity in rates quoted in words or figure, rate quoted in words shall be considered.
7. The following documents form part of Tender/Contract:
 - a. Special conditions/Specifications as mentioned.
 - b. Schedule of approximate quantities as mentioned.
 - c. Standard General Conditions of Contract and Standard Specifications for materials and works of Indian Railway as amended/corrected up to latest correction slips, copies of which can be seen in the office of Sr. Divisional Engineer (Co-ord), E.C. Railway, Sonpur or obtained from the office of the Chief Engineer, East Central Railway on payment of prescribed charges.
 - d. ECR Unified Standard Schedule of Rates-2021 & CPWD D.S.R.-2021, as amended/corrected up to latest correction slips, copies of which be seen in the office of Sr. DEN(Co-ord), E.C. Railway, Sonpur or obtained from the office of the Chief Engineer, East Central Railway on payment of prescribed charges.
 - e. All general and detailed drawings if any pertaining to work will be issued by the Engineer or his Representatives (from time to time) with all changes and modifications.

****Note:- If any anomaly is in tender document, condition of GCC/2022 upto date corrected will prevail.***
8. **Drawings for the work:**

The Drawings for the work if any can be seen in the office of the Sr. Divisional Engineer(Co-ordn.), E.C. Railway, Sonpur and/or Chief Engineer, E.C. Railway at any time during the office hours. The drawings are only for the guidance of Tenderer(s). Detailed working drawings, if required, based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.
9. The Tenderer(s) shall quote his / their rates as a percentage above or below the Schedule of Rates of East Central Railway as applicable to **Sonpur Division** except where he/they are required to quote item rates and must quote rate for all the items shown in the Schedule of approximate quantities attached. The quantities shown in the attached Schedule are given as a guide and are approximate only and are subject to variation according to the needs of the Railway. The Railway does not guarantee work under each item of the Schedule. The tenderer(s) shall quote rates / rebates only at specified place in Tender Form supplied by Railway. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.
10. **Rights of the Railway to deal with tender (Clause 7 of Part-I of GCC-2022) :**

The Railway reserves the right of not to invite tenders for any of Railway work or works or to invite open or limited

tenders and when tenders are called to accept a tender in whole or in part or reject any tender or all tenders without assigning reasons for any such action. In case if tender is accepted in part by Railway administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.

If the tenderer(s) deliberately gives/give wrong information in his/their tender or creates/create circumstances for the acceptance of his/their tender, the Railway reserves the right to reject such tender at any stage.

11. Permission to Bid for a bidder from a country which shares Land boundary with India:

(Clause 7 D of Part-I of GCC-2022) Any bidder from the countries sharing a land border with India will be eligible to bid in any procurement of works (including turnkey projects) only if the bidder is registered with the Competent Authority. The Competent Authority for registration will be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India. For interpretation of this para, Department of Expenditure, Ministry of Finance, Government of India letter F.No.6/18/2019-PPD dated 23/07/2020 shall be referred.

12. (Clause 9 of tender form second sheet Part-I of GCC-2022) If any partner(s) of a partnership firm expires after the submission of its tender or after the acceptance of its tender, the Railway shall deem such tender as cancelled/contract as terminated under clause 61 of the Standard General Conditions of Contract, unless the firm retains its character as per partnership agreement. If a sole proprietor expires after the submission of tender or after the acceptance of tender, the Railway shall deem such tender as cancelled / contract as terminated under clause 61 of the Standard General Conditions of Contract.

13. Bid Security: (Clause 5 of Part-I of GCC-2022) :

***ACS- 11 dated 13.03.2026**

- (1) a. The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. The Bid Security shall be as under:

Value of the Work	Bid Security
For all works	2% of the estimated cost of the work

Note:

- (i) The Bid Security shall be rounded off to the nearest ₹100. This Bid Security shall be applicable for all modes of tendering.
 - (ii) Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as „Startups“ shall be exempted from payment of Bid Security detailed above.
 - (iii) Labour Cooperative Societies shall submit only 50% of above Bid Security detailed above.
- (b) It shall be understood that the tender documents have been issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the Railway.
- (c) If his tender is accepted, this Bid Security mentioned in sub para (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.
- (2) The Bid Security shall be deposited either in cash through e-payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per **Annexure- VIA** and shall be valid for a period of 90days beyond the bid validity period.
- (3) In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured:**
- i. A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender.
 - ii. The original Bank Guarantee should be delivered in person to the official nominated as indicated in the tender document **before closing date** for submission of bids. **(i.e. excluding the last date of submission of bids)** **(Advance correction Slip No.5 dt 20.10.2023)** [Para 5(3) ii of GCC-2022]
 - iii. Non submission of scanned copy of Bank Guarantee with the bid on e-tendering portal (IREPS) and/or non submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid.
 - iv. The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender.

- v. The details of the BG, physically submitted should match with the details available in the scanned copy and the data entered during bid submission time, failing which the bid will be rejected.
- vi. The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification “**Bid for the ***** Project**” and shall clearly indicate the name and address of the Bidder. In addition, the Bid Due Date should be indicated on the right hand top corner of the envelope.
- vii. The envelope shall be addressed to the officer and address as mentioned in the tender document.
- viii. If the envelope is not sealed and marked as instructed above, the Railway assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted and consequent losses, if any, suffered by the Bidder.

14. Security Deposit (Clause 16(1) of Part-II of GCC-2022) :

The Security Deposit shall be 5% of the contract value. The Bid Security submitted by the Contractor with his tender will be retained/encashed by the Railways as part of security for the due and faithful fulfillment of the contract by the Contractor. Provided further that, if Contractor submits the Cash or Term Deposit Receipt issued from a Scheduled commercial bank of India or irrevocable Bank Guarantee Bond from a Scheduled commercial bank of India, either towards the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security, to the Contractor.

Balance of Security Deposit may be deposited by the Contractor in cash or Term Deposit Receipt issued from Scheduled commercial bank of India or irrevocable Bank Guarantee bond issued from Scheduled commercial bank of India, or may be recovered at the rate of 6% of the bill amount till the full Security Deposit is recovered. Provided also that in case of defaulting Contractor, the Railway may retain any amount due for payment to the Contractor on the pending "on account bills" so that the amounts so retained (including amount guaranteed through Performance Guarantee) may not exceed 10% of the total value of the contract.

The Irrevocable Bank Guarantee submitted towards Security deposit shall be initially valid up to the stipulated date of Maintenance period plus 60 days and shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17A and 17B of the Standard General Conditions of Contract.

Note: Security Deposit deposited in cash by the Contractor or recovered from the running bills of a Contractor or submitted by contractor as Term Deposit Receipt(s) can be refunded/returned to the contractor, in lieu of irrevocable Bank Guarantee bond issued from scheduled commercial bank of India, to be submitted by him, for an amount equal to or more than the already available Security Deposit, provided however that, in a contract of value less than Rs.50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times and in a contract of value equal to or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times.

Clause 16(2) of Part-II of GCC-2022) of Security Deposit: Security Deposit mentioned in sub clause (1) above shall be returned to the Contractor along with or after, the following:

- (a) Final Payment of the Contract as per clause 51.(1) and
- (b) Execution of Final Supplementary Agreement or Certification by Engineer that Railway has No Claim on Contractor and
- (c) Maintenance Certificate issued, on expiry of the maintenance period as per clause 50.(1), in case applicable.

*** (Maintenance period:**

i) For Civil & other Works :- 12 (Twelve) months from the date of completion of work.

ii) For P.Way Works:-06 (Six) months from the date of completion of work.

16. (2) (ii) Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of these conditions, the Security Deposit already with railways under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of these conditions, the Security Deposit shall not be forfeited.

16.(3) No interest shall be payable upon the Bid Security and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 16.(4)(b) of this clause will be payable with interest accrued thereon.

15. Performance Guarantee(P.G.) (Clause 16.4 of part-II of GCC-2022) :-

The procedure for obtaining Performance Guarantee is outlined below:

- (a) The successful bidder shall have to submit a Performance Guarantee (PG) within 21 (Twenty one) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (Twenty one) days and up to 60 days from the date of issue of LOA may be given by the Authority who is competent to sign

the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21(Twenty one) days, i.e. from 22nd day after the date of issue of LOA. Further, if the 60th day happens to be a declared holiday in the concerned office of the Railway, submission of PG can be accepted on the next working day.

In all other cases, if the Contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit Bid Security and other dues payable to the contractor against that particular contract, subject to maximum of PG amount. In case a tenderer has not submitted Bid Security on the strength of their registration as a Startup recognized by Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect. The failed Contractor shall be debarred from participating in re-tender for that work.

- (b) The successful bidder shall submit the Performance Guarantee (PG) amounting to 5% of the original contract value and Additional Performance Guarantee as per clause 16(4) (h) in any of the following forms,:-

***ACS- 11 dated 13.03.2026**

- (i) A deposit of Cash;
(ii) Irrevocable Bank Guarantee;
(iii) Insurance Surety Bond as per Annexure - XVII;

***ACS-9 dated 09.01.2025**

Note:

***ACS- 11 dated 13.03.2026**

In case of extension of Date of Completion, selected bidder needs to submit extended Insurance Surety Bond/Fresh Insurance Surety Bond/Fresh Performance Security, in any form as given above, before expiry of existing Insurance Surety Bond.

- (iv) Government Securities including State Loan Bonds at 5% below the market value;
(v) Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India;
(vi) Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled Commercial Bank of India;
(vii) Deposit in the Post Office Saving Bank;
(viii) Deposit in the National Savings Certificates;
(ix) Twelve years National Defence Certificates;
(x) Ten years Defence Deposits;
(xi) National Defence Bonds and
(xii) Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of FA&CAO (free from any encumbrance) may be accepted.
- (c) The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.
- (d) The value of PG to be submitted by the Contractor is based on original contract value and shall not change due to subsequent variation(s) in the original contract value.
- (e) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the Contractor has completed the work in all respects satisfactorily.
- (f) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed.
- (g) The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- (i) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.
- (ii) Failure by the Contractor to pay President of India any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.
- (iii) The Contract being determined or rescinded under clause 62 of these conditions.

***ACS- 11 dated 13.03.2026**

16. (4)(h) of part II of GCC-2022

(h) If a tender is accepted on the quoted rates of bidder which is below the advertised tender value, an additional performance security shall be submitted by the bidder as below:

Bid quoted in % advertised cost	Additional Performan Guarantee (%)
Below 0-5% (inclusive)	NIL
Below 5%	5%

16. Minimum Eligibility Criteria: - (Clause 10 of part-I GCC-2022) :-

Technical Eligibility Criteria (Clause 10.1 of GCC-2022):

- (a) The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:
- (i) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or
 - (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or
 - (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender.
- (b) (1) In case of tenders for composite works (e.g. works involving more than one distinct component, such as Civil Engineering works, S&T works, Electrical works, OHE works etc. and in the case of major bridges – substructure, superstructure etc.), tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:-
- (i) Three similar works each costing not less than the amount equal to 30% of advertised value of each component of tender, or
 - (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or
 - (iii) One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender.

Note for b(1): Separate completed works of minimum required values shall also be considered for fulfillment of technical eligibility criteria for different components.

(b)(2) In such cases, what constitutes a component in a composite work shall be clearly pre-defined with estimated tender cost of it, as part of the tender documents without any ambiguity.

(b)(3) To evaluate the technical eligibility of tenderer, only components of work as stipulated in tender documents for evaluation of technical eligibility, shall be considered. The scope of work covered in other remaining components shall be either executed by tenderer himself if he has work experience as mentioned in clause 7 of the Standard General Conditions of Contractor through subcontractor fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract or jointly i.e., partly himself and remaining through subcontractor, with prior approval of Chief Engineer in writing.

However, if required in tender documents by way of Special Conditions, a formal agreement duly notarized, legally enforceable in the court of law, shall be executed by the main contractor with the subcontractor for the component(s) of work proposed to be executed by the subcontractor(s), and shall be submitted along with the offer for considering subletting of that scope of work towards fulfillment of technical eligibility. Such subcontractor must fulfill technical eligibility criteria as follows:

The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract, costing not less than 35% value of work to be subletted, in last 5 years, ending last day of month previous to the one in which tender is invited through a works contract.

***Note:** for subletting of work costing up to Rs.50 lakh, no previous work experience of subcontractor shall be asked for by the Railway.*

In case after award of contract or during execution of work it becomes necessary for contractor to change subcontractor, the same shall be done with subcontractor(s) fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract, with prior approval of Chief Engineer in writing.

Note for Item 10.1: (Clause 10.1 of part-I GCC-2022):

Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by Public listed company having average annual turnover of Rs. 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

Financial Eligibility Criteria (Clause 10.2 of part-I GCC-2022):

The tenderer must have minimum average annual contractual turnover of V/N or „V“ whichever is less; where

V= Advertised value of the tender in crores of Rupees

N= Number of years prescribed for completion of work for which bids have been invited.

The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.

The tenderers shall submit requisite information as per Annexure-VIB, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant duly supported by Audited Balance Sheet.

Clause 10.3 of part-I GCC-2022: Bid Capacity: The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-VI.

10.4: No Technical and Financial credentials are required for tenders having value up to Rs.50 lakh. (Clause 10.4 of part-I GCC-2022)

Note : - “The balance sheet and all other financial document attested/certified by chartered accountant (CA) to substantiate fulfillment of financial eligibility criteria should be with UDIN, failing which the offered shall be considered as incomplete and will be summarily rejected without any further reference.”
[Ref . : CE/Works/HJP Letter no. ECR-HQOENGG.(Cont.)/0009/2025 dt. 18.11.2025]

10.5: Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under:

The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India or entity authorized by RBI to do so for the relevant date or immediately previous date for which rates have been published. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date or immediately previous date for which rates have been published.

Explanation for Para 10 of the Tender Form (Second Sheet) including Para 10.1 to 10.5 – Eligibility Criteria:

1. *Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.*
2. *In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.*
3. *If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials*
4. *In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work.*

In case of substantially completed work, the total gross amount already paid including the PVC amount (if paid), as mentioned in the certificate, shall be considered as the cost of substantially completed work.

5. *If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to the subcontractor by a Govt. Organization or public listed company as defined in Note for Item 10.1 Para 10 of the Tender Form (Second Sheet), the same shall be considered for the purpose of fulfillment of credentials.*
6. *In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost including the PVC amount (if paid) of that completed work or substantially completed work, shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.*
7. *In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of 0.3×0.2 * value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.*
8. *In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.*
9. *In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit*

along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.

10. Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A&B partners in any other partnership firm⁶ or propriety firm without leaving partnership firm of A&B partners.
11. In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.
12. If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.
13. In a partnership firm "AB" of A&B partners, in case A also works as propriety firm "P" or partner in some other partnership firm "AX", credentials of A in propriety firm "P" or in other partnership firm "AX" earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.
14. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
15. In case company A is merged with company B, then company B would get the credentials of company A also.]

17. Tenderer Credentials: (Clause 11 of part-I of GCC-2022) :-

Documents testifying tenderer previous experience and financial status should be produced along with the tender.

Tenderer(s) who is / are not borne on the approved list of the Contractors of _____ Railway shall submit along with his / their tender:

- (i) Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.
- (ii) Audited Balance Sheet duly certified by the Chartered Accountant regarding contractual payments received in the past.
- (iii) The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.
- (iv) A copy of certificate stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the certificate to be submitted by the bidder is enclosed as Annexure-V. In addition to Annexure-V, in case of other than Company/Proprietary firm, Annexure-V(A) shall also be submitted by the each member of a Partnership Firm/Joint Venture (JV)/Hindu Undivided Family (HUF)/Limited Liability Partnership (LLP) etc. as the case may be. Non submission of a copy of certificate by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested / digitally signed by which they/he are/is qualifying the Qualifying Criteria mentioned in the Tender Document.

****Note:-Vide Railway Board's letter no. 2022/CE-I/CT/GCC Correspondence dated. 14.05.24 the provision of downloading of Annexure-V of GCC & uploading of physically signed Annexure-V by the tenderer had been discontinued on IREPS because on IREPS Module a facility has already been created for online submission of Annexure-V.**

- (v) The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway there under.
- (vi) (a) **In case of any information submitted by tenderer is found to be false, forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of upto two years.** (Ref: Advance correction Slip No.3 vide Railway Board's letter No.2022/CE-I/CT/GCC-2022/Policy dtd. 26.04.2023)
- (c) **In case of any information submitted by tenderer is found to be false, forged or incorrect after the award of contract, the contract shall be terminated. Bid Security, Performance Guarantee and Security Deposit available with the railway shall be forfeited. In addition, other dues of the contractor, if any, under this**

contract shall be forfeited and agency shall be banned for doing business for a period of upto two years. (Ref: Advance correction Slip No.3 vide Railway Board's letter No.2022/CE-I/CT/GCC-2022/Policy dtd. 26.04.2023)

18. Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected. **(Clause 12 of part-I of GCC-2022).**
19. Vehicles and Equipments of contractors can be drafted for restoration work and relief to passengers by Railway administration in case of accidents natural calamities involving human lives.
20. The following information should be displayed on a proper "steel board" of size not less than 1m x 1m at all project sites for better appreciation of the project to railway officials and to the public as well : {Ref. :- Railway Board's letter No.2014/CE-I/CT/O/21/1 dated 10.11.2014} **(Clause 34(5) part-II of GCC-2022)**

Name of The Organization/ Railway

- (i) Name of Project
- (ii) Approx. Cost of Project
- (iii) Expected Date of Completion
- (iv) Name and address of the Contractor
- (v) Address of Engineer-in-Charge

21. Engagement of Engineering Graduate/Diploma Holders

(Ref:-Rly bd's letter No.2012/CE-I/CT/0/20 dated 10.05.13)

In terms of provisions of new Clause 26A. to the General Conditions of Contract (GCC), contractor shall also employ following Qualified Engineers during execution of the allotted work.

- a. One Qualified Graduate Engineer when cost of work to be executed is Rs.200 lakh and above, In case the contractor fails to employ the qualified Engineer as mentioned, he shall be liable to pay an amount of Rs. 40,000/- for each month or part thereof for the default period
- b. One Qualified Diploma Holder Engineer when cost of work to be executed is more than Rs.25 lakh, but less than Rs.200 lakh.. In case the contractor fails to employ the qualified Engineer as mentioned, he shall be liable to pay an amount of Rs.25,000/- for each month or part thereof for the default period.

22. Price Variation Clause (PVC) : (Clause 46A part-II of GCC-2022)

46A.1 Applicability: Price Variation Clause (PVC) shall be applicable only in tender **having advertised value above Rs.2 Crores.** Provided further that, in a contract where PVC is applicable, following shall be outside the purview of price adjustments (i.e. shall be excluded from the gross value of the work for the purpose of price variation) :

- a) Materials supplied by Railway to the Contractors, either free or at fixed rate;
- b) Any extra item(s) included in subsequent variation falling outside the purview of the Bill(s) of Quantities of tender, under clause 39. (1)(b) of these Standard General Conditions, unless applicability of PVC and „Base Month“ has been specially agreed, while fixing the rates of such extra item(s).

46A.2 Base Month: The Base Month for "Price Variation Clause" shall be taken as the one month prior to closing of tender, unless otherwise stated elsewhere. The quarter for applicability of PVC shall commence from the month following the Base month. The Price Variation shall be based on the average Price Index of the quarter under consideration.

46A.3 Validity:

Rates accepted by Railway Administration shall hold good till completion of work and no additional individual claim shall be admissible except:

- (a) Payment/recovery for increase/decrease in GST on works contract or imposition/removal of any tax/cess on Works Contract as per Clause 37,
- (b) Payment/recovery for overall market situation as per Price Variation Clause given hereunder.

46A.4 Components of various items in a contract on which variation in prices be admissible, shall be steel, cement, ferrous material, non-ferrous material, insulators, zinc and other materials, labour, plant & machinery, fuel, explosives, detonators etc. Adjustment for variation in prices of these items shall be determined in the manner prescribed.

46A.5 No price variation shall be admissible for fixed components.

46A.6 The percentages of various components in various type of works shall be as specified for all item (s)/ Bill(s) of Quantities in tender document and the same shall be fixed as per table & classifications given below:

(I). For Civil Engineering Works

S N	Classification		1A, 2 & 3A	4A	5A	6A	7	8A	9A	1B, 3B, 4B, 5B, 6B 8B & 9B	1C, 3C, 4C, 5C, 6C, 8C & 9C	3D, 4D, 5D, 6D, 8D & 9D	3E, 4E, 5E, 6E, 8E & 9E
	Components												
1	Fixed	*	15	15	15	15	15	15	15	15	15	15	15
2	Labour	L _c	20	25	30	20	50	20	20	0	0	10	25
3	Steel	S _c	0	0	0	0	0	0	0	85	0	50	0
4	Cement	C _c	0	0	15	0	0	0	0	0	85	0	0
5	Plant Machinery & Spares	PM _c	30	15	5	20	15	20	30	0	0	10	30
6	Fuel & Lubricants	F _c	25	15	5	15	15	20	15	0	0	10	20
7	Other materials	M _c	10	15	30	30	5	25	20	0	0	5	10
8	Detonators & Explosive	E _c	0	15	0	0	0	0	0	0	0	0	0
Total			100	100	100	100	100	100	100	100	100	100	100

* It shall not be considered for any price variation.

The classification mentioned in the table above represents following type of item(s) in the work(s) –

1 Earthwork in Formation

1A All Item(s) excluding 1B or/and 1C

1B Item(s) for supply of Steel

1C Item(s) for supply of Cement

2 Ballast Supply Works**3 Tunnelling Works (Without Explosives)**

3A All Item(s) excluding 3B or/and 3C or/and 3D or/and 3E

3B Item(s) for supply of Steel

3C Item(s) for supply of Cement or/and Grout

3D Item(s) for Fabrication & Erection of Structures including supply of Steel

3E Item(s) for Fabrication & Erection of Structures excluding supply of Steel.

4 Tunnelling Works (With explosives)

4A All Item(s) excluding 4B or/and 4C or/and 4D or/and 4E

4B Item(s) for supply of Steel

4C Item(s) for supply of Cement or/and Grout

4D Item(s) for Fabrication & Erection of Structures including supply of Steel

4E Item(s) for Fabrication & Erection of Structures excluding supply of Steel.

5 Building Works

5A All Item(s) excluding 5B or/and 5C or/and 5D or/and 5E

5B Item(s) for supply of Steel

5C Item(s) for supply of Cement

5D Item(s) for Fabrication & Erection of Structures including supply of Steel

5E Item(s) for Fabrication & Erection of Structures excluding supply of Steel.

6 Bridges & Protection work

- 6A All Item(s) excluding 6B or/and 6C or/and 6D or/and 6E
 6B Item(s) for supply of Steel
 6C Item(s) for supply of Cement
 6D Item(s) for Fabrication, Assembly, Erection & Launching of Girders including supply of Steel
 6E Item(s) for Fabrication, Assembly, Erection & Launching of Girders excluding supply of Steel

7 Permanent Way linking**8 Platform, Passenger Amenities**

- 8A All Item(s) excluding 8B or/and 8C or/and 8D or/and 8E
 8B Item(s) for supply of Steel item/fittings
 8C Item(s) for supply of Cement Item
 8D Item(s) for Fabrication & Erection of Structures including supply of Steel
 8E Item(s) for Fabrication & Erection of Structures excluding supply of Steel

9 Any Other Works not covered in Classification 1 to 8

- 9A All Item(s) excluding 9B or/and 9C or/and 9D or/and 9E
 9B Item(s) for supply of Steel
 9C Item(s) for supply of Cement or/and Grout
 9D Item(s) for Fabrication & Erection of Structures including supply of Steel
 9E Item(s) for Fabrication & Erection of Structures excluding supply of Steel

46A.7 Formulae: The Amount of variation in prices in various components (labour, material etc.) shall be worked out by the following formulae:

- (i)
$$L = \frac{(W \text{ or } W_{SF} \text{ or } W_F \text{ or } W_{SFL} \text{ or } W_{FL}) \times (L_Q - L_B) \times L_C}{L_B \times 100}$$
- (ii)
$$M = \frac{(W \text{ or } W_{SF} \text{ or } W_F \text{ or } W_{SFL} \text{ or } W_{FL}) \times (M_Q - M_B) \times M_C}{M_B \times 100}$$
- (iii)
$$F = \frac{(W \text{ or } W_{SF} \text{ or } W_F \text{ or } W_{SFL} \text{ or } W_{FL}) \times (F_Q - F_B) \times F_C}{F_B \times 100}$$
- (iv)
$$E = \frac{(W) \times (E_Q - E_B) \times E_C}{E_B \times 100}$$
- (v)
$$PM = \frac{(W \text{ or } W_{SF} \text{ or } W_F \text{ or } W_{SFL} \text{ or } W_{FL}) \times (PM_Q - PM_B) \times PM_C}{PM_B \times 100}$$
- (vi)
$$S = \frac{(W \text{ or } W_S \text{ or } W_{SF}) \times (S_Q - S_B) \times S_C}{S_B \times 100}$$
- (vii)
$$C = \frac{(W \text{ or } W_C) \times (C_Q - C_B) \times C_C}{C_B \times 100}$$

(II) For Railway Electrification Works:

- (viii)
$$T = [0.4136 \times (C_Q - C_B) / C_B] \times 85$$
- (ix)
$$R = [0.94 \times (R_T - R_O) / R_O + 0.06 \times (Z_T - Z_O) / Z_O] \times 85$$
- (x)
$$N = [(P_T - P_O) / P_O] \times 85$$
- (xi)
$$I = [(I_T - I_O) / I_O] \times 85$$
- (xii)
$$G = [(M_Q - M_B) / M_B] \times 85$$
- (xiii)
$$Er = [(L_Q - L_B) / L_B] \times 85$$

Where,

L	Amount of price variation in Labour
M	Amount of price variation in Materials
F	Amount of price variation in Fuel
E	Amount of price variation in Explosives
PM	Amount of price variation in Plant, Machinery and Spares
S	Amount of price variation in Steel Supply Item
C	Amount of price variation in Cement Supply Item
T	Percentage variation payable on the gross value of bill of Concreting (Bill(s) of Quantities for concrete items)
R	Percentage variation payable on the gross value of bill of Ferrous Items (Bill(s) of Quantities for ferrous items)
N	Percentage variation payable on the gross value of bill of Non-Ferrous Items(Bill(s) of Quantities for non-ferrous items)
I	Percentage variation payable on the gross value of bill of Insulator (Bill(s) of Quantities for Insulator items)
G	Percentage variation payable on the gross value of bill of General Works (Bill(s) of Quantities for General items)
Er	Percentage variation payable on the gross value of erection (Bill(s) of Quantities for Erection Item)
L _C	% of Labour Component in the item(s)
M _C	% of Material Component in the item(s)
F _C	% of Fuel Component in the item(s)
E _C	% of Explosive Component in the item(s)
PM _C	% of Plant, Machinery and Spares Component in the item(s)
S _C	% of Steel Supply item Component in the item(s)
C _C	% of Cement Supply item Component in the item(s)
W	Gross value of work done by Contractor as per on-account bill(s) excluding the Gross value of work under W _S or/and W _C or/and W _{SF} or/and W _F or/and W _{SFL} or/and W _{FL} and cost of materials supplied by Railway either free or at fixed rate,
W _S	Gross value of work done by Contractor for item(s) of supply of steel.
W _C	Gross value of work done by Contractor for item(s) of supply of cement and /or supply of grout material.
W _{SF}	Gross value of work done by Contractor for item(s) of Fabrication & Erection of Structures including supply of Steel.
W _F	Gross value of work done by Contractor for Fabrication & Erection of Structures excluding supply of Steel.
W _{SFL}	Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders including supply of Steel.
W _{FL}	Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders excluding supply of Steel.
L _B	Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the base period
L _Q	Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration
M _B	Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the base period
M _Q	Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration
F _B	The average of official prices of Diesel available on the official website of „Petroleum Planning and Analysis cell“ under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the base period

F _Q	The average of official prices of Diesel available on the official website of „Petroleum Planning and Analysis cell“ under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the 3 months of the quarter under consideration
E _B	Index number of Monthly Whole Sale Price Index for the category „Explosive“ of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the base period.
E _Q	Index number of Monthly Whole Sale Price Index for the category „Explosive“ of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the average price index of 3 months of the quarter under consideration.
PM _B	Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for „Manufacture of machinery for mining, quarrying and construction“– published in RBI (Reserve Bank of India) Bulletin, for the base period.
PM _Q	Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for „Manufacture of machinery for mining, quarrying and construction“– published in RBI (Reserve Bank of India) Bulletin, for the average price index of 3 months of the quarter under consideration.
S _B	The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the base period.
S _Q	The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the 3 months of the quarter under consideration.
C _B	Index No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the base period
C _Q	No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the average price index of the 3 months of the quarter under consideration
R _T	IEEMA price index for Steel Blooms (size 150mmx150mm) for the month which is two months prior to date of inspection of material.
R _O	IEEMA price index for Steel Blooms (size 150mmx150mm) for the month which is one month prior to date of opening of tender.
P _T	IEEMA price index for Copper wire rods for the month which is two months prior to date of inspection of material.
P _O	IEEMA price index for Copper wire rods for the month which is one month prior to date of opening of tender.
Z _T	IEEMA price index for Zinc for the month which is two months prior to date of inspection of material
Z _O	IEEMA price index for Zinc for the month which is one month prior to date of opening of tender
I _T	RBI wholesale price index for the sub-group “Insulators” for the month which is two months prior to date of inspection of material
I _O	RBI wholesale price index for the sub-group “Insulators” for the month which is one month prior to date of opening of tender

46A.8 The demands for escalation of cost shall be allowed on the basis of provisional indices as mentioned above in Clause 46A.7. Any adjustment needed to be done based on the finally published indices shall be made as and when they become available. **(Clause 46A.8 part-II of GCC-2022)**

46A.9(i): Relevant categories of steel for the purpose of operating Price Variation formula as mentioned in this Clause shall be as under: **(Clause 46A.9 part-II of GCC-2022)**

SL	Classification	Rates to be used for calculating S _Q or S _B
1.	Reinforcement bars and other rounds	Average of per tonne rates of 10mm dia TMT & 25mm dia TMT; confirming IS1786; Fe 500
2.	All types and sizes of angles, channels and joists	Average of per tonne rates of „Angle 75x75x6mm, Mild Steel Plate 10mm thickness and Channel 150x75mm; confirming IS2062, E250 Gr “A”
3.	All types and sizes of plates	Average of per tonne rates of „MS Plates 10mm thickness and 25mm thickness; confirming IS2062, E250 Gr “A”
4.	Any other section of steel not covered in the above categories	Average of price for the 3 categories covered under SL 1, 2 & 3 in this table.

- (2). Relevant city for referring “JPC (Joint Plant Committee)” rates of steel items (SQ /SB) in different Zonal Railways shall be as under :

SL	City	Railway
1.	Delhi	Northern , North Central, North Eastern, North Western
2.	Kolkata	Eastern, East Central, East Coast, Northeast Frontier, South Eastern, Southeast Central
3.	Mumbai	Central, Western, West Central
4.	Chennai	Southern, South Central & South Western

46A.10 Price Variation during Extended Period of Contract (Clause 46A.10 part-II of GCC-2022)

The price adjustment as worked out above, i.e. either increase or decrease shall be applicable up to the stipulated date of completion of work including the extended period of completion where such extension has been granted under Clause 17A of the Standard General Conditions of Contract. However, where extension of time has been granted due to Contractor’s failure under Clause 17B of the Standard General Conditions of Contract, price adjustment shall be done as follows:

- In case the indices increase above the indices applicable to the last month of original completion period or the extended period under Clause 17A, the price adjustment for the period of extension granted under Clause 17B shall be limited to the amount payable as per the Indices applicable to the last month of the original completion period or the extended period under Clause 17A of the Standard General Conditions of Contract; as the case may be.
- In case the indices fall below the indices applicable to the last month of original/ extended period of completion under Clause 17A, as the case may be; then the lower indices shall be adopted for the price adjustment for the period of extension under Clause 17B of the Standard General Conditions of Contract.

23. VARIATIONS IN EXTENT OF CONTRACT (Clause 41 part-II of GCC-2022):

Modification to Contract to be in Writing: In the event of any of the provisions of the contract required to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the Railway and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the Railway unless and until the same is incorporated in a formal instrument and signed by the Railway and the Contractor, and till then the Railway shall have the right to repudiate such arrangements.

Powers of Modification to Contract (Clause 42.(1) part-II of GCC-2022): The Engineer on behalf of the Railway shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the Contractor will not be entitled, to any compensation for any increase/reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.

42.(2) (i) Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be up to 25% of the quantity originally contracted, except in case of foundation work (in which no variation limit shall apply). However, the rates for the increased quantities shall be as per sub- para (iii) below.

(ii) The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever up to the limit of 25% variation in quantity of individual item of works.

(iii) In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates

- Quantities operated in excess of 125% but up to 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
- Quantities operated in excess of 140% but up to 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;
- Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.

- d. Variation to quantities of Minor Value Item:
The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original contract value.
- d.(i) Quantities operated up to and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender;
- d.(ii) Quantities operated in excess of 100% but up to 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender;
- d.(iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
- (iv) In case of earthwork items, the variation limit of 25% shall apply to the gross quantity of earthwork items and variation in the quantities of individual classifications of soil shall not be subject to this limit.
- (v) As far as Standard Schedule of Rates (SSOR) items are concerned, the variation limit of 25% would apply to the value of SSOR schedule(s) as a whole and not on individual SSOR items. However, in case of Non Standard Schedule of Rates (SSOR) items, the limit of 25% would apply on the individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).

24. Execution of Contract Documents)(Clause 13 part-I of GCC-2022):- The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the _____, Railway for carrying out the work according to the Standard General Conditions of Contract, Special Conditions /Specifications annexed to the tender and Standard Specifications (Works and Materials) of Railway as amended/corrected up to latest correction slips, mentioned in tender form (First Sheet).

The Tenderer whose tender is accepted shall be required to appear in person at the office of General Manager/General Manager (Construction), Chief Administrative Officer (Construction), Divisional Railway Manager or concerned Engineer, as the case may be, or if tenderer is a firm or corporation, a duly authorized representative shall appear (there would be no need for appear in person if agreement is signed digitally) and execute the contract agreement within seven days of notice from Railways that the Contract Agreement is ready. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender. The Contract Agreement shall be entered into by Railway only after submission of valid Performance Guarantee by the Contractor. In such cases the Railway may determine that such tenderer has abandoned the contract and there upon his tender and acceptance thereof shall be treated as cancelled and the Railway shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The failed Contractor shall be debarred from participating in the re-tender for that work.

(Clause 8 part-I of GCC-2022):-

25. Document to be submitted along with the tender (Clause 14 part-I of GCC-2022):-

- (i) The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern, and copy of PAN Card along with their tender. Tender Documents in such cases are to be signed by such persons as may be legally competent to sign them on behalf of the firm, company, association, trust or society, as the case may be.
- (ii) Following documents shall be submitted by the tenderer:
 - (a) **Sole Proprietorship Firm:**
 - (i) All documents in terms of Para 10 of GCC/2022 of the Tender Form (Second Sheet) above.
 - (b) **HUF:**
 - (i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender on behalf of HUF is in the position of „Karta“ of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.
 - (ii) All other documents in terms of Para 10 of GCC/2022 of the Tender Form (Second Sheet) above.
 - (c) **Partnership Firm:**
 - (i) All documents as mentioned in para 18 of GCC/2022 of the Tender Form (Second Sheet).
 - (d) **Joint Venture (JV):** All documents as mentioned in para 17 of GCC/2022 of the Tender Form (Second Sheet).
 - (e) **Company registered under Companies Act 2013:**

- (i) The copies of **MOA (Memorandum of Association) / AOA (Articles of Association)** of the company
 - (ii) A copy of Certificate of Incorporation
 - (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company.
 - (iv) All other documents in terms Para 10 of GCC/2022 of the Tender Form (Second Sheet) above.
- (f) LLP (Limited Liability Partnership):-**
- (i) A copy of LLP Agreement
 - (ii) A copy of Certificate of Incorporation
 - (iii) A copy of Power of Attorney/Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP.
 - (iv) An undertaking by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.
 - (v) All other documents in terms of Para 10 of the Tender Form (Second Sheet).
- (g) Registered Society & Registered Trust:**
- (i) A copy of Certificate of Registration
 - (ii) A copy of Memorandum of Association of Society/Trust Deed
 - (iii) A copy of Power of Attorney in favour of the individual to sign the tender documents and create liability against the Society/Trust.
 - (iv) A copy of Rules & Regulations of the Society
 - (v) All other documents in terms of Para 10 of GCC/2022 of the Tender Form (Second Sheet) above.
- (iii) If it is NOT mentioned in the submitted tender that tender is being submitted on behalf of a Sole Proprietorship firm / Partnership firm / Joint Venture / Registered Company etc., then the tender shall be treated as having been submitted by the individual who has signed the tender.
 - (iv) After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered Society / HUF/LLP etc. shall be neither asked nor considered, if submitted. Further, no suo moto cognizance of any document available in public domain (i.e., on internet etc.) or in Railway's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.
 - (v) A tender from JV shall be considered only where permissible as per the tender conditions.
 - (vi) The Railway will not be bound by any change of power of attorney or in the composition of the firm made subsequent to the submission of tender. Railway may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.

(Clause 15 part-I of GCC-2022)- The tenderer whether sole proprietor / a company or a partnership firm /registered society / registered trust / HUF / LLP etc if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) o f the firm or any other person, specifically authorizing him/them to sign the tender, submit the tender and further to deal with the Tender/ Contract up to the stage of signing the agreement except in case where such specific person is authorized for above purposes through a provision made in the partnership deed / Memorandum of Understanding / Article of Association/Board resolution, failing which tender shall be summarily rejected.

A separate power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, shall be submitted after award of work, specifically authorizing him/them to deal with all other contractual activities subsequent to signing of agreement, if required.

Note: A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Appostille certificate. (Ref: Advance correction Slip No.3 vide Railway Board's letter No.2022/CE-I/CT/GCC-2022/Policy dtd. 26.04.2023)

26. Employment/Partnership etc. of Retired Railway Employees: (Clause 16 of part-I of GCC-2022)

- (a) Should a tenderer
 - i) be a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, whether in the

executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, OR

- ii) being partnership firm / joint venture (JV) / registered society / registered trust etc have as one of its partners/members a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, OR
- iii) being an incorporated company have any such retired Engineer of the gazetted rank or any other gazetted officer working before his retirement as one of its directors

AND

in case where such Engineer or officer had not retired from government service at least 1 year prior to the date of submission of the tender

THEN

the tenderer will give full information as to the date of retirement of such Engineer or gazetted officer from the said service and as to whether permission for taking such contract, or if the Contractor be a partnership firm or an incorporated company, to become a partner or director as the case may be, has been obtained by the tenderer or the Engineer or officer, as the case may be from the President of India or any officer, duly authorized by him in this behalf, shall be clearly stated in writing at the time of submitting the tender.

- (a) In case, upon successful award of contract, should a tenderer depute for execution of the works under or to deal matters related with this contract, any retired Engineer of gazetted rank or retired gazetted officer working before his retirement in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, and now in his employment, then the tenderer will ensure that retired Engineer or retired gazetted officer had retired from government service at least 1 year prior to the date of his employment with tenderer and in case he had retired from service within a year then he possesses the requisite permission from the President of India or any officer, duly authorized by him in this behalf, to get associated with the tenderer.
- (b) Should a tenderer or Contractor being an individual, have member(s) of his family or in the case of partnership firm/company / joint venture (JV) / registered society / registered trust etc. one or more of his partner(s)/shareholder(s) or member(s) of the family of partner(s)/shareholder(s) having share of more than 1% in the tendering entity employed in gazetted capacity in the Engineering or any other department of the railway, then the tenderer at the time of submission of tender, will inform the authority inviting tenders the details of such persons.

Note: - If information as required as per 16.a), b), c) above has not been furnished, contract is liable to be dealt in accordance with provision of clause 62 of the Standard General Condition of contract.

27. Restrictions on the Employment of Retired Engineers of Railway Services within One Year of their Retirement: (Clause 59.9 of part-II of GCC-2022)

The Contractor shall not, if he is a retired Government Engineer of Gazetted rank, himself engage in or employ or associate a retired Government Engineer of Gazetted rank, who has not completed one year from the date of retirement, in connection with this contract in any manner whatsoever without obtaining prior permission of the President and if the Contractor is found to have contravened this provision it will constitute a breach of contract and administration will be entitled to terminate the contract and forfeit his Performance Guarantee as well as Security Deposit.

28. Provision of efficient and competent staff at work sites by the contractor (Clause 26 of part-II of GCC-2022):

- 26.1 The Contractor shall place and keep on the works at all times efficient and competent staff to give the necessary directions to his workmen and to see that they execute their work in sound & proper manner and shall employ only such supervisors, workmen & laborers in or about the execution of any of these works as are careful and skilled in the various trades.
- 26.2 The Contractor shall at once remove from the works any agents, permitted sub-contractor, supervisor, workman or laborer who shall be objected to by the Engineer and if and whenever required by the Engineer, he shall submit a correct return showing the names of all staff and workmen employed by him.
- 26.3 In the event of the Engineer being of the opinion that the Contractor is not employing on the works a sufficient number of staff and workmen as is necessary for proper completion of the works within the time prescribed, the Contractor shall forthwith on receiving intimation to this effect deploy the additional number of staff and labour as specified by the Engineer within seven days of being so required and failure on the part of the Contractor to comply with such instructions will entitle the Railway to rescind the contract under Clause 62 of these conditions.
- 26A. Deployment of Qualified Engineers at Work Sites by the Contractor:
- 26A.1 The Contractor shall also employ qualified Graduate Engineer(s) or equivalent, or qualified Diploma Engineer(s), as prescribed in the tender documents.

- 26A.2 In case the Contractor fails to employ the Engineer, as aforesaid in Para 26A.1, he shall be liable to pay liquidated damages at the rates, as prescribed in the tender documents.
- 26A.3 No. of qualified Engineers required to be deployed by the Contractor for various activities contained in the works contract shall be specified in the tender documents as „Special Condition of Contract“.

29. Recovery of Taxes:

Income tax @2% (two percent) on the gross amount of each bill will be recovered from all the bills of the contractors in terms of section 194C of Income tax Act 1961 and Ministry of Finance circular no. 593 dtd. 05.02.1991. In case of any revision/ Alteration in taxes, receipt from the Income Tax department, the same will be taken into account as per the directives, However differences will be reimbursed by / to the Railway as the case may be.

30. Provisions of “The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996” and “The Building and Other Construction Workers” Welfare Cess Act, 1996”: (Clause 55.D of GCC-2022).

The tenderers, for carrying out any construction work, shall get themselves registered with the Registering Officer under Section-7 of the Building and Other Construction Workers Act, 1996 and Rules made thereto by the concerned State Govt., and submit Certificate of Registration issued by Registering Officer of the concerned State Govt. (Labour Dept.). The Cess shall be deducted from contractor’s bills as per provisions of the Act.

31. Reporting of Accidents: (Clause 56 of GCC-2022).

The Contractor shall be responsible for the safety of all employees directly or through petty Contractors or sub-contractor employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the works to the Engineer or the Engineers Representative and shall make every arrangement to render all possible assistance.

32. Care in Submission of Tenders: (Clause 6 of part-I of GCC-2022)

- (a)(i) Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all inclusive to accord with the provisions in Clause-37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.
- (a)(ii) Tenderers will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state’s State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt.& as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.
- (a)(iii) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to railway immediately after the award of contract, without which no payment shall be released to the Contractor. The Contractor shall be responsible for deposition of applicable GST to the concerned authority.
- (a)(iv) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/ SGST Act, the railway shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.
- (b) When work is tendered for by a firm or company, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.
- (c) The Railway will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.
- a(v) Contractor shall be liable to pay/refund the amount collected as GST to the Indian Railways along with interest and penalties, if any imposed by the authorities, in case GST input tax credit of Indian Railways is denied/rejected by the tax authorities due to reasons mentioned below but not limited to :
- Wrong/incorrect invoice issued by Contractor;

No-filing of GST returns;
Non-payment of GST collected from Indian Railways to the authorities;
Any other non-compliance done by contractor;

General Indemnity : Contractor hereby agrees to indemnify and hold harmless the Indian Railways from and against any and all losses, including loss on account of Input Tax Credit and all losses incurred by the Indian Railways relating to or arising out of or in connection with any actual or threatened claim, legal action, proceedings, prosecution or inquiry by or against the Indian Railways arising out, directly or indirectly, of failure by the contractor to comply with the provisions of GST and related laws, or based upon or arising from any failure by the Contractor.

Retention Money: Any payment liable to be paid by Indian Railways to contractor against the goods or services or both supplied by such contractor to Indian Railways shall be kept on hold in case supplier makes any non-compliance of any of the GST law provisions including non-reporting of invoices in GST returns. Such payment shall be released after proper verification of records and availability of ITC to Indian Railways as per provisions of GST Law. . **(New Para 6(a)(v), of part-I of GCC-2022) (Advance correction slip No.6 dt. 21.12.23)**

- 6.1 The tenderers shall submit a copy of certificate stating that all their statements/documents submitted along with bid are true and factual. Standard format of certificate to be submitted by the bidder is enclosed as Annexure-V. In addition to Annexure-V, in case of other than Company/Proprietary firm, Annexure-V(A) shall also be submitted by the each member of a Partnership Firm/ Joint Venture (JV)/Hindu Undivided Family (HUF)/Limited Liability Partnership (LLP) etc. as the case may be. Non submission of above certificate(s) by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. **(Clause 6.1 of part-I of GCC-2022) (Advance correction slip No.2 dt. 26.12.22)**

****Note:** Vide Railway Board's letter no. 2022/CE-I/CT/GCC Correspondence dated. 14.05.24 the provision of downloading of Annexure-V of GCC & uploading of physically signed Annexure-V by the tenderer had been discontinued on IREPS because on IREPS Module a facility has already been created for online submission of Annexure-V.

33. Wages To Labour (Clause 54 of part-II of GCC-2022) :

The Contractor shall be responsible to ensure compliance with the provision of the Minimum Wages Act, 1948 (hereinafter referred to as the "said Act") and the Rules made thereunder in respect of any employees directly or through petty Contractors or sub-contractors employed by him for the purpose of carrying out this contract.

If, in compliance with the terms of the contract, the Contractor supplied any labour to be used wholly or partly under the direct orders and control of the Railways whether in connection with any work being executed by the Contractor or otherwise for the purpose of the Railway such labour shall, for the purpose of this Clause, still be deemed to be persons employed by the Contractor.

If any moneys shall, as a result of any claim or application made under the said Act be directed to be paid by the Railway, such money shall be deemed to be moneys payable to the Railway by the Contractor and on failure by the Contractor to repay the Railway any moneys paid by it as aforesaid within seven days after the same shall have been demanded, the Railways shall be entitled to recover the same from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.

- 34. Provisions of Employees Provident Fund and Miscellaneous Provisions Act, 1952 (Clause 55-B of part-II of GCC-2022):** The Contractor shall comply with the provisions of Para 30 & 36-B of the Employees Provident Fund Scheme, 1952; Para 3 & 4 of Employees' Pension Scheme, 1995; and Para 7 & 8 of Employees Deposit Linked Insurance Scheme, 1976; as modified from time to time through enactment of "Employees Provident Fund & Miscellaneous Provisions Act, 1952", wherever applicable and shall also indemnify the Railway from and against any claims under the aforesaid Act and the Rules.

55-C (i) Contractor is to abide by the provisions of various labour laws in terms of above clause 54, 55, 55-A and 55-B of the Standard General Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website „www.shramikkalyan.indianrailways.gov.in“. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The registration/ updation in Portal shall be done as under:

- (a) Contractor shall apply for onetime registration of his company/firm etc. in the Shramik kalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration in the portal within 7 days of receipt of such request.
 - (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all Letter of Acceptances (LoAs) issued in his favour.
 - (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoAs) / Contract Agreements on shramik kalyan portal within 15 days of issue of any LoA for approval of concerned Engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
 - (d) After approval of LoA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramik kalyan portal on monthly basis.
 - (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
- (ii) While processing payment of any „On Account Bill“ or „Final Bill“ or release of „Advances“ or „Performance Guarantee / Security Deposit“, contractor shall submit a certificate to the Engineer or Engineer's representatives that “I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at „www.shramikkalyan.indianrailways.gov.in“ till - - - Month, Year.”**

35. JOINT VENTURE (JV) IN WORKS TENDERS (Clause 17 of part-I of GCC-2022)

Participation of Joint Venture (JV) in Works Tender **(Clause 17 of part-I of GCC-2022)**: This para shall be applicable for works tenders wherein tender documents provide for the same.

Separate identity/name shall be given to the Joint Venture.

Number of members in a JV shall not be more than three, if the work involves only one department (say Civil or S&T or Electrical or Mechanical) and shall not be more than five, if the work involves more than one Department. One of the members of the JV shall be its Lead Member who shall have a majority (at least 51%) share of interest in the JV. The other members shall have a share of not less than 20% each in case of JV with upto three members and not less than 10% each in case of JV with more than three members. In case of JV with foreign member(s), the Lead Member has to be an Indian firm/company with a minimum share of 51%.

A member of JV shall not be permitted to participate either in individual capacity or as a member of another JV in the same tender.

The tender form shall be purchased and submitted only in the name of the JV and not in the name of any constituent member. The tender form can however be submitted by JV or any of its constituent member or any person authorized by JV through Power of Attorney to submit tender.

Bid Security shall be submitted by JV or authorized person of JV either as :

- (i) Cash through e-payment gateway or as mentioned in tender document, or
- (ii) Bank Guarantee bond either in the name of JV, or in the name of all members of JV as per MOU irrespective of their share in the JV if the JV has not been constituted legally till the date of submission of tender.

A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV along with the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other obligations shall be furnished in the MoU.

Once the tender is submitted, the MoU shall not normally be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Bid Security shall be liable to be forfeited.

Approval for change of constitution of JV shall be at the sole discretion of the Railway. The constitution of the JV shall not normally be allowed to be modified after submission of the bid by the JV, except when modification becomes inevitable due to succession laws etc., provided further that there is no change in qualification of minimum eligibility criteria by JV after change of composition. However, the Lead Member shall continue to be the Lead Member of the JV. Failure to observe this requirement would render the offer invalid.

Similarly, after the contract is awarded, the constitution of JV shall not be normally allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract conditions.

On award of contract to a JV, a single Performance Guarantees shall be submitted by the JV as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization Advance, Machinery Advance etc. shall be accepted only in the name of the JV and no splitting of guarantees amongst the members of the JV shall be permitted.

On issue of LOA (Letter of Acceptance), the JV entity to whom the work has been awarded, with the same shareholding pattern as was declared in the MOU/JV Agreement submitted along with the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act - 2013' (in case JV entity is to be registered as Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case JV entity is to be registered as Partnership Firm) or under 'The LLP Act 2008' (in case JV entity is to be registered as LLP). A separate PAN shall be obtained for this entity. The documents pertaining to this entity including its PAN shall be furnished to the Railways before signing the contract agreement for the work. In case the tenderer fails to observe/comply with this stipulation within 60 days of issue of LOA, contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The entity so registered, in the registered documents, shall have, inter-alia, following Clauses:

Joint and Several Liability - Members of the entity to which the contract is awarded, shall be jointly and severally liable to the Railway for execution of the project in accordance with General and Special Conditions of Contract. The members of the entity shall also be liable jointly and severally for the loss, damages caused to the Railways during the course of execution of the contract or due to non-execution of the contract or part thereof.

Duration of the Registered Entity - It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance period after the work is completed.

Governing Laws - The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.

Authorized Member - Joint Venture members in the JV MoU shall authorize Lead member on behalf of the Joint Venture to deal with the contract, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV. (Ref: Advance correction Slip No.3 vide Railway Board's letter No.2022/CE-I/CT/GCC-2022/Policy dtd. 26.04.2023)

No member of the Joint Venture shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the Railway in respect of the said tender/contract.

Clause 17.14.7, Para I of GCC:- A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate. (Ref: Advance correction Slip No.3 vide Railway Board's letter No.2022/CE-I/CT/GCC-2022/Policy dtd. 26.04.2023)

Documents to be enclosed by the JV along with the tender:

In case one or more of the members of the JV is/are partnership firm(s), following documents shall be submitted:

- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
- (ii) A copy of consent of all the partners or individual authorized by partnership firm, to enter into the Joint Venture Agreement on a stamp paper,
- (iii) A notarized or registered copy of Power of Attorney in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.
- (iv) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.

In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:

- (i) A copy of notarized affidavit on Stamp Paper declaring that his Concern is a proprietary Concern and he is sole proprietor of the Concern OR he who is signing the affidavit on behalf of HUF is in the position of „Karta“ of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.

In case one or more members of the JV is/are companies, the following documents shall be submitted:

- (i) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement,
- (ii) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company
- (iii) A copy of Certificate of Incorporation
- (iv) A copy of Authorization/copy of Power of Attorney issued by the company (backed by the resolution of

Board of Directors) in favour of the individual, to sign the tender, sign MOU/JV Agreement on behalf of the company and create liability against the company

In case one or more members of the JV is/are LLP firm/s, the following documents shall be submitted:

- (i) A copy of LLP Agreement
- (ii) A copy of Certificate of Incorporation of LLP
- (iii) A copy of resolution passed by partners of LLP firm, permitting the Firm to enter into a JV agreement
- (iv) A copy of Authorization /copy of Power of Attorney issued by the LLP firm (backed by resolution passed by the Partners) in favour of the individual, to sign the tender and/or sign the MOU/ JV agreement on behalf of the LLP and create liability against the LLP.
- (v) An undertaking by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.

In case one or more members of the JV is/are Society/s or Trust/s, the following documents shall be submitted:

- (i) A copy of Certificate of Registration
- (ii) A copy of Memorandum of Association of Society/Trust Deed
- (iii) A copy of Rules & Regulations of the Society
- (iv) A copy of Power of Attorney, in favour of the individual to sign the tender documents and create liability against the Society/Trust.

All other documents in terms of Para 10 of the Tender Form (Second Sheet) above.

Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfillment of the following criteria:

17.15.1 Technical Eligibility Criteria („a“ or „b“ mentioned hereunder):

(a) For Works without composite components

The technical eligibility for the work as per para 10.1 of GCC/2022 above, shall be satisfied by either the „JV in its own name & style“ or „Lead member of the JV“.

Each other (non-lead) member(s) of JV, who is/ are not satisfying the technical eligibility for the work as per para 10.1 above, shall have technical capacity of minimum **10%** of the cost of work i.e., each non-lead member of JV member must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of **10%** of advertised value of the tender.

(b) For works with composite components

The technical eligibility for major component of work as per para 10.1 of GCC/2022 above, shall be satisfied by either the „JV in its own name & style“ or „Lead member of the JV“ and technical eligibility for other component(s) of work as per para 10.1 above, shall be satisfied by either the „JV in its own name & style“ or „any member of the JV“.

Each other (non-lead)member(s) of JV, who is/ are not satisfying the technical eligibility for any component of the work as per para 10.1 above, shall have technical capacity of minimum **10%** of the cost of any component of work mentioned in technical eligibility criteria. i.e., each other (non- lead) member of must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of **10%** of cost of any component of work mentioned in technical eligibility criteria.

Note for Para 17.15.1:

a) The Major component of the work for this purpose shall be the component of work having highest value. In cases where value of two or more component of work is same, any one work can be classified as Major component of work.

b) Value of a completed work done by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned technical eligibility criteria in the tender under consideration.

Financial Eligibility Criteria

The JV shall satisfy the requirement of “Financial Eligibility” mentioned at para 10.2 of GCC/2022 above. The “financial capacity” of the lead member of JV shall not be less than 51% of the financial eligibility criteria mentioned at para 10.2 of GCC/2022 above.

The arithmetic sum of individual “financial capacity” of all the members shall be taken as JV’s “financial capacity” to

satisfy this requirement.

Note: Contractual payment received by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying compliance of the above mentioned financial eligibility criteria in the tender under consideration.

Bid Capacity

The JV shall satisfy the requirement of "Bid Capacity" requirement mentioned at para 10.3 of GCC/2022 above. The arithmetic sum of individual "Bid capacity" of all the members shall be taken as JV's "Bid capacity" to satisfy this requirement.

36. Participation of Partnership Firms in works tenders (Clause 18 of Part-I of GCC-2022 :

The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.

The partnership firm should have been in existence or should have been formed prior to submission of tender. Partnership firm should have either been registered with the Registrar or the partnership deed should have been notarized as per the Indian Partnership Act, prior to submission of tender.

Separate identity / name should be given to the partnership firm. The partnership firm should have PAN / TAN number in its own name and PAN / TAN number in the name of any of the constituent partners shall not be considered. The valid constituents of the firm shall be called partners.

Once the tender has been submitted, the constitution of the firm shall not normally be allowed to be modified / altered / terminated during the validity of the tender as well as the currency of the contract except when modification becomes inevitable due to succession laws etc., in which case prior permission should be taken from Railway and in any case the minimum eligibility criteria should not get vitiated. The re-constitution of firm in such cases should be followed by a notary certified Supplementary Deed. The approval for change of constitution of the firm, in any case, shall be at the sole discretion of the Railways and the tenderer shall have no claims what-so-ever. Any change in the constitution of Partnership firm after submission of tender shall be with the consent of all partners and with the signatures of all partners as that in the Partnership Deed. Failure to observe this requirement shall render the offer invalid and full Bid Security shall be forfeited.

If any Partner/s withdraws from the firm after submission of the tender and before the award of the contract, the offer shall be rejected and Bid Security of the tenderer will be forfeited. If any new partner joins the firm after submission of tender but prior to award of contract, his / her credentials shall not qualify for consideration towards eligibility criteria either individually or in proportion to his share in the previous firm. In case the tenderer fails to inform Railway beforehand about any such changes / modification in the constitution which is inevitable due to succession laws etc. and the contract is awarded to such firm, then it will be considered a breach of the contract conditions liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract. A partner of the firm shall not be permitted to participate either in his individual capacity or as a partner of any other firm in the same tender.

The tender form shall be submitted only in the name of partnership firm. The Bid Security shall be submitted by partnership firm. The Bid Security submitted in the name of any individual partner or in the name of authorized partner (s) shall not be considered.

On issue of Letter of Acceptance (LOA) to the partnership firm, all the guarantees like Performance Guarantee, Guarantee for various Advances to the Contractor shall be submitted only in the name of the partnership firm and no splitting of guarantees among the partners shall be acceptable.

On issue of Letter of Acceptance (LOA), contract agreement with partnership firm shall be executed in the name of the firm only and not in the name of any individual partner.

In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following undertakings shall be furnished by all the partners through a notarized affidavit, before signing of contract agreement.

(a) Joint and several liabilities:

The partners of the firm to which the Letter of Acceptance (LOA) is issued, shall be jointly and severally liable to the Railway for execution of the contract in accordance with General and Special Conditions of the Contract. The partners shall also be liable jointly and severally for the loss, damages caused to the Railway during the course of execution of

the contract or due to non- execution of the contract or part thereof.

(b) Duration of the partnership deed and partnership firm agreement:

The partnership deed/partnership firm agreement shall normally not be modified/alterd/ terminated during the currency of contract and the maintenance period after the work is completed as contemplated in the conditions of the contract. Any change carried out by partners in the constitution of the firm without permission of Railway, shall constitute a breach of the contract, liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract.

(c) Governing laws: The partnership firm agreement shall in all respect be governed by and interpreted in accordance with the Indian laws.

(d) No partner of the firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other partner/s and that of the Railway.

The tenderer shall clearly specify that the tender is submitted on behalf of a partnership firm. The following documents shall be submitted by the partnership firm, with the tender:-

- i. A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
- ii. A notarized or registered copy of Power of Attorney in favour of the individual to tender for the work, sign the agreement etc. and create liability against the firm.
- iii. An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.
- iv. All other documents in terms of Para 10 of GCC/2022 of the Tender Form (Second Sheet).

Evaluation of eligibility of a partnership firm:

Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillment of the eligibility criteria laid down in Para 10 of GCC/2022 of the Tender Form (Second Sheet) above.

(Signature)

(Designation)

Signature of Tenderer(s)

Date _____

East Central Railway, Sonpur

Date _____

****Note:-** Vide Railway Board's letter no. 2022/CE-I/CT/GCC Correspondence dated. 14.05.24 the provision of downloading of Annexure-V of GCC & uploading of physically signed Annexure-V by the tenderer had been discontinued on IREPS because on IREPS Module a facility has already been created for online submission of Annexure-V.

New Annexure-V(A). Part I of GCC shall be read as under

ANNEXURE-V(A)

Reference-Para6.1 of ITT

(This certificate is to be given by attorney/authorized signatory/each member of Partnership firm/Joint Venture (JV) /Hindu Undivided Family (HUF) /Limited Liability Partnership (LLP) etc.)

(Advance correction slip No.2 dt. 26.12.22)

I/We (Name), attorney / authorized signatory of the... (constituent firm/constituent partner) and member/partner of the..... tendering firm) hereby solemnly affirm and state as under:

1. I/we certify that..... (constituent firm/constituent partner) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/TV/Society/Trust.
2. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfill all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed),

SEAL AND SIGNATURE
OF THE CONSTITUENT FIRM / CONSTITUENT PARTNER

Place:

Dated:

Mode of Payment in Works Tenders or Service Tenders through “ Letter of Credit” (Ref. Railway board letter No.2018/CE-I/CT/9 dated 04.06.2018

1. For all the tenders having advertised cost of Rs.10 lakh or above, the contractor shall have the option to take payment from Railways through a letter of credit (LC) arrangement.
2. This option of taking payment through LC arrangement has to be exercised in IREPS (Indian Railway Electronic Procurement System – the e-application on which tenders are called by Railways) by the tenderer at the time of bidding itself, and the tenderer shall sign a firm having read over and agreed to the terms and conditions of the LC option.
3. The option so exercised, shall be an integral part of the bidder's offer.
4. The above option of taking payment through LC arrangement, once exercised by tenderer at the time of bidding, shall be final and no change shall be permitted, thereafter, during execution of contract.
5. In case tenderer opts for payment through LC, following shall be the procedure to deal release of payment through LC:
 - (a) The LC shall be a sight LC.
 - (b) The contractor shall select his Advising/Negotiating bank for LC. The incidental cost towards issue of LC and its operation thereof shall be borne by the contractor.
 - (c) SBI, New Delhi, Main Branch will be the nodal branch for issue of LCs based on online requests received from Railway Accounts Units for tenders opened in financial year 2018-19. SBI branches where the respective Railway Accounts office has its Account (Local SBI branch) will be the issuance/reimbursing branch for LC issued under this arrangement. The Bank shall remain same for this tender till completion of contract. The incidental cost @ 0.15% per annum of LC value, towards issue of LC and operation thereof shall be borne by the contractor and shall be recovered from his bills.
 - (d) The LC shall be opened initially for duration of 180 to 365 days in consultation with contractor. The LC shall be extended time to time as per the progress of the contract, on the request of the contractor. The value of LC to be opened initially as well as extended thereafter shall be finalized by the engineer in consultation with the contractor on the basis of expected progress of work.
 - (e) The LC terms and conditions shall inter-alia indemnify and save harmless the Railway from and against all losses, claims and demands of every nature and description brought or recovered against the Railways by reason of any act or omission of the contractor, his agents or employees, in relation to the Letter of Credit (LC). All sums payable/borne by Railways on this account shall be considered as reasonable compensation and paid by contractor.
 - (f) The LC terms and conditions shall inter-alia provide that Railways will issue a Document of Authorization (format enclosed as Annexure 2) after passing the bill for completed work, to enable contractor to claim the authorized amount from their bank.
 - (g) The acceptable, agreed upon document for payments to be released under the LC shall be the Document of Authorization.
 - (h) The Document of Authorization shall be issued by Railway Accounts Office against each bill passed by Railways.
 - (i) On issuance of Document of Authorization, a copy of Document of Authorization shall be posted on IREPS for download by the contractor. A digitally signed copy of Document of Authorization shall also be sent by Railway Accounts Office to Railway's bank (Local SBI Branch.)
 - (j) The contractor shall take print out of the Document of Authorization available on IREPS and present his claim to his bank (advising Bank) for necessary payments as per LC terms and conditions. The claim shall comprise of copy of Document of Authorization, Bill of Exchange and Bill.
 - (k) The payment against LC shall be subject to verification from Railway's Bank (Local SBI Branch).
 - (l) The contractor's bank (advising bank) shall submit the documents to the Railway's Bank (Local SBI Branch).
 - (m) The railway's bank (issuing bank) shall, after verifying the claim so received w.r.t. the digitally signed Document of Authorization received from Railway Accounts Office, release the payment to contractor's bank (advising bank) for crediting the same to contractor's account.
 - (n) Any number of bills can be dealt within one LC, provided the sum total of payments to contractor is within the amount for which LC has been opened.
 - (o) The LC shall be closed after the release of final payment including PVC amount, if any, to the contractor.
 - (p) The release of performance guarantee or security deposit shall be dealt directly by railway with the contractor i.e., not through LC.

**RAILWAY
TENDER FORM (First Sheet)**

Tender No. _____

Name of work: - _____

To
The President of India,
Acting through the _____ Railway

1. I/We _____ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of _____ days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our "Bid Security". I/We offer to do the work for _____ Railway, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within _____ months from the date of issue of letter of acceptance of the tender.

2. I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.

3. A Bid Security of ₹ _____ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:

- (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
- (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the Railway that such documents are ready; and
- (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.

4. (a) I/We am/are a Startup firm registered by Department of Industrial Policy and Promotion (DIPP) and my registration number is.....valid upto
..... **(Copy enclosed) and hence exempted from submission of Bid Security.**

5. We are a Labour Cooperative Society and our Registration No. is with
..... **and hence required to deposit only 50% of Bid Security.**

6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

.....
Signature of Tenderer(s)

Date:

Address of the Tenderer(s)

.....

TENDER FORM (Second Sheet)

1. Instructions to Tenderers and Conditions of Tender: The following documents form part of Tender / Contract:

- (a) Tender Forms – First Sheet and Second Sheet
- (b) Special Conditions/Specifications (enclosed)
- (c) Bill(s) of quantities (enclosed)
- (d) Standard General Conditions of Contract and Standard Specifications (Works and Materials) of Indian Railways as amended/corrected upto latest correction slips, copies of which can be seen in the office of____or obtained from the office of the Chief Engineer, _____Railway on payment of prescribed charges.
- (e) Standard Schedule of Rates (SSOR) as amended / corrected upto latest correction slips, copies of which can be seen in the office of_____or obtained from the office of the Chief Engineer,____Railway on payment of prescribed charges.
- (f) All general and detailed drawings pertaining to this work which will be issued by the Engineer or his representatives (from time to time) with all changes and modifications.

2. Drawings for the Work: The Drawing for the work can be seen in the office of the __and/or Chief Engineer,_____Railway at any time during the office hours. The drawings are only for the guidance of Tenderer(s). Detailed working drawings (if required) based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.

3. The Tenderer(s) shall quote his / their rates as a percentage above or below the Standard Schedule of Rates (SSOR) of Railway as applicable to_____Division except where he/they are required to quote item rates and must tender for all the items shown in the Bill(s) of Quantities attached. The quantities shown in the attached Bill(s) of Quantities are given as a guide and are approximate only and are subject to variation according to the needs of the Railway. The Railway does not guarantee work under each item of the Bill(s) of Quantities. The tenderer(s) shall quote rates / rebates only at specified place in Tender Form supplied by Railway. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.

4. Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.

5. The works are required to be completed within a period of_____months from the date of issue of acceptance letter.

6. Bid Security:

- (a) Subject to exemptions provided under para 5(1) (a) of Part-1 (ITT) of this document, the tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.
- (b) The Tenderer(s) shall keep the offer open for a minimum period of 60 days (in case of two packet system of tendering 90 days) from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to _____Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be forfeited to the Railway.
- (c) If his tender is accepted,
 - (i) the Bid Security mentioned in sub para(a) above deposited in cash through e-payment gateway will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract;
 - (ii) the Bid Security mentioned in sub para(a) above submitted as Bank guarantee bond, will be encashed as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.
- (d) The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation to the Bid Security that may happen thereto while in their possession, nor be liable to pay interest thereon.

Reference – Para 10.3 & 17.15.3 of Tender Form (Second Sheet) of Annexure I of ITT

TENDERER’S CREDENTIALS (BID CAPACITY)

RAILWAY

For tenders having advertised value more than **Rs. 10 crore** wherein eligibility criteria includes bid capacity also, the tenderer will be qualified only if its available bid capacity is equal to or more than the total bid value of the present tender. The available bid capacity shall be calculated as under:

$$\text{Available Bid Capacity} = [A \times N \times 2] - 0.33 \times N \times B$$

Where,

A = Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender), taking into account the completed as well as works in progress.

N= Number of years prescribed for completion of work for which bids has been invited.

B= Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender.

Note:

(a) The Tenderer(s) shall furnish the details of -

- (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) for calculating A, and
- (ii) Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender for calculating B. In case of no works in hand, a „NIL“ statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.

(b) In case if a bidder is JV, the tenderer(s) must furnish the details of

- (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) by each member of JV for calculating A, and
- (ii) Existing commitments and balance amount of ongoing works with each member of JV either in individual capacity or as a member of other JV as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to each member of JV either in individual capacity or as a member of other JV but yet not started upto the date of inviting of tender for calculating B. In case of no works in hand, a „NIL“ statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.

(c) Value of a completed work/work in progress/work awarded but yet not started for a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned bid capacity in the tender under consideration.

(d) The arithmetic sum of individual “bid capacity” of all the members shall be taken as JV’s “bid capacity”.

(e) In case, the tenderer/s failed to submit the above statement along with offer, their/his offer shall be considered as incomplete and will be rejected **summarily**.

(f) The available bid capacity of tenderer shall be assessed based on the details submitted by the tenderer. In case, the available bid capacity is lesser than estimated cost of work put to tender, his offer shall not be considered even if he has been found eligible in other eligibility criteria/tender requirement.

Reference – Para 10.2 & 17.15.2 of Tender Form (Second Sheet) of Annexure I of ITT

Each Bidder or each member of a JV must fill in this form separately:

NAME OF BIDDER/JV PARTNER:

Annual Contractual Turnover Data for the Previous 3/4 Years (Contractual Payment only)			
Year	Amount Currency	Exchange Rate	Indian National Rupees Equivalent
Average Annual Contractual Turnover for last 3 years			

1. The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.
2. The information supplied shall be substantiated by data in the audited balance sheets and profit and loss accounts for the relevant years in respect of the bidder or all members constituting the bidder.
3. Contents of this form should be certified by a Chartered Accountant duly supported by Audited Balance Sheet duly certified by the Chartered Accountant.

SEAL AND SIGNATURE OF THE BIDDER

Certified that all figures and facts submitted in this form have been furnished after full consideration of all observations/notes in Auditor’s reports. _____

(Signature of Chartered Accountant)

Name of CA: _____

Registration No: _____

(Seal)

**Para 5 of the Instructions to Tenderers of GCC/Apr"2022
(Bid Security)**

Bank Guarantee Bond from any scheduled commercial bank of India

(On non-judicial stamp paper, which should be in the name of the Executing Bank).

Name of the Bank: -----

President of India,
Acting through.....,
... Railway,

Beneficiary:- FA & CAO, E.C. Railway, Hajipur.

Date:.....

Bank Guarantee Bond No.:

Date:-----

In consideration of the President of India acting through ----- (*Designation & address of Contract*

Signing Authority), Railway, (hereinafter called "The Railway") having invited the bid for _____ through Notice inviting tender (NIT) No.,

We have been informed that [*Insert name of the Bidder*] (hereinafter called "the Bidder") intends to submit its bid (hereinafter called "the Bid").

WHEREAS, the Bidder is required to furnish Bid Security for the sum of [*Insert required Value of Bid Security*], in the form of Bank Guarantee, according to conditions of Bid.

AND

WHEREAS, [*Insert Name of the Bank*], with its Branch [*Insert Address*] having its Headquarters office at [*Insert Address*], hereinafter called the **Bank**, acting through [*Insert Name and Designation of the authorised persons of the Bank*], have, at the request of the Bidder, agreed to give guarantee for Bid Security as hereinafter contained, in favour of the Railway:

1. KNOW ALL MEN that by these present that I/We the undersigned [*Insert name(s) of authorized representatives of the Bank*], being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay to the Railway full amount in the sum of [*Insert required Value of Bid Security*] as above stated.
2. The Bank undertakes to immediately pay on presentation of demand by the Railway any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Railway on the Bank shall be final, conclusive and binding, absolute and unequivocal on the Bank notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Bidder or Bank.
3. The Bank shall pay the amount as demanded immediately on presentation of the demand by Railway without any reference to the Bidder and without the Railway being required to show grounds or give reasons for its demand of the amount so demanded.
4. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Bidder.
5. The Bank agrees that no change, addition, modifications to the terms of the Bid document or to any documents, which have been or may be made between the Railway and the Bidder, will in any way absolve the Bank from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification made by Railway at any time.
6. This guarantee will remain valid and effective from [*insert date of issue*] till [*insert date, which should be minimum 90 days beyond the expiry of validity of Bid*]. Any demand in respect of this Guarantee should reach the Bank within the validity period of Bid Security.

7. The Bank Guarantee is unconditional and irrevocable.
8. The expressions Bank and Railway herein before used shall include their respective successors and assigns.
9. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the Railway. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758.
10. The Bank hereby confirms that it is on the SFMS (Structured Financial Messaging System) and shall invariably send the advice of this Bank Guarantee to the following bank details –

IFSC CODE	SBIN00RAIL
IFSC TYPE	BRANCH
BANK NAME	STATE BANK OF INDIA
BRANCH NAME	RAIL
CITY NAME	NAVI MUMBAI
ADDRESS	SECTOR-11, CBD BELAPUR, NAVI MUMBAI
DISTRICT	NAVI MUMBAI
STATE	MAHARASHTRA
BG ENABLED	YES

11. The Guarantee shall be valid in addition to and without prejudice to any other security Guarantee(s) of Bidder in favour of the Railway. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Railway.

Date

.....

Place.....

Bank's Seal and authorized signature(s)

[Name in Block letters]

*[Designation with Code
No.].....*

[P/Attorney] No.

Witness:

1 Signature, Name & Address & Seal

2 Signature, Name& address & Seal

Bank's Seal

[P/Attorney]No.

Note: All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.

37. Clause 17A of part-II of GCC-2022 [advance correction slip No.1]:

17A, Extension of Time in Contracts: Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the Contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as maybe directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

(i) **Extension due to Modification:** If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise.

(ii) **Extension for Delay not due to Railway or Contractor:** If in the opinion of the Engineer, the progress of work has any time been delayed by any act or neglect of Railway's employees or by other Contractor employed by the Railway under Sub-Clause (4) of Clause 20 of these Conditions or in executing the work not forming part of the contract but on which Contractor's performance necessarily depends or by reason of proceeding taken or threatened by or dispute with adjoining or to neighbouring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by the Engineer pending arbitration or in consequences of the Contractor not having received in due time necessary instructions from the Railway for which he shall have specially applied in writing to the Engineer or his authorized representative then upon happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer within 15 days of such happening, but shall nevertheless make constantly his best endeavours to bring down or make good the delay and shall do all that may be reasonably required of him to the satisfaction of the Engineer to proceed with the works. The Contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time.

(iii) **Extension for Delay due to Railways:** In the event of any failure or delay by the Railway to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the Railway due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the Contractor to damages or compensation therefor, but in any such case, the Railway may grant such extension or extensions of the completion date as may be considered reasonable.

The Contractor shall indicate the period for which the work is likely to be delayed and shall seek extension of time as may be considered necessary under clause 17A(i) or/and 17A(ii) or/ and 17A(iii) above, as soon as the cause thereof shall arise and, in any case, not less than **15 days** before the expiry of the date fixed for completion of the works. The Engineer shall consider the same and shall grant and communicate such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby. No other compensation shall be payable for works so carried forward to the extended period of time; the same rates, terms and conditions of contract being applicable, as if such extended period of time was originally provided in the original contract itself.

The non-submission of request for extension or submission of request within less than **15 days** before the expiry of the date fixed for completion of the works, shall make him ineligible for extension under these sub clauses, subject to final decision of Engineer.

Clause 17B of part-II of GCC-2022 [advance correction slip No.1]:

17B Extension of Time with Liquidated Damages (LD) for delay due to Contractor: The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the Contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in Clause 17 and 17A, the Railway may, if satisfied that the works can be completed by the Contractor within reasonable short time thereafter, allow the Contractor for further extension of time (Proforma at Annexure-VII) as the Engineer may decide. On such extension the Railway will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the Contractor as agreed damages and not by way of penalty for each week or part of the week, a sum calculated at the **rate of Liquidated Damages as decided by Engineer, between 0.05% to 0.30% of contract value of the works for each week or part of the week.**

For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also, that the total amount of liquidated damages under this condition shall not exceed 5% of the contract value or of the total value of the item or groups of items of work for which a separate distinct completion period is specified in the contract.

Provided further, that if the Railway is not satisfied that the works can be completed by the Contractor and in the event of failure on the part of the contractor to complete the work within further extension of time allowed as aforesaid, the Railway shall be entitled without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's Security Deposit and rescind the contract under Clause 62 of these Conditions, whether or not actual damage is caused by such default.

NOTE:

In a contract, where extension(s) of time have been allowed once under clause 17B, further request(s) for extension of time under clause 17A can also be considered under exceptional circumstances. Such extension(s) of time under clause 17A shall be without any Liquidated damages, but the Liquidated damages already recovered during extension(s) of time granted previously under clause 17B shall not be waived. However, Price variation during such extension(s) shall be dealt as applicable for extension(s) of time under clause 17B.

38. Measurement of Works by Railway (Clause 45 (i) of part-I of GCC-2022) : The Contractor shall be paid for the works at the rates in the accepted Bill(s) of Quantities and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Engineer or the Engineer's representative in accordance with the rules prescribed for the purpose by the Railway. The quantities for items the unit of which in the accepted Bill(s) of Quantities is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted Bill(s) of Quantities is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Engineer shall be proper having regard to the progress of works. The date and time on which „on account“ or „final“ measurements are to be made shall be communicated to the Contractor who shall be present at the site and shall sign the results of the measurements(which shall also be signed by the Engineer or the Engineer's representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measurements. Failing the Contractor's attendance, the work may be measured up in his absence and such measurements shall, notwithstanding such absence, be binding upon the Contractor whether or not he shall have signed the measurement books provided always that any objection made by him to measurement shall be duly investigated and considered in the manner set out below:

- (a) It shall be open to the Contractor to take specific objection to any recorded measurements or Classification on any ground within seven days of the date of such measurements. Any re-measurement taken by the Engineer or the Engineer's representative in the presence of the Contractor or in his absence after due notice has been given to him in consequence of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and Classification of the measurements.
- (b) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.

**Measurement of Works by Contractor's Authorized Representative (in case the contract provides for the same):
(Clause 45 (ii) of part-I of GCC-2022)**

(a) The Contractor shall be paid for the works at the rates in the accepted Bill(s) of Quantities and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Contractor's authorized Engineer in accordance with the rules prescribed for the purpose by the Railway. The quantities for items the unit of which in the accepted Bill(s) of Quantities is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted Bill(s) of Quantities is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time. The date and time on which „on account“ or „final“ measurements are to be made shall be communicated to the Engineer.

The date and time of test checks shall be communicated to the Contractor who shall be present at the site and shall witness the test checks, failing the Contractor's attendance the test checks may be conducted in his absence and such test checks shall notwithstanding such absence be binding upon Contractor provided always that any objection made by Contractor to test check shall be duly investigated and considered in the manner set out below:

- (i) It shall be open to the Contractor to take specific objection to test checks of any recorded measurement within 7 days of date of such test checks. Any re-test check done by the concerned Railway's authority in the presence of the Contractor or in his absence after due notice given to him in consequent of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurements.
- (ii) If an objection raised by the Contractor is found by the Engineer to be incorrect the contractor shall be liable to pay

the actual expenses incurred in measurements.

(b) Incorrect measurement, actions to be taken: If in case during test check or otherwise, it is detected by the Engineer that agency has claimed any exaggerated measurement or has claimed any false measurement for the works which have not been executed; amounting to variation of 5% or more of claimed gross bill amount, action shall be taken as following:

- (i) On first occasion of noticing exaggerated/ false measurement, Engineer shall recover liquidated damages equal to 10% of claimed gross bill value.
- (ii) On any next occasion of noticing any exaggerated/false measurement, railway shall recover liquidated damages equal to 15% of claimed gross bill value. In addition, the facility of recording of measurements by Contractor as well as release of provisional payment shall be withdrawn. Once withdrawn, measurements shall be done by railway as per clause 45(i) above.

Implementation of Contractor 'e'-Measurement Book ('e'-MB)

All contracts costing more than Rs.5 crore, Contractor's e-MB is mandatory. In exceptional cases, approval of DRM/PHOD/CHOD with finance concurrence may be taken, as the case may be. (Ref: Railway Board's letter No.2017/CE-I/CT/9 dtd. 31.05.2023)

39. DETERMINATION OF CONTRACT (Clause 61 & 62 of part-I of GCC-2022)

61.(1) Right of Railway to Determine the Contract: The Railway shall be entitled to determine and terminate the contract at any time should, in the Railway's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the Railway of such determination and the reasons therefor shall be conclusive evidence thereof.

61.(2) Payment on Determination of Contract: Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the Railways shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The Railway's decision on the necessity and propriety of such expenditure shall be final and conclusive.

61.(3) The Contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

62.(1) Determination of Contract owing to Default of Contractor:

If the Contractor should:

- (i) Becomes bankrupt or insolvent, or
- (ii) Make an arrangement for assignment in favour of his creditors, or agree to carry out the contract under a Committee of Inspection of his creditors, or
- (iii) Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or
- (iv) Have an execution levied on his goods or property on the works, or
- (v) Assign the contract or any part thereof otherwise than as provided in Clause 7 of these Conditions, or
- (vi) Abandon the contract, or
- (vii) Persistently disregard the instructions of the Engineer, or contravene any provision of the contract, or
- (viii) Fail to adhere to the agreed programme of work by a margin of 10% of the stipulated period, or
- (ix) Fail to Execute the contract documents in terms of Para 8 of the Instructions to Tenderers.
- (x) Fail to submit the documents pertaining to identity of JV and PAN in terms of Para 17.11 of Tender Form (Second Sheet) of Annexure I available in the Instructions to Tenderers.
- (xi) Fail to remove materials from the site or to pull down and replace work after receiving from the Engineer notice to the effect that the said materials or works have been condemned or rejected under Clause 25 and 27 of these Conditions, or
- (xii) Fail to take steps to employ competent or additional staff and labour as required under Clause 26 of these Conditions, or
- (xiii) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required under Clause 28 of these Conditions, or
- (xiv) Promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of the Railway or to any person on his or on their behalf in relation to the execution of this or any other contract with this Railway.

(xv) Fail to adhere to the provisions of Para 16 of Tender Form (Second Sheet) of Annexure I of the Instructions to Tenderers, or provision Clause 59(9) of these Conditions.

(xvi) Submits copy of fake documents / certificates in support of credentials, submitted by the tenderer.

Then and in any of the **said Clause**, the Engineer on behalf of the Railway may serve the Contractor with a notice (Proforma at Annexure-IX) in writing to that effect and if the Contractor does not within seven days after the delivery to him of such notice proceed to make good his default in so far as the same is capable of being made good and carry on the work or comply with such directions as aforesaid of the entire satisfaction of the Engineer, the Railway shall be entitled after giving 48 hours' notice (Proforma at Annexure-X or XII, as the case may be) in writing under the hand of the Engineer to rescind the contract as a whole or in part or parts (as may be specified in such notice) and after expiry of 48 hours' notice, a final termination notice (Proforma at Annexure-XI or XIII, as the case may be) should be issued.

Note: Engineer at his discretion may resort to the part termination of contract with notices (Proforma at Annexure- IX, XII and XIII), only in cases where progress of work is more than or equal to 80% of the original scope of work.

62.(2) Right of Railway after Rescission of Contract owing to Default of Contractor: In the event of any or several of the courses, referred to in Sub-Clause (1) of this Clause, being adopted:

(a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the contract unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.

(b) In the contract which has been rescinded as a whole, the Security Deposit already with railways under the contract shall be encashed/ forfeited and the Performance Guarantee already submitted for the contract shall be encashed. The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.

Further the authorized representative of failed Contractor cannot be accepted as authorized representative in new contract.

(c) In the contract rescinded in part or parts,

(i) The full Performance Guarantee available for the contract shall be recovered. No additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract. The contract value of part terminated contract stands reduced to the balance value of work under the contract.

(ii) The Security Deposit of part terminated contract shall be dealt as per clause 16(2) of these Conditions.

(iii) The defaulting Contractor shall not be issued any completion certificate for the contract.

(iv) The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.

(v) Further the authorized representative of failed Contractor will not be accepted as authorized representative in new contract.

(d) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.

(e) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site. The legitimate amount due to the Contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

40. Termination of contract-effect of non-performance by the contractor within the validity:- will be dealt by Policy letter no. RB/CE/6 railway board letter no. 99/CE-I/CT/28(PT) dated. 17.05.2004

. 41. Telecommunication circular No. 09/2023 dt. 12.06.2023

Procedure for undertaking digging work in the vicinity of signaling, electrical & Telecommunication cables (Reference:- Railway board letter no. 2021/Tele/5(2)/3-Part(1)(3425647) dt. 12.06.2023

42. Advance correction slip No. 10 to GCC April 2022.

New Clause 64.(1)(i)(a), Part-II of GCC shall be read as under :-

64.(1)(i)(a) : In the event of any dispute or difference between the parties hereto as to the construction or operation of this contract, or the respective rights and liabilities of the parties on any matter in question, dispute or difference on any account or as to the withholding by the Railway of any certificate to which the Contractor may claim to be entitled to, or if the Railway fails to make a decision within 120 days, then and in any such case, but except in any of the "excepted matters" referred to in Clause 63.1 of these Conditions, the Contractor, after 120 days but within 180 days of his presenting his final claim on disputed matters shall demand in writing that the dispute or difference be referred to arbitration.

New Clause 64.(1)(i)(b), Part-II of GCC shall be read as under:-

64.(1) (i) (b) : Arbitration as a method of dispute resolution should not be routinely or automatically included in procurement contacts/tenders, especially in large contracts.

New Clause 64.(1)(i)(c), Part-II of GCC shall be read as under :-

64.(1)(i)(c): As a non, arbitration as a method of dispute resolution may be restricted to disputes with a value less than Rs. 10 crore. This figure is with reference to the value of the dispute (not the value of the contract, which may be much higher).

New Clause 64.(1)(i)(d), Part-II of GCC shall be read as under:-

64.(1) (i) (d) : Inclusion of arbitration clauses covering disputes with a value exceeding Rs. 10 crore, should be based on careful application of mind and recording of reasons and with the approval of an officer not below the rank of Senior Administrative Grade (SAG) or the Accepting Authority of the tender whichever is higher.

Clause 64.(3)(a), Part-II of GCC shall be read as under :-

64. (3)(a): The Arbitral Tribunal shall consist of a panel of three arbitrators. General Manager/Additional General Manager will appoint two arbitrators, one railway nominee and other from among the contractor's nominee. Contractor can recommend his nominee either from approved panel of Railways or from approved panel of Indian Council of Arbitration (ICA) within 30 days from the date of dispatch of approval of written and valid acceptance of demand for arbitration by the General Manager/Additional General Manager.

64.(3)(a)(i) : If contractor wants to choose his nominee from Railway panel, the Railway will send a panel of at least four (4) names of retired Railway Officers empanelled to work as arbitrator within 30 days from the day when a written and valid demand for arbitration is received by the General Manager/Additional General Manager. Contractor will be asked to suggest to General Manager/Additional General Manager at least 2 names out of the panel for appointment as Contractor's nominee within 30 days from the date of dispatch of the request by Railway. The General Manager/Additional General Manager shall appoint at least one out of them as the Contractor's nominee within 30 days from the receipt of the names of Contractor's nominees. The railway panel shall be provided free of cost to the contractor.

64.(3)(a)(ii): If contractor wants to choose his nominee from Indian Council of Arbitration panel, Contractor will send at least 2 names of Arbitrators from the ICA panel for appointment as Contractor's nominee within 30 days from the date of dispatch of the request by Railway. The General Manager/Additional General Manager shall appoint at least one out of them as the Contractor's nominee within 30 days from the receipt of the names of Contractor's nominees. Nomination and appointment of arbitrators from ICA panel shall be as per the ICA Rules for Domestic Commercial Arbitration and amended from time to time.

Some general guidelines of ICA Rules for Domestic Commercial Arbitration are as under:-

- i. Contractor may access the ICA's panel of arbitration through ICA's official webpage: <https://icaindia.co.in/pdf/Engineers.pdf>.
- ii. A formal request for nomination shall be submitted to ICA, accompanied by:-
 - a. A brief Statement of Claim outlining the nature and quantum of the disputes.
 - b. A copy of the relevant contract and any supporting documents.
 - c. A copy of the notice intimating the other party of the initiation of arbitration proceedings, with proof of delivery (if any)
- iii. Ad-hoc appointment fees for the nomination and appointment of arbitrators shall be as per the ICA Rules for Domestic commercial Arbitration and revised from time to time and shall be submitted along with the request.

Clause 64.(3)(b), Part-II of GCC shall be read as under :-

64.(3)(b) : Two selected arbitrators are free to select presiding arbitrator (3d arbitrator) within thirty (30) days from the date of their appointment. The presiding arbitrator may be selected from approved panel of Railways or approved panel of Indian Council of Arbitration (as per mutual agreement), which will be approved by General Manager/Additional General Manager. General Manager/Additional General Manager shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of all the three arbitrators.

Clause 64.(3) (c) (i), Part-II of GCC shall be read as under :-

64. (3)(c) (i) : If one or more of the arbitrators appointed as above refuses to act as arbitrator, withdraws from his office as arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as arbitrator for any reason whatsoever or dies or in the opinion of the General Manager/Additional General Manager fails to act without undue delay, the General Manager/Additional General Manager shall appoint new arbitrator/arbitrators to act in his/their place in the same manner in which the earlier arbitrator/arbitrators had been appointed. Such re-constituted Tribunal may, at its discretion, proceed with the reference from the stage at which it was left by the previous arbitrator (s).

Clause 64.(3)(c)(iii), Part-II of GCC shall be read as under :-

64.3(c) (iii): (i) Qualification of Railway Empanelled Arbitrator (s):

- (a) Retired Railway Officers not below SA Grade level, one year after his date of retirement.
- (b) Age of arbitrator at the time of appointment shall be below 70 years.
- (c) Persons not involved in any current vigilance/CBI cases or against whom disciplinary or prosecution proceedings are not in process.
- (d) Persons who had not been imposed a major penalty or two or more minor penalties or against whom administrative action has not been taken three times or more or
- (e) Persons who have not been imposed one minor Penalty and against whom two administrative actions have not been taken as a result of vigilance/CBI action while in service on Railways.

(ii) An arbitrator may be appointed notwithstanding the total number of arbitration cases in which he has been appointed in the past.

(iii) While appointing arbitrator(s) under Sub-Clause 64.(3)(a), 64(3) (a)(i), 64.(3)(a) (ii) & 64.(3) (b) above, due care shall be taken that he/they is/are not the one/those who had an opportunity to deal with the matters to which the contract relates or who in the course of his/their duties as Railway servant(s) expressed views on all or any of the matters under dispute or differences. A certification to this effect as per annexure- XVI shall be taken from Arbitrators also. The proceedings of the Arbitral tribunal or the award made by such Tribunal will, however, not be invalid merely for the reason that one or more arbitrator had, in the course of his service, opportunity to deal with the matters to which the contract relates or who in the course of his/their duties expressed views on all or any of the matters under dispute.

Clause 64.(4),Part-II of GCC shall be read as under:-

64.(4) : Any ruling on award shall be made by a majority of members of Tribunal. In the absence of such a majority, the views of the Presiding Arbitrator shall prevail.

Clause 64.(6), Part-II of GCC shall be read as under:-

64.(6) : The cost of arbitration shall be borne by the respective parties. If all the three arbitrators are selected from the Railway Panel, the fee of the arbitrators shall be determined as per the rates fixed/revised by Railway Board from time to time and the fee shall be borne equally by both the parties, provided parties sign an agreement in the format given at Annexure XV to these conditions after/ while referring these disputes to Arbitration. However, if any of the three arbitrators is selected from the Panel of Indian Council of Arbitration (ICA), the fee of the arbitrators shall be determined as per the rates fixed/revised by the Indian Council of Arbitration from time to time and the fee shall be borne equally by both the parties, provided parties sign an agreement in the format given at Annexure XV to these conditions after/ while referring these disputes to Arbitration.

43. Special conditions of contract for mandatory updation of labour data on Railway's shramikkalyan Portal by contractor.

Vide railway board's letter no. 2018/CE-I/CT/4 Dated 17.10.2018, special condition has been introduced which is as follows :-

- A. Contractor is to abide by the provisions of Payment of Wages act & Minimum Wages act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/ updation of Portal shall be done as under:

(a) Contractor shall apply for onetime registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.

(b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LoAs issued in his favour.

(c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoA) / Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.

(d) After approval of LoA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.

(e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.

B. While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' tillMonth,Year.

44. Assignment or subletting of Contract (Clause 7 of part-II of GCC-2022) :- The Contractor shall not assign or sublet the contract or any part thereof or allow any person to become interested therein in any manner whatsoever without the special permission in writing of the Chief Engineer, save as provided below. Any breach of this condition shall entitle the Railway to rescind the contract under Clause 62 of these Conditions and also render the Contractor liable for payment to the Railway in respect of any loss or damage arising or ensuing from such cancellation; provided always that execution of the details of the work by petty Contractor under the direct and personal supervision of the Contractor or his agent shall not be deemed to be sub-letting under this clause.

In case Contractor intends to subcontract part of work, he shall submit a proposal in writing seeking permission of Chief Engineer for the same. While submitting the proposal to railway, Contractor shall ensure the following:

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(a) (i) (The Contractor shall not sub- contract the Works comprising more than 40% (forty percent) of the Contract Price and shall carry out Works for at least 60% (sixty per cent) of the total Contract Price directly under its own supervision and through its own personnel. The Parties expressly agree that for the purposes of computing the value of sub-contracts under this Clause 3.2.1, the Contract Price shall exclude the sub-contract for any procurement of goods and equipment like [rails, sleepers and track fittings, signaling and telecommunication & Power supply equipment). The Parties agree that all obligations and liabilities under this Agreement for the entire Railway Project shall at all time remain with the Contractor. {The Parties agree that works equal to at least 30% (thirty per cent) of the Contract Price shall be discharged solely by the Lead Member.}\$

Procurement of material, hire of equipment or engagement of labour by prime contractor or procuring entity will not mean sub-contracting.

\$ May be deleted if the Contractor is not a Consortium/Joint Venture.

(ii) The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract in last 5 years, ending date of submission of proposal by Contractor to Railway, costing not less than 35% value of work to be subletted, through a works contract. For fulfilment of above, Work Experience Certificate issued by a Govt. Department/Organisation shall be considered. Further, Work Experience Certificate issued by a Public listed company shall be considered provided the company is having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock

Exchange, registered at least 5 years back from the date of submission of proposal by Contractor to Railway and work experience certificate issued by a person authorised by the Public Listed Company to issue such certificates.

Note: for subletting of work costing up to Rs 50 lakh no previous work experience shall be asked for by the Railway.

In case contractor submits subcontractor's work experience certificate issued by public listed company, the contractor shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

(iii) There is no banning of business with the sub-contractor in force over IR.

(b) The Contractor shall provide to the Engineer a copy of the agreement to be entered into by Contractor with subcontractor. No subcontractor shall be permitted without a formal agreement between Contractor and subcontractor. This agreement shall clearly define the scope of work to be carried out by subcontractor and the terms of payment in clear & unambiguous manner.

(c) On receipt of approval from Chief Engineer, Contractor shall enter into a formal agreement legally enforceable in Court of Law with subcontractor and submit a copy of the same to the Engineer.

(d) The Contractor shall intimate to the Engineer not less than 7 days in advance, the intended date of commencement of subcontractor's work.

(e) Once having entered into above arrangement, Contractor shall discontinue such arrangement, if he intends to do so at his own or on the instructions of Railway, with prior intimation to Chief Engineer.

(f) The Contractor shall indemnify railway against any claim of subcontractor.

(g) The Contractor shall release payment to the Sub-contractor(s) promptly and shall endeavour to resolve all issues amicably and speedily with the Sub-contractor(s), so that the execution of work is not affected in any manner whatsoever.

(h) In addition to issuance of work experience certificate to Contractor, the Engineer, when, based on documents, is satisfied that subcontracted work has been carried out by subcontractor, shall issue work experience certificate to the subcontractor also for the portion of work subcontracted and successfully completed by the sub-contractor.

Note: Work Experience Certificate to the subcontractor shall be issued only when the contractor's work is complete and contractor is entitled for the issuance of Work Experience Certificate. However, in the same contract, when the Chief Engineer, based on documents, is satisfied that the subcontractor has successfully carried out subletted work; without issuance of work experience certificate to subcontractor at this stage, the Chief Engineer can, only once, consider the successfully completed subletted work for the fulfilment of eligibility for further subletting of work to the subcontractor in the same contract. When the contractor's work is complete and contractor is entitled for the issuance of work experience certificate, the subcontractor shall be issued one Work Experience Certificate for the total scope of work executed by the subcontractor in the contract.

(i) The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the Contract.

(j) Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. No claim of Contractor whatsoever on this account shall be entertained by the Railway and this shall be deemed as 'excepted matter'(matter not arbitrable).

(k) The permitted subcontracting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the Railway and shall not relieve the Contractor of any responsibility under the Contract.

***ACS- 11 dated 13.03.2026**

45. Illegal Gratification :- (para 18.(1) of Part –II of GCC-22)

Procuring authorities as well as bidders, contractors and consultants should observe the highest standard of ethics and should not indulge in the following prohibited practices, either directly or in indirectly, at any stage during the procurement process or during execution of resultant contracts:

- i) "Corrupt practice": making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;**
- ii) "Fraudulent practice": any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract;**

- iii) "Anti-competitive practice": any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of the procuring entity, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;
- iv) "Coercive practice": any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process or affect the execution of a contract
- v) "Conflict of interest" (COI): any personal, financial, or business relationship between the bidder and any personnel of the procuring entity who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of the procuring entity directly or indirectly;
- vi) "Undue Advantage": improper use of information obtained by the bidder from the procuring entity with an intent to gain an unfair advantage in the procurement process or for personal gain. This also includes if the bidder (or his allied firm) provided services for the need assessment/procurement planning of the tender process in which he is participating;
- vii) "Obstructive practice": materially impede the procuring entity's investigation of a procurement process either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to such investigation or from pursuing the investigation; or by impeding the procuring entity's rights of audit or access to information;

PUNITIVE PROVISIONS :- (para 18.(2) of Part –II of GCC-22) :-

Without prejudice to and in addition to the rights of the procuring entity to other penal provisions as per the bid documents or contract, if the procuring entity comes to a conclusion that a (prospective) bidder/contractor directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the procuring entity may take appropriate measures including one or more of the following:

- i) If his bids are under consideration in any procurement
 - a) Forfeiture or encashment of bid security;
 - b) calling off of any pre-contract negotiations; and
 - c) rejection and exclusion of the bidder from the procurement process
- ii) If a contract has already been awarded
 - a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the procuring entity;
 - b) Forfeiture or encashment of any other security or bond relating to the procurement;
 - c) Recovery of payments including advance payments, if any, made by the procuring entity along with interest thereon at the prevailing rate;
- iii) Provisions in addition to above:
 - a) Removal from the list of enlisted contractors and banning/debarment of the bidder from participation in future procurements of the procuring entity for a period not less than one year;
 - b) In case of anti-competitive practices, information for further processing may be filed under a signature of the Joint Secretary level officer, with the Competition Commission of India;
 - c) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

Any question or dispute as to the commission of any such offence or compensation payable to the Railway under this Clause shall be settled by the General Manager of the Railway, in such a manner as he shall consider fit & sufficient and his decision shall be final & conclusive.

ANNEXURE – XI

Reference Para 62.(1)

Registered Acknowledgement Due

PROFORMA OF TERMINATION NOTICE

_____ **RAILWAY**

(Without Prejudice)

No. _____

Dated _____

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

Forty eight hours (48 hrs.) notice was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the work.

Since the period of 48 hours' notice has already expired, the above contract stands rescinded in terms of Clause 62 of the Standard General Conditions of Contract and the balance work under this contract will be carried out independently without your participation. Your participation as well as participation of every member/partner in any manner as an individual or a partnership firm/JV is hereby debarred from participation in the tender for executing the balance work and your Security Deposit shall be forfeited and Performance Guarantee shall also be encashed.

The Final measurements of work executed by you against the said contract will be taken/started onat hrs. at site. The measurement will be continued till all the measurement are taken. You are advised to be present at site on the above mentioned date and time to witness the measurement, otherwise measurements will be taken ex-parte and thereafter, variation (addendum & corrigendum) & final bill of work executed till date of termination based on ex-parte final measurement shall also be processed ex-parte.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – XVII

Reference Para 16.(4)

Insurance Surety Bond for Performance Security

Name of the issuer of surety bond:

President of India,

Acting

Through.....

.....

Railway.

Date :-.....

.....

Surety Bond No.

Issue Date :

Amount of Bond :

Expiry Date :

WHEREAS, In consideration of the President of India acting through(*Designation & address of contract signing authority*),.....Railway....., (hereinafter called "The Railway") having accepted the bid of M/S XXXXX hereinafter called the contractor, for the work of XXX" under invitation for bids No. XXXX Dated XXXXX, Vide Letter of Acceptance No.....

AND

WHEREAS, the contractor is required to furnish Performance Security for the sum of Rs. XXXX (*Rupees XXXX Only*), in the form of Surety Bond, being a condition precedent to the signing of the contract agreement.

SB No :

Date:

WHEREAS, we,..... (*Name of insurance company*) hereinafter called the Surety, acting through [*Designation(s) of the authorized person of the Surety*], have, at the request of the M/s. XXXX contractor, agreed to give Bond for performance security/additional performance security as hereinafter contained:

1. KNOW ALL MEN by these present that I/We, the undersigned [*Insert name(s) of authorized representatives of the Surety*], being fully authorized to sign and incur obligations for and on behalf of the Surety, confirm that the Surety, hereby, unconditionally and irrevocably Bond to pay the Railway the full amount in the sum of XXXX (*Rupees XXXX Only*) as above stated.

2. The Surety undertakes to immediately pay on presentation of demand by the Railway any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Railway on the Surety shall be final, conclusive and binding, absolute and unequivocal notwithstanding any disputes raised/pending before any Court, tribunal, arbitration or any authority or any threatened litigation by the Bidder or Bank.
3. On payment of any amount less than aforementioned full amount, as per demand of the Railway, the Bond shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Railway.
4. The Surety shall pay the amount as demanded immediately on presentation of the demand by Railway without any reference to the contractor and without the Railway being required to show grounds or give reasons for its demand or the amount demanded.
5. The Surety Bond shall be unconditional and irrevocable.
6. The Bond hereinbefore shall not be affected by any change in the constitution of the Surety or in the constitution of the Contractor.
7. The Surety agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Railway and the Contractor, will in any way release us from the liability under this Bond; and the Surety, hereby, waives any requirement for notice of any such change, addition or modification to the Surety.
8. This Bond is valid and effective from the date of its issue, which is *[insert date of issue]*. The Bond and our obligations under it will expire on *XXXX (Expiry Date)*. All demands for payment under the Bond must be received by us on or before that date.
9. The Surety agrees that the Railways right to demand payment of aforementioned full amount in one instance or demand payments in parts totaling up to the aforementioned full amount in several instances will be valid until either the aforementioned full amount is paid to the Railway or the Bond is released by Railway before the Expiry date.
10. The Surety agrees that its obligation to pay any amount demanded by the Railway before the expiry of this Bond will continue until the amount demanded has been paid in full.
11. The expressions Surety and Railway hereinbefore used shall include their respective successors, administrators and assigns.
12. The Surety hereby undertakes not to revoke the Bond during its currency, except with the previous consent in writing of the Railway. This Bond is subject to the Uniform Rules for Demand Bonds, ICC Publication No. 758.
13. We, the Surety Insurer, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, tribunal, arbitrator or any other authority.
14. The Bond shall be in addition to and without prejudice to any other security Bond (s) of the contractor in favour of the Railway available with the Railway. The Surety, under this Bond, shall be deemed as Principal Debtor of the Railway.

Notwithstanding anything to the contrary contained in these presents,

- a. Our liability under this Surety Bond shall not exceed *XXXX (Rupees XXXXX Only)*.
- b. This Surety Bond shall be valid up to *XXXX (being the date of expiry)*;
- c. Unless the bank is served a written claim or demand on or before *XXXX [date of expiry]* all rights under this Bond shall be forfeited and the Surety shall be relieved and discharged from all liabilities under this Bond irrespective of whether or not the original Surety bond is returned to the Surety.

Dated _____ the day of 2024

15. The Insurance Surety Bond shall be verified by sending mail to [customer.care@sbigeneral.in].

Place

Bank's Seal and authorized signature(s)
[Name in Block letters]

[Designation with Code No.]

[P/Attorney] No.

Witness

1.

2

* * * * *

[Note: All italicized texts are for guidance on how to prepare this Insurance Surety Bond and shall be deleted from the final document.]

PART -2

Special Conditions

01. SPECIAL CONDITION OF TRACK (Applicable for P.way/Track Works)

1. The work will be done as per instruction and under supervision of sectional PWI or his representative.
2. Day to Day caution will be issued by sectional PWI or his representative and track protection will be done by Railway.
3. All tools and plants including rail cutting machine, hacksaw blades and drill twise, ratched brace etc. required for the work will be supplied by the contractor at his own cost.
4. Traffic block required for the work will be arranged by the sectional PWI or his representative and contractor will be responsible for strict adherence and timely completion of work. In case of non- availability of block due to any reason no compensation will be payable.
5. The work will be carried out in day time between sun rise to sun set only and the contractor must ensure that during the course of work as well as after the days work track is fit for movement of traffic.
6. No compensation towards any accident what so ever will be paid by the Railway.
7. Packing will conform to para 601-609 of Indian Railway P. Way Manual 2020 up to date corrected.
8. The work may be started from the length of the section according to the need of the Railway and as directed by PWI In-charge. The contractor shall be bound to execute the work accordingly.
9. Medical facilities, housing and watering arrangement for contractor's labour and his staff will be arranged by the contractor.
10. The track will be handed over in perfect condition i.e. level gauge's alignment, packing and boxing should be proper before the work ends finally in accordance with para 525 & 526 of IRPWM 2020 up to date corrected.
11. The work will be done under speed restrictions to be imposed by sectional PWI. Caution signalman will be provided by the Railway.
12. Contractor will use 20mm size screening mesh for screening work.
13. Wooden blocks and wedges required for the work will be supplied by the contractor at his own cost.
14. No two consecutive sleepers shall be tackled at a time.
15. Work will be stopped in perfectly safe condition at least 10 minutes earlier before passenger of every train.
16. The length of the track will be taken open or different operations of Deep screening etc. as per the direction of the Engineer at site.
17. Deep screening must proceeds changing of sleepers, Deep screening and re-sleepering shall not be done simultaneously at a particular location.
18. Prevention of accidents, where vehicles are permitted to ply adjacent to the running line experienced Gangman shall also be posted by the Railway as Flagman at the cost of the contractor to prevent accidents and the amount towards wages of the Flagman will be recovered from the contractor's bill.
19. If there is any conflict between conditions nominated in the "special condition" contained herein and which appear in the pamphlet and schedules reformed in the former shall be observed.
20. Any further clause or remarks added in the tender form by the contractor will disqualify his tender. In case of any remarks required to be added that should be done in a covering letter.
21. The contractor must abide by and comply with the provisions and Rules of contract Labour (Regulations and Abolition) Act. 1970 and Central Rules- 1971.
22. The contractor shall not start any work without the presence of railway supervisor or his representative and contractors supervisor at site.
23. There shall be an assurance register kept at each site, which will have to be signed by both, i.e. Railway supervisor or his representative as well as the contractor's supervisor as a token of their having understood the safety precautions to be observed at site

24. The contractor shall be responsible for adequate supervision of the work as regard safety of track , train and traveling public, proper care and custody of Railway Materials and any other Govt. property handed over to be the concerning PWI till it is returned back to PWI concerned at his/their stores and properly stacked at place indicated by PWI concerned.
25. Deep Screening/Track Renewal works shall be allowed to be taken up by the contractor only after issue of “ Permit to work” by a competent Railway Supervisor daily whenever work is in progress.
26. Adequate numbers of labourer are to be provided in the work by the contractor, during execution.
27. In addition of this Measures to be taken to ensure safety at works site while working near railway track will be governed as per letter no W-4/374/09/CE-CIR dt. 18.03.2010, PCE’s circular no. 16/2010/Track

Note:- Nevertheless as stated above all track work shall be executed in accordance with IRPWM 2020 up to date corrected.

02. ADDITIONAL SPECIAL CONDITIONS OF CONTRACT (TECHNICAL)

1. The work covered in this tender is for manufacturing, supplying and fixing of BG Galvanized Steel Channel Sleepers along with all fittings and fixtures (also galvanized) on Br. Nos. as indicated in Schedules, of Sonpur Division. The Channel Sleeper fittings shall conform to RDSO Drg.s as per steel channel sleeper drawings.

a) Fabrication and Workmanship- Fabrication, Workmanship shall generally comply with current IRS specification No.B1-79 with latest correction/amendments thereof unless otherwise specified in special conditions of this contract or as specially directed by the Engineer in writing.

The Contractor shall submit test certificates for Chemical, Metallurgical & structural properties conforming to appropriate standards of all steel material used for fabrications. All structural steel shall be free from rust, scales, laminations, cracks, fissure and other surface defects.

The workmanship and finish shall be equal to the best general practice in modern structural shops. The greatest accuracy shall be observed that in the manufacture of every part of the work all similar part shall be strictly inter-changeable.

NOTE:

Only weldable steel conforming to IS:2062/92

Steel fusion welding quality shall be used for fabrication of Steel Channels Sleepers as per RDSO’s approved drawing.

No Re-rolled Steel should be used.

Steel should be procured only from SAIL or TISCO or such reputed steel manufacturers only.

The source of steel should be got approved by the Railway.

In support of purchase copy of vouchers are to be submitted.

Following specifications with all latest amendments shall be followed:-

- a) Indian Railway Steel Bridge Code as corrected up to date.
- b) Indian Railway welded Bridge Code 1972.
- c) Indian Railway Schedule of dimension for Broad Gauge-1939 (Reprinted in Metric units in 1973).
- d) IS:2062-1992, Steel for general structural purpose.
- e) Indian Railway Specification B-1, 1979: Fabrication and erection of Steel Girder Bridges.
- f) IRS H-5 for rivets.
- g) IS:2155-1962 : Rivets for General purposes (Below 12mm diameter).
- h) IRS H-19, for bolts and nuts.
- i) IS: 102-1962, Ready Mixed Paint, Brushing Red Lead, Non setting priming.
- k) IS: 123-1963 : Ready mixed paints, brushing, finishing Semi-gloss for General purposes to Indian Standard Colours Red Oxide.
- l) B.S.S.916 and/or IS:1963-1967 : Black Hexagonal Bolts/Nuts etc. black Hexagonal Bolts/Nuts and lock Nuts (6 to 39mm) and black Hexagonal Screws (dia 6 to 24mm).
- m) IS:800-1984.
- n) IS:1148-1973 : Hot Rolled Steel Rivet Bars for structural purposes.
- o) IS:2062-1975 : Steel grade-„B” for welded structures. The tenderer shall maintain a master steel tape of approved make for which he has obtained a certificate of accuracy from the National Laboratory.
- p) IS:815-1974 : Classification coating of covered electrodes for metal arc welding of structural steel.
- q) IS:817-1992 : Manual for metal arc welding.
- r) IS:822-1970 : Code of procedure for inspection of welds.

- s) IS:2629-1985 : Recommended practice for hot dip Galvanising of Iron & Steel.
- t) IS:2623-1986 : Method for testing uniformity of coating of zinc coated articles.
- u) IS:6586-1978 : Recommended practice for metal spraying for protection of Iron & Steel.
- v) IS: 5905-1989 : Sprayed aluminium and zinc coating on Iron & Steel.
- w) IS:4699-1968 : Refined secondary arc grade SZM 98.5 minimum contents 98.5% in corrosion resistant used for Galvanising.
- x) IS:1148-1973 : Hot forged rivets for structural purpose.

The paints to be used in the work shall be from the firms of repute such as

- a) M/s. Asian Paints.
- b) M/s Jenson & Nicholson.
- c) M/s. Goodless Nerolac.
- d) M/s. Shalimar Paints.
- e) M/s. Bergar Paint (Formerly M/s British Paints)
- f) M/s. Garware Paints etc.

Rolled materials before being laid off or worked, must be made straight if straightening or flattening is necessary, it shall be done by method that will not damage the material. Sharp kinks and bends shall be rejected.

b) HOLING : Holes for rivets and bolts shall be drilled to conform to Clause 10 of IS:7215. All holes, except as stated here under shall be drilled to the required size or sub-punched 2mm. less in diameters and reamed thereafter to the required size. Thickness of the materials for sub-punching shall not be greater than 16mm. All matching holes for rivets or bolts shall register with each other so that a gauge of 0.8mm less in diameter than the holes can pass freely through the members assembled for riveting or bolting in the direction at right angle to such members. All punching and sub-punching shall be cleared and accurate and all drilling shall be free from burns. No holes shall be made by Gas Cutting process.

c) WELDING :

General : The welding and welded work shall generally conform to IRS welded bridge code and subject to further specifications given in the following paragraphs.

All welding, to the maximum extent possible, should be done either by fully automatic or semi-automatic process. Manual metal arc welding may be done only by welder possessing competency certificate issued by Govt. Recognised Agency/Institute duly certified by AEN/DEN.

All welding work shall be done in shops and the layout and sequence of operation shall be so arranged as to eliminate distortion and shrinkage stress. The parts to be welded shall be properly assembled and held firmly in position by means of Jigs and fixtures prior to and during welding.

d) ELECTRODES_: All Electrodes shall be kept under dry conditions. Any electrode with parts of its flux coating broken away or otherwise damaged shall be rejected. Any electrode older than six months from the date of manufactures or older than the date of expiry as specified by manufacturer should not be used. Welding Electrodes to be used in the work should be from to RDSO approved vendor and quality only.

The Electrodes to be used should be No.8 SWG or 10 SWG of class B-1 & B-2 of mild steel for arc welding.

e) PREPARATION OF JOINTS : The edge shall be prepared with an automatically controlled flame cutting torch correctly to the size and dimension of the groove prescribed in the design and shop drawing.

The welding surfaces shall be smooth, uniform and free from fine tears notches or any other defects which may adversely effect welding and shall be free of loose scale, slag rust, grease, paint, moisture or any other foreign material.

f) WELDING PROCEDURES : The welding procedure shall be arranged by the contractor to suit the details of the joints as indicated on the drawing and the position at which welding has to be carried out. Working procedure shall cover the following :-

- i) Type and size of Electrodes.
- ii) Current and for automatic welding are Voltage.
- iii) Length of run for Electrode, or for automatic welding speed of travel.
- iv) Number and arrangement of runs in multi run welding.
- v) Position and set up of parts.
- vi)Preparation and set up of parts.
- vii)Welding sequence.
- viii) Pre or post heating.
- ix) Any other relevant information.

The welding procedure shall be so arranged that the distortion and shrinkage stress are reduced to a minimum and the welds meet requirement and quality specified, hereunder.

Any weld found defective shall be cut by using either chipping hammer or gouging torch in such a manner that adjacent material is not injured in any way.

Fusion faces and surrounding surface within 50mm of welds shall be free from all mill scale and free from oil paint or any substances which might effect the quality of the welds and impede the quality/progress of welding. They shall be free from irregularity, which interfere with the deposition of specified size of weld or be the cause of defects.

- g) **ASSEMBLY FOR WELDING:** Before taking up mass production of any type of sleeper the production of 20 sleepers shall be taken up and the dimensions thereafter shall be checked by means of a test track 13 Mtrs. long assembled at the Workshop. The rails for linking of the steel track shall be made available free of charge by Railway at a point convenient to the Railways which should be returned to Railway after its use is over. Transportation of the Rails from this point to the contractors workshop and returning the same to the point of collection shall be done by the contractor at his own cost.

ACCURACY OF FIT UP : Parts to be fillet welded shall be brought into as close contact as practicable and the gap due to faulty workmanship or incorrect fit up shall not exceed 1.5mm.

h) **JIGS & MANIPULATORS** : Jigs, fixtures and manipulators shall be manufactured by the contractor and used during fabrication to ensure dimensional accuracy, minimum welding distortion and facilitate welding in flat or horizontal position and to ensure that all welded locations are easily accessible.

MINIMUM LEG LENGTH AND THROAT THICKNESS IN FILLET WELDS

The minimum leg length of a fillet weld as deposited, shall not be less than the specified size. In no case shall a concave weld be deposited unless specifically permitted. Where permitted, leg length shall be increased above that specified, so that the resultant throat thickness remains the same as would have been by the deposition of a flat faced weld of the specified leg length.

- i) **DE-SLAGGING:** After making each run of welding all slag shall be thoroughly removed and the surface cleaned.

j) **QUALITY OF WELDING:**

The weld metal as deposited, including tack weld is to be incorporated, shall be free from cracks, slag inclusion, porosity, cavities and other deposition faults. The weld steel shall be properly fused with the parent steel metal without undercutting or over lapping at the toes of the weld. The surface of the weld shall have a uniform consistent contour and regular appearance.

k) **WEATHER CONDITIONS:**

Welding shall not be done under open weather conditions, which might adversely affect the quality of welding. It should be done only under a covered shed in a workshop.

2. QUALIFICATION AND TESTING OF WELDERS:

The contractor shall satisfy the Engineer that the welders are suitable for the work for which they will be employed and shall produce evidence to the effect that welders have satisfactorily completed appropriate tests as prescribed in I. S.- 877. The Engineer may at his own discretion order periodic tests of the welder and/or of the welds produced by them. Such tests shall be at the expense of the contractor.

3. SUPERVISOR:

The Contractor shall employ a competent welding supervisor to ensure that standard of quality of materials, workmanship and welding comply with the requirements laid down in the specifications.

4. CONTROL IN THE FABRICATION AND ASSEMBLY OF VARIOUS STRUCTURE

Criteria for Testing : The contractor shall conduct test in accordance with following norms.

- a) Visual examination 100% (One hundred percent).
- b) Mechanical Test.
- c) Dye Penetrant Examination.

TESTS:

(a) **Visual Examination:** The contractor shall conduct visual examination and measurement of the external dimensions of the weld for all joints. Before examining the welded joints surface area close to it on both side of the weld for a width not less than 20mm., shall be cleaned of slag and other impurities. Examination shall be done by a magnifying glass, which has a magnification power of 10 and measuring instrument, which has an accuracy of ± 0.1 mm, or by weld gauges. Welded joints shall be examined from both sides.

The contractor shall examine the following during the visual checks.

*Correctness and shape of the welded joint.

- *Incomplete penetration of weld metal.
- *Influx.
- *Burns.
- *Un-welded craters.
- *Under cuts.
- *Cracks in welded parts and heat effected zones.
- *Porosity in welds and spot welds.
- *Displacement of welded elements.

The contractor shall document all data as per sound Laboratory practices.

(b) Mechanical Test :

The Contractor shall carryout various mechanical tests to determine weldability, the metal alloy ability, nature of break, correct size and type of electrodes, degree of pre-heat and post-heat treatment etc. The type, scope and sample of various mechanical tests shall be determined in agreement with the Engineer. The number of tests conducted shall depend on the results obtained to satisfy the Engineer that the correct type and size of electrode, degree of pre-heating and post-heating and weldability of different metal are being followed.

Dye Penetrate Examination :

All welds as desired by Engineer will be examined by dye penetrates for detection of discontinuities as per IS: 3658- 81, IS:12889-89 and RDSO's Specification No. NRC/NDT/4/91/APPD.

5. **Inspection and testing of fabrication:** The Engineer shall have free access at all reasonable times to the Contractor's works where the fabrication of steel work is carried out and shall be afforded be all reasonable facilities including transport by the Contractor for satisfying himself that the fabrication is being under taken in accordance with the provisions of the drawings and specifications.

The Contractor shall continuously inform the Engineer of the progress in fabrication as and when the individual pieces get ready for inspection. The Contractor shall give a minimum of three working days notice to the Engineer for inspection of the individual pieces.

Unless directed otherwise, inspection shall be made at the place of manufacture prior to despatch by an authorised representative of Railway. Should any structure found not to comply with any of the provisions of this specification it shall be liable for rejection. No structure or part of the structure, once rejected shall be re-submitted for inspection/test, except in cases where the Engineer considers the defect as rectifiable

Defects, which may appear during fabrication, shall be made good with the consent and according to the procedure laid down by the Engineer. All gauges and templates necessary to satisfy the Engineer shall be supplied by the Contractor. The Engineer, may at his discretion, check the test results obtained at the Contractors works by independent tests at the Government Test House or else where the costs of such tests shall be borne by the Contractor.

6. Marking, Packing and Dispatch :

Each piece shall be distinctly marked before delivery in accordance with the approved marking diagram and shall bear such other marks as will facilitate erection.

7. Supervision of work :

During the entire progress of the work the contractor shall have a competent supervisor in personal charge of the work. All works shall be done by skilled competent workmen

The above conditions are read/understand and accepted by me/us with the rates offered by me/us as above

Special Condition for Painting Work

1. Painting shall be done after thorough cleaning of steel surface by removing oil, grease, dirt, mill scale and other contaminated materials by mechanical process, as directed by site Engineer.
2. The surface prepared for painting should be clean, dry and free from contaminants. It should be rough enough to ensure adhesion of the paint film. However, it should not be so rough that the film cannot cover the surface peaks.
3. Surface preparation /Painting shall not be done in the following condition-
 - (i) When the ambient temperature is below 10 degree C or above 50 degree C.
 - (ii) In rainy season
 - (iii) During night
 - (iv) In winter before 8.00AM
 - (v) In summer bet. 11.00AM & 03.00PM, in areas that are likely to be exposed to direct sun light.
 - (vi) Extremely sandy/ misty/ dirt blowing condition.
 - (vii) When relative humidity is more than 90%.
4. Measurement of DFT (dry film thickness) shall be taken after surface preparation and after each coat of painting with Elecometer.
5. Precautions to be taken during Bridge painting:
 - Paints from approved manufacturers only should be used.
 - Special care should be taken to shift sleepers on girders or rail bearers to clean the seating very thoroughly before applying the paint.
 - Paint should be mixed in small quantities sufficient to be consumed within 1 hour in the case of red lead paint and 5 days in the case of red oxide paint.
 - Paints should be used within the prescribed shelf life from the date of manufacture. The quantity of paint procured should be such that it is fully utilized before the period prescribed for its use.
 - Brush shall not be less than 5cm in width and should have good flexible bristles. A new brush before use should be soaked in raw linseed oil for at least 24 hours. The brushes shall be cleaned in linseed oil at the end of each day's work.
 - Dust settled after scraping shall be cleaned before applying paint.
 - When the paint is applied by brush, the brush shall be held at 45 degree to the surface and paint applied with several light vertical / lateral strokes turning the brush frequently and transferring the paint and covering the whole surface. After this, the brush shall be used crosswise for complete coverage and finally finished with vertical / lateral strokes to achieve uniform and even surface. The flat brushes should not be more than 75mm in width having soft flexible bristles and conforming to IS:384. Round and oval brushes of approved quality is IS:487 also be used as per the instructions of the Engineer or his representative. The new brush should be soaked in raw linseed oil to IS:77 for at least 24 hours before use.
 - Rags, waste cotton, cloth or similar articles should not be used for applying paint.
 - The coat of paint applied shall be such that the prescribed dry film thickness is achieved by actual trial for the particular brand of paint. The applied coat of paint shall be uniform and free from brush marks, sags, blemishes, scattering, crawling, uneven thickness, holes, lap marks, lifting, peeling, staining, cracking, checking, scaling and allegatoring.
 - Each coat of paint shall be left to dry till it sufficiently hardens before the subsequent coat is applied. The drying time shall not be less than 3 days in the case of Red lead paint.
 - The entire contents of a paint drum should be mixed thoroughly either by pouring a number of times or by mechanical mixing to get uniform consistency. The paint should not be allowed to settle down during painting by frequent stirring or mixing. Driers such as spirit or turpentine should not be used. Mixing of kerosene oil is strictly prohibited.
 - The maximum time lag between successive operations as indicated below shall not be exceeded.
 - Between surface preparation and the application of primer coat -24 hours
 - Between surface preparation and first finishing coat in the case of patch painting - 48 hours
 - Between the primer coat and the 1st finishing coat - 7 days
 - Between the 1st finishing coat and the 2nd finishing coat - 7 days.
6. Each batch of paint to be get tested by Contractor at his own cost by RITES/government approved test houses/NABL accredited test houses as per instructions of site engineer. Test certificate of each batch of paint along with proof of purchase of paint to be submitted to site engineer.
7. In case of item No.041261 of USSOR 2021, painting with one coat ready mix Zinc Chromate conforming to IS: 104 should be done with 25-30 μ minimum dry film thickness (DFT). This should be followed by one coat of Zinc Chromate red oxide conforming to IS: 2074 with 25 μ minimum dry film thickness(DFT).

8. In case of item No.041262 of USSOR 2021, in place of IS: 13607 with 20-25μ minimum dry film thickness (DFT) in each coat. The colour/shade should be of Smoke Grey No. ISC 692 as mentioned in IS: 5-2004.
9. In case of item No.041263 of USSOR 2021, painting should be done with two coats Aluminium paints in dual containers confirming to IS: 2339, with 15-20 μ minimum dry film thicknesses (DFT) in each coat (total 40 μ minimum dry film thicknesses).
10. At each stage, dry paint film thickness shall be measured with digital elecometer, elecometer to be supplied by contractor at his own cost. Elecometer should be in working condition with valid calibration certificate for measuring thickness of paint coating.
11. Before use all the materials are to be passed by the Engineer-in-charge or his representative.
12. The rates quoted shall be inclusive of all the materials i.e. paints, equipment, loading, unloading charges, all taxes and freight etc. applicable at the site of work.
13. All relevant IS codes etc. shall be available at work site.

1. Books of reference:-

- I. IR Specification for fabrication of steel girder bridges & locomotive turn tables – (Fabrication specification)- Serial No. BI-2001 issued by RDSO with all up to date correction slips.
- II. IS-800-2007
- III. All IS & IRS specifications mentioned in RDSO Booklet serial No. BI-2001
- IV. GCC-2022 of East Central Railway with all up to date correction slips.
- V. Where any specification is in conflict with other standard the clauses of Fabrication & specification mentioned against Sl. No. (I) above shall prevail.

2. INCLUSIVE PRICE:-

- I. The cost of all painting, temporary erection and testing at the Tenderer's workshop, packing and delivery at the site of the work is specified in the schedule, is to be included in the price quoted on the tender.
- II. Any fittings, accessories or apparatus which may not have been mentioned in the specification, but which are considered necessary for the execution of this work are to be provided by the contractor without any extra payment. The work must be completed in all details.

3. MATERIAL/FABRICATION/WORKMANSHIP/ERECTION:-

Fabrication/workmanship and erection shall comply with RDSO fabrication specification booklet Sl. No. IRS B1-2001 with all up to date correction slips.

Materials specification- steel should confirm to IS:2062 (Gr. B0/BR) as per approved Drg.

- I. Manufacturing- The whole work shall be representative of the highest class of workmanship. The greatest accuracy shall be observed in the design, manufacture and erection of every part of the work to ensure that all parts will fit accurately together on erection and similar parts shall be strictly interchangeable.
- II. The contractor shall maintain steel tape of approved make, for which he has to obtain a certificate of accuracy from any National Test House or government recognized institution, competent to do so.
- III. Rolled materials before being laid off or worked, must be made straight. If straightening or flattening is necessary it shall be done by method that will not damage the material. Sharps kinks and bents will be rejected.
- IV. Tolerance- The tolerance in fabrication shall be in accordance with as mentioned in – Appendix –II of RDSO Booklet B-I-2001 with up to date correction slips.
- V. Fabrication record:- the records of fabrication shall be maintained in the register as per format given in Appendix –I of RDSO Booklet B-I-2001 with up to date correction slips.
- VI. Flattening and straightening: - All steel materials, plates, Bars and structures shall have straight edge, surfaces and be free from twist. If necessary, they shall be cold straight tender flattened by pressure before being worked or assembled unless they are required to be off curvilinear form.
- VII. Flattening and straightening under hot condition shall not be carried out unless authorized and approved by inspecting officer
- VIII. The tenderer may fabricate the steel work at his own workshop or at the site of the work as is convenient to him. If the fabrication is done in his own workshop. The transportation of the fabricated materials may be done by road or rail transport at his own cost, including all taxes viz. GST, Entry tax etc. If applicable. The tenderer must inspect the approach road right from the workshop and should be insured that it would be possible for him to transport the materials by road.
- IX. If the tenderer proposes to fabricate the street at site, the transport of steel section may be done by one of the

method mentioned above.

- X. The responsibility of custody of the material in tenderers workshop or at site will remain with tenderer till the completion of the work and then handed over to the Railway.

4. TEMPLATES

The templates throughout the work shall be of steel. The templates shall be used for making of cutting materials and as well as profile machining for the girders of Railway loading.

Templates shall be used for making of drilling holes in steel structures other than girders of railway loading. In case where actual material from a bridge have been used as templates shall be used for making of drilling similar pieces the inspecting officer will decide whether they are fit to be used as part of the finish structure.

5. RIVETS AND RIVETTING

Refer if fabrication specifications sl No. IRS-B1-2001 issued by RDSO Cl. 23.1 to Cl 23.10 and Appendix –IV with upto date correction slips.

6. BOLTS, NUTS AND WASHERS

Refer if fabrication specifications Sl. No. IRS-B1-2001 issued by RDSO –Cl 28.1 to Cl 28.8 with upto date correction slips.

7. WELDING.

Refer if fabrication specifications Sl. No. IRS-B1-2001 issued by RDSO –Cl 26.1 to Cl 27.3 and Appendix -V with upto date correction slips.

8. ALTERATION IN THE WORK.

Refer if fabrication specifications Sl. No. IRS-B1-2001 issued by RDSO –Cl 53.1 to Cl 53.2 and Appendix -IV with upto date correction slips.

9. ERECTION & EQUIPMENT:-

Refer if fabrication specifications Sl. No. IRS-B1-2001 issued by RDSO –Cl 21.1 to Cl 21.9 and Appendix -I with upto date correction slips.

10. HANDLING AND STORAGE OF MATERIAL:-

- (a) The material on receipt on site shall be carefully unloaded, examined for defects, checked, sorted and stacked securely on a level bed out of danger from flood or tied, and out of contact with water or ground moistures.
- (b) Any material found damaged or defective shall be stacked separately and the damaged defective portion painted distinctive colour. Such material is to be dealt with under the orders of engineer without delay.
- (c) Care must be taken to see that parts at site are available in proper sections.
- (d) The tenderer shall unload the materials promptly, on delivery from the wagon /BFR"s otherwise he shall be responsible for demurrage charges.

11. BEARING & ANCHORAGE:

- (i) Bed plates and shoes shall be set level in exact position. They shall be given full and even bearing by setting them on a layer of cement mortar (Cement to be paid by the railway as per provision and instructions to tenderers) after blocking them accurately as directed by the Engineer.
- (ii) The tenderer shall drill the holes and set the anchor bolts except where the bolts are already built into the concrete or masonry.
- (iii) Before grouting, the holes should be cleaned very carefully as such there should not be any deposit of and or rubbish etc. No extra payment will be made for that.

12. TESTING:-

Refer if fabrication specifications Sl. No. IRS-B1-2001 issued by RDSO –Cl 35.1 to Cl 35.3 and Appendix -IV with upto date correction slips.

13. CHECK ON TESTS MADE AT CONTRACTOR'S WORK:-

Refer fabrication specifications Sl. No. IRS-B1-2001 issued by RDSO –Cl 36.1 to Cl 36.2 and Appendix -IV with upto date correction slips.

14. REMOVAL OF UNUSED MATERIAL ETC:-

- (a). The contractor shall take steps as desired by the Inspecting officer to ensure that rejected work is not resubmitted for inspection.
- (b). On the completion of the work, the tenderer shall remain all his unused and surplus material, paints and staging or other materials produced from his operation and shall leave the site in a clean and tidy condition.

15. COMMENCEMENT OF THE ERECTION WORK AT SITE:-

The contractor shall commence the erection work when and as soon as, but not until he receives instructions from XEN / AEN In charge to do so. On such order being given possession of site / authority shall be given to the contractor of such portion or portions of the site as the XEN / AEN may determine.

16. CONTRACTOR TO STUDY DRAWING & SPECIFICATION ETC AND HIS LIABILITY:

The tenderer shall be responsible for close scrutiny of the drawing supplied/approved by the Railway for any discrepancies error or omission in the drawings of other particulars indicated therein and shall approach the railway immediately for rectification of such discrepancies, errors and omission in any dimensions / figure upon drawings or plan differ from those obtained by calling the drawing or plan, the dimensions as figured upon the drawings of plan shall be taken as correct.

17. LAND

The Railway administration will at its discretion arrange free of cost land to the extent sparable for contractor's office at sites, field workshop, stores, assembly and erection yard. Land required by the contractor for labour or staff colony or other purpose will have to be arranged by him at his own cost. The contractor shall not use or allow to be used, the site for any purpose other than that of executing the work. Due to any activities of the contractor, any form of damage (including environmental damage) happens to railway land, the same shall be made good by the contractor at its own cost.

18. TRANSPORTATION AND HANDLING OF MATERIAL & PLANT

The contractor shall be responsible to arrange at his own cost wagons (if required of transportation of materials and stores (other than those which are being arranged by the railway) required for the works. The railway will however, render all possible assistance to him in getting allotment of wagons, but the Railway will undertake no responsibility for delay in at supply. The contractor shall be responsible for all handling and timely loading and unloading as per railway commercial rule for public.

19. ISSUE OF MATERIALS BY RAILWAY

If at any time any material or equipment which the contractor is required to arrange himself in supplied by the Railway either at the contractor's request or in order to prevent any possible delay in the execution of the works due to contractor's inability to make adequate arrangement for the supply, such material or equipment will be made available to or taken back from the contractor in the Railway's stores, Godown, All handling from here or there to will be the contractor's responsibility Recovery of the cost of such supply will be made from the contractors bills at the present markets rate prevailing at the time or issue plus 5%on account of freight and 2% on account of incidental charge. Any demurrage of other charge due on account of detention to wagon in loading or unloading will also be recovered from the contractor.

20. LOADING

Refer Clause 44.1 to 44.3 of IR fabrication specification Serial BI-2001 issued by RDSO with up to date correction slip.

21. MATALLISING WITH SPRAYIED ALUMINIUM (IF REQUIRED AS PER TENDER SCHEDULE).

1. Surface preparation.
2. Metal spraying.
3. Purity of Aluminum
4. Appearance of the Coating
5. Thickness of the Coating
6. Painting

NOTE: For above items refer IR specification for fabrication Serial No.IRS-BI-2001 issued by RDSO appendix-VII with up to date correction slip.

22. FURTHER DRAWING AND INSTRUCTIONS :-

1. Chief Bridge Engineer shall have full power to make and issue further drawings or instructions or direction from time to time as may appear necessary and proper to the contractor for efficient completion and maintenance of the work. The Contractor shall be bound by the same as fully as if they had been mentioned or referred to in the contract and the contractor shall not be entitled to any extra payment in respect of any work or materials shown or directed.
2. The Tenderer's rate should provide for cutting M.S plates for making out M.S. flat from plates, in case M.S. Flats are not available. No extra payment for such cutting and grinding that may be necessary for converting M/.S. Plates to Flats will be admissible.

3. If the works are required to be done in by Rly. Yard and Rly. Tracks are to be crossed, the tenderer shall inspect the site and make himself thoroughly acquainted with site condition and quote proper rate including provision for making suitable facilities at site for the work.
4. The work shall have to be done in such a manner that the normal working of the Railway within the railway yard does not get disturbed. Proper protection is to be ensured by the contractor for allowing their laboures to cross the Railway lines with head-leads. No material/temporary structures should be kept adjacent to the running track within 3M from the centerline of track, which may infringe rail traffic. The contractor shall take necessary precaution to prevent/ cause damage to the Railway property & staff addition to provision of the standard conditions and Specification on safety requirement detailed in Tender Document elsewhere.

23. EXECUTION AND OUALITY CONTROL OF WELDING WORK-

All workshop fabrication shall be done using SAW (Submerged Arc Welding process)

24. JIG AND FIXTURES:-

To ascertain accuracy in cutting and drilling holes on the existing girder -part or for the splice members being fabricated for the use in the existing structure, and also for erection purposes extensive use of jigs and fixtures should be used. Contractor will prepare design and drawing of jigs and fixtures for each such items at his own cost and submit to the Rly. for approval. Fabrication and erection will be carried out with the help of jigs & fixtures only. Contractor will fabricate jigs and fixtures and will be paid under the enabling work.

04. SPECIAL CONDITIONS FOR BRIDGE WORK:-

1. **Scope of work:-** As detailed in name of work which is to be operated by relevant items of schedule. This might include dismantling of corroded structural members and erection of new members with supply of steel and returning the released steel materials to nominated Depot fabrication, erection, replacement of corroded rivets, painting of new members and returning the released steel materials to nominated depot.
2. **Supply of steel:** All steel materials required for strengthening/repairing of structural members shall be supplied by the contractor. The structural steel used shall be of make, TATA/ SAIL/ TISCO/JINDAL/Railway approved brand and shall produce the relevant Test certificate from recognized Test house along with the bills. All steel shall conform to IS-2062 Gr A/Gr. B.
3. **Painting : a)** Painting shall be done after thorough cleaning of steel surface by removing oil, grease, dirt, mill scale and other contaminated materials manually or by mechanical process as directed by site Engineer. Priming coat shall be done by one coat of IS-104 zinc chrome paint followed by another coat of zinc chromate red oxide confirming to IS-2074. Thereafter, two finishing coats of aluminum paint confirming to IS-2339 shall be applied. There should be a gap of 48 hours in between each coat of paint for drying.
b) All paints to be used for painting of steel members shall be procured from the brand from the approved list of RDSO manufacturer and final approval by the Site Engineer
 Each batch of paint to be get tested by Contractor at his own cost by RITES/government approved test houses as per instructions of site engineer. Test certificate of each batch of paint along with proof of purchase of paint to be submitted to site engineer.
4. **Defects:** Any fabricated materials found defective and unacceptable in the opinion of the Site Engineer shall be fully replaced by the contractor with its own labour and materials.
5. **Inspection:** Contractor shall allow the railway representative to inspect the work at all reasonable time and offer all facilities to conduct such inspection at any stage of work. Contractor shall arrange to supply necessary gadgets, template and other tools for checking the fabricated and other materials. Following testing equipment shall be kept at site :
 - i) Elcometer.
 - ii) Inside and outside calliper.
 - iii) Rivet testing hammer..
6. **Disposal of dismantled materials:** The released steel materials shall be transported to store of nominated Inspector at contractor's cost. The released materials shall be kept under the safe custody of contractor in the yard by deputing contractor's watchman till such time the released materials are deposited to store of nominated Inspector. The contractor shall be penalized for shortfall of any released materials by an amount calculated at double the Railway's last auction rate of similar released steel materials and will be recovered from Contractor's bill.
7. **Rates:** Contractor shall quote rates taking the difficulties, detentions etc. into account which he feels may be encountered in course of execution of the work and nothing extra will be paid on this account.

8. Specifications: Specifications will be as per IS Code referred below :-

I	IS-2062 Gr.A/Gr.B	Structural steel.
II	IS-1148-1982	Hot rolled rivets bar (upto 40mm diameter)
III	IS-102-1962	Red lead primer.
IV	IS-21339-1963	Paint Aluminium of general purpose.
V	IS-123-1992	Paint red oxide for general purpose.
VI	IS-1929-1982	Red with IS-10102 taking the supply conditions of rivets.

N.B: Latest revision of the IS code will be in forms if any revision take place. All the batch of rivets must be tested from National Test House or Government approved Test house or RITES to use as per specification. A copy of above codes shall be available at site office of contractor.

9. Site Inspection Certificate: Tenderers are requested to inspect the site before quoting rate to assess the type of works to be executed and must submit a certificate in this regard.

10. Drawing :- Contractor shall submit drawings for fabrication of the work for replacement/ strengthening of the corroded girder components/ members and shall submit scheme for replacement of corroded members and work shall be under taken as per the approved drawing No. separate payment shall be made for this.

11. Time schedule:- On acceptance of the tender, the contractor shall within 15 days submit his time schedule for different activities for completion of work within the stipulated period. The work is required to be executed during day and even in night, if necessary to facilitate completion of the work within time schedule. If work is carried out at night, contractor shall take prior approval of the Engineer in writing and all lighting arrangement is to be borne by the contractor.

12. Progress Report : The contractor shall also submit fortnightly progress report bringing out the progress vis-à-vis the time schedule submitted by him for the work as per approved Performa.

(A). SPECIAL CONDITIONS AND SPECIFICATIONS OF TENDERS (For Bridge work)

1. Disaster Management:-

“Vehicles and equipment of contractors can be drafted by Railway Administration in case of accidents/ natural calamities involving human lives”.

2. CONDITIONS FOR WORKS.

- i. The contractor shall not start any work without the presence of railway supervisor or his representative and contractors supervisor at site.
- ii. The Engineer In-charge shall approve the methodology proposed to be adopted by the contractor, with a view to ensure safety of trains, passengers and workers and he shall also ensure that the methods and arrangements are actually available at site before start of the work and the contractor’s supervisors and the workers have clearly understood the safety aspects and requirements to be adopted / followed while executing the work.
- iii. There shall be an assurance register kept at each site, which will have to be signed by both,
i.e. Railway supervisor or his representative as well as the contractor’s supervisor as a token of their having understood the safety precautions to be observed at site.

3. DECLARATION:

Regarding tender documents downloaded from website. The tenderer, hereby, declares that the tender documents (being submitted after downloading the same from website) are exactly the same which has been published by Railway. No addition/ alteration/deletion has been done in the tender document by the tenderer, else the tender will be summarily rejected. If it is detected having modified at any stage, the same will be treated as invalid, i.e. terms & conditions as provided in the original tender documents will prevail and will be binding on both side.

4. All dismantled and rejected materials i.e. debris shall be removed from the work sites and dumped by the Contractor at his cost at a suitable place marked by the Engineer in charge.

5. For working Road Cranes- (ROBs/RUBs/Subway works):

As per Executive Director CE/B&S-II (Rly.Bd’s)letter No.2015/CE-IV/RUB/206 dated 15.02.2016.

- (a)** No machine shall be selected to do any lifting on a specific job until its size and characteristics are considered against the weights, dimensions and lift radii of the heaviest and largest loads.

- (b) The contractor shall ensure that a valid Certificate of Fitness is available before use of Road Cranes.
 - (c) Contractors can utilize the services of any competent person as defined in Factories Act, 1948 and approved by Chief Inspector of Factories.
 - (d) The laminated photocopies of fitness certificate issued by competent person, the operators' photo, manufacturer's load chart and competency certificate shall always be either kept in the operator cabin or pasted on the visible surface of the lifting appliances.
 - (e) All lifting appliances including all parts and gears thereof, whether fixed or movable shall be thoroughly tested and examined by a competent person one at least in every six months or after it has undergone any alterations or repairs liable to affect its strength or stability. **Dy.CE/Track/HJP letter No.W-4/514/0/Safety Policy/Pt.I/156 dt.12.02.2016** – The instructions given in the PCE's Circular No.16/2010/Track dt. 18.03.2010 before and during execution of work in the vicinity of the railway track should be rigidly followed.
- Actions to be taken by the contracted agency to ensure safety at work site should be incorporated in the agreement and assurance of the contractor should be taken in writing after explaining such action.

6. Procurement of Steel Items in Railway Projects/Contracts.

Approved specifications and Guidelines for work contracts w.r.t supply & use of quality TMT Bars and structural steel are as under:-

- (a) All reinforcement Steel (TMT Bars) and structural steel shall be procured as per specifications mentioned in BIS's documents- IS: 1786 and IS: 2062 respectively. Independent tests shall be conducted, wherever required, to ensure that the materials procured conform to the specifications.
- (b) These steel shall be procured only from those firms, which are Established, Reliable, Indigenous & Primary Producers of steel, having Integrated steel Plants (ISP), using iron ore as the basic raw material and having in-house iron rolling facilities, followed by production of liquid steel and crude steel, as per Ministry of Steel's guidelines.
- (c) However, only certain isolated sections of structural steel, not being rolled by ISPs, can be procured from the authorized re-rollers of ISPs or authorized licensee of BIS having traceability system and who use billets produced by ISPs. Traceability shall be ensured by an officer specially authorized by the concerned SAG officer of the Zonal Railway on case to case basis for this purpose."

{Authority : Railway Board's letter no. 2007/CE-I/CT/B, Dated 01.05.2012}

05. SPECIAL CONDITION & SPECIFICATION FOR EARTHWORK.

(Formation, Cess Repair & Bridges work)

1. GENERAL

- 1.1 Earthwork shall be done generally in accordance with provision of Part II of General Conditions of Contract and Indian Railway Unified Standard specification (Works & Materials) IRUSS-2021.
- 1.2 **The book "Comprehensive Guidelines and Specifications for Railway formation-specification No. RDSO/2020/GE:IRS-0004,Sept-2020" issued by Geo-technical wing of RDSO known here under, as "RDSO guidelines" shall form the basis of principles for conducting all testing and execution of work of embankments.**
- 1.3 Standard sections for Earthwork in formation, cutting, blanketing for single line, double line conventional doubling are given in the Indian Railways Permanent Way Manual (with all correction slip) and Indian Railways Code for Engineering Deptt. 2021 (with all correction slip) which are Government of India's priced publications. These sections are for guidance of contractor to assess the type of work involved but the actual dimensions/side slopes etc. may vary to some extent depending on local conditions.
- 1.4 Where these conditions and specifications are in conflict with or repugnant to the East central Railway Standard Specifications and/or other books mentioned as Book of Reference in these tender documents, the clause of these Special Conditions and Specifications shall prevail.

2. EARTHWORK

- 2.1 Before the work is started, the whole area between the toes of the bank or top of cutting, shall be properly cleared by the contractor of all Trees, Roots, Heavy grass and all obstructions. No extra payment will be made for such work. All trees of girth (parameter) more than 12 inch at 1 meter above the bottom shall be the property of the Railway and the Contractor shall, after uprooting, deposit the same with Railway. Before cutting trees, necessary permission required from the forest department or any other appropriate authority, shall be taken, by the contractor on the basis of Railway's recommendatory letter.
- 2.2 (a) Where an embankment is being extended in width, the slope shall be benched as per specification of GCC and the cost for the same shall be included in the through rate and shall not be payable separately.

3. PAYMENT

- 3.1 Except of otherwise specified regarding secured advance, all payment shall be made on finished cross

sectional quantities, cross sectional areas at various points shall be worked out and the arithmetic mean of the areas, at any two such continuous points multiplied by the horizontal distance between these two points measured along the centerline of the alignment shall be taken as the quantity of earthwork between the two points on which the payment shall be made. The contractor shall have no claim for the quantities over and above the payments on account of subsidence, base settlement, wastage or guttering due to rain, floods, wind, wave wash etc. all bridges and other gaps shall be deducted in full from the quantity of the earthwork.

- 3.2 SETTLEMENT ALLOWANCE: Where the embankment is compacted to specified dry density mentioned hereunder, no allowance for settlement of the bank shall be made, where the bank has not been formed by dumping earth, light tamping, and/or passing a monsoon over it, necessary allowances for settlement as specified in the GCC shall be made.
- 3.3 All payments shall be made in accordance with items given in the “Schedule of Items” only. Any arrangements/works required to be done to achieve the work defined in various Items of the “Schedule of Items” shall be done at contractor’s cost without any extra payment and the Contractor should include such expenses in the rates quoted against the said items.
- 3.4 While making embankment, earth shall not be dumped in any standing water at the location where embankment has to be constructed. If there is any standing water, the same shall be drained or pumped out completely before any earth is dumped in this area. In case of draining out or pumping out water, no extra payment will be made to the contractors and quoted rates for earthwork shall cover all such charges.
- 3.5 There shall be only two classifications of soil, e.g. (a) all types of soil except those requiring blasting for excavation (b) those requiring blasting. All the payments for excavations in cuttings shall be made as per the Schedule of Items only on the basis of these two classifications.
- 3.6 LEAD / LIFT etc.: No separate lift / crossing of line or similar item shall be payable separately otherwise than provided in the Schedule of items. Lead shall be payable as provided in the Schedule of Items.
- 3.7 Stone excavated from cuttings, which may be considered useful for use as building stone, for pitching or for breaking into ballast or chips shall be stacked separately by the contractor as directed by the Engineer at site. This stone will be property of the Railway and may be issued as Railway materials to the contractors as pitching etc. in accordance with relevant Item of L&M Schedule.
- 3.8 If any service roads, culverts, bridges etc. are to be built, the contractor shall build the same at his own cost, including ramps for transporting earth to make embankment, all the service roads are to be maintained by the contractor at his own cost. No separate payment for such works shall be made.
- 3.9 The contractor shall break all clods / lumps of soil and fill up all hollows in the earthwork in embankment by light tamping / consolidation which may be achieved by a few passes of plate vibrator or a suitable type of roller. The rates in items in earthwork in embankment shall include this.
- 3.10 The work of bolder pitching, turfing etc. Shall be carried out under ECRUSSOR-2021 unless other wise specified.
- 3.11 Turfing shall be done during monsoon period only. The contractor shall take care of the turfing including watering of the turfing, in case of failure of monsoon, till the sods/seeds take firm roots. The sods/seeds shall be of approved quality.

4 SUITABILITY OF EARTH FOR EMBANKMENT:

Soils shall be used for the embankment with approval of ADEN in accordance with “GE:IRS-0004, Sept. 2020”.

5 COMPACTION :-

- 5.1 Before work is commenced, the contractor is advised to conduct, field compaction trials for his own guidance so that compaction is efficiently and economically achieved. This trial should also be used to assess the thickness of the loose layer of soil that should be adopted for formation of the bank, as well as to determine the most efficient type of rollers. RDSO guidelines have given the suitable, type of roller and the same may be taken as guidance.
- 5.2 Water, if required, for adding to the earth shall be arranged free of cost by the Contractor himself.
- 5.3 The compaction of soil is essentially required for obtaining a uniform soil mass of desired density and known soil properties. The method of compaction should, therefore, be shown accordingly.
- 5.4 In cutting area the final surface shall be suitably compacted by suitable type of roller to achieve desired dry density.

5.5 **SUITABILITY OF TYPE OF ROLLER:**

Type of soil	Suitable type of roller
Course grained soil such as gravels, sands and gravel s mixtures with very little trace of fines	Rubber tyred roller, vibratory plate or smooth roller.
Gravels or sands with appreciable amount of silt or clay	Rubber tyred roller, vibratory rollers, sheep rollers.
Silts and clays of low plasticity.	Rubber tyred roller, vibratory rollers, sheep roller.
Silts and clays of high plasticity.	Sheep foot rollers and vibratory rollers.

6 **METHOD OF COMPACTION OF EARTHWORK**

- 6.1 After site clearance all pockets and depressions left in the soil, if any, shall be made good and compacted.
 - 6.2 Earthwork shall be done in layers not exceeding 300mm thick in case of vibratory roller & 300mm thick in other cases in loose state and compacted with suitable roller to obtain the specified density as per IS: 10379 –1982. The number of passes of the roller and the optimum thickness of each layer will be fixed after carrying out field trials with the roller proposed to be used from time to time from location to location. The main criteria are being to obtain the maximum density achievable uniformly.
 - 6.3 (i) Cohesion less soils shall be compacted to get a minimum density index (relative density) of 70% as obtained in accordance with IS: 2720(Pt. XIV) – 1983.
(ii) All other types of soils when compacted shall attain at least 98% of the maximum dry density as determined using heavy compaction in accordance with IS: 2720 (Pt.VIII) – 1983 followed by field trials as per IS: 10379 – 1982.
 - 6.4 If the soil is dry, water shall be sprinkled either in the borrow pit or over the spread layer, as convenient in order to obtain a workable moisture content before rolling is commenced. Where the natural moisture content of borrow pit is high, compaction in higher moisture contents can be allowed by the permission of Engineer-in-charge.
 - 6.5 Each layer shall be compacted to the specific density over its entire width commencing from the two sides, before another layer is started
 - 6.6 While compacting it shall be ensured that there is minimum overlap of 150mm between each run of the rollers.
 - 6.7 Care should be taken during the compaction operation to slope the surface of the bank to facilitate the shedding and to minimize the absorption of rainwater, particular attention being given to the prevention of ponding.
 - 6.8 The Railway shall ascertain the density of each layer of compacted soil by testing an adequate number of soil samples.
 - 6.9 The quality of compaction work shall be determined by considering the Mean Density of the samples collected mostly on either side of the center line at intervals of 10M or so with a few taken at random near the two sides in each layer. The Mean Dry Density shall be equal to or exceed the minimum specified density. In no individual case the density be less than the minimum value specified by more than 2% otherwise further rolling shall be done at the appropriate location.
 - 6.10 The contractor shall be allowed to lay a further layer of soil only after the compaction of a particular layer has been found satisfactory.
 - 6.11 The top of the formation shall be finalized to a slope of 1 in 30 away from the centers.
 - 6.12 Extra width of 50 cm shall be rolled on either side, which after finishing the bank up to final height shall be dressed to final cross section by removing the loose earth or extra width. No extra payment for this extra width shall be made.
- 7 **In case of any discrepancy / contradiction between specifications given above with RDSO guidelines IRS004/2020, the RDSO guidelines will prevail.**

6. SPECIAL CONDITION for H-Beam Sleeper & fittings

(PART-I)

1. Fabrication will confirm to RDSO Drg. No. RDSO/T-5155 to RDSO/T-5468 and related drawings as per requirement as shown in the approved CE's drawing of individual bridges
2. All the MS fittings/components will have to galvanize by the contractor at his own cost.
3. The matching components such as steel fittings, etc. complete in all respect. as per approved drawing will be supplied duly inspected and passed by Third party inspection agencies (TPIs) (as directed vide **letter no. 2022/RS(G)/779/8/Pt.I(E3424266)** dt. **15.03.2023** or any other updated letter in this context from time to time) in sealed gunny bags. The contractor will have to arrange for TPI's inspection at their own cost and will be responsible for furnishing all tests certificates before the dispatch of fittings.
4. MS square washer used for fixing hook bolts with channel/H-Beam sleeper should invariably be used with a rubber washer of same size as of MS washer. No extra payment will be made for this.
5. The size & Length of the channel/H-Beam sleepers may vary as per site condition. The length of sleepers to be fabricated will depend on site condition and approved CE's drawings.
6. The contractor will have to fabricate the sleepers as per approved CE's drawings, taking into account site measurement by PWI and contractor's site engineer. As per site measurement, minor modification may have to be made for providing fixing arrangement of hook bolts, width/length of channel/H-Beam sleepers and other such modification so that cross level and alignment is maintained to the required level after taking into account minor variations existing in the girder from the one as shown in the approved CE's drawings. The rate quoted herein item wise for all the items of this tender schedule shall accommodate all such miscellaneous works if any. No extra claim in this regard will be entertained on account of such modification at any stage.
7. The rate quoted shall include cleaning of rust etc. at the new sleeper and girder contact point and painting with one heavy coat of epoxy paint of approved quality to a thickness of 110 micron dry film thickness. If required, the contractor will have to make pre-block arrangements for shifting existing timbers for doing painting work. Also, the contractor will have to paint exposed portion of girder after removal of old sleepers and not covered under new sleeper, with one coat of ready mixed paint zinc chromate priming to IS :104 followed by one coat of zinc chrome red oxide priming to IS : 2074 as priming coats . The rate quoted herein item wise for all the items of this tender schedule shall accommodate all such works if any. No extra claim in this regard will be entertained on account of such works at any stage.

(PART- II)

- 1) Galvanising of steel channel/H-Beam sleepers and M.S fittings shall be done by hot dip process of thickness 100 ± 5 microns with zinc conforming to IS:869-77 and IS :2629-85.
- 2) Fixing of all elastomeric pads must be done by Epoxy adhesives approved by Rly's Engineers supplied by Contractor at his cost.
 - a) Painting the sleepers seat by one coat of epoxy paint of approved quality which will be supplied by the contractor.
- 3) For all the supplied item the contractor has to give one Indemnity Bond and has to keep the items in safe custody by deputing day and night watchman up to the completion of the work- Railway will have no responsibility on this account for theft damage, loss etc. Payment will be entertained taking into account the materials fitted and fixed on the running lines.
- 4) Out of two holes for hook bolts, hole on one side of sleepers will be made in the work shop along with the fabrication of the channel/H-Beam sleepers and the hole on the other side will be drilled on actual measurement at site to ensure correct alignment of track after final assembly on the bridge.
- 5) Care should be taken during transportation, loading, unloading, drilling holes, welding etc to ensure that no damage is done to the galvanizing. However galvanized surface inadvertently damaged should be painted as detailed below:-

Application of one coat of ready mixed paint zinc chromate priming to IS:104 followed by one coat of zinc chrome red oxide priming to IS:2074 as priming coats on an approved surface. Application of two coats of paint aluminum conforming to IS :2339 as covering coats as per the approval of the Engineer– in – charge.

- 6) The following shall be ensure by the tenderers
Availability of covered workshop adequate area with machinery (listed below) and facilities for fabrication & testing facilities to execute this nature of work. The testing shall be as prescribed in the respective IRS specifications.

Profile Gas cutting
 Machine Drilling
 Machine Punching
 Machine Shaping
 Machine
 Welding Generator & equipment for welding of adequate capacity.Planting Machine
 Air Compressor & riveting equipment.
 Jigs & Fixtures for fabrication of channel/H-Beam sleepers
 Facility for testing of welding work by dye penetration test/ultrasonic testing.
 Master tape of approved quality duly certified for accuracy by National Lab.

Availability of qualified technical supervisors for fabrication welding etc. and certified welders.

NOTE : Tenderers may note that their offer demanding assistance for the procurement of raw materials and other fittings will not be entertained and such offer will not be considered.

Payment of the M.S. Grooved pad plates, packing plates etc. will be made as per the original tonnage of the plates used. No deduction or enhancement will be considered for grooves made or welding done.

The basic cost, items & quantities are only approximate and for guidance of tenderer(s). This may vary as per the site conditions and no claim what-so-ever on this account will be entertained.

- 7) The work is to be executed with contractor's materials and labour under the supervision and direction of concerning PWI & DEN/AEN-in-charge of work.
- 8) The rates quoted and accepted by the Rly. are inclusive of all charges and taxes including sales tax, Octroi etc.as leviable by the Central Govt./State Govt/Civil Authorities.
- 9) After completion of work, the same should be maintained for a period of 12 months. Any defect noticed during this period will be rectified by the Contractor at his own cost failing which the same will be rectified by the Railway Administration and the cost will be recovered from amounts due to the contractor including the Security Deposit. The security amount will be refunded after successful completion of maintenance period and certified by the Engineer-In-Charge.
- 10) The work is to be carried out under traffic block. The block will be arranged by the Rly. However, Rly. will not be responsible for idling of man, materials and machinery due to non-availability of blocks.
- 11) The tenderer should mention the place/workshop where they intend to manufacture/galvanize the channel/H- Beam sleepers & fittings.

12) INSPECTION :-

- (a) The finished steel channel/H-Beam sleepers and Grooved Steel Pad Plates/MS packing plates which are inspected and passed for the work by the nominated Railway Officials, not below the rank of an Assistant Engineer, should only be brought to the work site by the contractor. The inspection shall be in two stages:

Before galvanizing (to check up the quality of fabrication) After galvanizing (to check up the quality of galvanizing)

The inspection will be carried out at the premises of the manufacturer.

Necessary *dye penetration* test and Radio-active test should be conducted for all welding while passing the fabrication. Inspecting official nominated by Chief Bridge Engineer, East Central Railway will issue necessary Inspection Certificate as a proof of passing the channel/H-Beam sleepers after his inspection. Materials shall be dispatched to site of work by the Contractor in full sets i.e., channel/H-Beam sleepers with all matching components fittings complete.

The matching components fittings will be supplied duly inspected and passed by RITES in sealed gunny bags. The contractor will have to arrange for RITES inspection at their own cost and will be responsible for furnishing all test certificate before the dispatch of fittings.

Materials including P. Way fittings will be utilized at site only after receipt of the inspection certificate by inspecting officials.

ADDITIONAL SPECIAL CONDITIONS OF CONTRACT (TECHNICAL)

(Note: In under mentioned conditions, conditions related with H-Beam sleeper and fittings will be applicable)

The Channel/H-Beam Sleeper fittings shall conform to RDSO Drg.s as per steel channel/H-Beam sleeper drawings. mentioned relevant items of Schedule with latest alteration & up to date as per relevant and approved CE's Drg.

Fabrication and Workmanship - Fabrication, Workmanship shall generally comply with current IRS specification No.B1-79 with latest correction/amendments thereof unless otherwise specified in special conditions of this contract or as specially directed by the Engineer in writing.

The Contractor shall submit test certificates for Chemical, Metallurgical & structural properties conforming to appropriate standards of all steel material used for fabrications. All structural steel shall be free from rust, scales, laminations, cracks, fissure and other surface defects.

The workmanship and finish shall be equal to the best general practice in modern structural shops. The greatest accuracy shall be observed that in the manufacture of every part of the work all similar part shall be strictly inter-changeable.

NOTE:

Only weldable steel conforming to IS:2062/92 Grade-B Steel fusion welding quality shall be used for fabrication of Steel Channel/H-Beams Sleepers.

No Re-rolled Steel should be used.

Steel should be procured only from SAIL or TISCO or such reputed steel manufacturers only. The source of steel should be got approved by the Railway.

In support of purchase copy of vouchers are to be submitted.

Following specifications with all latest amendments shall be followed:-

- Indian Railway Steel Bridge Code as corrected up to date.
 - Indian Railway welded Bridge Code 1972.
 - Indian Railway Schedule of dimension for Broad Gauge-1939 (Reprinted in Metric units in 1973).
 - IS:2062-1992, Steel for general structural purpose.
 - Indian Railway Specification B-1, 1979: Fabrication and erection of Steel Girder Bridges.
 - IRS H-5 for rivets.
 - IS:2155-1962 : Rivets for General purposes (Below 12mm diameter).
 - IRS H-19, for bolts and nuts.
 - IS: 102-1962, Ready Mixed Paint, Brushing Red Lead, Non setting priming.
 - IS: 123-1963 : Ready mixed paints, brushing, finishing Semi-gloss for General purposes to Indian Standard Colours Red Oxide.
 - B.S.S.916 and/or IS:1963-1967 : Black Hexagonal Bolts/Nuts etc. black Hexagonal Bolts/Nuts and lock Nuts (6 to 39mm) and black Hexagonal Screws (dia 6 to 24mm).
 - IS:800-1984.
 - IS:1148-1973 : Hot Rolled Steel Rivet Bars for structural purposes.
 - IS:2062-1975 : Steel grade-„B“ for welded structures. The tenderer shall maintain a master steel tape of approved make for which he has obtained a certificate of accuracy from the National Laboratory.
 - IS:815-1974 : Classification coating of covered electrodes for metal arc welding of structural steel.
 - IS:817-1992 : Manual for metal arc welding.
 - IS:822-1970 : Code of procedure for inspection of welds.
 - IS:2629-1985 : Recommended practice for hot dip Galvanising of Iron & Steel.
 - IS:2623-1986 : Method for testing uniformity of coating of zinc coated articles.
 - IS:6586-1978 : Recommended practice for metal spraying for protection of Iron & Steel.
 - IS: 5905-1989 : Sprayed aluminium and zinc coating on Iron & Steel.
 - IS:4699-1968 : Refined secondary arc grade SZM 98.5 minimum contents 98.5% in corrosion resistant used for Galvanising.
 - IS:1148-1973 : Hot forged rivets for structural purpose.
- The paints to be used in the work shall be from the firms of repute such as

- a) M/s. Asian Paints.
- b) M/s Jenson & Nicholson

- c) M/s. Good lass Nerolac.
- d) M/s. Shalimar Paints.
- e) M/s. Berger Paint (Formerly M/s British Paints)
- f) M/s. Garware Paints etc.

Rolled materials before being laid off or worked, must be made straight if straightening or flattening is necessary, it shall be done by method that will not damage the material. Sharp kinks and bends shall be rejected.

HOLING : Holes for rivets and bolts shall be drilled to conform to Clause 10 of IS:7215. All holes, except as stated here under shall be drilled to the required size or sub-punched 2mm. less in diameters and reamed thereafter to the required size. Thickness of the materials for sub-punching shall not be greater than 16mm. All matching holes for rivets or bolts shall register with each other so that a gauge of 0.8mm less in diameter than the holes can pass freely through the members assembled for riveting or bolting in the direction at right angle to such members. All punching and sub-punching shall be cleared and accurate and all drilling shall be free from burns. No holes shall be made by Gas Cutting process.

4.

WELDING :

General : The welding and welded work shall generally conform to IRS welded bridge code and subject to further specifications given in the following paragraphs.

All welding, to the maximum extent possible, should be done either by fully automatic or semi-automatic process. Manual metal arc welding may be done only by welder possessing competency certificate issued by Govt. Recognized Agency/Institute duly certified by AEN/DEN.

All welding work shall be done in shops and the layout and sequence of operation shall be so arranged as to eliminate distortion and shrinkage stress. The parts to be welded shall be properly assembled and held firmly in position by means of Jigs and fixtures prior to and during welding.

ELECTRODES : All Electrodes shall be kept under dry conditions. Any electrode with parts of its flux coating broken away or otherwise damaged shall be rejected. Any electrode older than six months from the date of manufactures or older than the date of expiry as specified by manufacturer should not be used. *Welding Electrodes to be used in the work should be from to RDSO approved firm and quality only.*

The Electrodes to be used should be No.8 SWG or 10 SWG of class B-1 & B-2 of mild steel for arc welding.

PREPARATION OF JOINTS : The edge shall be prepared with an automatically controlled flame cutting torch correctly to the size and dimension of the groove prescribed in the design and shop drawing.

The welding surfaces shall be smooth, uniform and free from fine tears notches or any other defects which may adversely effect welding and shall be free of loose scale, slag rust, grease, paint, moisture or any other foreign material.

WELDING PROCEDURES : The welding procedure shall be arranged by the contractor to suit the details of the joints as indicated on the drawing and the position at which welding has to be carried out. Working procedure shall cover the following :-

- a. Type and size of Electrodes.
- b. Current and for automatic welding are Voltage.
- c. Length of run for Electrode, or for automatic welding speed of travel.
- d. Number and arrangement of runs in multi run welding.
- e. Position and set up of parts.
- f. Preparation and set up of parts.
- g. Welding sequence.
- h. Pre or post heating.
- i. Any other relevant information.

The welding procedure shall be so arranged that the distortion and shrinkage stress are reduced to a minimum and the welds meet requirement and quality specified, hereunder.

Any weld found defective shall be cut by using either chipping hammer or gouging torch in such a manner that adjacent material is not injured in any way.

Fusion faces and surrounding surface within 50mm of welds shall be free from all mill scale and free from oil paint or any substances which might effect the quality of the welds and impede the quality/progress of welding. They shall be free from irregularity, which interfere with the deposition of specified size of weld or be the cause of defects.

ASSEMBLY FOR WELDING: Before taking up mass production of any type of sleeper the production of 20 sleepers shall be taken up and the dimensions thereafter shall be checked by means of a test track 13 Mtrs. long assembled at the Workshop. The rails for linking of the steel track shall be made available free of charge by Railway at a point convenient to the Railways which should be returned to Railway after its use is over. Transportation of the Rails from this point to the contractors workshop and returning the same to the point of collection shall be done by the contractor at his own cost.

ACCURACY OF FIT UP : Parts to be fillet welded shall be brought into as close contact as practicable and the gap due to faulty workmanship or incorrect fit up shall not exceed 1.5mm.

JIGS & MANIPULATORS : Jigs, fixtures and manipulators shall be manufactured by the contractor and used during fabrication to ensure dimensional accuracy, minimum welding distortion and facilitate welding in flat or horizontal position and to ensure that all welded locations are easily accessible.

MINIMUM LEG LENGTH AND THROAT THICKNESS IN FILLET WELDS

The minimum leg length of a fillet weld as deposited, shall not be less than the specified size. In no case shall a concave weld be deposited unless specifically permitted. Where permitted, leg length shall be increased above that specified, so that the resultant throat thickness remains the same as would have been by the deposition of a flat faced weld of the specified leg length.

DE-SLAGGING: After making each run of welding all slag shall be thoroughly removed and the surface cleaned.

QUALITY OF WELDING:

The weld metal as deposited, including tack weld is to be incorporated, shall be free from cracks, slag inclusion, porosity, cavities and other deposition faults. The weld steel shall be properly fused with the parent steel metal without undercutting or over lapping at the toes of the weld. The surface of the weld shall have a uniform consistent contour and regular appearance.

WEATHER CONDITIONS:

Welding shall not be done under open weather conditions, which might adversely affect the quality of welding. It should be done only under a covered shed in a workshop.

5. QUALIFICATION AND TESTING OF WELDERS:

The contractor shall satisfy the Engineer that the welders are suitable for the work for which they will be employed and shall produce evidence to the effect that welders have satisfactorily completed appropriate tests as prescribed in I. S.- 877. The Engineer may at his own discretion order periodic tests of the welder and/or of the welds produced by them. Such tests shall be at the expense of the contractor.

SUPERVISOR:

The Contractor shall employ a competent welding supervisor to ensure that standard of quality of materials, workmanship and welding comply with the requirements laid down in the specifications.

6) CONTROL IN THE FABRICATION AND ASSEMBLY OF VARIOUS

STRUCTURE Criteria for Testing : The contractor shall conduct test in accordance with following norms.

- a) Visual examination 100% (One hundred percent).
- b) Mechanical Test.
- c) Dye Penetrant Examination.

TESTS:

- a) **Visual Examination:** The contractor shall conduct visual examination and measurement of the external dimensions of the weld for all joints. Before examining the welded joints surface area close to it on both side of the weld for a width not less than 20mm., shall be cleaned of slag and other impurities. Examination shall be done by a magnifying glass, which has a magnification power of 10 and measuring instrument, which has an accuracy of ± 0.1 mm, or by weld gauges. Welded joints shall be examined from both sides.

The contractor shall examine the following during the visual checks.

- a) Correctness and shape of the welded joint.
- b) Incomplete penetration of weld metal.
- c) Influx.
- d) Burns
- e) Un-welded craters.

- f) Under cuts.
- g) Cracks in welded parts and heat effected zones.
- h) Porosity in welds and spot welds.
- i) Displacement of welded elements.

The contractor shall document all data as per sound Laboratory practices.

b) **Mechanical Test :**

The Contractor shall carryout various mechanical tests to determine weldability, the metal alloyability, nature of break, correct size and type of electrodes, degree of pre-heat and post-heat treatment etc. The type, scope and sample of various mechanical tests shall be determined in agreement with the Engineer. The number of tests conducted shall depend on the results obtained to satisfy the Engineer that the correct type and size of electrode, degree of pre-heating and post-heating and weldability of different metal are being followed.

Dye Penetrate Examination :

All welds as desired by Engineer will be examined by dye penetrates for detection of discontinuities as per IS: 3658-81, IS:12889-89 and RDSO's Specification No. NRC/NDT/4/91/APPD.

7. **Inspection and testing of fabrication:** The Engineer shall have free access at all reasonable times to the Contractor's works where the fabrication of steel work is carried out and shall be afforded be all reasonable facilities including transport by the Contractor for satisfying himself that the fabrication is being under taken in accordance with the provisions of the drawings and specifications.

The Contractor shall continuously inform the Engineer of the progress in fabrication as and when the individual pieces get ready for inspection. The Contractor shall give a minimum of three working days notice to the Engineer for inspection of the individual pieces.

Unless directed otherwise, inspection shall be made by Third party inspection agencies (TPIs) (as directed vide **letter no. 2022/RS(G)/779/8/Pt.I(E3424266)** dt. **15.03.2023** or any other updated letter in this context from time to time). The contractor will have to arrange for TPI's inspection at their own cost.

8. Supervision of work :-

During the entire progress of the work the contractor shall have a competent supervisor in personal charge of the work. All works shall be done by skilled competent workmen

9. **Fixing of Steel Channel/H-Beam Sleepers at site :**

The Channel/H-Beam Sleepers shall be provided on the nominated bridges by the contractor. Following points are to be taken care of during execution of work:-

Working in the vicinity of Railway Track :

All works, which may affect the safety of Railway working, shall only be done under traffic block and written authority and also under the direct supervision of the Engineer-in-charge at site or his authorized representative for the said bridge. The Contractor shall in consultation with the Engineer, decide the sequence of work required to be done for efficient provision of channel/H-Beam sleepers.

The gauge, level, alignment of the track shall be adjusted by the Contractor suitably as per satisfaction of the Engineer and as per tolerances laid down in Indian Railway Permanent Way Manual for New Track.

- 10. The fabricator's name & Drg. No. should be indicated on all Channel/H-Beam Sleepers suitably on a plaque fixed on the web of the channel/H-Beam sleeper at one end.
- 11. Galvanised Steel Channel/H-Beam Sleepers are to be supplied and fixed on the bridges under concerning ADEN. The existing track on the bridge is to be dismantled including guard rails, running rails, bridge timbers removing all the fittings & fastenings. New channel/H-Beam sleepers are to be fixed as per Drg. No. Mentioned in relevant items of Schedule with alteration and correction up-to-date. The track is to be re-linked over the channel/H-Beam sleepers with the same or new running and guard rails by the fittings and fixtures supplied by the Contractor as per relevant items of the Schedule.
- 12. Works have to be executed in the running traffic condition or under the traffic blocks. The will be made available as per the convenience of the Railway depending on the position of the trains. Block and caution orders will be taken and cancelled by the authorized Railway officials only.
- 13. Released Unserviceable small fittings, Bridge Timbers and worn-out rails (if any) etc. will have to be transported by the contractor to the Store Depot of concerned PWI at his own expenditures and as instructed by Engineer-in-charge at site.
- 14. Dip-lorries for the transportation of the materials has to be arranged by the Contractor at his own cost.
- 15. Carrying of materials and protection of Dip lorries by trained staff will have to be done by contractor

Ensuring safe running of traffic under the supervision of Railway representative.

16. Contractor has to arrange for adequate number of skilled workers and competent supervisors for the execution of this work, their safety during dismantling, transporting and linking of the track over the girders will be the sole responsibility of the contractor.
17. Serviceable materials released from dismantling of the track should be properly accounted and kept in the custody of contractor for re-use. Unserviceable materials will be made good by the Railway (For rails, F/bolts Fish plates etc.).
18. Materials supplied free of cost by the Railway to the contractor will not form part of the value of the contract entered into and will fall outside the purview of the price variation clause.
19. All the mild steel fittings and fixtures have to be galvanized at the contractors cost before use.

The above conditions are read/understand and accepted by me/us with the rates offered by me/us as above.

07. SPECIAL CONDITION FOR PILE CONDITION:-

1. GENERAL

Before the work is started, the whole of the work site shall be cleared by the contractor at his own cost.

- (i) The contractor shall set out the work according to the plan and as directed by the Engineer or his representative. Reference pegs shall be made permanent and kept clear of all obstructions. It is the responsibility of the contractor with any extra payment to fix the center line and position of the piles during the course of the work. A base line will be fixed by the contractor at his own cost and the contractor shall make use of this base line to fix the position of the piles. If required the contractor shall make, at his own cost, subsidiary base lines during the execution of the work. The contractor shall obtain in writing approval of the Engineer for the correctness of the setting out and the reference marks, before commencing actual execution of the work. However such approval shall not relieve the contractor of his responsibility regarding correct setting out of work.
- (ii) The total length of piles mentioned in the schedule of quantities is based on the tentative founding levels fixed on the basis of generalized soil profile. The final founding levels for individual groups of piles shall be decided by the Engineer on the basis of actual boring data obtained during the execution of work. The contractor shall be bound to execute the entire piling work as per the final founding levels and no claim shall be admissible on this account. However, the payment shall be made for the actual work done as per schedule of rates.

2. PILE CAPS AND TIE BEAMS

Pile caps shall be of reinforced cement concrete of specified grade and shall be constructed as per approved drawings.

- (i) The pile heads shall be properly chipped off either manually or pneumatically up to proper level. The pile reinforcement shall be cleaned properly by wire brush before reinforcement for pile cap is placed.
- (ii) A levelling course of 1:3:6 nominal mix cement concrete shall be provided below the base of pile cap.
- (iii) The tie beams shall be of reinforced concrete cast monolithically with the pile caps. The grade of concrete in tie beams shall be same as that of pile caps. Tie beams shall be provided only in those foundations where these are shown in the approved drawings.

3. CAST- IN SITU R.C.C. BORED PILE:

- (i) The execution of pile foundation shall conform to IS: 2911 (part I to IV)-1979 with latest amendments. All the piles shall be of the same type and shall be built to carry the heaviest load.
- (ii) The specifications for safe allowable load, test load, total settlement, total deformations, net settlements, would be as per IS: 2911 (part I/Section 2).

4. FOUNDING OF PILES:

- (i) The founding levels of piles have been tentatively shown on the drawings. However depending on the actual conditions met at site during pile boring operations, the Engineer will decide the exact founding levels, which shall be final and binding on the Contractor.

5. BORING:

- (i) The ground level shall be taken at the location of each pile before commencement of boring operations.
- (ii) Boring may be done by either rotary or percussion equipment or grabbing equipment using reverse or direct mud circulation method. In case of unstable soils, the boring tools used should be such that suction efforts are minimized. Stabilization of the sides of the borehole shall be done by the use of bentonite slurry or casing. The size of cutting tool shall not be less than the diameter of the pile
- (iii) Removal of obstruction if any met with during pile driving or boring shall also be done by the contractor. No extra payment will be made for this work.
- (iv) The spoils arising out of boring shall be disposed off as directed by the Engineer within the quoted rates.

6. DRILLING MUD:

- (i) Use of drilling mud (Bentonite) in stabilizing the sides of the boreholes is permitted wherever necessary. The properties of The drilling mud shall comply with those given in Appendix- A of IS: 2911 (Part-I/ Sec 2). The Bentonite suspension used for piling work shall satisfy the following requirements:
- (ii) liquid limit of Bentonite when tested in accordance with IS: 2720 (part V) shall be more than 300 percent and less than 450 percent.
- (iii) The sand content of the Bentonite powder shall not be greater than seven percent.

Note: The purpose of limiting the sand content is mainly to reduce the wear and tear of the pumping equipment.

- (iv) Bentonite solution should be made by mixing it with fresh water using pump for circulation. The specific gravity of the Bentonite solution should be about 1.12.
- (v) The Marsh viscosity when tested by Marsh cone should be about 37 seconds.
- (vi) The swelling index as measured by the swelled volume after 12 hours in abundant quantity of water shall be at least 2 times its dry volume.
- (vii) The PH value of the Bentonite suspension shall be less than 11.5.
- (viii) The Contractor will not be entitled to any extra payment on account of the use of Bentonite for piling.
- (ix) Drilling mud shall be kept at least for a height of one meter above subsoil water and the hole shall be always kept almost full with fluid, which should preferably be kept in motion. The specific gravity and composition of the fluid shall be such as to suit the requirements of the ground condition and to maintain the fine materials from the boring in suspension. A five percent bentonite suspension would be generally suitable.

7. CLEANING OF BOREHOLE BOTTOM:

- (i) The bottom of the hole shall be cleaned very carefully before concreting work is taken up. The cleaning of the hole shall be ensured by careful operation either by flushing with fresh drilling mud through the bottom of the hole or by airlifting process. To lift the spoil at founding level before concreting, borehole shall be agitated by jetting with fresh drilling mud with relatively higher pressure than that used during boring or air through tremie pipe. While boring by use of drilling mud, the specific gravity of the mud suspension in the vicinity of the bottom of borehole shall be determined at suitable intervals and recorded. Consistency of the drilling mud suspension shall be controlled throughout the boring as well as concreting operation in order to keep the hole stabilized as well as to avoid suspension of the mud.

8. CASING:

- (i) In case of boring with casing, the casing shall be used from the working ground level. The casing shall be of sufficient thickness and strength to hold its original bore and show no harmful distortion.
- (ii) Where the soil is loose and liable to flow, the bottom of the casing shall be kept enough in advance of the boring tool to prevent the entry of the soil into the casing, thus preventing the formation of cavities and settlements in the adjoining ground.
- (iii) The water level in the tube shall be maintained at the natural ground water level till the tube is sealed so that no boiling of the bottom of the hole occurs due to difference in hydrostatic head.

9. CONCRETING:

The Pile shall be RCC bored cast in situ type with concrete of grade as specified in the approved drawing.

- (ii) The quantity of concrete required for the depth of the particular pile shall be calculated on the spot and checked with the actual quantity of concrete used. The quantity of concrete used in each pile should also be recorded and signed by the contractor and the Engineer's representative, and this record will form the basis for calculating the cement actually used. The concrete will be machine mixed and weigh batched.
- (iii) The minimum cement content should be 400 kg/cum of concrete. Under water concreting shall be done as per para. 13.2 of IS 456-1978. Concrete is to be placed in the pile only by tremie method ensuring that tip of the tremie is at least 500mm below the top of concrete at any time. The top of concrete in the pile shall be brought above the cutoff level to permit removal of all laitance and weak concrete before capping and to ensure good concrete of the specified grade at the cut-off level for proper embedment into the capping structural elements. The cement required for providing overflow concrete or scum concrete beyond cut-off level will be accounted in the same manner as that of the pile concrete.
- (iv) Concreting of boreholes shall start as soon as possible after its completion and in any case should not be longer than four hours. If a borehole is left unconcerned for more than two hours, it shall be cleaned thoroughly as directed by the Engineer before placing concrete. Concreting under water shall be done in one operation. It shall however, be ensured that concrete entering the tremie pipe does not get mixed up with the slurry.
- (v) In the circumstances where cut-off level is below ground water level, the need to maintain a pressure on the concrete equal to or greater than water pressure shall be observed and accordingly length of extra concrete above cut of level shall be determined and allowed in works.

10. SEQUENCE OF PILING:

- (i) During installation of piles, the sequence of construction shall be as directed by the Engineer.
- (ii) Where the piles are to be provided on the existing embankment lines and structures etc. Care shall be taken to avoid damage to existing structures.

11. DEFECTIVE PILES:

- (i) In case, defective piles are formed, they shall be removed or left in place as directed by the Engineer depending on how they affect the performance of the adjacent piles or the group as a whole. Additional piles shall be provided without any cost whatsoever to the employer and in this regard Engineer's decision shall be binding on the Contractor.
- (ii) Any deviation from the designed location, alignment or load capacity of any pile shall be noted and adequate measures shall be taken before the concreting of the pile cap if the deviations are beyond the permissible limits.
- (iii) After concreting the actual quantity of concrete shall be compared with the average obtained from field observations made in the case of a few piles initially cast. If the actual quantity is found to be considerably less, special investigations shall be conducted and appropriate measures taken.

12. CONTROL OF ALIGNMENT:

- (i) The control of alignment of piles should be as per Para 7 of IS: 2911 (Part I/Section 2) with latest amendments.
- (ii) Piles shall be installed as accurately as possible as per the designs and drawings. The piles shall not deviate more than 75mm from its designed positions at the cut off level and tilt not exceeding 1.5 percent from vertical.
- (iii) In case of piles deviating beyond these limits, and to such an extent that the resulting eccentricity cannot be taken care of by a redesign, piles shall be replaced or supplemented by one or more additional piles by the Contractor at his own cost and any additional concrete in the capping structures necessitated on account of such additional piles, with shuttering and reinforcement shall also be to the Contractor's cost. The decision taken by the Engineer regarding the need for such additional piles, their location and other details, the increased in the size of supported structures necessary because of additional piles etc, shall be final and binding on the Contractor.
- (iv) Level marks shall be put accurately on each pile immediately after it is installed. If any pile shows subsequently a tendency to heave up due to installation of other piles later or due to any other reason. The same shall be reinstalled firmly in a suitable manner as approved by the Engineer.

13. CHIPPING OF PILE HEAD:

- (i) Manual chipping shall be permitted after three days of pile casting. Pneumatic chipping shall not be started before 7 days.

14. PROVIDING M.S. LINERS:

This item is for supply and fixing permanent M.S. Liners for the piles from cut off level up to the required depth as may be decided by the Engineer.

- (i) The Contractor shall fabricate the liners from M.S. Sheets to suit the diameter of the pile as directed. The required length of the M.S. Liners will be made up by welding each unit at site by the Contractor. M.S. sheets required for manufacture of the liners shall be supplied by the Railways.
- (ii) The length of the liner above the cut- off level shall be cut to facilitate chipping the top portion of the pile and for interlacing its reinforcement bars into the casting slab.
- (iii) The payable depth of the liner shall be measured from the cut- off level to the depth up to which the liner is actually provided, though the liner might have been provided right from the level of the working platform from practical considerations.

15. REINFORCEMENT:

- (i) When the tube or bore has reached its final depth, it shall be free from any foreign matter before the placing of the reinforcement. The reinforcement for the pile shall be carefully placed in position and concreting then started.
- (ii) The reinforcement shall be made into cages by suitable spot welding of the lateral ties or spiral binding on the longitudinal bars so as to be able to withstand handling of the cages without damage or distortion. The reinforcement shall be extended to a sufficient distance to permit it to be adequately bent into the capping structural elements. Care shall be taken to preserve the correct cover and alignment of reinforcement throughout the whole operation of placing the concrete.

16. RECORDING OF DATA:

During installation of piles, a complete site record shall be made by the Contractor, as per IS 2911 (Part /Section 2) along with any other data as directed by the Engineer. The record shall be submitted to the Engineer in triplicate on completion of installation of each pile.

17. CONCRETE STRENGTH TEST:

Concrete strength test shall be carried out at regular interval or as directed by the Engineer. Sampling, testing and interpretation of results shall be done as per relevant clause of these specifications. The cost of these tests shall be borne by the Contractor.

18. MEASUREMENT AND PAYMENT:

- (i) In case of piles, payment for piles shall be made for the length of pile measured from actual founding level to the bottom of pile cap and in no case payment for extra concrete consumed shall be allowed. The rates quoted for the relevant item in the schedule shall be deemed to be inclusive of such excess consumption if any. However the actual quantity of cement consumed will be entertained. The rates shall also be deemed to be inclusive of cost of all labour, material, tools and equipment and other work involved in making the pile complete as shown in the drawing, cutting and removing of pile heads to correct levels etc. No payment for empty boring will be made.
- (ii) No payment shall be made for temporary casing permanent liner provided if and where required above bottom of pile cap up to working platform level, which is to be removed up to bottom of pile cap will not be paid for.
- (iii) Payment for liners shall be made on the basis of weight of liner calculated on the basis of unit weight of plates used for issue of states, Theoretical diameter and the actual length of liner plate provided measured from the cut off level to the depth to which the liner has been provided. The rate for the item shall cover the cost of all materials, cost of fabrication of liner by welding or any other means including all consumables, fixing of liner in position and to the depth as decided by the Engineer, cutting of the liner up to cut off level, wastages in the liner plate, and all other work of any description involved in the provision of liner plate.

19. LOAD TEST ON PILES:

- (i) The test shall be carried out on test pile and selected representative working piles as directed by the Engineer and are to be carried out only after the lapse of sufficient time to permit adjustment of the soil conditions following disturbance resulting from the method of installation. The period between installation of the test pile and any other piles in the vicinity and the test loading of the pile shall be minimum 28 days or otherwise specified by the Engineer. The test pile shall be installed following specifications as indicated in preceding clauses and test shall be carried out in accordance with IS 2911(Part IV).
- (ii) The Contractor shall so adjust and/ or phase out the programme of construction so as to allow for time required in conducting routine tests. Minimum number of routine tests shall be two percent of total number of piles. Routine tests shall be carried out for vertical load (compression) and lateral load.
- (iii) The number of routine tests on piles shall be as indicated in schedule of quantities and these may be varied as tracked by the Engineer depending on site conditions. Routine tests shall be carried out on piles selected by the Engineer.

20. VERTICAL LOAD TEST:

METHOD:

- (i) The test load shall be applied by jacking against Kent ledge or any other structure approved by the Engineer. No working pile shall be used for any loading for load test on pile.
- (ii) Any Kent ledge used shall be adequately supported to prevent instability particularly in the event of a sudden change in the load reaction from the pile. The reaction from Kent ledge to be made available for the test shall be 25% more than the final test load proposed to be applied. The test shall be carried out at cut-off level or at such depth below ground level as directed by the Engineer.
- (iii) Where anchor piles are used to sustain the loaded platform for the test, the center to center distance between test pile and anchor pile shall be minimum 5 times the test pile diameter and there shall be minimum two anchor piles at two ends of the test pile. Details regarding test set up shall be submitted to the Engineer well in advance for approval. Permanent working piles shall not be permitted to be used as anchor piles and anchor piles, if used, shall be entirely at Contractor's cost.

LOAD:

- (i) The jack is to be hydraulically operated. The hydraulic power being supplied from a power driven pump having a discharge which can be varied to suit the required rate of loading. The load being applied to the pile shall be recorded either by a gauge in the hydraulic system or a proving ring with fresh calibration from an approved laboratory. The reading limit of the recording device shall not exceed 1.5 of the full load. Test load shall be applied in equal increments of about one fifth of the estimated safe load and reduced to smaller increments at final stages or to direct. Alternate loading and unloading of each load increment shall be performed and elastic and plastic settlements recorded.
- (ii) A test certificate and fresh calibration chart from and approved laboratory for jack and pump is to be produced to the Engineer well in advance before the same is used for any load testing on pile.

21. DEFLECTION MEASUREMENTS:

- (i) The settlement of the pile shall be recorded by three dial/ gauge recording to 0.02mm and placed at equal distance around test pile. The dial gauges shall be fixed to datum bars whose ends rest upon no movable supports. The supporters for datum bars with reference to which the settlement of the pile would be measured shall be at least "5 d" away clear from the test piles (where "d" is the diameter of the circular pile) subject to a minimum of 2m for good sandy soil and 5 m for loose soil.

22. CAPACITY OF TESTING EQUIPMENT:

The testing equipment shall be capable of loading a pile to twice the design loading as per bridge manual reference, updated engineering code.

23. PREPARATION OF PILE HEAD:

The pile head shall be chipped of carefully till sound concrete is met. The projecting reinforcement shall be bent suitably and the top finished smooth and level with plaster of Paris, when required or as directed by the Engineer.

24. METHOD OF LOADING AND ASSESSMENT OF SAFE LOAD:

The Contractor shall perform routine load test on working piles as directed and selected by the Engineer and results must satisfy requirements of the test as indicated hereafter.

a. ROUTINE TEST:

- (i) Routine test and assessment of safe load carrying capacity of pile shall be carried out as per IS: 2911 (Part-IV). Loading shall be not less than one and a half times the estimated safe load carrying capacity of the pile. The loading procedure shall be as follows.
- (ii) The test shall be carried out by applying load in equal increments of about one fifth of the estimated safe load and reduced to smaller increments at the final stages, or otherwise as directed by the Engineer. Each stage of loading or unloading shall be maintained till the rate of movement of pile top is not more than 0.02 mm per hour in case of clayey soils and 0.10mm per hour for soils or a maximum of 2 hours. For this purpose, the types of soil met at pile shall be considered. The estimated safe load may be maintained for 24 hours and settlements should be observed every hour during this period.
- (iii) For each increment, application of „load“ shall be smooth as far as possible. Time and settlement observations shall be made at the commencement and completion of each increment. Settlement observations shall be continued when each increment load is kept constant at about 15 minute intervals.
- (iv) Safe load on single pile shall be as given in IS: 2911 (Part IV) under Vertical load test – C1.4.2.3.9.

b. RECORDING OF DATA AND PRESENTATION:

- (i) All pile test data, i.e. load, displacement and time shall be recorded in a suitable form along with the information about the pile as approved by the Engineer.
- (ii) The data shall also be presented by curves drawn between load displacements and displacement time and safe load shall be indicated on the graphs.

c. LATERAL LOAD TEST:

- (i) The test shall be conducted as far as possible at the cut- off level of piles. The test may be carried out by introducing a hydraulic jack gauge between piles or the reaction may be suitably obtained otherwise. These tests may also be done by applying lateral pull by at suitable set-up.
- (ii) If the test is conducted by jack located between two piles, the full load imposed by the jack shall be taken as the lateral resistance of each pile. The loading shall be applied in increments of 20% of the estimated safe load.
- (iii) The next increment shall be applied after the rate of displacement is about 0.05mm per/hour in sandy soils and 0.02 mm per hour in clayey soils or 2 hours whichever is earlier.
- (iv) The displacement shall be read by using at least two dial gauges spaced at 30 cm and kept horizontally one above the other on the test pile. Where is not possible to locate one of the dial gauges in the line of jack axes, then the two dial gauges may be kept at a distance of 30 cms at a suitable height and the displacement interpolated at load point from similar triangles.
- (v) The safe lateral load on the pile shall be as stated in Cl. 4.3.5 of IS: 2911 (Part. IV).
- (vi) A test certificate and fresh calibration chart from an approved laboratory for jack and pump is to be produced to the Engineer well in advance before the same is used for any load testing on pile.

d. MEASUREMENT FOR PAYMENT:

Payment for routine load tests shall be on the basis of numbers of pile tested as per specifications, with the proviso that tests which do not show satisfactory results shall not be paid for.

e. RATES FOR TESTING:

- (i) Payment for testing shall be made on the number of tests carried out provided the test is successful and results are satisfactory and pile acceptable as per codal provisions.
- (ii) Rates for lateral load tests and routine load test for vertical load on working piles already driven shall cover, earth excavation, supplying and transporting all equipment and kent ledge etc. all necessary work for making arrangements for loading, supplying and fixing of testing instruments, recording the results, and making all arrangements for unloading, dismantling and clearing the site. The rates shall also cover all materials and labour necessary for all connected work and submission of test results as specified, and all other work or any other description connected with the test.

- (iii) Payment for testing of piles shall be made to the Contractor only when the test is found to be satisfactory. For tests which are found unsatisfactory no payment shall be made to the Contractor. The pile will then be considered defective and will not be paid for. No payment shall be made for test which is incomplete for any reason whatsoever. Additional tests required by the Engineer shall be carried out at the same quoted rates.
- (iv) The Contractor shall also indemnify the employer against any claim or obligations arising out of any damage to structure or out of any injury to any person / persons due to piling work done by him.

f. VARIATION TO THE ANTICIPATED DEPTH:

- (i) Any additional length of pile over the approximate length shown in the drawings or mentioned elsewhere shall be carried out at the rate quoted against the items of work for piles.
- (ii) The Contractor shall carry out the work at the accepted rate without any variation limit in case of any increase or decrease in the number of piles.

08. SPECIAL CONDITION OF CONTRACT OF RECONDITIONING OF POINTS AND CROSSING

1. The Welder who perform the job of reconditioning should have certificate from firm approved by RDSO for supply H3-C class electrode. and tenderer will also produced the certificate with tender document. Non submission of this certificate along with the offer will lead to summarily rejection of the offer.
2. Contractor should have the certificate from the firm authorized by RDSO for H3C/H3-C class electrode for the execution of the above job.
3. Contractor should have the certificate for firm authorized by RDSO/LKO for the procurement of the genuine materials.

4. Work Specification:

- 4.1.1 These special tender conditions, instructions to tenderer and the General Conditions of Contract (GCC April-2022) as amended from time to time and up-to-date shall govern the work done under this contract. Where there is any conflict between these, the special conditions will prevail.
- 4.1.2 The work shall conform to manual metal arc welding electrodes brand under H3-C class as per IRS specifications and approved by RDSO/LKO.

4.2 Scope of work:-

- 4.2.1 The work will be carried out by contractor as per provisions of the contract under the supervision of P.Way official of the Railway by deploying the entire welding team skilled/unskilled labour etc.
- 4.2.2 The work of reconditioning of Crossing/Tongue rails shall be done in situ/under traffic or on cess as per requirement. In case of work being done under traffic, through all effort will be made for arranging of suitable speed restrictions/traffic block, however, the contractor shall have no claim on the Railway non availability of traffic block/caution order.
- 4.2.3 The entire welding as required for carrying out the reconditioning work along with filing/grinding shall be engaged by the contractor at its own cost. No Tools & Plants or Electricity etc. will be supplied by the Railway. All the Tools & Plants, materials and machinery will be carried to and from site by the contractor at his own cost.
- 4.2.4 The contractor shall be responsible for proper filing/grinding of reconditioning work and final finished surface shall be within specified tolerance to the full satisfaction of the site Incharge.
- 4.2.5 Reconditioning of crossing where ever is more than 6mm at nose will only be carried out along with that of Wing rails. Crossing wise register will be opened by SSE(P.Way)/ Incharge and wear measurements should be recorded for each crossings separately before actual work of reconditioning is taken in hand. This should be signed by both the SSE(P.Way) and contractor and checked 100% by Incharge before actual welding is taken in hand.
- 4.2.6 While doing reconditioning, recommendations by RDSO should be followed and the work will be done during the day time only and when the weather is clear.

4.3 Quality Control :-

- 4.3.1 The welder who will perform the job of reconditioning should have the certificate from the firm approved by RDSO for H3C/H3-C class electrode.
- 4.3.2 The reconditioning crossing/switches should have guaranty of satisfactory performance for 6months and for which 10% of the cost of the work will be retained by the Railway for the guarantee period. In case of failure of any crossing/switches within 6 months from the date of reconditioning or from the date of inserting into track, the reconditioned work will be done by the contractor at their own cost and nothing extra will be paid by the Railway for that.

- 4.3.3 In case of failure of any reconditioned crossing/switches, the contractor has to re-do its reconditioning at his own cost within a period of six months, which will be intimated by the Engineer-in-Charge.
- 4.3.4 If the second reconditioning work is not done by the contractor within two months from the period as mentioned in Para 4.3.3 above, deduction will be made from the contractor dues, at the double of the rate of payment made to him for that particular reconditioned work as a penalty.

5.0 Miscellaneous:

- 5.1 A competent Railway Supervisor will be arranged by Railway to supervise this work. A log book for the daily work assignment and progress will be maintained by the Railway Supervisor. This log book should be separate from the site order book, meant for instructions to be given to the contractor by inspecting authorities.
- 5.2 The contractor should employ a competent supervisor whose technical knowledge has been checked for such work and certificate issued.
- 5.3 Work should only be permitted in the presence of the Railway and contractor's authorized Supervisor, SSE(P.Way)/Incharge will ensure that no work is undertaken without the presence of the authorized Railway or Contractor Supervisor.
- 5.4 The contractor will be responsible for safety of track as well as its labour and tools & plants.
- 5.5 The contractor shall not start any work without the personnel presence of the authorized Railway Supervisor/PWI at site. In case, contractor representative starts any work in absence of Railway supervisor/PWI, it shall be treated as unauthorized and illegal, tampering with the track and the contractor will be liable for action under the 'INDIAN RAILWAY ACT'.
- 5.6 The contractor will be responsible to ensure safety of his work and nothing will be left infringing in the track.
- 5.7 In case of failure of reconditioned crossing the contractor shall have to do recondition at his own cost within a period of one month, which will be intimated by the engineer –incharge in writing.
- 5.8 The reconditioned crossing should have guarantee of satisfactory working for 6 months. SD shall be returned only after satisfactory performance during guarantee period. In case of failure of any crossing within guarantee period, the reconditioned work will be done by the contractor at his own cost and nothing extra will be paid by railway for rectifying the defects. However railway will ensure that proper fittings are provided on points & crossings and points and crossings are maintained properly.
- 5.9 (i) The crossings must give a service life of 80 GMT after in-situ reconditioning. The parameter for measurement/assessment shall be governed by IRPWM para no. 237(3)(e). However, in case of pre-mature removal of crossing, RDSO/CTE will establish the cause of failure. Decision of RDSO/CTE shall be final and no claim will be entertained whatsoever once the cause is established.
(ii) In case of failure due to improper reconditioning as established in clause 5.10.
(iii) The firms shall do the reconditioning again at no extra payment.
- 5.10 Pooled performance Guarantee of Rs. 5,00,000/- is to be deposited by the firm to Railway, if already not deposited against any other contract of this nature. In case of failure within guarantee period of 80 GMT or 24 months in main line, if firm is not carrying out reconditioning will be carried out from any other agency/department. Total cost of reconditioning, as decided by contracting authority will be deducted from Performance guarantee.
- 5.11 Large number of men and machinery are deployed by the contractors for reclamation of crossing. It is therefore essential that adequate safety measures are taken for safety of the trains as well as the work force.
- 5.12 The contractor shall not start any work without the presence of railway supervisor at site.
- 5.13 Whether the road vehicles and/or machinery are required to work in the close vicinity of railway line, it should be ensured that there is no infringement to the railway's schedule of dimensions. For this purpose the area, where road vehicles are required to ply, shall be demarcated and acknowledged by the contractor. Special care shall be taken for vehicle/machinery such that there is no infringement to the running tracks.
- 5.14 The tenderer shall submit a certification from RDSO, Lucknow to the effect that the offered technology for in situ reconditioning of CMS crossing is recommended for field trial and approved by Railway Board for extended trial/regular use.

09. Special Condition for Mobile Flash Butt Welding:-

- 1.0 The following Special Conditions shall apply to the contract for the Flash Butt Welding of rails by Mobile Flash Butt Welding Plant. Wherever Special Conditions differ from the General Conditions, former shall prevail over the General Conditions.
- 2.0 **Scope of work:**
- 2.1 The work involves conducting Flash Butt Welding at site using contractors own, labour, own flash butt welding plant & own infrastructure and all other tools and plants.
- 2.2 The contractor will have to make his own arrangement for loosening/removing of fittings, movement of rail panels for creating gaps, end cleaning of rails, end cropping of rails to remove holes, welding and stripping of rail joints, grinding and final finishing of welded joints complete. The contractor will arrange adequate labour, competent supervision, grinding, welding, stripping, pre and post straightening machines as required for the job. All the machines, plant and, equipment will be arranged and provided by the contract or at his own cost.
- 2.3 Scope of the work cover unloading and transporting of free rail, welding of rail joints of free rail to make it 3/5 /10 rail panels , transporting welded rail panels to the site of laying and welding of rail joints of single/panel rail in track for converting it to long welded rails.
- 2.4 Rails to be welded will be of following types:

60 Kg (90 UTS), 52 Kg (90 UTS), 52 Kg (72 UTS), 90 R
Unless otherwise superseded by the stipulation of this contract, the welding process and methodology will be governed by the “Manual for Flash Butt Welding of Rails (2022)” with up to date correction slips issued by Research Design and Standards Organisation (RDSO), Ministry of Railways, Lucknow.
- 2.5 The free rails in BG rakes are proposed to be offered at nominated station yard/depots which may be in midsections, in siding/loops for the purpose of unloading and transporting the same to the nominated depots which may be in yards and midsections. The land required for making such depots will made available to the contractor free of cost, if available within the Railway limits.
- 2.6 The free rails are to be converted into 3/5/10 rail panels by Flash Butt Welding of rail in depot set up by the contractor. It shall be the responsibility of contractor to pull and align the rails as required and directed by Engineer-in-Charge with rails in “head on” position without contact with soil.
- 2.7 The welded panel are to be stacked at the depot and the same have to be transported and distributed at the site of laying in the section/station yard. The contractor shall exercise special care in handling of rails so as not to bend or damage them and shall follow the stipulations of “Handling Instructions for 90 UTS rails” as detailed in the para 11 of the Manual. In addition the contractor shall maintain on site equipment and labour to straighten and align the rails to tolerances specified, rails that may have been bent or damaged during the rail handling process.
- 2.8 These instructions are laid down for execution of butt Welding work at site by a robust and sturdy mobile self propelled flash butt Welding plant (hereafter, called the MFBWP), which should be suitable for aligning & welding of rails and shearing upset welding metal to produce long welded rails and capable of substantially high output under different situations, as laid down in the specifications.

3.0 PERFORMACE OF WORK:

- 3.1** The work shall be performed at the place or places specified in the tender or at such other place' or places as may be approved by the Engineer.
- 3.2** The capability of welding plant & its accessories installed by the contractor will be judged by testing initial 100 nos. of weld joints for following tests to confirm whether the welded joints produced are satisfying the requirement as per the "Manual for Flash Butt, Welding of Rails,.2022 ,with up-to-date correction slips issued by RDSO/Lucknow:
- 3.3** Visual Inspection & Dimensional check: - Every weld joint will be checked for it & weld joints not passing under this check will be rejected. The rejection more than 1% will be considered as unsatisfactory.
- 3.4** Ultrasonic Test: - Each & every weld joint will be tested for it & weld joints not passing under this test will be rejected. The rejection more than 0.1% will be considered unsatisfactory.
- 3.5** Transverse Test: - The weld joint @ one per 25 weld joints will be tested for it & weld joints not pass under this check will be rejected. No rejection is permitted in this test.
- 3.6** Hardness Test: The Weld joint @ one per 25 weld joints will be tested for it and weld joints not pass under this check will be rejected. No rejection is permitted in this test.
- 3.7** Macro Examination: The weld joint @ one per 25 weld joints will be tested for it & weld joints not pass under this check will be rejected. No rejection permitted in this test.
- 3.8** In Case, the initial 100 weld joints produced by contractors welding machine fails to pass the above tests, another opportunity will be given to the contractor for testing of another 100 weld joints for above tests. If these weld joints pass the above tests satisfactorily, the contractor will be allowed to continue the work further and if these weld joints do not pass the above test, the contract will be terminated on contractors account and no payment will be given for the weld joints done for testing.
- 3.9** The visual inspection & Dimensional Check, Ultrasonic Test, Transverse Test etc. will be done by railway in its premises in presence of the contractor's authorised representative. The USFD machine, operating staff and all other infrastructure shall be arranged by the contractor at site to enable testing.
- 3.10** The Hardness Test & Macro Examination will be done at any of the following test centres or place as approved by engineer in charge.
RDSO / Lucknow, Plant Depot Mugalsarai C.M.T. / KGP The testing charges including transportation charges for carrying of test places to & from testing centre will be borne by the contractor.
- 3.11** Once weld joints produced by the contractors welding machine & its accessories are found to satisfy the requirements as per the Manual for Flash Butt Welding of rails 2022 with up to date correction slips issued by R.D.S.O. / Lucknow, after initial testing of 100 joints, the further testing will be done as per the schedule prescribed in the Manual for Flash Built Welding of rails 2022 with up to date correction slips issued by R.D.S.O. / Lucknow.

4.0 DIMENSIONAL AND OPERATING REQUIREMENTS

- 4.1** The profile of the complete system longitudinally and in cross section during transfer towed in train formation or self propelled or during working shall be within the Indian Railways standards metric BG Schedule of Dimensions. The bidder shall ensure that the MFBWP does not cause infringement while moving on curve up to 10° at any cross section.
- 4.2** Adequate Clearance shall be allowed so that no component infringes the minimum clearance of 102 mm from rail level while travelling.
- 4.3** MFBWP shall be capable of continuous operation during the varying atmospheric and climatic conditions occurring throughout the year in India.

4.4 Fuel tank capacity / consumable storage capacity shall be adequate for travelling of long distances / working as the case may be.

4.5 It shall be capable of working without requiring power block in electrified section 25 KVA Current is used for traction through on overhead wire at 5.5 m above rail level.

4.6 While working on double line sections, it shall not infringe the adjoining track.

5.0 ON ROAD

The provisions of the Motor Vehicles Act 1988 shall be complied with. It shall be the responsibility of the manufacture to obtain the technical certification of roadworthiness of the vehicle from the authorised agencies in India such as the Automobile Research Institute of India, Pune prior to the registration of the vehicle. For plying the vehicles on roads of different classification, it may require special permission from the Ministry of surface Transport, Government of India.

6.0 FLASH BUTT WELIDNG PLANT

6.1 The important characteristics of the Flash Butt Welding Plant shall be as under.

- i) The welding clamps of rail shall provide contact area along the entire web of rail and shall be fitted with spring-loaded balls for optimum alignment of rail ends.
- ii) The Welding head shall be equipped with an integrated shearing device for sharing of the weld seam automatically, immediately after the welding process has been finished.
- iii) The welder head shall be capable of welding loose rails of 13m to 39 m long rail / 520 m long rails or of any intermediate length into longer lengths in different situations as laid down in this specification. Loose rails shall be placed to one side with long welded rail on other side.
- iv) The clamping jaw construction should be such that sleeper around the rail joint should not hinder the welding process under opened out fastening condition.
- v) During welding process, rail ends shall be adjusted to pre design over lift value of 0.6 mm to 3 mm depending upon type of rail section materials and UTS and pre decided value to avoid dip at weld. The bidder of the machine for this purpose shall give the design over life values for respective 52kg/60 kg rails. Rail end crowning should be accomplished with the help of function key given in machine for this purpose.
- vi) A recorder system shall be provided for the simultaneous recording of butting pressure, upset and magnitude current and duration of welding etc. for each weld.

6.2 It shall be the responsibility of the contractor to pull and align the rails as required and directed by the Engineer with the rails in head on position. In addition the contractor shall maintain on site equipment and labour to straighten and re align rails to straightness tolerances specified, that may have been bent or damaged during the rail handling processes.

6.3 Arrangement shall be made to have test welds and their testing for proving of the flash but welding technique and competence of welders deployed for welding work.

6.4 The welds shall be finished to final profile by controlled grinding as approved by the Engineer. The finished weld alignment shall be as per specified tolerance Rail head profile grinding to produce the finished alignment shall not extend more than 300 mm on either side of the weld.

6.5 All welds shall be indelibly marked with an individual number that clearly identifies the welder and the weld. This weld number shall be painted on the rail web. The number, once painted in the rail, shall be maintained until taking over of the work. The weld identification shall contain a maximum of five characters.

- 6.6** All surfaces or other irregularities shall be ground flush. Any defects or irregularities in welds which, in the opinion of the Engineer cannot be rectified by grinding shall be rejected. These defective joints shall be cut out 20 cms on either side before rewelding at the contractors' expenses.
All works pertaining to preparation of rail ends for welding like loosening / removing fittings, pulling of rails etc and re fixing of all fittings to be done by the contractor, nothing extra will be paid on this account.

7.0 WORK PLAN

The contractor shall submit his proposed method statement along with quality assurance plan for welding to the Engineer for approval. This plan shall include the details of machinery, welding process to be adopted, tools and equipment for finishing the welded joints.

8.0 OPERATIONS

The contractor shall employ qualified and experienced personnel to weld the rails and shall carry out regular test with his own machine, plants and inspections to ensure that the welds comply with the specifications detailed herein.

9.0 PREPARATION OF RAILS TO BE WELDED

- 9.1** All rails to be used for welding shall be examined prior to welding. Rails not meeting with the rail end geometry as stipulated in clause 3.4 of the Manual shall be straightened before welding by using a purpose made rail and straightener as approved by the Engineer that shall cause no damage or indentation to the rails. Any rail which cannot be straightened to within the above tolerances shall be cut back to a sufficient distance to get the required alignment. All straightening or cutting shall be done prior to welding. The rails shall be cut clean and square by means of rail saws or abrasive cutting disk. Gas torch cutting of rail is prohibited.

- 9.2.** Rail ends to be welded shall meet the following geometrical standards.

- a) End bends in the vertical plane not greater than 0.7 mm on a 1.5 m straight edge, sagging ends not permitted.
- b) End bend in the Horizontal Plane not greater than + 0.7 mm on 1.5 m straight edge.
- c) Deviation of the end from the +square not greater than + 0.6 mm.

- 9.3.** Difference in width of rail head to be welded

- i) The difference in the width of railheads of two rails to be welded shall not exceed 1.0 mm.
- ii) Any difference in the width of railheads at the welded ends, in case of both new and old rail shall be transposed to one side of the head keeping the other side as perfectly aligned. The aligned side of such welded panels shall be distinctively marked by a distinguishable permanent paint.

10.0 END CLEANING

- 10.1** Before welding, end faces & both sides (electrode contact location) of the web of the rails shall be thoroughly cleaned of loose scales, rust paint etc. by mechanized brushing. Oil and grease, if present shall be removed by Carbon Tetrachloride or Benzene. If any internal defects such as piping are noticed during end clearing the rail shall not be welded.

- 10.2** The rail ends shall be cleaned up to a length as prescribed by the welding machine manufacturer before placing them on rollers. The gap between the rail ends to be welded shall be according to the supplier specification. The rail ends shall be perfectly aligned in both horizontal and vertical planes. To compensate for lowering of joints due to thermal contraction, the two ends to be welded shall be raised by appropriate amount as specified by the bidder or as gained by the experience of the welding team.

11.0 TESTING OF JOINTS

- 11.1** The Contractor shall submit a testing procedure plan covering the test criteria stipulated in clause 10 of the Manual for testing of every joint as well as testing of sample joints. The test to be conducted shall include Visual Inspection, Dimensional Check, Ultrasonic Test, Transverse test and Macro examination. For the transverse test, test criteria in respect of 880 grade rails shall be as stipulated for 60 kg / 52 kgs rails respectively, in clause 10.2.2.1 of the Manual.

11.2 No payment shall be made for sample welds for the purpose of testing. But the rails required for test joints shall be given free of cost but no extra payment shall be made for cutting rails etc.

11.3 The contractor shall also arrange to transport these joints at his own cost for the purpose of testing. The test pieces after testing shall be returned at the nominated point to railway with his own transport.

12.0 QUALITY CONTROL

In order to ensure quality control during the welding process, the contractor shall furnish a quality assurance programme to be approved by the RDSO, such a plan shall have provision for submission of weld records of all welds. The proposed proforma for the maintenance of weld records shall be submitted by contractor for approval. The record shall contain as a minimum the following information.

- i. Pre welding inspection results.
- ii. Physical inspection results.
- iii. Ultrasonic inspection record.
- iv. Weld chained to the nearest meter.
- v. Weld number
- vi. Rail grade and section
- vii. Date of Weld
- viii. Rail temperature at the time of welding
- ix. Weld test record sheet
- x. Dimensional check result.

Copies of certified production welding test results identify the rail panel and weld position shall be submitted to the engineer.

13.0 TRANSPORTATION AND IMPORTATION OF MFBWP

13.1 Transportation of the MFBWP shall be the responsibility of the contractor including customs and other clearances, taxes payable and all other related formalities and charges which may be required for the import and export of the MFBWP and also other equipment, spares, consumable etc which may be required during the contract.

13.2 Contactor shall bear the cost of transfer of the MFBWP or any of its part. When transported in train formation in India Railway network for any reason on contracts account like repairs, maintenance schedules, etc.

14.0 LAND

The contactor can make use of the Railway land to the extent available and spared by the Railway free of any charge in case any additional land is required for storage of material etc. the contractor will have to make his own arrangement at suitable location.

15.0 CRITERIA OF CONTRACTION / CODES & SPECIFICATIONS

15.1

- a) The specification mentioned in special condition regarding site Data and specification shall be prime governing.
- b) Where there is conflict between IRS & IS specifications, IRS specification shall prevail.
- c) Where there is no provision of specification in IRS, the IRC conditions shall be followed.

15.2 Apart from the basis data, specification etc. all items of works shall be governed by the following codes as revised / corrected / amended up to the time of submission of the tender / negotiated rates for acceptance.

1. Indian Railway Manual for Flash Butt Welding of rails 2022 with upto data correction slip issued by RDSO / Lucknow.
2. East central Railway Engg. Deptt. General Condition of contract-2022 and instruction to tenderers and standard form of contract.
3. East Central Railway Engg. Deptt. Standard schedule of Rate -2021 within errata and

- corrections slip upto date.
- 4. East Central Railway Engg. Deptt. Standard specifications for material and work 2022 with errata and correction slip upto date.
- 5. Indian Railway Schedule of Dimension of Broad Gauge.
- 6. Indian Railway permanent way manual.
- 7. Indian Railway Works Manual.

Note

- a) Latest edition including correction slip as on date of submission of tenders / negotiated rates shall govern.
 - b) The list given above is by no means exhaustive. All IRS codes pertaining to work shall be applicable.
- 16.0 The contractors shall employ sufficient number of technical staff who shall be qualified Graduate Engineers and Diploma Holders as required for setting out alignment taking the established bench marks and the cross section levels plotting the cross section levels, computation of quantities, taking measurements, preparation of bills and also for efficient supervision of various works at different work spots.
- 17.0 **SAFETY PRECAUTIONS**
 The contractor shall at all times adopt such safe methods of work as will ensure safety of structure, equipment, labour and public. If at any time, the Engineer in charge finds the safety arrangement inadequate or unsafe, the contractor shall take immediate corrective actions as directed by Engineer at site. Any dereliction in the matter shall in no way absolve the contractor of his sole responsibility to adopt safe working methods.
- The contractors shall design and execute temporary works, such as to ensure absolute safety of contractors personnel as well as railway, staff and personal engaged on the work. The contractors shall also be responsible for all structural & decorative damage to property or injury caused by works or his workman to persons, animals or things including any compensation arising out of claims on this account and shall be held entirely responsible for all works carried out by him until it is finally taken over by the Railway .
- All safety measures shall be taken by the tenders / contractor to prevent any accident at site during execution of work.
- 18.0 **Maintenance period**
 The maintenance period shall be one year after the completion of work. If any joint fails within this period it shall be replaced free of cost by the contractor with two joints or the contractor will reimburse four times the accepted rate per joint to railway, which will be adjusted from the security deposit available with the Railway or the contractor may be asked to deposit the amount.
- 19.0 **Construction Equipment**
- 19.1 The contractor shall arrange and operate at his own cost, all necessary tools, plants, machinery and equipment necessary for successful and timely completion of the work.
- 19.2 If in the opinion of the Engineer, equipment / plants brought by the contractor are not suitable for the work concerned, the Engineer shall have the right to order the contractor to replace them by suitable plants / equipment. In the interest of public convenience the Engineer may insist on a specific method of execution of the work.

20.0 Service Roads

Service Road required by the contractor either near the site or elsewhere whether within or outside railway limits for carriage of material or for any other purpose whatsoever will have to be constructed and maintained by the contractor at his own cost. For the purpose of construction of service roads on Railway land, permission will be given free of any charge. If any land other than railway land is necessary to be arranged or to be entered upon, such arrangement or permission to enter in the land will have to be arranged by the contractor at his own cost. The contractor will not prefer any claim whatsoever on this account. The Railway, however, reserves the right to make use of such service roads as may be constructed by the contractor without any charge. However, contractor may be permitted to make use of existing service roads, or service roads constructed by the Railway for its use, free of cost.

21.0 Water Supply

The contractor shall be responsible for the arrangements to obtain clean water supply necessary for the work as well as for drinking water for his labourers at his own cost, and the quoted rates shall be deemed to include the cost of such water supply arrangements. On request by the contractor the Railways may assist only to the extent of recommending the contractor's application for water supply to any authority arranging such supply.

22.0 Interruption of works during monsoons

The contract period may extend over a few monsoons. In the region, the monsoon lasts for about 2½ months from July to Sept. and there are severe winter rains during January affecting the work. The contractor should, therefore, plan and programme his work keeping this fact in mind.

23.0 PERMISSION TO WORK ON INDIAN RAILWAY SYSTEM

- i. The contractor shall be responsible for obtaining necessary authorizations and clearances, wherever required, for the movement of contractor's equipment on India Railway System.

24.0 MISCELLANEOUS

The Railway shall not be responsible for any loss or damage to contractor's men, materials, equipment, tools and plants etc. from any cause whatsoever. No claim for idle labour, idle machinery / plant etc. on any account will be entertained similarly, no claim shall be entertained for business loss on any such loss.

The contractor will ensure that minimum water way of the bridges is blocked during the course of its construction and also that such blockage is removed by him at his own cost before the middle of June every year or as directed by the Engineer. Any damage to the bridge on this account will be the contractor's responsibility.

10. SPECIAL CONDITIONS OF COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT FOR SMALL TRACK MACHINES:-

1. The CMC is operative for a period of issue of letter of acceptance if manually agreed upon by both the parties, the contract can be extended with same terms and conditions and the rates.
2. The contract will be governed by general conditions of contract-2022 corrected up to advance correction slip and to carry out the work according to General / Additional / Special conditions / Specification of contract for CMC / works tender etc. on detailed elsewhere in the document.
3. SPARE PARTS :-
 - 3.1 The tender will be governed by Indian Railway Revised Standard Condition of contract-2022
 - 3.2 The firm will be responsible for the safe working of all his Agents Labours / Engineer / technician during the course of the maintenance and Railways will not be responsible for making any compensation for any negligence of contractor obligation under relevant Act/Law etc.
 - 3.3.1 During servicing, if any components / spare parts from the enclosed list are required to be replaced, service engineer would arrange for the same, which will be duly certified by the SSE/STM for every machine and will be paid at the accepted rates. List of Spares to be replaced/provided shall be jointly signed by contractor representative & SSE/STM.

- 3.3.2 The spares to be supplied should confirm to OEMs specifications and for any fitment problem or technical problem, use of spares will be warranted by firm for minimum 6 (six) months from the date of fitment against faulty workmanship and defective manufacturing parts. Guarantee period for spare and components to be supplied against CMC will be for a period of 6 (six) months, from the date of replacement except consumable spares for which guarantee will as per OEM's.
- 3.3.3 Machines once services shall work for at least 3 months without any requirement of overhauling. If overhauling is required to be done within less than 3 months cost of overhauling shall not be paid. Spares parts once replaced if fails within 06 months shall also be replaced free of cost.
- 3.3.4 The contract does not bind Railways to procure listed and unlisted spares from firm only. It is Sole discretion of Railway the spares can be procured from other agencies and suitable to machines. The charges for replacement are included in the rate mentioned under List of Spare Parts of Schedule of tender schedule. **NO ADDITIONAL CHARGES SHALL BE PAYABLE.** In case part required to be replace is not inclusive in schedule list of schedule same may be paid in schedule for cost of part of OEM (GST inclusive) or authorised representative specific approval from ADEN shall be taken.
- 3.3.5 The contract shall be governed by the Contract Act and shall be subjected to the jurisdiction of concerned courts only.
4. In case the work is not executed within the stipulated time the Railways may take necessary action as it deems fit under relevant clause of the contract.
- 4.1 During the CMC period, the firm will carry out servicing and repairing including replacement of chargeable spares as per agreed rate in the Schedules only.
- 4.1.1 The firm shall send their service Engineers as per requirement to nominated place of division once every month where contractor staff will carry out repair work. Suitable working space shall be provided & T&P and M&P shall be arranged by contractor on his own.
- 4.1.1.1 No accommodation for contractor staff shall be provided by railway.
- 4.1.2 If any machine is found un-repairable by service engineers/technician, detailed report duly signed by SSE/SE/JE in charge of SSE/P.way/STM and service engineer is to be submitted to concern Sr. DEN/DEN/AEN. The un-repairable machine shall be sent to firms Centre with due authorization of the SSE/STM/Workshop. The same would be repaired, serviced and delivered within 30 days. If firm fails to repair the machines and returned back to Railway, otherwise penalty @Rs. 500/- per day shall be levied on contractor after a period of 45 days.
- 4.1.3 The SSE/JE in charge of STM Workshop will make a joint inspection report with firm's service engineer for defective spares etc. for every month for every machine at STM/Depot.
- 4.2 The CMC shall not cover the damage due to wrong usage/alteration or accidental damage, repairs related to such cases shall be charged separately. This aspect will decided by the Sr. DEN/DEN/ADEN & binding to the contractor.
- 4.3 During the AMC period if any machine is declared condemned/unserviceable by railway, the same shall be deleted from list.
- 4.4 During the AMC period, railway will ensure that no repair/Alteration shall be made by the user or anybody other than service engineer/technician. However, Railways can make minor repairs and replacement of mechanical spares if required. All the released parts replaced on chargeable basis will be returned to the Railway and shall keep in store ledger for further disposal as per extent railway policy.
- 4.5 During the subsistence of the service contract, the railway may terminate the contract by giving one calendar month notice.
- 5 Delivery period of the spare parts shall be 20 days from the date of issue of written request by the railway However, the firm shall try to deliver at earliest according to the agency, availability and requirement of the spares. The delivery will be supplied to divisional SSE/STM In-charge. In case of order placed on last date or nearing the end of AMC period the delivery period of 20 days shall be

- provided by the railway even if it falls beyond the AMC period by the extending the DOC of the contract.
- 6 The piecemeal order for spares and consumables will be given to the firm as and when the needs arise. The material shall be delivered against the requirement and placement of piece meal order issued by SSE/STM. The total value of the orders will be restricted to value mentioned in tender schedule. However there is no guarantee that orders totaling to value mentioned in tender schedule will be placed on the firm. The firm shall have no claim whatsoever in this regard.
 - 7 Contractor will raise the bill directly to the Railways with a certified copy of service report from Railway officer/In-charge of machine for arranging payment. The "Service Report" and "Bill" should clearly indicate the following:-
 - 7.1 STM Machine No.
 - 7.2 Number of days worked
 - 7.3 Date of deputation of service engineer
 - 7.4 Details of journey.
 - 7.5 Report from Service Engineer:- On deputation of the servicing during each visit the Service Engineer shall submit a service report which needed to be signed by SSE/JE in charge of STM Machine as a token of confirmation that the visit as per the contract has been made and STM machine has been attended to satisfactory level. Report of Service Engineers should include servicing details, suggestion for precaution taken for proper working of STM machine.
 - 7.6 Service engineer must give detailed report in case of emergency breakdown giving cause of failure, type of failure, precautions required to avoid such failures in future etc.
 - 8 Bills and service report of each visit in 4 copies should be submitted to this office along with above documents.
 - 9 The quantities mentioned in schedule of rates are approximate and can be varied as per railway requirement. Payment shall be made as per unit rates of items mentioned in tender schedule.
 - 10 The firm representative/service engineer shall visit the STM Workshop on monthly basis & submit a report to ADEN quarterly regarding progress of work & effective maintenance of machines being done.
 - 11 Transportation, boarding and lodging charges for attending STM Workshop by Service Engineer are included in the schedule rate. No addition charges shall be paid to the contractor on this account.
 - 12 No any travelling, lodgings and boarding charges shall be paid for site visit for service Engineer. The payment shall be made as per accepted schedule & No additional charges shall be paid to the contractor on this account.
 - 13 The total amount of spares is indicated in schedule as per number of machines in the division under AMC. The list is not exhaustive only tentative to be changed as per requirement.

Sr. DEN/II/SEE