

Dy. CHIEF SIGNAL & TELECOMM ENGINEER/CTC
NORTH CENTRAL RAILWAY
Project Unit Tundla

E-Tender No. PU-TDL-W-03-2026 Dated 12.06.2026

TENDER NOTICE (Single Packet)

No.: PU-TDL-W-03-2026

Date: 12.06.2026

Dy. Chief Signal & Telecom Engineer/CTC, Tundla, North Central Railway for and on behalf of the President of India invites open e-Tender from reputed contractors/JV firms with adequate experience and financial capability, for the following work on Single Packet System up to 15.00 hrs. on the opening date of E-tender mentioned therein. If date of opening is declared a holiday or offer could not be opened due to technical issue, the offers shall be opened on the next working day.

The details of the Tender are as under:

Name of work	Construction of S&T service buildings (LSC) in KAA-ALJN section in connection with the work of "Reliability improvements of track circuits by provision of MSDAC in parallel of existing DCTC at 14 stations in KAA-ALJN section of Prayagraj Divn. of NCR.
Estimated cost of work	Approx. Cost Rs. 2,50,28,756.15 - (Rs. Two Crore Fifty Lakh Twenty Eight Thousand Seven Hundred Fifty Six and Fifteen Paise Only)
Bid Security	Rs.500600/-(Rs. Five Lakh Six Hundred Only)
Tender form cost.	NIL.
Completion Period:	09 Months.
Availability of tender form	Tender forms shall be available on web site, www.ireps.gov.in , 21 days (minimum) prior to date of opening of the tender.
Closing Date / Time of Tender	06.07.2026 before 15:00 Hrs
Tender Opening Date /Time	06.07.2026 at 15:30 Hrs
Place of Opening	Through Online E-Portal www.ireps.gov.in the office of Dy. CSTE/CTC/TDL, Near Railway Control Office, Tundla (UP) – 283204
Validity of Offer	45 days from date of opening.
Right of Railway to deal with tender	Railway administration reserves the rights to postpone/modify or to cancel the tender without assigning any reasons.

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FOR DY.CSTE/CTC/TDL

Tenderers who wish to participate in tenders invited on www.ireps.gov.in have to register on the website mandatorily. Please refer to website for more details. Tenderers can submit EMD only through online mode. Online payment of Bid security can be made through net banking, debit/credit card etc. Further particulars can be obtained from Indian Railways website www.ireps.gov.in.

UWID – 060233252003

ALLOCATION- 29332103

(Kush Gupta)
Dy. CSTE/CTC/TDL
For & on behalf of the President of India

Copy to:

1. PCSTE, N.C. Railway, HQ Office, Prayagraj - For kind information please.
2. CSTE/Proj/Co/NCR/Prayagraj - For kind information please.
3. CSTE/P-III/NCR/Prayagraj - For kind information please.
4. CPRO, N. C Railway, Prayagraj - For publication of NIT.
5. AFA/C&PU/NCRPU/PRYJ - For nomination of Official for opening the tender.
6. Dy. C. V. O./ Engg. /NCR/Prayagraj - For kind information please.
7. DRM/ NCR/PRYJ, JHS, AGRA - For kind information please.

उप मुख्य संकेत एवं दूर संचार अभियंता/सी टी सी
उत्तर मध्य रेलवे
परियोजना इकाई टूण्डला

ई-टेंडर नं : **PU-TDL-W-03-2026**

निविदा सूचना (सिंगल - पैकेट)

ई-टेंडर नं : PU-TDL-W-03-2026

Date: 12.06.2026

भारत के राष्ट्रपति के लिए एवं उनकी और से उप मुख्य संकेत एवं दूर संचार अभि / सी ० टी ० सी ० / टूण्डला, द्वारा ई - टेंडर के द्वारा पर्याप्त वित्तीय क्षमता एवं अनुभव सहित प्रतिष्ठित ठेकेदारों / ज्वाइंट वेंचर फर्म से निम्न लिखित कार्य के लिए सिंगल - पैकेट सिस्टम पर खुली निविदा , ई - निविदा में वर्णित खुलने के दिनांक को 15:00 बजे तक आमंत्रित की जाती है। यदि निविदा खुलने की तारीख पर अवकाश घोषित होता है या तकनीकी वजह से निविदा तय तिथि पर नहीं खुलती है तो निविदा अगले कार्य दिवस पर खोली जाएगी।

कार्य का नाम	प्रयागराज डिवीजन, एनसीआर के कोरारा-अलीगढ़ खंड में 14 स्टेशनों पर मौजूदा DCTC के समानांतर MSDAC की व्यवस्था करके ट्रैक सर्किट की विश्वसनीयता सुधार के कार्य के संबंध में कोरारा-अलीगढ़ खंड में S&T सेवा भवनों (LSC) का निर्माण
कार्य की अनुमानित लागत	रु. 2,50,28,756.15 (रु. दो करोड़ पचास लाख अट्ठाईस हजार सात सौ छप्पन और पंद्रह पैसे मात्र)
धरोहर राशि	रु.500600/- (रु. पाँच लाख छह सौ मात्र)
निविदा प्रपत्र राशि	कुछ नहीं ।
कार्य पूरा करने की अवधि	9 माह ।
निविदा प्रपत्रों की उपलब्धता	निविदा प्रपत्र वेब पोर्टल www.ireps.gov.in पर निविदा खुलने की तिथि से 21 दिन पहले उपलब्ध हो जायेंगे ।
निविदा जमा करने की अंतिम तारीख एवं समय	दिनांक 06/07/2026, 15:00 बजे तक ।
निविदा खुलने की तिथि एवं समय	दिनांक 06/07/2026, 15:30 बजे ।
निविदा खुलने का स्थान	निविदा उप मुख्य संकेत एवं दूर संचार अभि / सी ० टी ० सी ० / टूण्डला के कार्यालय में ऑनलाइन पोर्टल www.ireps.gov.in द्वारा खोली जाएगी खोली जाएगी ।
ऑफर की वैधता	खुलने की तिथि से 45 दिन तक ।
निविदा डीलिंग हेतु रेलवे का अधिकार	रेलवे प्रशासन को] किसी भी समय बिना कारण बताये कोई एक या सारी निविदाओं को स्थगित / संशोधित / निरस्त करने का अधिकार सुरक्षित है ।

बिना धरोहर राशि के निविदाएं निरस्त कर दी जाएगी।

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निविदा प्रपत्र एवं अन्य विवरण रेलवे की वेब साईट www.ireps.gov.in पर देखे जा सकते हैं । www.ireps.gov.in पर आमंत्रित किसी भी निविदा में भाग लेने के लिए इच्छुक निविदाकारों को www.ireps.gov.in पर पंजीकरण करना अनिवार्य है । विस्तृत विवरण वेब साईट पर अवश्य देखें । निविदाकार उपरोक्त निविदा का धरोहर राशि केवल आन लाइन माध्यम से ही चुका सकते हैं।

UWID - 060233252003

ALLOCATION- 29332103

(कुश गुप्ता)

डिप्टी सी एस टी ई सी टी सी

उत्तर मध्य रेलवे, टूंडला

कृते भारत के राष्ट्रपति के लिए /की ओर से

प्रतिलिपि

1. प्रधान मुख्य संकेत एवं दूरसंचार अभियंता /उत्तर मध्य रेलवे /प्रयागराज को सादर सूचनार्थ ।
2. मुख्य संकेत एवं दूरसंचार अभियंता /प्रोजेक्ट /समन्वय/उत्तर मध्य रेलवे,प्रयागराज को सादर सूचनार्थ ।
3. मुख्य संकेत एवं दूरसंचार अभियंता /प्रोजेक्ट-III /उत्तर मध्य रेलवे,प्रयागराज को सादर सूचनार्थ ।
4. सी पी आर ओ /उ .म रे /प्रयागराज,कृपया प्रकाशन हेतु ।
5. सहायक वित्त सलाहकार / पी यू /प्रयागराज को सूचनार्थ,कृपया टेन्डर खोलने हेतु वित्त प्रतिनिधि को नामित करें ।
6. उप मुख्य सतर्कता अधिकारी /इंजी /प्रयागराज को कृपया सूचनार्थ ।
7. डी आर एम/ एन0सी0आर/ प्रयागराज, आगरा, झाँसी को सादर सूचनार्थ ।

Dy. CHIEF SIGNAL & TELECOMM ENGINEER**NORTH CENTRAL RAILWAY****Tundla****(NCRPU ENGINEERING DEPARTMENT)****TENDER FORM****MODE OF THIS TENDER: E-OPEN TENDER –SINGLE PACKET SYSTEM****REGULATIONS FOR TENDER & CONTRACTS, CONDITIONS OF TENDER AND
SCHEDULE OF RATES AND QUANTITIES****Tender Notice No.**

SN	Description of work	E- Tender Notice No.	Approx Cost	Bid Security	Cost of Tender form	Date of closing	Completion period
1	2	3	4	5	6	7	8
01	Construction of S&T service buildings (LSC) in KAA-ALJN section in connection with the work of "Reliability improvements of track circuits by provision of MSDAC in parallel of existing DCTC at 14 stations in KAA-ALJN section of Prayagraj Divn. of NCR.	PU-TDL-W-03-2026	Rs.2,50,28,756.15	Rs 500600.00	Nil	06.07.2026	09 months
Note: For complete details and submission of tender please see Indian Railway's website http://www.ireps.gov.in							

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FOR DY.CSTE/CTC/TDL

INDEX FOR TENDER FORM

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TENDER DOCUMENT**Tender No.: PU-TDL-W-03-2026 Dated 12.06.2026**

1	Name of work	Construction of S&T service buildings (LSC) in KAA-ALJN section in connection with the work of “Reliability improvements of track circuits by provision of MSDAC in parallel of existing DCTC at 14 stations in KAA-ALJN section of Prayagraj Divn. of NCR.
2	Approximate Cost	Rs.2,50,28,756.15
3	Bid Security	Rs 500600.00
4	Completion Period	09 months including monsoon & harvest from the date of issue of acceptance letter

Tender Closing Date & Time: 06.07.2026 at 15:00 Hrs.

CONTRACTOR

FOR DY.CSTE/CTC/TDL

IMPORTANT NOTE FOR INTENDING TENDERERS**PLEASE ENSURE THAT :**

1. Accept the validity prescribed by the Railway in **Clause No. 8 of Tender Form Second sheet.**
2. The Tenderer should normally not stipulate any special conditions while submitting his tender. In such eventuality, North Central Railway reserves the right to summarily reject such tenders without assigning any reasons whatsoever.
3. Any condition not acceptable may be indicated in a separate deviation statement and may be submitted with offer as per **Annexure-1A.**
4. (a) For present tender Bid Security is Rs 500600.00 Tenderer must submit requisite Bid Security in the acceptable form if asked by Railway. Tenders submitted on the strength of Standing Bid Security with any organization/Department, even of North Central Railway, will be dealt as without Bid Security. (Please refer para 4.0 of P.12)
(b) Tenderer must submit required document in support of fulfilling minimum eligibility Criteria along with tender.
5. The Tenderers should please note that the item and rates of Master Schedule Items are based on **DSR-2021 (CPWD) Vol-I&II.**
6. "GCC" means Indian Railway Standard General Conditions of Contract, April-2022 i.e. GCC April-2022 issued by Railway Board which also available at website as under;
www.indianrailways.gov.in/railwayboard >>"About Indian Railways" >>"Railway Board Directorates" >> "Civil Engineering" >>"IR General Conditions of Contracts" >>IR General Condition of Contracts- 2022.
7. **PRECAUTIONS TO BE OBSERVED:-**
 - (a) **No document in support of minimum eligibility criteria will be accepted /entertained after closing of tender.**
 - (b) The work will have to be carried out in such a manner as to cause least obstruction to the Railway's traffic. The work also must be carried out in such a manner so as not to jeopardize the safety and/or movements of trains. The Tenderers will be required to make good at his cost any damage caused to the Railway property or travelling public arising out of his work at site.
 - (c) The work should be so planned as not to cause any infringement of the moving dimensions laid down in the Standard Schedule of Dimensions for B.G. 2004 or latest with up to date Correction Slip during any stage of construction.
8. The tenderer(s) must submit along with his/their Tender a statement showing similar works executed by him / them and also certificates from the party with whom they worked for the successful completion of his / their work. The Tenderer/s should also submit a list of their Engineering Organization and equipments, construction tools, and plants available with them.

9. The end of tender document is indicated by “**End of Tender Document**” marker. Tenderer/s should carefully see that above marker appears on the last page of downloaded tender document to ensure that downloaded document is complete.
10. The Tenderer/s shall keep them updated about any modification in tender notice and tender document, issued by Railway through newspapers, website or E-mail or any other means and shall act accordingly. It is the responsibility of the Tenderer to check any correction or any modifications published subsequently in Web site and the same shall be taken into account while submitting the tender. **Tenderers offer is liable to be rejected if they have not enclosed all the corrections/corrigendum along with their offer.**
11. The Tenderer/s are requested to kindly carefully go through the relevant instructions /conditions / requirements contained in Tender documents / Bid documents / IRS Conditions of contract, as the case may be, before submitting the offer. Various conditions / instructions will be taken as read and agreed if not specifically indicated to be disagreed /deviated.
12. Tenderer/s must sign all the pages of tender booklet and the documents which should be uploaded. However not signing the document or tender conditions/booklet will be treated as agreed by the tenderer/s and will be treated as signed.
13. **ELECTRONIC REVERSE AUCTION (E-RA):**
(Ref: RB L No. 2017/Trans/01/Policy/Pt-S dated 28.03.2018)

Process of Electronic Reverse Auction (e-RA) shall be adopted for Works tenders valued more than Rs. 50 Cr. in each case. In this tender Electronic Reverse auction will not be applicable as per Railway Board's guidelines.

The details are as under:-

- a) Financial Bids in single currency/parameter only shall be allowed. This currency will be in INR (Indian Rupee) unless otherwise specified in tender document.
- b) The procedure discussed herein shall be fully implemented through IREPS. Any reference to Reverse Auction in these instructions shall imply e-RA.
- c) Conduct and reporting of Reverse Auction shall be as detailed below.
- d) The essential technical and commercial parameters will be specified in a transparent manner in the tender document. No deviation to such essential Technical & Commercial conditions shall be permitted to the tenderer(s) in the electronic bid form.
- e) **Technical Bid & Initial Price Offer:**
 - (i) Bidder shall be simultaneously required to electronically submit a Technical & Commercial Bid and Initial Price Offer. The offers found eligible for award of contract/meeting eligibility criteria shall be categorized as Qualified for Award of Contract for the purpose of e-RA.
 - (ii) Offers not complying with essential technical & commercial requirements of the tender shall be declared as Ineligible for award of contract.
 - (iii) Initial Price Offer of only those bidders categorized as Qualified for Award of contract shall be opened and tabulated by system separately.
- f) **Financial Bid:**
 - (i) Financial Bid shall comprise of Final Price Offer obtained through Reverse Auction. Following conditions and procedure shall be followed in selection of bidders for conduct of Reverse Auction:

Number of Tenderers Qualified for Award of contract	Number of Tenderers to be selected for Reverse Auction	Remarks
<3	Nil*	The bid disallowed from participating in the Reverse Auction shall be the highest bidders(s) in the tabulation of Initial Price Offer. In case the highest bidder quotes the same rate, the Initial Price Offered received last, as per time log of IREPS, shall be removed first, on the principle of last in first out, by IREPS system itself
3 to 6	3	
More than 6	50% of tenderers qualified for award of contract (round off to next higher integer)	

- (ii) *If the number of tenderers qualified for Award of Contract is less than 3, RA shall not be done and tender may be decided on the basis of Initial Price Offer(s).
- (iii) Make in India criteria: All bidders eligible for benefits under Public Procurement (Preference to Make in India) Order – 2017, found Qualified for Award of Contract and are within the specified range of price preference of lowest Initial Price Bid shall be permitted to participate in the Reverse Auction, irrespective of their interest ranking on the basis of Initial Price Bid. Such bidders shall be over and above the number of vendors selected for Reverse Auction, as per sub para (i) above.
- (iv) During Reverse Auction process, bidders shall not be allowed to bid a rate higher than the lowest Initial Price Offer.
- g) Reverse auction among bids categorized as Qualified for Award of Contract shall be conducted on IREPS platform.** Bidders shall be able to see the auction screens.

PROCEDURE FOR CONDUCT AND REPORTING OF e-RA

- The tendering authority shall solicit bids through an invitation to the electronic Reverse Auction to be published or communicated in accordance with the provisions similar to e-procurement.
- Depending upon the nature of item/work/service and complexity of case on hand, following shall be indicated in the tender for e-RA itself. (a) Initial e-RA period: This shall be the initial time interval for e-RA. e-RA shall be open for this duration. (b) Auto extension period: In case any offer is received in the time period equal to auto extension period before close of initial e-RA period, the e-RA shall be extended for time equal to auto extension period from the time of last bid. There shall be no upper limit on number of auto extensions. When no offer is received in the last auto extension period, e-RA shall close. (c) Minimum decrement in percentage of value of the last successful bid.
- Date and time for start of e-RA shall be communicated to qualified tenderers by the convener after evaluation of the Technical Bids.
- After submission of Initial Price Bid, tenderers will not be allowed to revise the taxes and other levies.
- During auction period, identities of the participating tenderers will be kept hidden.
- Minimum admissible bid value will be last bid value minus minimum decrement as specified by the tendering authority before starting of reverse auction. Starting point for reverse auction shall be the lowest initial Price Bid of the Tenderer eligible for award of contract.
- After close of the RA, tabulation of last (minimum) bids received from all the tenderers will be generated and made visible to Railways and participating tenderers.
- Railway users can also view the bidding history in chronological order.
- Bidders not be allowed to withdraw their last offer.
- L-1 will be defined as the lowest bid obtained after the closure of R.A. session for Goods, Works and Services tenders.

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CONTRACTOR

FOR DY.CSTE/CTC/TDL

TENDER FORM

Tender No.: PU-TDL-W-03-2026 Dated 12.06.2026

Name of work: Construction of S&T service buildings (LSC) in KAA-ALJN section in connection with the work of "Reliability improvements of track circuits by provision of MSDAC in parallel of existing DCTC at 14 stations in KAA-ALJN section of Prayagraj Divn. of NCR.

To,**The President of India,****Acting through the****Deputy Chief Signal & Telecomm Engineer****Tundla****North Central Railway.**

1. I/We _____ have read the various conditions to tender attached here to and hereby agree to abide by the said conditions. I / We also agree to keep this offer open for acceptance for a period of **45 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 North Central 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 **09 (Nine) months** including harvest and monsoon season from the date of issue of acceptance of the Tender.
2. I/We also hereby agree to abide by the Indian Railway Standard General Conditions of Contract with all correction slips up-to-date and to carry out the work according to the special conditions of the contract & specifications of materials and works as laid down by Railway in the Annexed Special Conditions/ specifications, Standard Schedule of Rates (SSOR) (North Central Railway) with all correction slips up-to-date for the present contract.
3. A Bid Security of Rs 500600.00 has already been deposited online /submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other rights 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. iswithand 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.

Signatures of witness:

Signature of Tenderer(s)

Date:

Address of the Tenderer(s)

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FOR DY.CSTE/CTC/TDL

N.C.Railway
CONTRACT AGREEMENT OF WORKS
 (Ref:- LOA No. _____)

CONTRACT AGREEMENT No.....

Dated

ARTICLES OF AGREEMENT made this _____ day of _____ 2026 between the President of India acting through the Railway Administration hereinafter called the "Railway" of the one part and

.....
 Here in after Called the "Contractors" of the other part. WHEREAS the Contractor has agreed with the Railway for performance of the works "Construction of S&T service buildings (LSC) in KAA-ALJN section in connection with the work of "Reliability improvements of track circuits by provision of MSDAC in parallel of existing DCTC at 14 stations in KAA-ALJN section of Prayagraj Divn. of NCR." set forth in the Bill(s) of Quantities hereto annexed upon the Standard General Conditions of Contract, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Specifications of North Central Railway updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the applicable Standard Schedule of Rates (SSOR) of North Central Railway updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Special Conditions and Special Specifications, if any and in conformity with the drawings here-into annexed AND WHEREAS the performance of the said works is an act in which the public are interested.

NOW THIS INDENTURE WITNESSETH that in consideration to the payments to be made by the Railways, the Contractors will duly perform the said works in the said Bill(s) of Quantities set forth and shall execute the same with great promptness, care and accuracy in a workman like manner to the satisfaction of the Railway and will complete the same in accordance with the said specifications and said drawings and said conditions of contract on or before the 09 **months** (..... day of 20.....) and will maintain the said works for a period of 09 **(Nine)** Calendar months from the certified date of their completion and will observe, fulfil and keep all the conditions therein mentioned (which shall be deemed and taken to be part of this contract, as if the same have been fully set forth herein), AND the Railway, both hereby agree that if the Contractor shall duly perform the said works in the manner aforesaid and observe and keep the said terms and conditions, the Railway will pay or cause to be paid to the Contractor for the said works on the final completion thereof the amount due in respect thereof at the rates specified in the Bill(s) of Quantities hereto annexed.

Contractor _____(signature)

Address

Deputy Chief Signal & Tele Engineer/

CTC/Tundla

North Central Railway

For & On behalf of the President of India

Date:- _____

Date:- _____

Signature of witnesses :

with address

1) _____

2) _____

CONTRACTOR

FOR DY.CSTE/CTC/TDL

INSTRUCTIONS TO THE TENDERERS (ITT)

1.0 Applicability:- These *instructions and* conditions of contract shall be applicable for all the tenders and contracts of railways for execution of works as defined in GFR 2017.

1.01 Order of Precedence of Documents:-

In a contract *agreement*, in case of any difference, contradiction, discrepancy, with regard to conditions of tender/contract, specifications, drawings, bill of quantities etc., forming part of the tender/contract, the following shall be the order of precedence:

- i. Letter of Award
- ii. *Bill(s) of Quantities*
- iii. Special Conditions of Contract
- iv. Technical Specifications as given in tender documents
- v. Drawings
- vi. Indian Railways Standard General Conditions of Contract updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- vii. Indian Railways Unified Standard Specification (IRUSS-2019) updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.
- viii. CPWD Specifications 2021 Vol I & II or latest updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.
- ix. Indian Railways Unified Standard Specifications (Works and Material) 2010 updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.
- x. IR Specifications/Guidelines updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- xi. Relevant B.I.S. Codes updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.

1.1 Interpretation: These Instructions to Tenderers shall be read in conjunction with the Standard General Conditions of Contract which are referred to herein and shall be subject to modifications additions or suppression by Special Conditions of Contract and/or Special Specifications, if any, annexed to the Tender Forms.

1.2 Definition:-

In these Instructions to Tenderers, the following terms shall have the Definitions meanings assigned hereunder except where the context otherwise required:-

- (a) "Railway" shall mean the President of the Republic of India or the administrative officers of the North Central Railway or of the Successor Railway authorized to deal with any matter which these presents are concerned on his behalf.
- (b) "General Manager" shall mean the Officer-in-Charge of the general superintendence and control of the Zonal Railway/Production Unit and shall also include Addl. General Manager, the General Manager (Construction) and shall mean and include their successors, of the Successor Railway.
- (c) "Chief Engineer" shall mean the Officer in charge of the Engineering Department of Railway and shall also include the Chief Engineer (Construction), Chief Electrical Engineer, Chief Electrical Engineer (Construction), Chief Signal & Telecom Engineer, Chief Signal & Telecom Engineer

(Construction), Chief Mechanical Engineer and shall mean and include their successors of the Successor Railway.

- (d) "Divisional Railway Manager" shall mean the Administrative Officer in charge of a Division of North Central Railway for the time being and shall mean and include the Divisional Railway Manager of the successor Railway.
- (e) "Engineer" shall mean the Divisional Engineer or the Executive Engineer, Divisional Signal & Telecom Engineer, Divisional Electrical Engineer, Divisional Mechanical Engineer in executive charge of the works and shall include the superior officers of Open Line and Construction organizations on the Railway of the Engineering, Signal & Telecom, Mechanical and Electrical Departments, i.e. the Senior Divisional Engineer/Deputy Chief Engineer/Chief Engineer, Senior Divisional Signal & Telecom Engineer / **Dy. Chief Signal & Telecom Engineer**, Senior Divisional Electrical Engineer / Deputy Chief Electrical Engineer, Senior Divisional Mechanical Engineer and shall mean & include the Engineers of the Successors Railway.
- (f) "Engineer's Representative" shall mean the Assistant Engineer in direct charge of the work and shall include any Resident Engineer or Section Engineer or any Inspector of the Civil Engineering Deptt. Appointed by the North Central Railway and shall mean and include the Engineer's Representative of the successor Railway.
- (g) "Contractor" shall mean the person firm or company whether incorporated or not who enters into the contract with the Railway and shall include their executors' administrators, Successors and permitted assigns.
- (h) "Tenderer" shall mean the person/firm/co-operative or company who tenders for the work with a view to execute the works on contract with the Railway and shall include their representatives, successors and permitted assigns.
- (i) Limited Tenders" shall mean tenders invited from all or some Contractors on the approved list of Contractors with the Railway.
- (j) Open Tenders" shall mean tenders invited in open and public manner and with adequate notice.
- (k) "Works" shall mean the works contemplated in the drawings and schedules set forth in the tender forms and description of contract and required to be executed according to Specifications.
- (l) "Contractor's authorized Engineer" shall mean a graduate Engineer **having more than 3 years'** experience in the relevant field of construction work involved in the contract, duly approved by the Engineer.
- (m) "Specifications" shall mean the specifications for Materials & Works, North Central Railway issued under the authority of the Chief Engineer or as amplified, added to or superseded by special specifications, if any, appended to the Tender Forms.
- (n) Standard Schedule of Rates (SSOR) shall mean the schedule of Rates adopted by the Railway, which includes-
 - 1. "Unified Standard Schedule of Rates of the Railway (USSOR)" i.e. the Standard Schedule of Rates of the Railway issued under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents;
 - 2. "Delhi Schedule Of Rates (DSR)" i.e. the Standard Schedule of Rates published by Director General/ Central Public Works Department, Government of India, New Delhi, as adopted and modified by the Railway under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- (o) "Schedule of Rates, North Central Railway" shall mean the Unified Schedule of Rates issued under the authority of the Chief Engineer from time to time.
- (p) "Drawing" shall mean the drawings, plans and tracings or prints thereof annexed to the Tender Forms.

- (q) “Contractor’s authorized Engineer” shall mean a graduate engineer or equivalent, having more than 3 years experience in the relevant field of construction work involved in the contract, duly approved by the Engineer.
- (r) Date of inviting tender shall be the date of publishing tender notice on IREPS website if tender is published on website or the date of publication in newspaper in case tender is not published on website.
- (s) “Bill of Quantities” shall mean Schedule of Item(s) included in the tender document along with respective quantities.

1.3 Words imparting the singular number shall also include the plural and vice versa where the context requires.

2. Tenders for Works:

Tender Form: Tender Forms shall embody the contents of the contract documents either directly or by reference and shall be as mentioned as per the tender document. **E-Tender Forms shall be issued free of cost to all tenders.**

- (a) These Regulations for Tenders and Contracts shall be read in conjunction with the General Conditions of Contract which are referred to herein and shall be subject to modifications, additions or suppression by special conditions of contract and/or special specifications, if any, annexed to the Tender Forms.
- (b) If there is any discrepancy/doubt/ambiguity between the condition on any issue in the tender document then the decision of the Engineer regarding applicability will be final and binding upon the contractor and no claim whatsoever is admissible on the this account and same will be treated as excepted matter.

3. Omissions and Discrepancies:

Should a tenderer find discrepancies in or omissions from the drawings or any of the Tender Forms or should he be in doubt as to their meaning, he should at once notify the authority inviting tenders. ***The tender inviting authority may, if deemed necessary, clarify the same to all tenderers.*** It shall be understood that every endeavour has been made to avoid any error which can materially affect the basis of tender and successful tenderer shall take upon himself and provide for the risk of any error which may subsequently be discovered and shall make no subsequent claim on account thereof.

4. Bid Security :

- (1) (a) The tenderer shall be required to submit the Bid Security of Rs. 500600.00 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 :

SN	Value of the work (Tender value)	Bid Security
1.	For all works	2% of the estimated cost of the work.

NOTE:

- (i) The Bid Security shall be rounded off to the nearest Rs 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 clause (a) above will be retained as part security for the due and faithful fulfilment 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's 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-A1** 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 within 5 working days of deadline of submission of bids.
- 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 Authority 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.

5. Care in Submission of Tenders:

- (a) (i) Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual Inspection of the site & locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the percentage/ rates* he enters in the Tender Form is/are* adequate and all inclusive to accord with the provisions in Clause 37 of the General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.
- (ii) Tenderer 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, notified by Central/State Govt. and 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.
- (iii) The successful tender 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 the 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.

- (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 of contractors, the tender shall be signed by the individual legally authorized representative to enter into commitments on their behalf supported by Power of Attorney & Partnership Deed in case of partnership firms.
- (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

5.1 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. Non submission of above 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 is qualifying the Qualifying Criteria mentioned in the Tender Document.

6. Consideration of Tenders:

6.1 Right of Railway to Deal with Tenders:

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.

6.2 (A) Two Packets System of Tendering:

(Being tender value is less than Rs.10 Crs, Two packet system shall not be applicable in this tender.)
(*Authority Rly. Bds letter No.94/CE-I /CT/4 Pt-17 dated 13.08.2012*).

With a view to assess the tenders technically without being influenced by the financial bids, 'Two Packets System of tendering' shall be adopted wherein tender documents provide for the same.

B. Pre Bid Conference: Intenders having advertised value more than Rs 50 Crore or as mentioned in the tender document, Railway shall conduct Pre Bid Conference(s) with the prospective bidders.

C. Make in India Policy: Provisions of Make in India Policy 2017 issued by Govt. of India, as amended from time to time, shall be followed for consideration of tenders.

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

E. Clarification of Bids: To assist in the examination, evaluation & comparison and pre-qualification of the Tender, the Railway may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Railway shall not be entertained or

considered. The Railway request for clarification and the response of the bidder in this regard shall be in writing.

However, if a Bidder does not provide clarification of its bid by the date and time communicated in the Railway request for clarification, the bid shall be evaluated as per the documents submitted along with the bid.

7. **Execution of Contract Document:**

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.

8. **Form of Contract Document:**

Every contract shall be complete in respect of the document it shall so constitute. Not less than 2 copies of the contract document shall be signed by the competent authority and the Contractor and one copy given to the Contractor (there would be no need of signing two copies if agreement is signed digitally).

(a) For Zone Contracts, awarded on the basis of the percentage above or below the applicable chapter(s) of Standard Schedule of Rates (SSOR) for the whole or part of financial year, the contract agreement required to be executed by the tenderer whose tender is accepted shall be as per specimen form, Annexure-II. During the currency of the Zone Contract, work orders as per specimen form Annexures-III, for works not exceeding ₹ 5,00,000 each, shall be issued by the Divisional Railway Manager / Executive Engineer under the agreement for Zone Contract.

(b) For contracts for specific works, the contract document required to be executed by the tenderer whose tender is accepted shall be an agreement as per specimen form Annexure- IV.

For contracts for specific works, valued more *than Rs. 5.00 lacs* , the contract document required to be executed by the tenderer whose tender is accepted shall be an agreement as per specimen form at **Page no. 9 of tender document**

9. **Eligibility Criteria only applicable** (Minimum Eligibility Criteria for Tenders having advertised value above Rs. 50 Lakhs) :

9.1 **a. Technical Eligibility Criteria:** The tenderer must have successfully completed or substantially completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

- Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or
- Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or
- One similar works each costing not less than the amount equal to 60% of advertised value of the tender.

Similar Nature of work :- Construction of Building.

b(i) **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 of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

- Three similar works each costing not less than the amount equal to 30% of advertised value of each component of tender, or
- Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or
- One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender.

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

(b) (ii) 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.

(iii) 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 Contract or 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 9.1:

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.

9.2 Financial Eligibility Criteria:

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/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

9.3 Bid Capacity: The tenders/technical bid (having advertised value more than 10 Crore) will be evaluated based on Bid capacity formula detailed in clause 10.3 under the Tender Form (Second Sheet) of GCC & as per **Annexure-VI**.

9.4 The Tenderer should submit documents in support of minimum eligibility criteria along with the tender. No document in support of minimum eligibility criteria will be accepted / entertained after opening of tender.

9.5 Tenders from JVs/Consortiums/MOUs are permitted against the tender if costing more than Rs. 10 (Ten) crores only as per the conditions laid down.

9.6 No Technical and Financial credentials are required for tenders having advertised value up to Rs 50 lakh.

9.7 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.

9.8 [Explanation for clause 9 including clause 9.1 to 9.7 - 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 fulfilment 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 fulfilment 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 $0.3 \times 0.2 \times \text{value of the work done in the previous entity}$. 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 firm 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.]*

10. Tenderer Credentials:

Documents testifying tenderer previous experience and financial status should be produced along with the 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 Certificates which may be an attested Certificate from the client, Audited Balance Sheet duly certified by the Chartered Accountant etc 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. 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
- 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.
- (b) 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 on entire Indian Railway for a period of upto two years.
- 11. Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.**
- 12. Execution of Contract Documents:** The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the _____, North Central Railway for carrying out the work according to Standard General Conditions of Contract, Special Conditions / Specifications annexed to the tender and Standard Specifications (Works and Materials) of Railway as amended/corrected upto latest correction slips, mentioned in tender form (First Sheet).
- 13. Documents to be Submitted Along with Tender:**
- (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 explanatory notes in clause 9 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 explanatory notes in clause 9 above.
- (c) Partnership Firm:**
- (i) The tenderer shall submit documents as mentioned in clause 18 of the Tender Form (Second Sheet) of GCC.
- (d) Joint Venture (JV):** The tenderer shall submit documents as mentioned in Clause 17 of the Tender Form (Second Sheet) of GCC.
Being tender value is less than Rs.10 Crs, JVs /consortiums/MOUs shall not be applicable in this tender.
- (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 of explanatory notes in clause 9 above.
- (f) **LLP (Limited Liability Partnership):** If the tender is submitted on behalf of a LLP registered under LLP Act-2008, the tenderer shall submit along with the tender:
 - (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 explanatory notes in clause 9 above.
- (g) **Registered Society & Registered Trust:** The tenderer shall submit:
 - (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 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 / Partnership firm etc. 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.
- 14. The tenderer whether sole proprietor / a company or a partnership firm / joint venture (JV) / 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) of 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 Apostille certificate.

15. INCLUSION OF LETTER OF CREDIT AS A MODE OF PAYMENT IN WORKS TENDERS

(Authority R Bds letter No.2018/CE-I/CT/9/New Delhi dated 04.06.2018).

- (i) For the all the tender **having advertised cost of Rs 10.00 lakh or above**, the contractor shall have option to take payment from Railways through a letter of credit (LC) arrangement.
- (ii) This option of taking payment through LC arrangement has to be exercise 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 affirm having read over and agreed to the terms and conditions of the LC option.
- (iii) The option so exercise shall be an integral part of the bidder's offer.
- (iv) The above option of taking payment through LC arrangement, once exercise by tenderer at the time of bidding shall be final and no change shall be permitted, thereafter during execution of contract.
- (v) In case tender opts for payment through LC, following shall be the procedure to deal release of payment through LC.
 - (a) The LC shall be a single 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 Railways accounts units for tenders opened in financial year 2018 _19. SBI branches where the respective Railways 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, toward 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 progress of 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 & conditions shall be 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 the 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 @ 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 payment to be released under the LC shall be the Document of Authorization.
 - (h) The Document of Authorization shall be issued by Railways Accounts Office against each bill passed by Railways.

- (i) On issuance of document of authorisation, a copy of document of Authorisation shall be posted on IREPS for download by the contractor. A digitally signed copy of document of authorisation 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 & 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 Railways bank (Local SBI branch).
- (m) The Railway's bank(Local SBI branch) after verifying the claim so received w.r.t. the digitally Document of Authorization received from Railway Account 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 payment 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 payment, 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. For opening of LC, executive department shall make a request letter to concerned Account Department on a format, placed as **Annexure-1**.

.....

Annexure-1**Request letter from Executive branch to Accounts Office for opening of LC**Office of
Railway

No. _ Dated: _

The PFA/Sr.DFM/ Dy. FA
HQ/Division/Workshop/Cost

Sub: Opening of LC

Ref: Supply order /Contract Agreement No.

It is requested to open a sight LC against the above referred Order/Agreement in favour of _____ . The details of beneficiary are asunder:

1. Name of Contractor/Supplier
2. Vendor Code
3. Address
4. Tender No.
5. Contract Agreement No.
6. Description of Goods/Service
7. Value of Contract
8. Stages of payment
9. Expected payment within 6 months (LC Amount)
10. Beneficiary bank details
11. Validity/period for which LC is to be opened.
 - a) Bank Name
 - b) Address
 - c) Account No.
 - d) IFSC code

It is certified that the supplier /contractor has exercised the option of taking payment due against the tender, though LC arrangement in IREPS portal at the time of bidding itself and the option has been flagged in the IREPS. This has the approval of _____

(Signature)

Name:

Designation: _____
(Official Seal)

CONTRACTOR

FOR DY. CSTE/CTC/TDL

Annexure-2

LCDA No. (18 DIGIT IPAS GENERATED NO.)

Dated: _____

DOCUMENT OF AUTHORIZATION

Reference : (i) Works Contract/Supply Contract No.____dated____
 (ii) Inland Letter of Credit No.____dated____

This document is issued against contract No.....(FROM IREPS) _____ dated..... for supply/work of.....DESCRIPTION OF GOODS/WORK FROM IREPS)_____

The beneficiary of the aforementioned Letter of Credit M/s.....(Name and Vendor Code) _____ (Vender Code as per IREPS.....) is entitled to receive payment, aggregating INR.....\$\$\$ (FROM ABSTRACT OR BILL PASSED) out of a total LC amount of INR (FROM MASTER TABLE OF LC OPENED) Against the first/second* commercial invoice No.(FROM IPASS _____ dated.....FROM IPASS for INR (FROM IPASS) raised against the above contract from State Bank of India..... (Branch-FROM LC MASTER TABLE)..... on the strength of this Certificate.

The details of payments already made to the beneficiary made this letter of Credit are as follows:

S.No.	Invoice No.	Invoice date	Invoice Amount (INR)	LCDA No.	LCDA Date	Amount paid (INR)
	Total paid					

THIS PAYMANT -----
 LC BALANCE AFTER THIS PAYMENT:_____

(Signature of authorized Railway authority)
 Name
 Designation
 Official Seal

(*Score out whichever is not applicable.)

CONTRACTOR

FOR DY. CSTE/CTC/TDL

TENDER FORM (SECOND SHEET)**(A) INSTRUCTIONS TO TENDERER & CONDITIONS OF TENDER****1. The following documents form part of Tender / Contract:**

- (a) Tender Forms – First Sheet and Second Sheet
 - (b) Special Conditions/Specifications (enclosed)
 - (c) Schedule of approximate quantities(enclosed)
 - (d) IR Standard GCC April-2022 and IR Unified Standard Specification-2019, CPWD Specification-2021 Vol-I&II as amended/corrected up to latest correction slips, copies of which can be seen in the office of Dy. CSTE/CTC/Tundla or obtained from the office of the Executive Engineer/., North Central Railway on payment of prescribed charges.
 - (e) IR Unified Schedule of Rates 2010 N.C.R Vol-I&II as amended / corrected up to latest correction slips, copies of which can be seen in the office of Dy. CSTE/CTC/Tundla, North Central Railway or obtained from the office of the executive Engineer, North Central 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 drawings for the works can be seen in the Office of Dy. CSTE/CTC/Tundla, North Central Railway at any time during 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 has to **quote their single rate** in offer format as per schedule given. 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 Railway. The Railway accepts no responsibility for their accuracy. The Railway does not guarantee work under each item of the Schedule. ***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.*** All rates for the each schedule of works should be written in words as well as in figures at all the pages wherever applicable. In case of discrepancies between the rate quoted in figures and words, the rate quoted in words will prevail.
4. Tenders containing erasures and alterations of the tender documents are liable to be rejected. Any correction made by the Tenderer/Tenderers in his/their entries must be attested by him/them.
5. **Tender Credentials:**
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 North Central Railway shall submit along with his / their tender as mentioned in **clause 13** under (A) INSTRUCTIONS TO THE TENDERERS above.

Further, the tenderer is required to produce following documents along with original tender papers duly filled & signed at all pages.

- (i) Bid Security in proper form.
 - (ii) Proforma No. I, II, III (A & B), IV, V, VI & VII (attached herewith) and Annexure 'A, A1 A2' & 'B'
- (a) **Proforma No. I:-** Particulars of tenderer.
 - (b) **Proforma No. II:-** Details of Works Executed Similar to Tendered Work.
 - (c) **Proforma-III-A:** List of works completed or substantially completed any of the following **during last 07 (seven) years, ending last day of month previous to the one in which tender is invited**, giving description of work, organization for whom executed approximate value of contract at the time of award, date of award and date of scheduled completion of work. Date of actual start, actual completion and final value of contract should be given.

- (d) **Proforma-III-B:** List of works on hand indicating description of work, contract value, approximate value of balance work yet to be done and date of award.
 - (e) **Proforma-IV:** List of plant and machinery available on hand (own) and proposed to be inducted (owned/hired, to be given separately) for the subject work
 - (f) **Proforma-V:** List of personal organization available on hand and proposed to be engaged for the subject work.
 - (g) **Proforma-VI :** Identity card
 - (h) **Proforma-VII :** Declaration of site of visit
 - (i) **Annexure 'V':** Format for certificate to be uploaded by tenderer along with the tender document.
 - (j) Annexure VIA : Format of Bid security in form of Bank Guarantee bond
 - (k) Annexure VIB: Format of Financial eligibility criteria for each bidder or each member of JV.
 - (l) **Annexure "VI":** Tenderer's Credentials (Bid Capacity) **For Works Costing More Than Rs.20Cr.**
- Note :** (1) In case of item (b), (c) & (d) above, supported documents/ certificates from the organization with whom they worked/ are working, should be enclosed.
- (2) Certificates from private individuals for whom such work are executed/ being executed, shall not be accepted.
- (iii) Tender documents duly signed & completed.
 - (iv) Any other document the tenderers may like to submit in support of his credentials/scheme.
 - (v) Deviation statement as per **Annexure-I (A)** if any.
 - (vi) Certificate for non-banning for Railway projects.
- 6. Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.**
- 7. Accepting Authority :**
The authority for the acceptance of the tender will rest with the Dy. CSTE/CTC/Tundla North Central Railway who does not bind himself to accept the lowest or any other tender nor does he undertake to assign reasons for declining to consider any particular tender or tenders. The successful Tenderer/Tenderers shall be required to execute an Agreement with the President of India acting through the Dy. CSTE/CTC/Tundla of North Central Railway, for carrying out the work according to the General Conditions of Contract and **Standard** Specifications for Works and Materials of North Central Railway.
- 8. Validity of Offer**
The Tenderer shall keep the offer open for a minimum period of **45 days** from the date of opening of the tender within which period the tenderer cannot withdraw his offer, subject to the period being extended further if required by mutual agreement from time to time. Any contravention of the above condition will make the tenderer liable for forfeiture of his Bid Security.
- 9.** Should the Railway decide to **negotiate** with a view to bring down the rates, the original offer will still be binding in case nothing materializes out of the **negotiations**. A declaration to this effect should be submitted by the tenderer/Tenderers along with the negotiated offer in the prescribed Proforma.
- 10. Proprietary Firm/Partnership firms/ Deeds, Power of Attorney/JV firm etc.:**
Please refer GCC Clause 14, 15, 17(JV Firms) & 18 under the Tender Form (Second Sheet) Annexure-I (contd....)
- 11. Employment/Partnership etc. of Retired Railway Employees:**
Please refer GCC Clause 16 under the Tender Form (Second Sheet) Annexure-I (contd....)
- 12. Deduction of I.T. at Source:-**
The Railway will deduct @1% of gross amount of each bill for payment/credit to resident individual or HUF and @ 2% of gross amount of each bill for payment credit to any person other than individual/HUF as Income-Tax (Under Section 194-C of the Income Tax Act 1961) and surcharge thereon as prescribed by Govt. from time to time and such deduction of I.T. shall be recovered while making payment to the Contractor.
- 13 Sales Tax/Commercial Tax/Turnover Tax In Works Contract**

The element of GST/sales tax / commercial tax/turnover tax etc. in works contract, if any, shall be considered to be included in the rates quoted by the tenderer/s in the tender schedule. GST/Sales tax / commercial tax / turnover tax on works contract will be recovered from the contractor's bill at the rate as applicable as per rules framed by State Govt. from time to time and remitted to the State Govt. by the Railways, **Railway shall deduct TDS, towards GST.(CGST & SGST) or (IGST) of the total value of Taxable amount and remit the same to the State Govt. The Amount of GST TDS show deducted and paid shall be reflected in the credit ledger of the contractor. (Rly Bds letter No.2018/AC-II/46 dated 19.09.2018 & 29.9.2018).** Contractor shall not have any claim whatsoever as a result of the increase in the rates for such royalties, taxes, duties or any other forms of levies etc. Concessional Sales Tax Form and Octopi Exemption Certificate will be issued to Contractor on his specific request, if legally permissible.

- 14 **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”:** 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.

15 **Taxes, Royalties and Patent Rights:**

All rates quoted in the tender shall be deemed to be inclusive of all taxes, royalties payable by the contractor/s to the Govt. or public body or local authority and no additional amount will be paid or claim entertained on this account by the Railway. The contractor shall defray the cost of all royalties, fees and other payments in respect of patents, Patent rights and licenses which may be payable to patented licensee or other person or corporation and shall obtain all necessary licenses. In case of any breach (whether willfully or inadvertently) by the contractor of this provision, the contractor shall indemnify the Railway and its officers, servants, representatives against all claims, proceedings, damages, cost, charges, acceptance, loss and liability which they or any of them may sustain incur or be put to by reason or in consequence of, directly or indirectly, any such breach and against payment of any royalties, damages or other moneys which the Railway may have to make to any person or paid in total to the patent rights in respect of the users of any machine, instructions, process, articles, matters or thing constructed, manufactured, supplied or delivered by the contractor to his order under this contract.

16 **Payment of Royalty Charges:**

All payment of royalty charges etc. to the State Government in connection with extraction and supply of rubble/stone ballast/sand/moorum/soil etc. from other than Railway land acquired by Railways have to be borne and paid by the contractor.

The Railways in consultation with the respective State Governments will confirm percentage of Royalty Charges to be recovered for supply of minerals. The Railway Administration is entitled to deduct from the contractors and keep in deposit such amount equal to the proportionate Royalty Charges from each on account bills and the same will be released as and when the contractor submits a receipt/documents/ clearance certificate certifying that Royalty Charges have been paid by the Contractors, relating to the contract.

The contractor will be required to obtain a **Final Royalty Clearance Certificate** from the concerned State/Revenue Authorities/Collector and produce the same to CE / Dy. CE /XEN after completion of supply but before the release of final bill. If in any case the contractor fails to produce the clearance certificate for Royalty Charges, final bills will be passed after retaining an amount equal to the amount of unpaid Royalty charges, as intimated by the Revenue Authorities/Collector or as calculated on the basis of relevant Rates, for payment of Royalty Charges applicable to the area. No claim regarding interest charges for delay in payment of the retained amount on Royalty account shall be entertained. Form for availing Concessional sales tax for supply to Government Deptt. will be issued for supply contracts only on request of contractor if legally permissible.

***For States where applicable**

(i) Towards this, contractor will either take a lease directly or procure minor minerals through existing valid lease holders. Lease holder will generate e-MM11 for each vehicle bringing mined material for consumption in the contract, from State Government's portal which must be verifiable online. In case material is brought on printed MM11 or transit passes of UP or other states, then verification will have to be done offline and any delay will not be railway's responsibility.

(ii) If Royalty Charges are determined as payable and contractor does not submit the e-MM11 which is verifiable online or does not submit printed prepaid challan receipts/ transit pass/ receipt in other format/ documents/ clearance certificate certifying that due Royalty Charges have been paid by the contractor, Railway Administration is entitled to deduct from the contractors and keep in deposit such amount equal to the unverified Royalty Charges from each on account bills. This amount withheld, will be released as and when the contractor submits a receipt/documents/clearance certificate certifying that Royalty Charges have been paid by the Contractors, with quantities and details confirming that the certificate is for mined material relating to the contract. However, if e-MM11 is used, Railways will verify it online and treat this verification as final proof of payment of royalty. Retention of amount will not be required in case of verified e-MM11.

17 **Permit or Parwana:**

The contractor will at his own expense obtain such permits or parwana from whomsoever necessary for carrying out work or for any other purpose as may be necessary to enable him to perform his part of the contract. The Railway Administration will not under any circumstances be liable to obtain any permit or parwana whatsoever, for the contractor.

18 **Legal Charges**

A fee of Rs 200/-per legal document like partnership deed or power of attorney executed before or after the execution of the contract, will be recovered from the contractor for obtaining *legal advice of the Law Officer*.

Date_ _____

(Signature) _____

(Designation) _____

Deputy Chief Signal and Tele Engineer
North Central Railway

SPECIAL CONDITIONS OF CONTRACT (PART-I)

1. GENERAL

- (1) These “Special Conditions and Specifications, Instructions to Tenderers and the stipulations made in the Schedule of quantities and rates” shall govern the works executed under this contract in addition to the “IR Unified Standard Specifications (2019), IR Unified Standard of Schedule of Rates 2010, IR Standard General Conditions of Contract-April-2022,”, each, as amended by correction slips from time to time.
- (2) All references in this document to the word “Standard Specifications” shall mean the Specifications mentioned in the “IR Unified Standard Specifications (2019) & CPWD specification 2021”.
- (3) Any foot note/s appearing below the item/s of the contract schedule will take precedence over these Special Conditions.
- (4) Any Specifications / Conditions stated by the tenderer in the covering letter submitted along with his tender shall be deemed to be a part of the contract only to such extent as have been explicitly accepted by the Railway.
- (5) The special conditions supplement the latest General Conditions of Tenders & along with up to date correction slips, up to date of up loading of tender document and Additional General Conditions of Tender, the General Conditions of Contract and the notes appearing under the relevant chapters and sub-chapters of the IR Unified Standard of Schedule of Rates-2010 and should be considered a part of the contract papers. **Where the provisions of these conditions are at variance with the IR Standard General Conditions of Contract April-2022, these special conditions shall prevail.** The General Conditions of Contract will mean the latest General Conditions of Contract & along with up to date correction slips up to date of up loading of tender document as amended and/or corrected from time to time and obtaining at the time of accepting of the tender and at the time of execution of the agreement mentioned in Conditions of Tender. It should be the responsibility of the Contractor before submitting his tender and again before entering into said agreement to ascertain all amendments and/or corrections made to the said General Conditions of contract.

No material price variation or wages escalation on any account whatsoever and compensation for “Force Majeure” etc. shall be payable under this contract, unless otherwise specified in acceptance letter. No claim whatsoever will be entertained by the Railway on account of any delay or hold up of the works arising out of delay in supply of drawings, changes, modifications, alterations, additions, omissions. Omissions in the site layout plans or detailed drawings or designs and or late supply of such materials as are required to be arranged by the Railway or due to any other factor on Railway accounts. *No claim for idle labour and or idle machinery etc. on any account will be entertained.* Similarly no claim shall be entertained for business loss or any such loss. The tenderer will have to comply with the provisions contract contained in the Additional Clause 55(a) to the General Conditions of contract. **Provisions of Contract Labour (Regulation and Abolition) Act, 1970:** No interest shall be allowed on the Bid Security deposited and security deposit. No adjustment of the released Bid Security or security deposit which might not have been refunded will be allowed and such tender will be treated as invalid.

2 Execution Co-Relation and Intent of Contract Documents:

The contract documents shall be signed in triplicate by the Railway and the Contractor. The contract documents are complementary and what is called for by anyone shall be as binding as if called for by all, the intention of the documents is to include all labour and materials, equipments and transportation necessary for proper execution of work. Materials or works not covered by or properly inferable from any heading or class of the specifications shall not be supplied by the Railway to the Contractors unless distinctly specified in the contract documents. Materials or works described in words which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

- 3 (1) Law Governing the Contract:** The contract shall be governed by the law for the time being in force in the Republic of India.

3 (2) Compliance to Regulations and Bye-Laws: The Contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute, regulations or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

3. (3) Environmental and Forest clearances:

The Railway represents and warrants that the environmental and forest clearances pertaining to the work commensurate with the progress of work/agreed programme, will be obtained by Engineer. In the event of any delay in securing respective clearances leading to delay in execution of work, the Contractor shall be entitled to Extension of Time for the period of such delay in accordance with the provisions of Clause-17A(ii) of GCC.

4. Communications to be in Writing: All notices, communications, reference and complaints made by the Railway or the Engineer or the Engineer's Representative or the Contractor inter-se concerning the works shall be in writing or e-mail on registered e-mail IDs *i.e. the e mail id provided for correspondence in the contract agreement, otherwise email id registered with IREPS* and no notice, communication, reference or complaint not in writing or through e-mail, shall be recognized.

5. Service of Notices on Contractors: The Contractor shall furnish to the Engineer the name, designation and address of his authorized agent and all complaints, notices, communications and references shall be deemed to have been duly given to the Contractor, if delivered to the Contractor or his authorized agent or left at or posted to the address so given and shall be deemed to have been so given in the case of posting on day on which they would have reached such address in the ordinary course of post /email or on the day on which they were so delivered or left. In the case of contract by partners, any change in the constitution of the firm shall be forthwith notified by the Contractor to the Engineer.

5.1 The contractor shall at all times, execute the contract work only in the presence and under the supervision of the Engineer's Representative or a Railway employee specifically appointed on his behalf. No work under the contract shall, therefore, be commenced by the contractor without the express permission of the Engineer's representative.

5.2 Non-compliance with the instructions/directives of the Engineer's representative:

(a) The contractor shall always comply with the instructions/directives issued by the Engineer's representative from the time to time. In the event of any non-compliance with such instructions/directives, apart from and in addition to other remedies available to the Railway as specified herein above the Engineer's representative may employ at the works Railway's workmen with necessary equipment as considered appropriate and adequate by him to provide the requisite conditions for the safe and unhampered movement of Railway traffic. The decision of the Engineer's representatives in regard to the need of appropriateness and adequacy of the deployment of the Railway Workmen with necessary equipment shall be final and conclusive.

(b) When the Railway workmen with necessary equipment are deployed in the above manner, recovery at the following rate shall be made from the contractor's dues under this contract or any other money of the contractor available with the Railway under this contract. The recovery for the total Railway Workmen Hours employed will be at the rate of Rs. 200/- (Rupees Hundred only) per Workmen-Hour irrespective of the type and grade of the Railway Employee actually employed. The aggregate period of the Workman-Hours for the above recoveries shall be reckoned from the time the Railway Workmen are actually

deployed at the work site till the work is completed to the satisfaction of the Engineer's Representative whose decision in this regard shall be final and conclusive.

- (c) If the contractor or his authorized representative/ deployed personnel persistently does not comply with the instruction / directives of the Engineer's representative, apart from and in addition to the remedies available to the Railway as specified herein above without prejudice to the Railway's rights in this regard, the Engineer's representative, which for the purpose of this clause shall include the inspector of civil Engineering department, appointed by the Railway, can require removal and replacement of contractor's personnel/ representative and/ or suspend the contractor's work till the Engineer's Representative is satisfied that the contractor has taken necessary steps and is in a position to comply with the instructions issued by the Engineer's representative.
- (d) The decision of the Engineer's representative in this regard shall be final, conclusive and binding on the contractor. The contractor shall not have any claim whatsoever against the Railway for such suspension of the work.
- (e) During the above-mentioned period of suspension of work, the contractor shall not in any manner attempt to carry out any work at the work site. Any such attempt of the contractor shall be deemed to be an unauthorized work on the work site. For such acts, the contractor shall then be liable for further appropriate action under the relevant provisions of the Indian Railway Act.

5.3 Warranty: The contractor shall warrant the materials supplied under this contract to be free of any defects in material and workmanship under ordinary use and service.

6. Assignment or Subletting of Contract:

Please refer GCC Clause 7 under Part-II Standard General Condition of Contract.

7. Assistance by Railway for the Stores to be obtained by the Contractor:

Please refer GCC Clause 8 under Part-II Standard General Condition of Contract.

8. Representation on Works:

Please refer GCC Clause 12 under Part-II Standard General Condition of Contract.

9. Excavated Material:

Please refer GCC Clause 14 under Part-II Standard General Condition of Contract.

10. Indemnity by Contractors:

Please refer GCC Clause 15 under Part-II Standard General Condition of Contract.

11. Security Deposit And Performance Guarantee On Acceptance Of Tender

Please refer GCC Clause 16.1, 16.2, 16.3 & 16.4 under Part-II Standard General Condition of Contract.

Please note the instruments mentioned in Clause 16.4 (i) to xi) under Part-II Standard General Condition of Contract, should be in favour of **Financial Advisor & Chief Accounts Officer/PU/ NCR/PRYJ**, may be accepted.

- Performance Guarantee (PG): The successful bidder shall submit the Performance Guarantee (PG) 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 upto 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) in any of the following forms, amounting to 5% of the original contract value:-** (i) A deposit of Cash; (ii) Irrevocable Bank Guarantee; GCC April 2022 (iii) Government Securities including State Loan Bonds at 5% below the market value; (iv) Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India; (v) Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled Commercial Bank of India; (vi) Deposit in the Post Office Saving Bank; (vii) Deposit in the National Savings Certificates; (viii) Twelve years National Defence Certificates; (ix) Ten years Defence Deposits; (x) National Defence Bonds and (xi) 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. **(Ref. Railway Board letter no. No. 2022/CE-I/CT/GCC -2022/P OLICY New Delhi, Dated 27.04.2022).**
- (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 % of advertised cost	Additional Performance Guarantee(%)
Below 0-5% (inclusive)	Nil
Below 5 %	5%

12. Force Majeure Clause

Please refer GCC Clause 17 under Part-II Standard General Condition of Contract.

13. Extension of Time in Contracts:

Please refer GCC Clause 17-A, 17-B & 17-C under Part-II Standard General Condition of Contract.

14. Execution Of Works:

Please refer GCC Clause 19.1, 19.2, 19.3 under Part-II Standard General Condition of Contract.

14(1) setting out of Works: The Contractor shall be responsible for the correct setting out of all works in relation to original points, lines and levels of reference at his cost. The Contractor shall execute the work true to alignment, grade, levels and dimensions as shown in the drawing and as directed by the Engineer's representative and check these at frequent intervals. The Contractor shall provide all facilities like labour and instruments and shall co-operate with the Engineer's representative for checking of all alignment, grades, levels and dimensions. If, at any time, during the progress of the works any error appear or arise in any part of the work, the Contractor, on being required so to do by the Engineer's representative shall, at his own cost rectify such errors, to the satisfaction of the Engineer's representative.

Such checking shall not absolve the Contractor of his own responsibility of maintaining accuracy in the work. The Contractor shall carefully protect and preserve all bench marks, sight rails, pegs and other things used in setting out the work.

14.1.1 In case of bridges the Railway will initially set out the centre line of the bridge and the alignment and fix the position of the piers and abutments with DGPS or any other precise means, having accuracy up to 01 mm and will get it approved from Railway. The contractor shall thereafter set out the work and every part thereof fully. The contractor shall be responsible for maintaining the accuracy of the alignment, positions, levels and of the work in accordance with the drawings, directions or instructions given from time to time to him and every facility shall be given to the engineer for checking of the same. The contractor at his own cost shall rectify an error in the dimensions, alignments positions or levels of work set out or constructed by him to the satisfaction of the Engineer.

14.1.2 In the case of building, or other structures the Engineer or his representative will set out the centre longitudinal or the face line and at least one main cross line.

14.1.3 The work shall be set out by the contractor to the satisfaction of the engineer but his approval thereto shall not, nor shall his joining with the contractor in setting out the work, relieve the contractor from his entire and sole responsibility for correctness thereof.

14.1.4 The contractor shall also provide, fix and be responsible for the maintenance of all stakes, template profiles, level marks, points etc. & must take all necessary precautions to prevent these from being removed, altered or disturbed and will be held responsible for the consequences of such removal, alterations or disturbances, should the same take place, and for their efficient reinstatement.

14.1.5 Contractors shall submit detailed design calculations and drawings of centring, shuttering involving construction of any structures across running line. Launching scheme if any and design calculation and drawings of launching scheme and the centring / shuttering should be submitted to office of Dy.Chief Engineer/DY.CSTE/CTC/TDL for examination and obtains the approval of competent authority. For all other structures the centring and shuttering shall be approved by the DY.CSTE/CTC/TDL/AXEN/PU/TDL In-charge of work.

14.1.6 Contractor should take all care to preserve the work until taken over by the Railway in good condition. Contractor is responsible for handing over of work to the Railway as per scope of contract

14.1.7 Service Roads and Approaches

The Contractor/s will be permitted to make use of existing service roads, or service roads constructed by the Railway for its use free of cost. New service roads required by the contractor/s either near the work site or elsewhere within or outside railway limits for carriage of materials or for any other purpose whatsoever, will have to be constructed and maintained by the contractor/s at his/their own cost. For the purpose of construction of service roads on railway land, permission will be given free of charge. However, contractor, at his own cost, will erect and man barriers on these approach roads to check unauthorized ingress of outsiders into railway land and near railway tracks. If any land other than railway land is

necessary to be acquired or to be entered upon, permission to enter in the land will have to be arranged by the contractor/s at his/ their cost. The contractor/s 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/s without payment of any charges.

14.1.8 Notice to Public Bodies

The contractor shall give to the Municipality, Police and other authorities all notices that may be required by the law and obtain all requisite licenses for temporary obstructions, enclosures and pay all fees, taxes and charges which may be leviable on account of his own operation in executing the contract. He should make good any damage to adjoining premises whether public or private and provide and maintain any light etc. required in night

14.1.9 Shifting of Electrical/Telegraph Wires/Cables Etc.

In some stretches, high tension grid towers/electric/ telegraph/ telephone wires or posts etc. May require shifting. It is expected that the electric lines/towers will be shifted in good time, but in case, there is any delay on this account suitable extension in period of completion will be considered and given to the contractor for only the affected portion and no compensation whatsoever in this respect or due to the delay thus caused will be payable and contractor has to adopt such methods of execution so as not to cause any damage to existing structures, lines etc.

14.1.10 Testing and Field Laboratory

- (a). This work is a highly technical work; therefore, to ensure desired quality of work, close monitoring has to be ensured. The tenderer has to establish Technical laboratory at site containing various test equipments and testing facilities involved in the work, including power back-up, with suitable numbers of Computers, Printers, Fax facilities etc., including their consumables, as per the directions of the engineer, to enable the quality control and their documentations.
- (b). The contractor shall get a percentage of samples tested from other approved laboratories as directed by Engineer-in-charge for confirmatory test without any extra payment to the contractor unless otherwise specified in the contract.
- (c). Materials supplied by the contractor will required to be tested as required by the various codes and specifications at contractor's cost.
- (c). The entire initial, running and post expenses in this regard have to be borne by the contractor and nothing extra will be paid by the Railway.

14.1.11 Communication Facilities

The work is very important work and will be executed along with the running line having heavy load of traffic. The work is required to be executed with close monitoring and coordination amongst the various departments of the Railways as well as various authorities involved in the execution of work. Therefore, communication system is of utmost importance. For smooth communication, the contractors should have proper facilities at site.

14.1.12 Work Prepared Away From The Site

The contractor shall give the Engineer written notice of the preparation or manufacture at a place away from site, of any materials or components to be used on the works, stating the place & time of preparation or manufacture, so that the Engineer may inspect all stages of the production process. Failure to give such notice may result in the rejection of the materials or components. The facilities for the inspection of such work shall be provided by the contractor.

14.1.13 Interruption of Works During Monsoon

The contract period shall extend over a few monsoon seasons. Normal period of monsoon in the area is from 15th June to 14th October. The contractor should therefore, plan and program his work bearing this fact in mind

14.1.14 Construction Programme

Construction work should be planned in such a way, that there will be unhindered progress of the construction. For this purpose, construction programme will be finalised by the contractor in consultation with Engineer in charge whose decision will be final & binding. Apart from the above, the contractor shall afford all reasonable facilities to other contractors employed by North Central Railway, Prayagraj or by any other authority to execute work on the site. This includes instrumentation, testing, etc. In case of disputes, decisions of the Engineer shall be final & binding.

14.1.15 Advertising

- i) The contractor shall treat the contract and everything within it as confidential. In particular, the contractor shall not publish any information drawing or photograph relating to the works and shall not use the site for advertising purpose, except with written consent of the Engineer and subject to such conditions as he may prescribe.
- ii) The contractor shall provide all facilities to the North Central Railway or its authorized representative to collect information, photographs or make movies of any stage of work including the working of the contractor's plant, machinery and equipment etc. for records, publication, or any other purpose.

14.1.16 Patented Devices, Materials & Processes:

When the contractor desires to use any designed device, material or process covered by letter or patent or copy right, the right for such use shall be secured by suitable legal arrangement and agreement with patent owner and the copy of the agreement shall be filed with the Engineer if so desired by the later.

14.1.17 Working Method

The contractor shall submit within the time stipulated by the Engineer in writing the details of actual method that would be adopted by the contractor for the execution of any item as required by the Engineer at each of the locations, supported by necessary detailed drawings and sketches including those of the plant and machinery that would be used, their locations, arrangement for conveying and handling materials etc. and obtain prior approval of the Engineer well in advance of starting of such item of work. The Engineer reserves the right to suggest modifications or make complete changes in the method proposed by the contractor whether accepted previously or not, at any stage of the work, to obtain the desired accuracy, quality, safety and progress of work which shall be binding on the contractor and no claim on account of such change in method of execution will be entertained by North Central Railway, so long as specifications of the item remain unaltered.

The contractor shall submit a detailed programme for the whole work at the commencement of the contract. He shall further submit a detailed programme for the coming calendar month by the 25th of each month and get the same approved by the Engineer. The North Central Railway reserves the right to modify or change any programme submitted by the contractor and the contractor shall have no claim for extra payment or compensation on the ground of such change of his programme.

14.1.18 Railway Land:

- i) Use of Railway Land required by the contractor for constructing temporary offices, quarters hutment etc. for the staff and storing the materials etc. will be permitted to him/them free by Railways, if available. The location of these offices etc. will be subject to the approval of the Engineer-In – Charge or his

representatives. The Railway will not acquire any land for the purpose of movement of Contractor vehicles, plant & machinery to site of work.

- ii) The contractor shall have to provide road approaches, water supply, power lines etc. for his use at his cost. The engineer and his representative will have free access at any time to the plots of land given to the contractor.
- iii) After completion of the work, the contractor shall clear all land under his temporary occupation to useable condition without any cost to North Central Railway Prayagraj. And hand it over to the N.C. Rly. Prayagraj through its authenticated representative without any encumbrance before completion of the maintenance period or at any earlier day as specified by the Engineer-In-Charge. In the event of failure to clear the site, the North Central Railway Prayagraj will get this done at his risk and cost after serving one month's notice.

iv) Use of Private Land:

The contractor will have to make his/their own arrangements for use of private land, outside Rly. Limits for due fulfilment of contract or for borrow pits, approaches etc. directly with the land owners or local authority and to pay such rents, if any, as are payable as may be mutually agreed upon between them.

15(1) Compliance to Engineer's Instructions:

Please refer GCC Clause 20.1 under Part-II Standard General Condition of Contract.

15(2) Alterations to be Authorized:

Please refer GCC Clause 20.2 under Part-II Standard General Condition of Contract.

15(3) Extra Works:

Please refer GCC Clause 20.3 under Part-II Standard General Condition of Contract.

15(4) Separate Contracts in Connection with Works:

Please refer GCC Clause 20.4 under Part-II Standard General Condition of Contract.

16. Instruction of Engineer's Representative:

Please refer GCC Clause 21 under Part-II Standard General Condition of Contract.

17. Adherence to Specifications and Drawings:

Please refer GCC Clause 22.1 under Part-II Standard General Condition of Contract.

18 (1) Drawings and Specifications of the Works:

The Contractor shall keep one copy of Drawings and Specifications at the site, in good order, and such contract documents as may be necessary, available to the Engineer or the Engineer's Representative.

Figures and dimensions on drawings shall supersede measurements by scale and drawings to a large scale shall take precedence over those to a smaller scale.

18.(2) Ownership of Drawings and Specifications:

Please refer GCC Clause 22.3 under Part-II Standard General Condition of Contract.

18(3) Compliance with Contractor's Request for Details:

Please refer GCC Clause 22.4 under Part-II Standard General Condition of Contract.

18(4) Meaning and Intent of Specification and Drawings:

Please refer GCC Clause 22.5 under Part-II Standard General Condition of Contract.

19. WORKS INVOLVING USE OF CEMENT AND STEEL:

Cement and steel for use in the works should be procured by the contractor from the authorized/approved manufacturers/their authorized dealers/ authorized stock yards which should conform to IS Specifications as enumerated in detail in relevant clause of special conditions. Cement bags should be procured preferably in paper / polythene bag packing & should bear the following information in legible markings:

- i) Manufacturer's name.
- ii) Registered Trade Mark of manufacturer, if any.
- iii) Type of Cement.
- iv) Weight of each bag in kg. or No. of Bags/Tonne.
- v) Date of manufacture, generally marked as week of the year /year of manufacture, e.g. 30/12 which means 30th week of 2012.

To ensure quality control, test certificates from the manufacturers should be produced by the contractors which should conform to the relevant specifications (latest specifications may be incorporated).

- a. To ensure quality control, test certificates from the manufacturers should be produced by the contractors which should conform to the relevant specifications (latest specifications may be incorporated).
- b. Railways may also take samples during the course of work & get the cement and steel tested to ascertain their conformity to specifications.
- c. When such sampling is done, it should be as per specifications laid down in relevant IS Codes.
- d. Tests on Cement will be as per IS 4031 and any other test as specified by the Engineer or his representative.
- e. Tests on steel samples will be carried out as per specifications laid down in relevant IS Codes.
- f. The contractor should make his own arrangement for proper stacking and storing of cement, reinforcing bars and structural steel etc. All material should be protected from any depletion. The reinforcing bars should be protected from corrosion.
- g. Further details have been indicated in the Additional Special Conditions of contract (Part-II).

20. INSPECTION REGISTERS AND RECORDS:

The contractor shall maintain accurate records, plans and charts showing the dates and progress of all main operations and the Engineer shall have access to this information at all times. Records of tests made shall be handed over to the Engineer's representative after carrying out the tests. The following registers will be maintained at site, by the Railway's representative and contractor or his representative will acknowledge and promptly comply with the orders/instructions given through entries in these registers:-

i) Site Order Register–

The contractor shall promptly acknowledge orders given therein by the Engineer or his representative or his superior officers and comply with them. The compliance shall be reported by the Contractor to the Engineer in good time so that it can be checked.

ii) Cement Register–

This register will be maintained to record daily receipt and consumption of the cement duly indicating the balance quantity. The quantum of the work done for the cement issued on a particular date will also be maintained.

iii) Steel Register–

This register will record the receipts of steel items and details of reinforcements and members wherever steel is used.

iv) Labour Register–

This register will be maintained to show daily strength of labour in different categories employed by the contractor. A separate column should be provided in this register for technical staff degree/deploma holder where this technical staff will sign in token of his presence.

v) Log Book of Events/Hindrance register

All events are required to be chronologically logged in this book, shift wise and date-wise. Any hindrance to the work beyond the control should be clearly indicated in this register.

vi) Material passing & Testing Register.

Register will show material brought at site, passed, rejected etc. with quantity, specifications and test results etc.

vii) Cube testing register

viii) Plant & Machinery register

ix) Steel Stock register: This register will be maintained to show record of steel procurement and payment through running bills

x) Registers for earthwork: Various registers for quality control of earthwork (blanket, sub-grade & sub-soil) will be maintained for all tests prescribed by RDSO guidelines.

xi) Steel fabrication check registers as per approved QAP/ WPSS including jigs inspection etc.

xii) Any other register required as per Work Plan/Method Statements/ QAP/ WPSS etc.

All the registers mentioned as above or ordered by Engineer's representative during execution of work will be signed by the representative of the Engineer and the contractor or his representative. Any other register considered necessary by the Engineer shall be maintained at site in which the representatives of the Engineer and the contractor will have to sign. Registers as mentioned above will have to be maintained depending on the scope of work as prescribed by the Engineer at site.

21. Sampling and Testing:

Contractor shall establish a field laboratory at site of work at his cost providing necessary facilities for performing routine type tests such as physical properties of cement, bricks, aggregate, water, concrete including its crushing strength to the satisfaction of the Engineer -in-charge. **He will also arrange for the testing of physical/ chemical properties of reinforcement steel used by him from Govt. approved test houses/Engineering Colleges to establish the quality of steel bars used.** He shall ensure that equipments provided are of latest specification and are in good working order and got calibrated at the laboratory. The contractor shall get certain percentage of samples tested at other approved laboratories as may be directed by the Engineer-in-charge as confirmatory tests at his own cost.

22. Damage to Railway Property or Private Life and Property:

Please refer GCC Clause 24 under Part-II Standard General Condition of Contract.

23. Sheds, Storehouses and Yards:

Please refer GCC Clause 25 under Part-II Standard General Condition of Contract.

24. Provision of Efficient and Competent Staff at Work Sites by the Contractor:

24.1 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 & labourers in or about the execution of any of these works as are careful and skilled in the various trades.

24.2 The Contractor shall at once remove from the works any agents, permitted sub-contractor, supervisor, workman or labourer 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.

24.3 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.

24.4 Deployment of Qualified Engineers at Work Sites by the Contractor:

(Ref. Rly Bd letter no.2012/CE-I/CT/O/20 dated 10.05.2013)

24.4.1 In terms of provisions of Clause 26A to the Standard General Conditions of Contract (GCC), the contractor shall also employ qualified graduate engineer or equivalent or qualified diploma engineer, based on value of contract, as may be prescribed by the Ministry of railways through separate instructions from time to time. However, the following Qualified Engineers to be employ by contractor during execution of the allotted work.

- a) One qualified Graduate Engineer when cost of work to be executed is Rs.200 lakh and above, and
- 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.

24.4.2 In case the contractor fails to employ the Engineer as aforesaid in Para 24.4.1 above, he shall be liable to pay an amount of Rs. 40000/- and Rs. 25000/- for each month or part thereof for the default period for the provisions, as contained in Para 24.4.1(a) and 24.4.1(b) above respectively.

24.4.3 Provision for deployment of Qualified Engineers (Graduate Engineer or Diploma Holder Engineer) shall be for the values as prescribed above. However, for the works contract tenders, if it is considered appropriate by the tender inviting authority, not to have the services of qualified engineer, the same shall be so mentioned in the tender documents by the concerned Executive with the approval of Officer not below the level of SAG officer for reasons to be recorded in writing.

24.5 Care of Staff:

No quarters will be provided by the Railway for accommodation of the contractor or any of his staff employed on the work. The contractor may be allowed to erect any labour camps for housing the labour at or near the site work on available Railway land. The contractor shall at his own cost make all necessary and adequate arrangements for the importation, feeding and preservation of the hygiene of his staff. The contractor shall permit inspection at all times of all sanitary arrangements made by him, by the Engineer or his assistant or the Medical staff of the Railway. If the contractor fails to make adequate medical and sanitary arrangements these will be provided by the Railway and the cost thereof, will be recovered from the contractor.

24.6 First-Aid

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

24.7 Issue Of Identity Cards By Contractors:

(i) The contractor is bound to issue identity card to each and every person employed by him and deployed for execution of the contract work, as per the prescribed format provided in the tender document (Annexure vi), at his cost. Failure on the part of the contractor to issue identity cards to their employees will be treated as breach of contract conditions and therefore will be dealt as per clause N0. 62(VII) of GCC.

(ii) It is mandatory on the part of every employee, deployed by the contractors to keep in his possession, the identity card, issued by the contractor throughout the execution of the work. Failure to possess such

identity will be treated as unauthorized presence in the Railway premises. Such persons shall be liable for prosecution as per law.

- (iii) It is mandatory for the contractors to submit the list of the employees issued with the identity cards and deployed for execution of the particular contract, to the railway's Engineer at site before commencement of the work and also for any subsequent changes made during the execution of the work.
- (iv) No claim whatsoever arising out of implementation of special conditions pertaining to issue of identity cards shall be admissible.

24.8 Transport of Labour To And From Work Site:

As labour camps for labour will have to be located by the contractor in the land arranged by him for facilitating movement of labour to work site and back, the contractor will have to make suitable arrangement at his own cost. Facilities are to be given to labour as per statutory provisions at no extra cost to Railway.

24.9 Temporary labour colony:

The contractor may be allowed to put temporary labour colony on their request, but it will be binding on them to remove the temporary hutments, jungles, etc., from the Railway land before finalisation of final bill.

24.10 Staff welfare and basic amenities at suitable location:

To get the required progress, efficient monitoring of the work and for achieving desired targets, the work of 3rd line has to be carried out by deployment of labour and machineries day and nights. Therefore, all basic amenities as per requirement, like: toilets, bathrooms, drinking water, lodgings and boarding and suitable well-furnished camp office/rest rooms along with suitable transportation facilities for officials use, etc. have to be provided at suitable location in the nearby of the site by the tenderer with their own expenses, as per direction of the engineer and nothing extra will be paid for this purpose. The tenderer has to quote their rate accordingly.

The work has to be carried out in the remote areas during night hours also; therefore, proper security arrangements of the authorities involved in the execution and supervision has to be ensured by the tenderer at their own cost.

25.1 Workmanship and Testing:

Please refer GCC Clause 27.1 under Part-II Standard General Condition of Contract.

25.2 Removal of Improper Work and Materials:

Please refer GCC Clause 27.2 under Part-II Standard General Condition of Contract.

26. Facilities for Inspection:

Please refer GCC Clause 28 under Part-II Standard General Condition of Contract.

27. Examination of Work before Covering Up:

Please refer GCC Clause 29 under Part-II Standard General Condition of Contract.

28. Temporary Works:

Please refer GCC Clause 30 under Part-II Standard General Condition of Contract.

29.1 Contractor to Supply Water for Works: Unless otherwise provided in the Contract, the Contractor shall be responsible for the arrangements to obtain supply of water necessary for the works.

29.2 Water Supply from Railway System: The Railway may supply to the Contractor part or whole of the quantity of the water required for the execution of works from the Railway's existing water supply system at or near the site of works on specified terms and conditions and at such charges as shall be determined by the Railway and payable by the Contractor, provided that the Contractor shall arrange, at his own expense, to effect the connections and lay additional pipelines and accessories on the site and that the Contractor shall not be entitled to any compensation for interruption or failure of the water supply.

29.3 Water Supply by Railway Transport: In the event of the Railway arranging supply of water to the Contractor at or near the site of works by travelling water tanks or other means, the freight and other charges incurred thereby, including demurrage charges that may be levied, shall be paid by the Contractor in addition to the charges referred to in Sub-Clause (2) of the Clause provided that the Contractor shall not be entitled to any compensation for interruption or failure of the water supply.

29.4(a) Contractor to Arrange Supply of Electric Power for Works: Unless otherwise provided in the contract, the Contractor shall be responsible for arrangements to obtain supply of Electric Power for the works.

(b) Electric Supply from the Railway System: The Railway may supply to the Contractor part or whole of the electric power wherever available and possible, required for execution of works from the Railway's existing electric supply systems at or near the site of works on specified terms and conditions and such charges as shall be determined by the Railway and payable by the Contractor provided the cost of arranging necessary connections to the Railway's Electric Supply systems and laying of underground/overhead conductor, circuit protection, electric power meters, transmission structure, shall be borne by the Contractor and that the Contractor shall not be entitled to any compensation for interruption or failure of the Electric supply system.

29.4.1 The contractor shall make his own arrangements for water supply. Wherever it is convenient to the Railway Administration, the water from piped supply may be made available to the contractor, provided the contractor shall arrange at his own expense to effect the connections and lay additional pipe lines and accessories to the site of work and that the contractor shall not be entitled to any compensation for interruption or failure of the water supply. The contractor will have to pay for such water supply from Railway well or tube wells at a rate of one per cent on the amount of all items or work appearing in the bills payable to the contractor in respect of which work such water has been used by the contractor and such charges shall be deducted from sums due or payable by the Railway to the contractor from time to time. Water Connections to labour camps will not be permitted. Contractor has to make his own arrangement for water supply to the labour camps.

29.4.2 The contractor shall make his own arrangements for the operation of mechanical equipments required for the execution of work and/or for the purpose of lighting for working during day/night time. Wherever, it is convenient to the Railway Administration, the electric supply may be made available to the contractor provided the contractor shall arrange at his own expense to effect the connections and lay additional wiring, provide meter and other accessories on the site. Such work of laying wiring etc. shall be done under supervision of a qualified staff and a certificate shall be required to be submitted to the effect that the work of wiring has been done as per rules or the work shall have to be got done through Railway Organization and the charges for the same shall have to be borne by the contractor as per extant rules.

29.4.3 The contractor shall not be entitled to any compensation for interruption or failure of the electric supply. The contractor will have to pay for such electric supply from Railway at a rate agreed to between contractor and Railway Administration and such charges shall be deducted from the sums due or payable by the Railway to the contractor from time to time.

29.4.4 Water available locally in wells, creeks or nallahs may be brackish water at some locations. It should be noted that no sea or brackish water shall be used in all classes of masonry, reinforced, mass

concrete work and curing of work. In addition, water used for the above works shall be free from earthy, vegetable or organic matter, oils, acids and alkaline substance in solutions or in suspension and impurities and shall be fit for drinking.

30 Property in Materials and Plant:

Please refer GCC Clause 32 under Part-II

30.1 Tools, Plant and Materials Supplied by Railway:

Please refer GCC Clause 33(1) under Part-II

30.2 Hire of Railway's Plant:

Please refer GCC Clause 33(2) under Part-II

30.3 The contractor shall make his own arrangements for all plants and machinery, other facilities, equipments, tools including spare parts, fuel and consumable stores, and all labour required to ensure efficient methodical execution of the work. The rates quoted and accepted shall be deemed to be inclusive of all charges of such items.

The Bidder shall deploy the minimum number of equipment for execution of the work as per the mutually agreed programme so that progress at the work site may be achieved as per satisfaction of Engineer-in-charge. :

Note:-

1. Deployment of equipment, will be worked out in consultation with Engineer and in case of dispute, Engineer's decision will be final. Any equipment not required further can be demobilized with the prior approval of the Engineer.
2. The records of mutually agreed programme of deployment as well as request for demobilisation of any equipment/plant and approval of the same should be maintained in a register.
3. The type of equipment specified can be changed by the Engineer depending upon suitability of the equipment as per site conditions with the approval of Dy CE/C concerned subject to that the total rate of production/output of proposed number and type of equipment should be equal to or more than that of the number and type of equipment stipulated in the contract agreement and quality of work is not compromised in any way;

30.4 On the contractor's request the Railway may, however, give on hire plant and machinery/other facilities, equipment and tools, if available spare with the Railway, without any commitment on the part of the Railway to do so, in such case, the hire charges for plant and machinery per annum will be calculated to cover interest, ordinary repairs and maintenance charges at 5%, special repairs and maintenance charges at 10%, depreciation charges as per extant rules of the Railway, and an additional 10% on the total of these four above, on the cost of the Plants & Machinery, which will be the present day market value plus freight and other incidental charges increased by 12.5% supervision charges.

30.5 Hire charges for items other than plant and machinery, which do not require any form of repair and maintenance, shall only take into account interest on capital, depreciation and an additional 10% on these two.

30.6 The hire charges per day shall be arrived at by dividing the annual hire charges by 250, which shall be assumed to be the number of working days in a year for this purpose only. These hire charges will be payable from the day the plant is handed over to the day it is returned to the Railway administration. If, however, during this period the plant remains out of order for reasons beyond the control of the contractor,

or is withdrawn for periodic overhaul or any repairs, such periods shall not be counted for levy of hire charges. The contractor shall enter into a separate agreement in this respect and the terms and conditions as per the agreement will be final and binding on the contractor.

30.7 In the event of a plant or equipment or facility given on hire to the contractor not being returned to the Railway administration in a reasonably good working order /depreciation that it would have suffered for the period of hire, the Railway shall treat the plant/facility as on sale, as per extant orders of the Railway, from the date it was initially given on hire, withdrawing the hire terms and charges.

30.8 If, however, the plant and machinery/other facilities, equipment's, and tools requisitioned by the contractor are not available in Railway's stock or the Railway decides not to supply the same for reasons whatsoever, neither the Railway shall be bound to arrange for the supply thereof nor will the Railway's inability to supply them be accepted as an excuse for delay in the completion of the works/or for any claims thereof.

30.9 Railway's material such as steel M.S. bars, coils, plates, tie-bars, angle iron, R. S. Js. Channels, etc. roofing material glazing or any other items as are stipulated in the agreement to be issued to the contractor for the work either free of charge or on payment as the case may be will be issued to him at the Railways depot/goods shed at Jhansi and will have to be transported by the contractor to the site of work at his cost. All such materials will be used by the contractor for the work in such quantities as are indicated in the schedule or in relevant specifications or drawings or as approved by the Engineers whose decision thereon shall be final. Wastage of or damage to such materials in any manner shall be totally avoided. **If surplus material issued, if any, is not returned in good condition immediately after completion of the work or if any quantity of material supplied by the Railway is consumed in excess or wasted or damaged or lost or not satisfactorily accounted for in that case recovery will be made from the contractor at twice the market rate or twice book rate at the time of last issue whichever is higher plus 5% freight and 2% incidental charges plus 12.5% supervision charges** on the above cost arrived at for the quantity of material consumed in excess or wasted or damaged, lost or not satisfactorily accounted for.

- a. In case it is discovered that the quantity of steel or any other items issued by the Railway as actually used in the work is less than the quantity/quantities specified to be used, the cost of steel and for other such items not so used shall also be recovered from the contractor/s on the basis stipulated in sub-para above.
- b. Action under this Clause will be without prejudice to the right of the Railway to take action against the contractor/s under the conditions of the contract for not doing/completing the work according to the contract for not doing/completing the work according the prescribed Specifications and approved drawing. If there is any delay in supply of material to the contractor/s no claim or compensation of any kind will be entertained, but only suitable extension of time will be considered by the Railway depending upon the merits of the case.

30.10 Mild steel rounds may be supplied in straight lengths or in coils and in lengths as may be available with the Railway. In the event of steel materials of diameters as specified in the drawings not being available, the nearest size will be given and no claims shall be entertained on account of increased weight of steel materials in handling and transport, cutting, bending, binding, hooking, fixing, placing etc, reinforcement including additional binding wire.

30.11 Railway may supply deformed bar/Tor steel instead of M.S. rounds or vice-versa for reinforcement, either of the same diameter or equivalent diameter and no extra payment will be made for handling and transport etc. of deformed bars/Tor steel if the same is used instead of M.S. rounds or vice-versa. 33B4 Railway's materials will be issued on specific requisitions by the contractor and as per requirement consistent with the progress of works and or progress of supply of fabricated materials to the

Railway. A guarantee bond for the amount to cover cost of Railway material will have to be furnished by the contractor before such materials are issued to him. The guarantee bond will be valid for at least 6 months beyond the completion period of contract.

- a. All material left over as 'Surplus' or as 'Scraps' out of materials supplied by the Railway should be returned to the Railway's Stores at Jhansi failing which the cost will be recovered, as per the provision of Clause 30.9 above.

31.1 Precaution During Progress of Works:

Please refer GCC Clause 34(1) under Part-II

31.2 Roads and Water Courses:

Please refer GCC Clause 34(2) under Part-II

31.3 Provision of Access to Premises: During progress of work in any street or thoroughfare, the Contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare and for any drainage, water supply or means of lighting which may be interrupted by reasons of the execution of the works and shall react and maintain at his own cost barriers, lights and other safeguards as prescribed by the Engineer, for the regulation of the traffic, and provide watchmen necessary to prevent accidents. The works shall in such cases be executed night and day, if so ordered by the Engineer and with such vigor so that the traffic way be impeded for as short a time as possible.

31.3.1 The contractor shall at all times be responsible for any damages or trespass committed by his agents and workmen in carrying out the work, unless such trespass is authorized by the Engineer. Code Nos. description and rates given in the schedule are based on the Unified Standard Schedule of Rates-2010, North central Railway. Any discrepancies noticed at any time during the execution, currency of the work in wording, rates, quantity of cement etc. should be rectified by reference to the printed schedule which shall be treated as authoritative and binding on the contractor. The notes appearing at the beginning of each of the relevant chapters of the North Central Railway's Unified Standard Schedule of Rates-2010 except as modified by these special conditions will be applicable to this contract, both for standard schedule and non-schedule *items*

31.4 Safety of Public:

Please refer GCC Clause 34(4) under Part-II

31.5 Display Board:

Please refer GCC Clause 34(5) under Part-II

32. Use of Explosives: Explosives shall not be used on the works or on the site by the Contractor without the permission of the Engineer and then also only in the manner and to the extent to which such permission is given. After such permission is given, the explosives will be stored and used as per extant explosive rules of the Government of India/State Government. Where explosives are required for the works, they shall be stored in a special magazine to be provided by and at the cost of the Contractor in accordance with the Explosive Rules. The Contractor shall obtain the necessary license for the storage and the use of explosives. All operations in which or for which explosives are employed shall be at the sole risk and responsibility of the Contractor and the Contractor shall indemnify the Railway in respect thereof.

32.1 These safety provisions should be brought to the notice of all concerned, display on a notice board at a prominent place at the work spot. The persons responsible for compliance of the safety code shall be named herein by the contractor.

- 32.2 To ensure effective endorsement of the rules and regulations relating to safety precautions, the arrangements made by the contractor shall be opened to inspection by Labour Officer / Engineer-in-charge of the Department or their representative.
- 32.3 In the procurement, transport, storage, issue and use of explosives, the contractor shall abide by the specification and provisions incorporated in the IS Specification No.4801-1967 and IS Specification No. 4756-1968 as amended from time to time. He shall also abide by all the rules and regulations provided in the Indian Explosives Act 1884 amended from time to time and such other Acts and rules as may be enacted and laid from time to time by the Government for such works.
- 32.4 Prior to carrying out any blasting the contractor shall obtain the concurrence of the engineers and shall be at all times bound to carry out his instructions regarding provision of blasting, the type, number, size and placing and firing of charges. Where the blasting has to be carried out close to running line, the engineer may restrict the sizes and number of shots to be fired at a time so that adjoining tracks and works are not adversely affected and so that the rock beyond the desired profile of the cutting etc. is not cracked or disturbed. Blasting in close proximity to track structures and power lines will be carried out only under traffic/power blocks. For works near telephone or telegraph wires, the contractor must advise the engineer in good time, so that he can satisfy himself that safe working methods are being adopted. The contractor will only fire charges at the time notified to him by the engineer and will observe all precautions considered necessary as ordered by the engineer. The contractor will have no claim for damages or loss due to any delay established or claimed to have occurred to the progress of any part of the work as a result of obeying such instruction of the engineer or taking such safety precautions as to the engineer may order to be taken from time to time.
- 32.5 The traffic and power blocks required for carrying out the blasting will be settled in advance and the contractor will be advised of the availability of blocks at least 6 hours in advance. If however, the block could not be made available due to any reason whatsoever, the contractor will have no claim for any loss.
- 32.6 The contractor shall take all precautions against damages from accidents, floods or tide. No compensation will be allowed to the contractor for his tools, plants, materials, machines and other equipment lost or damaged by any cause whatsoever. The contractor shall be liable to make good the damages to any structure or part of a structure, plant or material of every description belonging to the Railway Administration, lost or damaged by any cause during the course of contractor's work. The Railway Administration will not be liable to pay to the contractor any charges for rectification or repairs to any damage which may have occurred from any cause whatsoever, to any part of the new structures during construction. No claims in this regard will be arbitrable. The vehicles & equipments of contractors can be demanded by Railway Administration in case of accidents/natural calamities involving human lives. **Payment will be made as per the existing norms and power delegated to the railways, by operating "Non-Schedule" items.**

33. Suspension of Works:

Please refer GCC Clause 36(1), 36(2) & 36 (3) under Part-II Standard General Condition of Contract.

34. Rates for Items of Works:

Please refer GCC Clause 37 under Part-II Standard General Condition of Contract.

35 Rates for Extra Items of Works:

Please refer GCC Clause 39(1) & 39(2) under Part-II

36.1 Handing over of Works:

The Contractor shall be bound to hand over the works executed under the contract to the Railway complete in all respects to the satisfaction of the Engineer. The Engineer shall determine the date on which the work is

considered to have been completed, in support of which his certificate shall be regarded as sufficient evidence for all purposes. The Engineer shall determine from time to time, the date on which any particular section of the work shall have been completed, and the Contractor shall be bound to observe any such determination of the Engineer.

36.2 **Handing over of Site before start of work.**

Contractor should start the work **within 7 days** from the date of issue of acceptance letter. The site will be handed over to the contractor / authorized representative after reporting from the contractor's side. It will not be binding on the Railway to hand over full site at a time in the starting to the contractor, but the site will be handed over to the contractor commensurate with the progress of the work. Railway may not hand over the entire land required for completion of this work for making bank/cutting or excavation to the contractor(s) due to any unavoidable reasons. Land may be handed over in different stretches, which may not be continuous. Contractor(s) will be required to carry out the work in available stretches. If some stretch of land cannot be handed over to the contractor for borrowing earth or making bank/cutting within the contract period then suitable extension will be granted only for the affected portion without any payment of extra claim to the contractor. **A note of handing over of site to the contractor in addition to entry in the site order book will be prepared duly signed by the Railway and Contractor's representative and submitted to the Engineer In- Charge.**

36.3 In addition to what has been stipulated in clause 40 of General Condition of Contract, it is made clear that all the works and materials before being finally taken over by North Central Railway will be entirely liability of the contractor for guarding, maintaining and making good any damages of any magnitude. It is however understood that before taking over such work North Central Railway will not put it to its regular use as distinct from casual or incidental one except as specially mentioned elsewhere in this contract or mutually agreed to.

37. **Clearance of Site on Completion:**

Please refer GCC Clause 40 (2), under Part-II Standard General Condition of Contract.

VARIATIONS IN EXTENT OF CONTRACT

38. **Modification to Contract to be in Writing:**

Please refer GCC Clause 41 under Part-II Standard General Condition of Contract.

39. **Powers of Modification to Contract:**

Please refer GCC Clause 42 (1), 42 (2) & 42 (3) under Part-II Standard General Condition of Contract.

39.1 **Vitiating during variation in contract quantities:**

(Ref: RB LNo. 2017/Trans/01/Policy dated 08.02.2018)

(a) As a result of variations, a contract shall be considered "vitiating" only when, the following percentage variation in contract value between tenderers are noticed to have been exceeded:

	Value of contract	Percentage difference bet. Present contractor and new L-1 as a result of variation. (Percentage shall be calculated with base as the revised contract quantities multiplied by the rates of the present contractor)
	Small value contracts (Tender value less than Rs. 50 lakh)	10
	Other than small value contracts (Tender value equal to or more than Rs. 50 lakh)	5

(b) When the percentage difference between present Contractor and new L-1 is noticed as becoming beyond the values specified above, the following action shall be taken:

The railway administration should immediately examine whether it is practicable to bring in a new agency to carry out the extra quantity of work keeping in view the progress of the work in accordance with the original contract and the nature and lay-out of the work. If it is found that there will be no serious practical difficulty in meeting the additional quantity of work done by another agency, then fresh tenders for the extra quantity maybe invited otherwise negotiating the rate with the existing contractor for arriving at a reasonable rate for the additional quantities of work, may be adopted.

(c) The above shall be regulated as under:

- (i) The case shall be decided by the tender accepting authority (competent for the revised quantity) and shall not be treated as a case of single tender. The provisions of Railway Board letter No. 2007/CE.I/CT/18/Pt.XII dated 31.12.2010 hereby gets superseded.
- (ii) These instructions will be similarly applicable to earning contracts with H-1, H-2 substituted for L-1, L-2 and so on.
- (iii) Executives while executing the work shall make all efforts to ensure that no Vitiating takes place in normal circumstances. Vitiating should be an exception Rather than a routine affair. Efforts should be made to invite bids on the basis of percentage above/below/at par.
- (i) Vitiating should always be computed with respect to the items, rates, quantities and conditions as available at the time of Tender Opening and subsequent changes/ additions by way of new items will not be counted for computing Vitiating.

40. **Measurement of work by Contractor:**

- (a) This clause is to be read with clause 45(ii) of GCC. Measurement of work by contractor is allowed in works tender having value **more than Rs 5 crore**. (Ref. RB L.No.2017/Trans/01/Policy dt. 08.02.2018)
- (b) Contractor will present a bill on monthly basis. Minimum value of bill (gross) should be Rs 1 crore for first six months and 3 crores thereafter. DyCE/C can accept lower bill value, as a special case, if adequate reasons exist, on request of contractor. If works are progressing fast and contractor wants to present another bill in period less than a month from previous bill, then as long as it is more than minimum value prescribed, same can be accepted. Measurement recorded by contractor shall be test checked by Railway within 10 days of submission of measurements.
- (c) For details procedure and instructions please refer Addendum & Correction slip No. 50 to Indian Railways Code for Engineering Department in reference to Clause 1316 A of Indian Railways Code for Engineering Department .

41. **PRICE VARIATION CLAUSE (PVC):**

Price variation clause (PVC) as per latest Standard General Condition of Contract.

42. **Labour:**

Please refer GCC Clause 54, 55, 56, 57, 58, 59 & 60 under Part-II Standard General Condition of Contract.

43. **Determination of Contract**

Please refer GCC Clause 61 (1), 61(2), 61(3), 62(1) & 62(2) under Part-II Standard General Condition of Contract.

SETTLEMENT OF DISPUTES – INDIAN RAILWAY ARBITRATION AND CONCILIATION RULES

44. **Conciliation of disputes:**

Please refer GCC Clause (63) under Part-II Standard General Condition of Contract.

45. **Matters Finally Determined by the Railway & Dispute Adjudication Board (DAB):**

Please refer GCC Clause 63(1) & 63(2) under Part-II Standard General Condition of Contract.

46.1 Demand for Arbitration:

Please refer GCC Clause 64(1) under Part-II Standard General Condition of Contract.

46.2 Obligation During Pendency of Arbitration:

Please refer GCC Clause 64(2) Standard General Condition of Contract.

46.3 Appointment of Arbitrator, Qualification , Power, Proceeding , Award, Cost & Payment :

Please refer GCC Clause 64(3), 64(4), 64(5), 64(6), 64(7) & 64 (8) under Part-II Standard General Condition of Contract.

47. ADVANCE TO CONTRACTORS (For tender value more than Rs. 50 Crores):-

[As per Para 1264 of Engg Code with C.S.no.58 dt. 27.04.2022)

Please refer GCC Clause 46.4) under Part-II Standard General Condition of Contract.

48. JOINT VENTURE IN WORKS TENDERS (For tenders of value more than Rs. 10 Crores):-

[Railway Board letter no. 2002/CE-I/CT/37/JV Pt-III dt. 14.12.2012)

Please refer GCC Clause 17 under Tender Form (second Sheet) Annexure-I (Contd...) Part-II

The JV & MOU format is enclosed as -----

49. Participation of Partnership Firms in works tenders:

Please refer GCC Clause 18 under Tender Form (second Sheet) Annexure-I (Contd...) Part-II

(Signature)
(Designation)

Signature of Tenderer(s) _____ Railway Date _____
Date _____

JOINT VENTURE/CONSORTIUM AGREEMENT, IF APPLICABLE IN THE TENDER
NON JUDICIAL STAMP - Rs.500/-

This Joint Venture/Consortium Agreement executed at (Name of place) on thisday of(month &year) between M/s X.....(Name of firm) M/s Y.....(Name of firm) M/s Z(Name of firm) wherein Registered office of Ist 2nd and third party is at respectively represented through their constituted attorney.....for the 2nd party.....and for the third party.....(The expression and words of the first 2nd & 3rd party shall mean and include their heirs, successors, assigns, nominees' execution, administrators and legal representative respectively).

WHEREAS the parties herein above mentioned are desirous of entering into a Joint Venture/Consortium for submitting bid document and if contract awarded, carrying on Engineering and or contract works, in connection with "Tender for.....(name of work with tender No./Tender Notice No.) as mutually decided between the parties of this of the Joint Venture/Consortium.

NOW THIS AGREEMENT WITNESSES AS UNDER:

1. That in and under this Joint Venture/Consortium Agreement the work will be done jointly in the name and style of M/s .. (Joint Venture/Consortium of M/s X,Y,Z, with address).
2. That all the parties shall be jointly and severally legally liable to the Employer in the discharge of all the obligations and liabilities as per the Contract with the Employer and severally and jointly responsible for the satisfactory/successful execution /completion of the work in all respects and in accordance with terms & specified in JV agreement. All the parties shall be jointly and severally liable and responsible for fulfilling the obligations of the tender/bid document.

All the parties shall also be liable jointly and severally for the loss, damage caused to the Railway during the course of execution of the contract or due to non-execution of the contract or part thereof.

3. That the role and responsibility of each constituent of the said Joint Venture/Consortium in details, covering all aspects of the planning and Successful completion of the work shall be as under:

The First party shall be responsible for (details may be furnished) The Second party shall be responsible for..... (details may be furnished)

The third party shall be responsible for (details may be furnished).

4. The share of interest/participation, profit & loss of each constituent of the said Joint Venture/Consortium shall be asunder:
 - a. Lead Partner : at least 51%
 - b. Joint Venture Partner-I : Not less than 20%
 - c. Joint Venture Partner-II : Not less than 20%

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5. That the parties of this Joint Venture/Consortium shall depute sufficient no. of experienced staff as committed to commensurate with their role and responsibilities and as required for the successful completion of the works in close consultation with each other.
6. That the financial investment and other resources required for the successful execution/completion of work under this Joint Venture/Consortium shall be brought in by the parties as per mutual agreement/ understanding between them from time to time.
7. That all the Bank Guarantees like performance Guarantee Bank Guarantee for Mobilization advance, machinery advance etc. shall be furnished jointly by all the parties in the name of Joint Venture / Consortium only.
8. That all the parties nominate and authorize Shri.....(Name of representative) of(Name of firm) as the representative of the JV and to sign the tender, , contract Agreement in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and all letter correspondence related to the mentioned work on behalf of the Joint Venture.
9. That all the above noted parties i.e. M/s X,Y,Z undertake not to make any changes in this Joint Venture/Consortium agreement during the currency of contract except when modification becomes inevitable due to successive laws etc. without prior consent of the Employer. The parties further undertake that in any case lead Member shall continue to be the Lead member of the JV.
10. That all the parties undertake that no member of the Joint Venture firm 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 employer (Railways) in respect of the said tender/contract.
11. That all members of JV certify that they have not been black listed or debarred by or any other Ministry/Department of the Govt. of India/State Govt. from participation in tenders/contract in the past either in their individual capacity or the JV firm or partnership firm in which they were members/partners.
12. The Joint Venture agreement 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.
13. The Joint Venture agreement shall in all respect be governed by and interpreted in accordance with Indian Laws .
14. That this Joint Venture Agreement is pursuant the MOU entered in to at(place) this(day) (month) (Year) between above noted parties.
15. That the Credentials & Qualifying Criteria should be asunder.
 - a) Technical eligibility criteria.
 - b) Financial eligibility criteria

NOW THE PARTIES HAVE JOINED HAND TO FORM THE JOINT VENTURE /CONSORTIUM ON THIS.....DAY OFWITH REFERENCE TO AND IN

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FOR DY. CSTE/CTC/TDL

CONFIRMATION OF THEIR DISCUSSIONS AND UNDERSTANDING BROUGHT
ONRECORDON . (date)

IN WITNESS THEREOF THE ABOVE NAMED PARTIES HAVE SET THEIR RESPECTIVE
HANDS ON THIS JOINT VENTURE/ CONSORTIUM AGREEMENT ON THE DAY,
MONTH AND YEAR FIRST ABOVE MENTIONED IN THE PRESENCE OF THE
FOLLOWING WITNESS.

WITNESS:

- | | |
|-----|--------------|
| 01. | First Party |
| 02. | Second Party |
| 03. | Third Party |

MEMORANDUM OF UNDERSTANDING (MOU)
NON JUDICIAL STAMP - Rs.500/-

ENTERED INTO AT.....(place)THIS.....DAYOF
(month) 2018 Between

01.(name of firm) having its registered office at... (full address(there in after referred to as (say X, short form of firm) acting as the Lead Partner of the first part. And
02.(name of firm) having its registered office at(full address) (herein after referred to as
..... (say Y, short form of firm) in the capacity of first Joint Partner of the
other part. And
03.(name of firm) having its registered office at(full address) (hereinafter referred to as(say Z, short form of firm) in the capacity of 2nd Joint Partner of the other part.

The expressions of X,Y,& Z shall wherever the context admits, mean and include their Respective legal representatives, successors-in-interest and assigns and shall collectively be referred to as the parties and individually as “the Party”

WHEREAS the parties here to have agreed to enter in to a Joint Venture for the purpose of participation in tender in respect of the project work of “.....(complete name of work to furnish)” hereinafter to as the Work”) mentioned in tender Notice No.....and Tender No.....Invited by Dy. CSTE/CTC/Tundla/Chief Engineer (Con.), Prayagraj (thereinafter referred to as “Employer”)

Whereas in the event the Joint Venture being successful in its bid, the parties have agreed to perform the contract in accordance with the agreed terms & conditions and thereof and in the spirit of mutual co-operation to achieve the objective of this Joint Venture, to the full satisfaction of the Employer Now, therefore, for and in considerations and covenants hereinafter set forth, the parties hereby agree as follows:

01. The following documents shall be deemed to form and be read and construed as an integral part of this joint Venture.
 - i) Tender Notice
 - ii) Tender Document
 - iii) Any Amendment/Corrigendum issued “the Employer”
 - iv) The tender submitted on our behalf Jointly by the JV.
02. The “parties “ have studied the documents and have agreed to participate in submitting a tender jointly under he name “ X-Y-Z (JV)” (Name of JV furnish).
- 03 X..... (Name of the lead partner) shall be the lead member of the JV for all intents and purpose and shall represent the Joint Venture in its dealing with the Employer. For this purpose of submission of bid proposals, the parties agree to nominate Shri.....(name with designation)of.....name of the parties to which he belongs) as the leader duly authorized to sign and submit all documents and subsequent clarifications, if any, to the Employer. However, Shri.....(name with designation)shall not submit any such proposals, clarifications or commitments before securing the written clearance of the other partners. Which shall be expeditiously given by X,Y, to X (to be decided internally by the JV member).

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04. The parties have resolved that the share of interest/participation, in the said Joint Venture/Consortium shall be asunder:

- | | | | |
|---|--------------------------|---|-------------------|
| a | Lead Partner | : | at least 51% |
| b | Joint Venture Partner-1 | : | Not less than 20% |
| c | Joint Venture Partner-II | : | Not less than 20% |

05. JOINT AND SEVERAL RESPONSIBILITY

The parties undertake that they shall be jointly and severally legally liable to the Employer in the discharge of all the obligations and liabilities as per the contract with the Employer /Railways and for execution of project in accordance with General and special Condition of the Contract if work is awarded to their JV. The parties shall be jointly and severally liable & responsible for fulfilling the obligations of the tender/tender document.

The parties 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 of part thereof.

6. ASSIGNMENT AND THIRDPARTIES

The parties shall Co-operate throughout the entire period of this JV on the basis of exclusivity and neither of the parties shall make arrangements or enter to agreement either directly or indirectly with any other party or group of parties on matters relating for the present "work".

7. EXECUTIVE AUTHORITY

The said Joint Venture through its authorized representative shall receive instructions, payment from the Employer. The management structure for the project shall be prepared by mutual consultation to enable completion of project to quality requirements within the permitted cost & time.

8. GUARANTEE AND BONDS

The Bank Guarantee, Bid Security deposit etc. and other Bond shall be furnished jointly by all the parties in the name of joint venture and that shall be legally binding on all the partners of the Joint Venture.

9. BIDSUBMISSION

Each party shall bear its own cost and expenditure for participation and submission of the bid and all cost until conclusion of a contract with the Employer for the project. Common expenditure shall be shared by all the parties of JV ratio of their actual participation.

10. INDEMNITY

Each party hereto agree to indemnify the other party against its respective parts in case of breach/default of respective party of the contract works of any liabilities sustained by the Joint Venture.

11. For the execution of respective portion of works, the parties shall make their own arrangements as per mutual agreement /understanding between them from time to time to bring the required finance, plants and equipment, materials, manpower and other resources.

12. Validity

This MOU shall remain in force till occurrence of the earliest to occur of the following, unless by mutual consent, the parties agree in writing to extend the validity for a further period.

- The bid submitted by the Joint venture is declared unsuccessful, or
- Cancellation /Shelving of the project by the Employer for any reasons prior to award of work.
- Execution of detailed JV agreement by the parties, setting out detailed terms after award of work by the Employer.

13. The parties undertake not to make any modification /alteration /termination of the MOU of the Joint Venture during the validity of the tender.
14. The parties undertake not to make any changes in this Joint Venture or terminate this Joint venture, after submission of the tender bid except when modification becomes inevitable due to succession of law etc., without prior written consent of the employer .The parties further undertake that in any case Lead member shall continue to be the Lead member of the JV.
15. All members of JV certify that they have not been black listed or debarred by Railway or any other Ministry/Department of the Govt. of India/State Govt. from participation in tenders/contract in the past either in their individual capacity or the JV firm or partnership firm in which they were members/partners.
16. This JV shall be construed under the laws of India.
17. Credentials & Qualifying Criteria should be as under.
 - a. Technical eligibility criteria.
 - b. Financial eligibility criteria

Now the parties have joined hand to form the JV(MOU) on this.....day of(month)...Two thousand ten with reference to and in confirmation of their discussions and understanding brought on record on..... (day) (month)2020.

Lead Member

Member-I

Member –II

(X)

(Y)

(Z)

(Name of the signatory with designation and name of firm should be furnished)

In witness whereof the parties, have executed this JV the day, month and year first before written.

Witness:

01.

02.

SCOPE OF WORK

- a) The Scope of work includes Construction of S&T service buildings (LSC) in KAA-ALJN section in connection with the work of “Reliability improvements of track circuits by provision of MSDAC in parallel of existing DCTC at 14 stations in KAA-ALJN section of Prayagraj Divn. of NCR. Contractor has to deploy high efficiency improved equipment's, machinery, vehicles, Earth movers, Rock cutting machines and labour (including qualified competent civil graduate Engineers skilled/semi-skilled labour) operators etc.
- b) The dismantling of any type of structure which come across during work and disposal of muck at place directed by Engineer.
- c) Dismantling /diversion and shifting of various Engineering/Mechanical facilities and other services etc. Necessary for the execution of work.
- d) Any other building related works assigned by Concerned site engg.

Note: Tenderers to read understand and consider all the conditions, special & additional special conditions, instructions, specifications, work scope etc. before quoting rates.

Additional Special Conditions of Contract (Part-I)

1. Execution of any work under this contract will be done as per the provisions of following Codes/ Specifications / Manuals / Rules / Guidelines / Technical Circulars and contractor will comply with all provisions of these below-mentioned documents. Rate of items are inclusive of all methods/procedures of various activities involved in execution for particular item detailed in these documents, unless otherwise written in Special Conditions of Contract.

- 1) Indian Railway Bridge Rules
- 2) Indian Railway Bridge Manual
- 3) IRS Code of Practice for Plain, Reinforced & Pre-stressed Concrete for General Bridge Construction (Concrete Bridge Code)
- 4) IRS Code of Practice for the Design of Sub-Structures and Foundations of Bridges (Bridge Sub-Structures & Foundation Code)
- 5) IRS Specification for Fabrication and Erection of Steel Girder Bridges and Locomotive Turn-Tables (Fabrication Specification)
- 6) IRS Code of Practice for the Design of Steel or Wrought Iron Bridges Carrying Rail, Road or Pedestrian Traffic (Steel Bridge Code)
- 7) IRS Manual on the Design and Construction of Well and Pile Foundations (Well and Pile Foundation Code)
- 8) IRS Code of Practice for Metal Arc Welding in Structural Steel Bridges Carrying Rail, Rail-Cum-Road or Pedestrian Traffic (Welded Bridge Code)
- 9) IRS Code for Earthquake Resistant Design of Railway Bridges (Seismic Code)
- 10) IRS Code of Practice for the Design and Construction of Masonry and Plain Concrete Arch Bridges (Arch Bridge Code)
- 11) Indian Railways Permanent Way Manual
- 12) Guide lines for handling and stacking of rails CT-35
- 13) Indian Railways Code for the Engineering Department
- 14) Indian Railways Schedule of Dimensions 1676mm Gauge (BG)
- 15) National Building Code 2005
- 16) Any BIS/IRC Code referred in above listed documents
- 17) Instructions circulated by Railway Board/ RDSO/ NCR HQ etc.
- 18) Any other Codes , Manual & Circular as per the need

All above-mentioned codes/manuals etc. are freely available on websites of Indian Railways/ IRICEN. If contractor is not able to find any code/manual on internet, he may get it from office of AXEN/DY.CSTE/PU in soft copy. Any document (e.g. IS Codes) which are sold online/offline by BIS or any other agency, contractor must get it on his own.

2. Various BIS / IRC Codes are referred in BIS/IRC Code itself. Those referred BIS/IRC Codes will also apply in contract and contractor will comply with provisions of referred BIS/IRC Codes too.
3. If work is being carried out as per RDSO drawing/any other drawing approved by Railway, material to be used, processes involved in fabrication/erection of structure etc. will comply with drawing. Contractor will follow the all instructions conveyed through the notes of drawing or any other means.
4. For items not covered by IRS and BIS Codes, provision of IRC Codes and MOST Specification are to be followed in successive that order

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5. After issuance of LOA, contractor will submit detailed bar charts in line with these bar charts and get it approved from Railway.
6. Contractor will prepare Design Basis Report (DBR) for important bridges and obtain approval of RDSO as per guidelines of RDSO Report No. BS-122 within time frame as shown in bar chart if required and required by Railway.
7. Contractor will prepare the Quality Assurance Program for all activities required to complete the work (e.g. center line of bridge, concreting, steel, construction material to be used) and get it approved from Railway.
8. Contractor will prepare Method Statement for all activities required to complete the work keeping time frame of bar chart in mind and get it approved from Railway.
9. In case of any disputes regarding interpretation of any of the clause, decision of the concerned Chief Engineer/Const/North Central Railway, Prayagraj shall be final and binding on the contractor/s.
10. **Plea of Custom:** The plea of custom prevailing will not on any account be permitted as excuse for an infringement of any of the conditions of the contract or specifications.
11. Important events/construction stages will have to be recorded by contractors in still and digital video format at his own cost and will be handed over to Railways for record.
12. **WORKING METHOD AND PROJECT MONITORING:**
 - i) The contractor shall submit within the time frame stipulated by Engineer-in-charge. The details of actual method to be adopted by contractor for the execution of any item at each of location support. The relevant working drawings as plants and machinery to be used for method handling for approval of Engineer-in-charge, who reserves the right to suggest alteration/modification in proposed method, which shall be binding on the contractor and no claim on account of such changes in method of execution will be admissible.
 - ii) The contractor shall submit additional program for work commencement of work by preparing bar chart. PERT / CPM chart on computer using MS project for approval of Engineer-in-charge. This program will be reviewed at different stages of work.
13. **Design and Drawings:**

Contractor will have to collect the site details required for design and submit detailed structural design and drawing for any component if required for the foundation, substructure, Retaining wall or toe walls etc incidental to work. Except those components, for which Railway's standard drawing are available, as per the direction of Engineer-in-charge and the same will be submitted to the railways in required format duly proof checked by proof consultants of any of IIT's/NITs for final approval of railways along with all supporting input & output data with software used in the design & drawing to enable checking by the Railway's authorities. Nothing extra shall be paid on this account.
14. Contractor will have to drill bore holes for geotechnical investigation for development of design input data of foundations. He may encounter standing/flowing water in river course. Contractor has to develop earthen island/coffer dam for construction of piles/foundations. Same earthen island/coffer dam can be used for exploratory drilling/sampling/data collection/in-situ testing.

Payment for such temporary earthen island/coffer dam will be made under relevant SOR/NS item only once. Contractor must organize these activities accordingly.

The rate for forming an earthen island/coffer dam shall, unless otherwise stipulated, include the cost of its construction, its maintenance for the period of utility and its removal to the extent ordered.

15. Completion Drawing:

On completion of work the contractor will submit completion drawing of the work, structures & bridges covered under scope of contract (as directed by Engineer-in-charge) to the railway on C.D. with three sets of hard copies and on reproducible tracing film of 75 micron double matt type of approved quality available in the market for record. The rate includes for submission of completion plan and nothing extra will be paid for this work. If the same is not submitted before or along with final bill **then recovery at the rate of 0.2% of the overall gross payment of the contract paid to contractor will be recovered from the contractor's dues.** This recovered amount will be released only after receiving of completion drawing within 2 month from the date of passing of final bill to this office after this period; this recovered amount will stand forfeited.

If work is terminated then contractor has to submit completion drawing of the portion of work executed by him, otherwise action as stated above will be taken.

16. Transport Arrangement:

The work at entire stretch will be supervised by two or more railway supervisors, contractor shall provide & maintain proper transport facilities **(at least 1 nos road vehicles)** for efficient transport of Railway men and material. Timely and adequate transport facilities in the form of well maintained road vehicle like Ertiga /Scorpio/Tavera/Bolero or similar (not older than 3 years) etc. with fuel and driver for 24 hrs availability during entire completion period of work. No extra/additional payment will be made to the contractor for this arrangement. **In case of contractors failures to maintain these facilities, Rs.1500/- per day per vehicle shall be deducted from running bills as a deterrent.** In this regards decision of Engineer in charge shall be final and binding upon the contractor.

17. Railways can get the work supervised through Railway Officials or PMC.

18. No payment whatsoever, will be made to contractor for development and maintenance of site offices. All construction material, accessories, furniture etc. will be the property of contractor after completion of work.

Any delay in setting up of these site offices, which may hamper progress of work will be on account of contractor.

19. Contractor will employ qualified Engineer at site in compliance of Clause 26A of GCC & earlier mentioned clause 24.4 of Special Condition Part-I of this booklet:

20. List of essential minimum equipments to be maintained at site:

Contractor will arrange minimum number of equipments for execution of work as per mutually agreed programme as per earlier mentioned clause 30.3 of Special Condition Part-I of this booklet:

Contractor will prepare a deployment scheme for above equipments in accordance with agreed upon plan of work and get it approved from Railways. Demobilization or reduction in machinery can be allowed during the course of work, subject to progress of work not getting hampered. **Failure to provide above machinery will result in penalty of Rs 2000/- per day.**

21. Contractor will arrange to carry out good quality drone survey of various stages of construction at least 3 times in a year, at times advised by Engineer and submit video to railway.

SAFETY RULES

22. **Safety precautions:**

(a) Contractor will follow all provisions of PCE Circular 103-R (available in Tender Documents) or any other circular / instruction communicated regarding safety at worksite strictly during execution of work.

(b) Barricading/Fencing:

(i) Contractor will provide barricading parallel to track as and when directed by Engineer. Barricading will be done as per the drawing given in said circular or any other drawing as directed by Engineer. Cost of this will be paid under relevant SOR/NS item.

(ii) This fencing/barricading will be maintained till the time as directed by Engineer's representative. As this fencing gets damaged, stolen, broken due to many external factors, payment will be made for this under relevant NS item. Payment for maintenance of fencing can be made since day of erection. Clause of 'Maintenance Period' of 6 months will not be applicable.

(iii) If fencing is not found intact (as per drawing) by Railway engineer at any time, penalty equal to the cost of fencing of damaged patch will be imposed. Entry regarding this will be made in site order book and information will be sent to authorize engineer via WhatsApp /e-mail.

(iv) If a damaged patch is not repaired by contractor in next 3 days, a penalty of Rs. 100/- per meter per week or part thereof will be imposed till repairing is done.

(c) If during execution of work situation arises that formation beside running track is used by road vehicles, contractor will ensure that fencing is intact in that stretch. If fencing is not intact even at a single place, which may endanger the safety of running trains, contractor will provide manned barrier on both side of this stretch at his own cost till fencing is repaired.

(d) Contractor at the direction of Engineer's representative, will provide obstructions like excavation, placing of sleepers/cess ballast/released material, fencing, barrier etc. at the points from where road vehicles entry on formation parallel to track. No payment will be made for such activities.

(e) Manning of barriers:

(i) During execution of work situations will arise when vehicles will ply on railway formation/bed parallel to track. To control such movement, Engineer's representative can direct contractor to provide manned barrier at locations identified by him. Cost of manning will be paid under relevant SOR/NS item. Cost of barrier will be borne by contractor and it will be their property. Barrier must be sturdy and with locking arrangement.

(ii) Before manning, contractor and Engineer's representative (AXEN/XEN) will jointly plan the scheme mentioning how much time will it take to complete the work in that patch. If work is not completed in that period, further manning will be done by contractor at his own cost. While deciding the completion period of that particular patch, quantum of work, original completion

period of contract, bar chart submitted by contractor etc. must be considered. Engineer's representative will strive to minimize the requirement of manning. For example; 1. Patch lying between two level crossings may be manned from one side and closed from another side, reducing manpower deployment to one. 2. Manning can be done for the only period in which vehicles ply. If night working is not being done, manning will be done in day time only.

(iii) If work is not completed in stipulated time and manning of check points is also not being done by contractor, railway will arrange manning by departmental manpower/home guards/private guards/any other means. Recovery at double rate of cost of such arrangement will be made from contractor's dues.

(f) In case the contractor has to ply vehicles for the purpose connected with the contract adjacent to Railway track the Railway Administration will be at liberty to post an experienced staff as flag man for guidance of the movements such vehicles so as to prevent accidents and the contractor will bear wages including all etc. of the staff posted as flag man for the period such staff is posted for the purpose. The Railway Administration will be sole judge in the absolute discretion, of the fact that it is necessary to post any staff, that which of the staff will be suitable for the purpose, that what should be the wages and other allowance payable by the contractor for staff posted for the purpose. The Railway administration will have a right without prejudice to other remedies to deduct the wages etc. of such staff from the bills of the contractor in respect of this contract of from any moneys or the contractor whatsoever available with the Railway Administration. The contractor will be liable for any over payments under Workman Compensation Act on account of any injury sustained to Railway servant during that period.

(g) Within the station premises, especially on passenger platform, or near the running track, contractor/s shall ensure sufficient free space for movement of passenger traffic. He must cover and protect the excavation carried out in such areas with a view to avoid the accident. The works must be carried out most carefully in such a way that they do not hinder the railway operation except as agreed to by the railway.

(h) The contractors shall see that no change is caused to railway signaling and transmission wire, stations, installation, communication lines, electric devices, trains of any kind, fencing as well as any rolling stock and in general to all railway installation and equipment in case any damage is caused to these due to the fault of the contractor on the part of anyone on his behalf all repairs there required will be carried out by the railway at the entire cost of the contractor and amount of expenses thus incurred will be recovered from the payment due to him.

(i) The contractor shall be responsible for safe custody of tools and of the safety of his labour. He should ensure that labour on work removes their tools clear of the tracks on the approach of any trains. After the day work, the contractor should ensure that the tools are deposited proper tool box before the labours leave the work site. Tool issued should not be allowed to fall in unwanted hands who can tamper with the railway track.

(j) The contractor shall employ one suitable supervisor to supervise the work at site. Though all the work relating to the safety of running trains shall be executed under railway supervisor, presence of qualified supervisor from the contractor's side is a must at the site of work.

(k) Normally, night working shall be avoided. A night working shall be permitted by AXEN/XEN in writing. One inspector shall be specifically deputed to supervise the night working. The site/area where night working is to be done shall be adequately lit. Nothing extra shall be paid for this.

(l) The worksite shall be suitably demarcated to keep public and passengers away from work area. Necessary signage boards such as “Work in progress. Inconvenience is regretted” etc. shall be provided at appropriate locations to warn the public/ passengers. Adequate lighting arrangement of worksite wherever required shall be done to ensure safety of public/passengers during night.

(m) In the event of accident at the work site, a departmental enquiry shall be held and in case, it is established that the accident has occurred on account of contractor's negligence or the negligence of his men, penalties upto an upper limit of 10% of the total cost of the work shall be imposed on the contractor.

(n) Railway administration reserves the right to terminate the contract with immediate effect if contractor is found responsible for causing an accident, without giving any further notice/notices to the contractor.

(o) In the event of contractor not completing the work or leaving it unsafe at the end of day's work such that it may cause speed restrictions to be imposed, track shall be attended by the railway immediately at the contractor's cost without any further notice. In addition, the labour cost recoverable from the contractor, supervision charges @ 12.50% and train detention charges @ Rs. 50000/- every half hour or part thereof shall also be recovered.

(p) In the event of contractor starting the job without proper supervision causing an accident, he may be prosecuted under Railway Act for unlawful interference with the railway track in addition to the recovery of Rs. 20000/- or value of actual loss, whichever is higher.

(q) Training to Supervisors and Operators of Contractor: The supervisors and operators of the contractor proposed to be deployed at work site, which is close to the running track, shall be imparted mandatory training by the Railway at site free of cost about the safety measures to be adopted while working in the vicinity of running track. Engineering-charge of the work shall decide the scale, extent & adequacy of training. In case, training is imparted at a recognized Railway training institute, the charges for the same shall be recovered from contractor as per latest instructions available from Railway Board/NCR HQ. A competency certificate to this effect to the individual supervisor/ operator shall be issued by a Railway Officer not below the rank of Assistant Officer. No supervisor/ operator of the contractor shall work or be allowed to work in the vicinity of running track that is not in possession of valid competency certificate. All the labour, materials, tools, plants etc. except detonators, required for ensuring safe running of trains shall be provided by Contractor at his own cost. Wherever lookout men are provided by Railway, charges at the rate of Rs. 500/- per man day shall be recovered from Contractor.

The Railway will not acquire any land for the purpose of movement of vehicles of the contractor/s in doing earthwork.

(r) In addition, instructions issued through various PCE/Rly circulars with all amendments regarding barricading, protection of running lines while working in vicinity of it should be strictly followed.

(s) Storage of inflammables must be well away from site office/running track.

23. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra labourer shall be engaged for holding the ladder and if the ladder is used for carrying materials as will, suitable foot-holds and hand holds shall be provided on the ladder and the ladder shall be given an inclination not steeper than one horizontal to four vertical.

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24. Scaffolding or staging more than 3.5 meters above the ground or floor swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached bolted, braced and otherwise secured above the floor or platform of such scaffolding or staging and extending along the entire length thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
25. Working platform gangways and stairways should be so constructed that they should not sag unduly or unequally, and where the height of the platform or the gangway or the stairway is more than 3.5 meters above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in the Para above.
26. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 10 metres in length while the width between side rails in swung ladder shall in no case be less than 300mm for ladder up to and including 3.5 metres in length. For longer ladders this width should be increased by at least 20 mm for each additional meter of length. Uniform steps spacing shall not exceed 300 mm. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sides of work shall be so stacked or placed as to cause danger for inconvenience to any persons or the public.
27. The contractor shall provide all necessary fencing and lights to protect the public from accident, and shall be bound to bear the expenses of defence of every suit action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such persons or which may with the consent of the contractor be paid to compromise any claim by any such person.
28. Before any demolition work is commenced and also during the process of the work:-
- (a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - (b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
 - (c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
29. All necessary personal safety equipment as considered adequate by the Engineer-in-charge should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by these concerned.
- (a) Workers employed on mixing asphalt materials, cement and live mortar shall be provided with protective goggles.
 - (b) These engaged in white washing and mixing or attacking of cement bags or any materials which are injurious to the eyes shall be provided with protective goggles.
 - (c) Those engaged in welding works shall be provided with welder's protective eyesight lids.
 - (d) Stone breakers shall be provided with protective goggle and protective clothing and seated at sufficiently safe intervals.
30. When the work is done near any place where there is risk of drowning, all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any

persons in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

31. Use of hoisting machines and tackle including their attachment anchorage and supports shall conform the following standards or conditions:-

(a) (i) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order.
(ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.

(b) Every Crane Driver or hoisting appliances operator shall be properly qualified and no person under the age of 21 years shall be in-charge of any hoisting machine including any scaffolding.

(c) In case of every hoisting machine and of every cabin ring, shackle, swivel and pulley block used in hoisting or as means of suspension safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked within the safe working load.

In case of a hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machinery or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

(d) In case of departmental machine the safe working load shall be notified by the Electrical Engineer-in-charge. As regards contractor's machines, the contractor shall notify safe working load of the machine to the Engineer-in-charge whenever he brings any machinery to site of work, get it verified by the Electrical Engineer concerned.

32. Motors, gearing transmission, electric wiring and the dangerous part of hoisting appliances should be provided with efficient safe guards, hoisting appliances should be provided with such means will as reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized insulating mats, wearing apparel, such as gloves, sleeves and both as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

33. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold ladder or equipment shall be altered or removed while it is use. Adequate washing facilities should be provided at or near places of work.

34. **PRECAUTIONS WHILE WORKING IN THE VICINITY OF TRACK:-**

The Contractor shall not allow any road vehicle belonging to his or his suppliers etc., to ply in Railway land next to the running line. If for execution of certain works viz., earthwork for parallel Railway line and supply of ballast for new or existing rail line gauge conversion etc., road vehicles are necessary to be used in Railway land next to the Railway line, the Contractor shall apply to the Engineer-in-charge for permission giving the type and No. of individual vehicles, names and License particulars of the drivers, location, duration and timings for such work / movement. The Engineer-in-charge or his Authorized Representative will personally counsel, examine and certify, the road vehicle drivers, Contractor's flagmen and Supervisor and will give written permission giving names of road vehicle drivers, Contractor's flagmen and

Supervisor to be deployed on the work, location, period and timing of the work. This permission will be subject to the following obligatory conditions.

- a) The road vehicles will ply on between sunrise and sunset.
- b) Nominated vehicles and drivers will be utilized for work in the presence of at least one flagman and one Supervisor certified for such work.
- c) The vehicles shall ply minimum 6 m clear of track. Any movement/work at less than 6 m and up to minimum 3.5 m clear of track centre shall be done only in the presence of Railway employee Authorized by the Engineer-in-charge. No part of the road vehicle will be allowed at less than 3.5 m from track centre. Cost of such Railway employee shall be borne by the Railway.
- d) The Contractor shall remain fully responsible for ensuring safety and in case of any accident, shall of all damages to this equipment and new and also damages to Railway & its passengers.
- e) The Contractor shall also bound by the provisions of this agreement to ply the road Vehicles only with adequate margin of safety, well clear of the fixed structure profile of infringements, as stipulated in the rules made under the Indian Railways Act and to seek and be guided by the Signals and other directions of any look-out men or other personnel retained for the purpose of ensuring safety, and to ensure extra care and vigilance while turning, reversing or moving the road Vehicles Track or the siding as the case may be. The Contractor shall employ necessary look-out men also at his own cost, irrespective of any other arrangement that Railway may make in this regard.
- f) Any breach of these conditions by the Contractor and/or his agents affecting the safety of movement of Trains, engines, or other rolling stock of the Railway shall constitute a breach of Contract by the Contractor entailing liability for termination of contract for default on the part of the Contractor.
- g) *When the work is required to be done along or near the existing Railway track the contractor/s shall take such steps as are necessary for the safety of the track and labour working at site. He/they will also be required to programme his/their working so as not to interfere with the movement of trains. In this regard, contractor will not take up the track work on running lines without the presence of authorized representative of Railway. No extra payment shall be allowed for these precautions and also for crossing track/tracks, if required during the execution of the work. It should be ensured that the ballast of the track (s) is not spoiled or mixed with earth.*
- h) *In addition to the precaution by the contractor/s for the safety of the track and labour, it may necessary to post flagman in same locations as an additional safety measure, for which the cost shall be recoverable from the contractor/s on the basis of the expenditure incurred by the railways enhanced by 12½% department charges. The contractor/s shall be fully responsible for any damage to or trespass caused by his/their men to any surrounding structure, Railways bear no liability whatsoever on this account.*

35. notwithstanding the above clause from (1) to (14) there is nothing in these to exempt the contract or the operation of any other act or Rule in force in the Republic of India.

36. **PROTECTION AND STEPS TO BE TAKEN IN ORDER TO AVOID DANGERS TO RAILWAY INSTALATIONS:**

- a) At such of the locations where contractor/ road vehicle are permitted to ply adjacent to the running lines and yard, an experienced gang-man shall be deputed as flagman at the cost of the contractor to prevent accidents. This factor should be borne in mind by the contractor/s while formulating the rates.
- b) If the work to be executed is in proximity or the running railway track, the contractor will be required to be followed all precautions and carry out all works that may be necessary to ensure the safety of the running track/trains, without imposition of any speed restriction thereon as may be directed by the engineer or his authorized representative. No claim whatsoever will be

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entertained for either an inconvenience caused to the contractor or for the rescheduling of the operations or for any other reasons on this account.

- c) The contractor shall take all precautionary measures in order to ensure protection of his own personnel moving about or working on the railway premises and shall have to conform to the rules and regulations of North Central Railway. If any unforeseen accident or injury happens while on working, the contractor shall be solely responsible for the same.
- d) **Within the station premises, especially on passenger platform, or near the running track,** contractor/s shall ensure sufficient free space for movement of passenger traffic. He must cover and protect the excavation carried out in such areas with a view to avoid the accident. The works must be carried out most carefully in such a way that they do not hinder the railway operation except as agreed to by the railway.

The contractor's employee and workers shall not for any reason operate any appliances or installation of the railway concerning the safety of the trains movements but they should whenever necessary notify to the qualified railway staff who will then take necessary steps.

- e) The contractors shall see that no change is caused to railway signalling and transmission wire, stations, installation, communication lines, electric devices, trains of any kind, fencing as well as any rolling stock and in general to all railway installation and equipment in case any damage is caused to these due to the fault of the contractor on the part of anyone on his behalf all repairs there required will be carried out by the railway at the entire cost of the contractor and amount of expenses thus incurred will be recovered from the payment due to him.
- f) The contractor shall be responsible for safe custody of tools and of the safety of his labour. He should ensure that labour on work removes their tools clear of the tracks on the approach of any trains. After the day work, the contractor should ensure that the tools are deposited proper tool box before the labour proceeds for their homes. Tool issued should not be allowed to fall in and unwanted hand who can tamper with the railway track.
- g) The contractor shall employ one suitable supervisor to supervise the work at site. Though all the work relating to the safety of running trains shall be executed under railway supervisor and presence of qualified supervisor from the contractor's site is a must at the site of work.
Contractor shall provide 150mm thick white line with lime at a distance of 3.5m from centre to existing track. This white line shall be in the entire length where work is going on and/or the vehicle/machinery are plying along the track. Nothing extra shall be paid for this.
- h) Barricading with the help of portable fencing shall be provided in the length where the day's work is to be done in close vicinity of the track. The fencing shall consist of self supporting steel column connected with at least 20mm thick red nylon rope/red colour strips. The column shall be of 1.2m height. This will be placed at a distance of 3.5m from centre line of the nearest track. Nothing extra shall be paid for this work unless otherwise payable.
- i) **Asstt.Officer/Sr.Scale officer shall issue competency certificate after checking license and their working to all drivers of nominated vehicles/machinery.** Inspector at site shall ensure that the driver who does not possess the competency certificate will not work at site.
- j) The area between running line and white line shall not be permitted to become slushy and adequate drainage must be ensured at all times.
- k) **Machine/vehicle shall ply 6m clear of track and movement /work at less than 6m and up to 3.5m of clear track centre shall be done in the presence of the railway employee authorized by the Engineer in- charge. The railway employee so deputed shall ensure safety of the track, with banner flag, hand signal lamps and detonators.**
- l) If vehicle/machinery/materials are to come within 3.5m of existing track, work must be done under the presence of an inspector authorised to do safety works. A caution order shall be issued and track will be protected with the banner flag, hand signal lamps and detonators.
- m) Normally, night working shall be avoided. A night working shall be permitted by AEN/SEN in writing. One inspector shall be specifically deputed to supervise the night working. The site/area where night working is to be done shall be adequately lit. Nothing extra shall be paid for this.

37. PENALTIES DUE TO UNSAFE WORK:

- a) In the event of accident at the work site, a departmental enquiry shall be held and increase it is established that the accident has occurred on account of contractor's negligence or the negligence of his men, penalties up to an upper limit of 10% of the total cost of the work shall be imposed on the contractor.
- b) Railway administration reserves the right to terminate the contract with immediate effect in the contractor is found responsible for causing an accident without giving any further notice/notices to the contractor.
- c) In the event of contractor not completing the work or leaving it unsafe at the end of days work so they may serve speed restrictions if required to be imposed, track shall be attended to by the railway immediately at the contractor's cost without any further notice. In addition the labour cost recoverable from the contractor, supervision charges @ 12.50% and train detention charges @ Rs.2000/- every half hour or part thereof shall also be recovered.
- d) In the event of contractor starting the job without proper supervision causing an accident, he may be prosecuted under railway act for lawfully interfering with the railway track in addition to the recovery of Rs. 20000/- or value of actual loss, whichever is less as penalty.

38. FLAGMEN

At such of the locations where contractor/s road vehicles are permitted to ply adjacent to the running lines and yard, an experienced gang man shall be deputed as flagman at the cost of the contractor to prevent accidents. This factor should be borne in mind by the contractor/s while formulating the rates.

39. In case of any disputes regarding interpretation of any of the above clause, decision of the Chief Engineer (S&T)/Project /North Central Railway, Prayagraj shall be final and binding on the contractor/s.**40. SAFETY PRECAUTIONS TO BE TAKEN WHILE PERMITTING PLYING OF VEHICLES IN THE VICINITY OF WORKING SITE:**

Safe working of contractors (Extract of Para 826 of IRPWM):—A large number of men and machinery are deployed by the contractors for track renewals, gauge conversions, doublings, bridge rebuilding etc. It is therefore essential that adequate safety measures are taken for safety of the trains as well as the work force. The following measures should invariably be adopted:-

- (i) The contractor shall not start any work without the presence of railway supervisor at site.
- (ii) Wherever the road vehicles and/or machinery are required to work in the close vicinity of railway line, the work shall be so carried out that there is no infringement to the Railway's schedule of dimensions. For this purpose, the area where road vehicles and/or machinery are required to ply, shall be demarcated and acknowledged by the contractor. **Special care shall be taken for turning/ reversal of road vehicles /machinery without infringing the running track.** Barricading shall be provided wherever justified and feasible as per site conditions.
- (iii) The look out and whistle caution orders shall be issued to the trains and speed restrictions imposed where considered necessary. Suitable flagmen/detonators shall be provided where necessary for protection of trains.
- (iv) The supervisor/workmen should be counselled about safety measures. A competency certificate to the contractor's supervisor as per Performa shall be issued by AXEN/XEN, which will be valid only for the work for which it has been issued.

- (v) The unloaded ballast/rails/sleepers/other P-Way materials after unloading along track should be kept clear off moving dimensions and stacked as per the specified heights and distance from the running track.
- (vi) Supplementary site specific instructions, wherever considered necessary shall be issued by the Engineer in Charge.
- (vii) 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.

41. PLYING OF ROAD VEHICLES AND WORKING OF MACHINERIES CLOSE TO RUNNING TRACKS:

- (i) **Normally, the road vehicles shall be run or machinery shall be worked so as not to come closer than 6.0m from centre line of nearest running track.**
- (ii) The land strip adjacent to running tracks, where road vehicle is to ply or machinery is to work, shall be demarcated by lime in advance in consultation with the Railway's Supervisor. Wooden pegs at interval not exceeding 75mts shall be provided along the line marking as permanent marks. The road vehicles shall ply or machinery shall work so as not to infringe the line of demarcation.
- (iii) **If a road vehicle or machinery is to work closer to 6.0m due to site conditions or requirement of work, following precautions shall be observed.**
 - a. In no case the road vehicle shall run or machinery shall work at distance less than 3.5m from centreline of track.
 - b. Demarcation of land shall be done by bright coloured ribbon/nylon chord suspended on 75cm high wooden/bamboo posts at distance of 3.5 m from centreline of nearest running track.
 - c. Presence of an authorized Railway's representative shall be ensured before plying of vehicle or working of machinery.
 - d. Railway's Supervisor shall issue suitable caution order to Drivers of approaching train about road vehicles plying or machineries working close to running tracks. The train drivers shall be advised to whistle freely to warn about the approaching train. Whistle boards shall be provided wherever considered necessary.
 - e. Lookout men shall be posted along the track at a distance of 800m from such locations who will carry red flag and whistles to warn the road vehicle/machinery users about the approaching trains.
 - f. On curves where visibility is poor, additional lookout men shall be posted.
 - g. If work is required to be executed in night hours then adequate lighting arrangements including all safety measures to be ensured while working in vicinity of running lines.
- (iv) **If vehicle/machinery is to be worked closer to 3.5m from running track.**
Under unavoidable conditions, if road vehicles is to ply or machinery is to work closer to 3.5m due to site conditions or requirement of work, following precautions shall be observed:
 - a. Plying of vehicles or working of machinery closer to 3.5m of running track shall be done only under protection of track. Traffic block shall be imposed wherever considered necessary. The site shall be protected as per provisions of Para No. 806 & 807 of P-Way Manual as case may be.
 - b. Presence of a Railway's Supervisor shall be ensured at worksite.
 - c. Railway's Supervisor shall issue suitable caution order to Drivers of approaching train about vehicles plying or machineries working close to running tracks. The train drivers shall be advised to whistle freely to warn about the approaching train.

(v) Precaution to be taken while reversing road vehicle alongside the track.

The location where vehicle will take a turn shall be demarcated duly approved by Railway's representative. The road vehicle driver shall always face the Railway track during the course of turning/reversing his vehicle. Presence of an authorized Railway representative shall be ensured at such location.

(vi) Road vehicle shall not be allowed to run along the track during night hours generally. In unavoidable situations, however, vehicles shall be allowed to work during night hours only in the presence of an authorized Railway's representative and where adequate lighting arrangements are made and where adequate precautions as mentioned earlier have been ensured.

(vii) Road vehicles/machinery/plant etc. when stabled near running tracks shall be properly secured against any possible roll off and always be manned even during off hours.

42.EXECUTION OF WORKS CLOSE TO OR ON RUNNING LINES:

(i) Any work close to or on running tracks shall be executed under the presence of a Railway's Supervisor only.

(ii) Precaution to be taken to ensure safety of trains while execution of work close to the running line or on running lines.

a. Such works shall be planned and necessary drawings particularly with regard to infringement to moving dimensions shall be finalized duly approved by competent authority before execution of work. The work shall be executed only as per approved procedure and drawings.

b. All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimension do not infringe.

c. Suitable speed restriction shall be imposed or Traffic block shall be ensured as required.

d. The site shall be protected as per provisions of Para No. 806 & 807 of Indian Railway P-Way Manual as case maybe

e. Necessary equipment for safety of trains during emergency shall be kept ready at site.

(iii) Precaution to be taken to ensure safety of electrical/signal/ telephone cables while excavating near tracks.

a. Particular care shall be taken to mark the locations of buried electrical/signal/telephone cables on the plans jointly with S & T/Electric supervisor and also at site so that these are not damaged during excavation.

b. Copy of the cable plan should be given to the contractor's authorized representative before handing over the site to start the work.

c. Due care shall be taken to ensure that any part of the equipment or machinery or temporary arrangement does not come close to cables while working.

NOTE- To safeguard the underground cables (signalling, telecommunication and electrical cables) care should be taken during execution of work in accordance with as per Railway Board's JPO circulated vide letter No.2003/Tele/RCIL/1PtIX New Delhi dated 24.06.2013 and N.C. Railway JPO circulated vide letter No. S&T/NCR/JPO/CABLE dated 18.01.2016 and accordingly in case of damage to the cables action will be taken.

(iv) Precaution to be taken during execution of works requiring traffic blocks.

a. Any work, which infringes the moving dimensions, shall be started only after the traffic block has been imposed.

- b. Before closing the work, the track shall be left with the proper track geometry so that the trains run safely.
- c. After completion of work the released sleeper and fittings should be properly stacked away from the track to be kept clear of moving dimensions.
- d. Block shall be removed only when all the temporary arrangement, machineries, tools, plants have been kept clear of moving dimensions.

(v) **Precaution to be taken during execution of works during night.**

The work close to running line, generally, shall be carried out only during day hours. At locations, however, where night working is unavoidable, proper lighting arrangement should be made. The engineering indicator boards shall be lighted during night hours as per the provisions of IRPWM.

The staff deputed for night working should have taken adequate rest before deploying them in night shift. We can specify duration of night shift from 20.00 hrs to 04.00 hrs. All other safety precautions applicable for day time work should be strictly observed during night working.

(vi) **Precautions to be taken to ensure safety of workers while working close to running lines.**

- a. Necessary lookout men with red flags and whistles shall be provided to warn the workmen about the approaching train.
- b. Railway's supervisor shall issue suitable caution order to Drivers of approaching train for whistling to warn the workers about the approaching train. Whistle boards shall be provided wherever considered necessary.
- c. A "First aid kit" shall always be kept ready at site.

(vii) **Precaution shall be taken for safety of public or passengers, while executing works at locations, used by passengers and public.**

The worksite shall be suitably demarcated to keep public and passengers away from work area. Necessary signage boards such as "Work in progress

Inconvenience is regretted" etc. shall be provided at appropriate locations to warn the public/ passengers. Adequate lighting arrangement of worksite wherever required shall be done to ensure safety of public/passengers during night.

(viii) **Precaution to be taken before stacking materials alongside the track to ensure that safety of trains is not affected.**

The following precautions shall be taken before stacking the materials along the track for stacking of ballast, rails, sleepers etc.

- a. The sites for material stacking should be selected in advance in such a manner as to ensure that no part of the material to be stacked is infringing the Standard Moving Dimensions. A plan of proposed stacking locations be made and signed jointly by an authorized Railway's representative and contractor's representative.
- b. The selected locations shall be marked by lime in advance.
- c. Presence of an authorized Railway's representative while unloading and stacking shall be ensured.
- d. The material shall be stacked in such a height so as to not to infringe SOD in case of accidental roll off.

In addition, instructions issued through various PCE/Rly circulars with all amendments regarding barricading, protection of running lines while working in vicinity of it should be strictly followed. For safety PCE Circular no 103 R issued on 20.11.19 by NCR should be followed

43. PROTECTION OF TRACK DURING EMERGENCY:

- (i) **Action to be taken when a contractor's supervisor or vehicle operator apprehends any unusual circumstances likely to infringe the track and endanger safe running of trains.**

At any time if a contractor's supervisor or vehicle operator observes any unusual circumstances likely to infringe the track and apprehend danger to safe running of track, he shall take immediate steps to advise a Railway official of such danger and assist him in protection of track.

The track shall be protected as under:-

One person shall immediately plant a red flag (red lamp during night) at the spot and proceed with all haste in the direction of approaching train with a red flag in hand (red lamp during night) and plant a detonator on rail at a distance of 600m from the place of obstruction of BG track (400m for MG track) after which he shall further proceed for not less than 1200m from the place of obstruction from BG track (800m for MG track) and plant three detonators at 10m apart on rails. After this he shall display the red flag (red lamp during night) at a distance of 45m from the detonators. Attempts shall also be made to send an advice to nearest Railway station about the incident immediately.

- (ii) **Action to be taken if train is seen approaching to site of danger** and there is no time to protect the track as per guidelines mentioned above.

In such a case the detonators shall be planted on rails immediately at distance away from place of danger as far as possible and attention of driver of approaching train shall be invited by whistling, waving the red flag vigorously, gesticulating and shouting.

- (iii) **Action shall be taken if more than one track is obstructed:**

- In case of single line protection as above shall be done in both the directions from place of danger.
- In case of double line or multiple lines, if other tracks are also obstructed, the protection as above shall be done for other track also. The protection shall be done in that direction and on that track first on which train is likely to arrive first.
- The Contractor's Supervisors, Operators and lookout men shall be properly explained about the direction of trains on running tracks.

(iv) Equipment required for protection of track.

Minimum compliment of protection equipment i.e. 10 detonators, 4 red hand flags, 4 red hand lamps, 4 banner flags and whistles etc. shall always be kept ready at worksites for use in case of emergency. Railway will arrange to provide detonators, whereas Contractor shall arrange other equipment at his own cost.

Arrangement of lookout men and competency required for lookout man to warn labour about approaching train.

- Contractor will provide lookout men.
- The lookout men shall be properly trained in warning to staff at worksite about approaching train.
- Only those lookout men shall be provided at site who have been issued with a competency certificate by the Railway's Supervisor.
- In case, it is felt necessary to provide lookout men by Railway, the charges for the same as fixed by Railway Administration shall be recovered from Contractor.

44. Special conditions for working of cranes and hoisting arrangements:

(Ref: RB LNo. 2015/CE-IV/RUB/206 dated 15.02.2016 & 11.08.2016)

To ensure safe working of cranes/hoisting arrangements used in works, following items shall invariable be ensured before putting these arrangements to use:-

- (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) Based on site conditions i.e. maximum boom length and operating radius, safe working load of crane shall be assessed which should be more than 1.5 times of load to be handled.
- (c) Before actually commencing the work near track, trial at site shall be done by actually lifting the heaviest segment to be tackled with required boom length and required operating radius. Once, the trial is successful, then only crane shall be brought to site of actual work.
- (d) The stability of slope under imposed load of crane prop under worst loading conditions and point nearest to edge of slope shall be checked. The location of prop, location of working of crane and other relevant factors shall be clearly indicated on plan.
- (e) At locations near crane propping, the strengthening of slope by driving the rails/ sal balli piling shall be done to prevent any chance of slope failure. Also, the proper compaction/strengthening of soil at prop location shall be done to prevent any settlement of prop.
- (f) Stone/quarry dust may be filled by side of precast units with hand compaction before resorting train.
- (g) The contractor shall ensure that a valid Certificate of Fitness is available before use of Road Cranes.
- (h) Contractors should utilize the services of any competent person as defined in Factories Act, 1948 and approved by Chief Inspector of Factories.
- (i) The laminated photocopies of fitness certificate issued by competent persons, 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.
- (j) All lifting appliances including all parts and gears thereof, whether fixed or movable shall be thoroughly tested and examined by a competent person once at least in every six months or after it has undergone any alterations or repairs liable to affect its strength or stability.

45. **Emergency works:** In the event of any accident or failure occurring in, on or about the work or arising out of or in connection with the construction, completion or maintenance of the works, which in the opinion of the Engineer requires immediate attention, the Railway may bring its own workmen or other agency to execute or partly execute the necessary work or carry out repairs if the Engineer considers that the contractor/s is/are not in a position to do so in time and charge the cost thereof, which will be determined by the Chief Engineer (C), North Central Railway, to the contractor.
46. Vehicle and equipment of the contractor can be drafted by Railway Administration in case of accidents/natural calamities involving human lives. For payment purpose, the item may be operated as new non-schedule item (NS Item) as per existing norms and powers delegated.
47. Contractor shall provide suitable manpower to Engineer in-charge or his representative at all times during currency of the contract for assisting him in giving layout of work, carrying out quality checks, taking measurements and other associated activities for effective supervision of work.
48. **Work prepared away from the site:** The contractor shall give the Engineer written notice of the preparation or manufacture at a place away from site, of any materials or components to be used on the works, stating the place & time of preparation or manufacture, so that the Engineer may inspect all stages of the production process. Failure to give such notice may result in the rejection of the materials or components. Facilities for the inspection of such work shall be provided by the contractor.

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ADDITIONAL SPECIAL CONDITIONS & SPECIFICATIONS (PART- II)**[A] P. WAY LINKING WORK****1.0 SCOPE OF WORK & SITE :**

- 1.1** This tender covers **P.way Linking of BG track with 52kg/60kg. Single /3 Rail /20 Rail welded panels on PRC sleepers with M+7 /M+4/1660/1540Nos/Km density over a previously prepared bed including provision of 30/35 cms ballast cushion** under the sleepers as per specifications and Railway's approved drawing and also leading, handling, laying and fixing in position of all P.way materials in connection with the work mentioned above.

2.0 LINKING OF TRACK (BG):

The track shall consist of 52kg/60kg. Rails with M+7 /1660/1540 Nos/Km or lower sleeper density on the main line/loop line with appropriate rail fittings and sleeper fastenings. The sleeper shall be of PRC as per requirement of the various locations as per directions of the Engineer-in-charge and as per standard practice.

Rails shall be supplied at **yard**. The contractor will arrange for handling, re-handling and pairing the panels for the purpose of linking. **Nothing extra shall be paid for handling and leading of rails for the initial lead of 1000 metres.** Additional lead for rails shall be payable at the rates quoted by the tenderer in schedule of rates. Linking of the track shall be done in such a manner so that no damage to the rails/sleepers/fittings etc., occur during handling. The contractor's rate include drilling holes in rails wherever required oiling, greasing of fish plates, fish bolts, fishing plane of rail and fittings as per requirement. Ballast bed **350mm** depth shall be prepared by spreading of ballast on formation shall be rolled by suitable 5 to 10T rollers at his own cost before linking the track over it. Final payment for item for linking of track shall be made only after the portion of track has been finally passed by the Engineer or his representative according to the specifications / approved drawings, or as per direction of Engineer.

The payment to the extent of 70% for linking of track shall be made after the track has been assembled and linked over the prepared bed of ballast and properly aligned and passed by the Engineer-in-charge or his authorized representative according to specifications and approved working drawings.

Balance 30% payment shall be released after required numbers of through packing, completing ballast profile and passing of track to the required standard as approved by the Engineer and checking of the looseness of sleepers which shall not be more than 10% which should also be got attended.

- 2.1** Before rails are placed on sleepers, these are to be paired properly for equal lengths to achieve square joints, removing all the kinks by using Jim crow wherever required to the entire satisfaction of the Engineer-in-charge. The rails should be marked for required sleeper spacing with paint before linking is actually taken in hand.
- 2.2** The contractor will ensure that proper expansion gaps are provided based on provisions in SWP Manual for SWP and for 12metre /13metre rails in accordance with approved instructions.
- 2.3** The linking of the track will be done generally as per procedure laid down in Indian Railway permanent way Manual, Chief Engineer's P.Way Circulars issued from time to time. PCE/NCR, P.way circulars issued from time to time.
- 2.4** There may be some cases where linking of the track cannot proceed continuously due to non-completion of formation and provision of blanket layers which may be under execution through another agency. In such cases, the contractor will be required to link the track in different stretches for which the decision of

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the Engineer-in-charge of the work will be final and binding upon the contractor. Nothing extra shall be payable to the contractor on this account.

- 2.5 The linking of curved track including transition curves will be done as per relevant provisions of Indian Railway P.way Manual, and C.E. P.Way Circulars issued from time to time and other approved instructions and directions of Engineer-in-charge. Nothing extra shall be payable on this account.
- 2.6 Utmost care should be taken during linking to ensure good quality of work, which on no account should be allowed to suffer.
- 2.7 The rates against item of linking of track, turn-out, trap, SEJ etc. shall include the cost of initial katcha & first packing of the newly laid track with stone ballast to bring the track to fairly good geometry. Nothing extra shall be paid for katcha & first packing. For through packing of these items payment shall be made as per relevant items.
- 2.8 The ballast shall be spared from stacks available along the track alignment and paid under relevant NS item. Whenever the left over ballast after laying specified cushion of ballast is available along the cess on the formation, such ballast shall be handed over to the concern P.way inspector in proper stacks. Nothing extra for stacking of such left over ballast shall be payable.

For the purpose of payment for ballast leading, stack measurements of ballast stacks shall be recorded in a record MB by the AEN in-charge of the work in the presence of the contractor or his authorized representative before such ballast is handled and lifted for putting in the track. **The quantity of ballast stacks so measured less 8% towards shrinkages will be the quantity for payment against this item.** The rates includes all leads, lift, ascends, descends, crossing of nallah, track yards, road and any obstruction and cost of any safety precautions required for the same and nothing extra shall be payable on this account.

3.0 LAYING OF TURN-OUTS, GUARD RAILS & SEJ's :

3.1. LAYING OF TURNOUTS - GENERAL:

The work of turnout replacement is to be carried out with contractor's material except plain rails required for the work, which in turn will be given by the Railways. The following details to be followed:-

- i) A mark of RE are normally provided on all the sleepers on one end. The sleepers should be laid in a manner that the ends having mark RE are always laid on the RH side.
- ii) The list of fittings, which is attached with this schedule are to be arranged by contractor in advance for inspection of material.
- iii) The dowels fixed in the PSC sleepers should be cleaned with the help of suitable brush to remove dust/muck. All the screws required to be fixed in the dowels should be lubricated with graphite grease in advance at contractor's cost.
- iv) SRJ should be correctly located as directed by Engineer in-charge.
- v) Approach and exist sleepers, switch portion, lead portion and crossing portion sleeper are to be laid as per spacing mentioned in the RDSO Drg. No. T-4865 or T-4732.
- vi) Required no. of free rails will be unloaded well in advance at each location. The work include drilling of holes in rails/stock rails. Proper housing of tongue rail to be ensured by fixing of stretcher bars to the satisfaction of Engineer in-charge. **Hauling of rails/sleeper up to 1000m including crossing of track may be involved and no payment will be made for such hauling.**

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- vii) Tie angle to be fixed by contractor at the toe of switch from sleeper no. 3 to 2AS to prevent sleeper out of square at his own cost.
- viii) The SRJ and the heel of crossing should be correctly marked before taking the insertion of T/outs.
- ix) The three parts namely switch, lead and crossing are to laid individually by contractor. **Before welding, spacing and squaring of sleeper at joints to be corrected by contractor.** Welding will be done by the contractor including all ancillary work such as providing correct gap as per drg. Cutting of rails in squares such that 2 joints are in front of each other. Welding of joints shall be paid under relevant NS items.
- x) The above work are to be under taken in traffic block of 2 hours at each location for which contractor has to arrange sufficient labour machine, T&P etc. well in advance. **If contractor fails to complete the work within block period, penalty of Rs. 5000/- will be imposed for every case of block bursting.** Gap less joints for CMS crossing should be ensured.
- xi) **At theoretical toe of switches, pre bending of stock rail should be carried out to the extent that correct gauge is achieved at SRJ**

3.2 SITE PREPARATION FOR LAYING

- (i) Proper leveling of ballast should be ensured, for which no extra payment will be made to the contractor.
- (ii) Enough ballast should be stacked along the cess to enable filling up of ballast in the cribs on the same day as of laying PSC turnout sleepers.

3.3 APPROACH AND EXIT SLEEPERS.

The four approach sleepers 4A,3A, 2AS and 1AS and two main assembly sleepers nos. 1 and 2 will be laid ahead of toe of switch in the order 4A, 3A, 2AS, 1AS, 1 and 2. Similarly sleeper No. 1E, 2E, 3E, and 4E will be laid behind the sleeper no. 54 in case of 1 in 8.5 T/out and sleeper no. 83 in case of 1 in 12 for 1 in 8.5 As per RDSO T-4732 with latest alteration and RDSO Drg. T-4865 with latest alteration). These sleepers should be laid square to the track and at the spacing shown in the respective drawings. These being special sleepers, ordinary mainline sleepers can not be used in their place.

3.3.1 SWITCH PORTION:

Sleeper no. 3 to 13 in case of 1 in 8.5, and sleeper no. 3 to 21 in case of 1 in 12 turnout for the switch portion. These are special sleepers provided with dowels for fixing of slide chair with the help of rails screw. These sleepers are laid perpendicular to the mainline at spacing shown in respective RDSO drawings.

3.3.2 LEAD PORTION

Sleeper no. 14-41 in cases of 1 in 8.5 turnout, and sleeper no. 22-64 in case of 1 in 12 turnouts form the lead portion. The sleepers are laid at an angle $Q/2$ where Q is the angle between perpendicular to straight lead and curved as shown in RDSO Drg. Since these sleeper are laid at an angle to the mainline, the spacing is different on the two mainline lead rails and is indicated in respective RDO Drg. The desired angle will be automatically achieved by laying the sleepers to the spacing indicated above.

3.3.3 CROSSING PORTION

Sleeper no. 42-54 in case of 1 in 8.5 turnout, and sleeper no..65-83 in case of 1 in 12 turnout form the crossing portion. The sleepers in the crossing portion are to be laid perpendicular to the center line of the crossing at a spacing of 550 mm both in case of 1 in 8.5 turnout, and 1 in 12 turnout as shown in

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respective RDSO Drg. The perpendicularity of sleeper with respect to the center line of the crossing should normally be achieved by exactly locating the sleeper at spacing required on the straight portion of the turnout as well as on the center line of the crossing. Both the spacing have been indicated in the respective drawings. However, to ensure that the crossing sleepers are laid perpendicular to the center line of crossing, center line should be first marked on the crossing portion using the symmetry of CMS crossing along its center line and then sleeper can be arranged perpendicular to the center line using 'Thread and T-Square' (Gunia) instrument.

3.3.4 **PRE-ASSEMBLY**

- i The sleepers should be spread as per disposition and spacing given.
- ii Required no. of free rail should be unloaded at site well in advance.
- iii The crossing and switches should be unloaded at the site in such a fashion so as to avoid damage to any of its components, else damaged switch/ X-ing or components has to be replaced free of cost.
- iv The curvature of stock rail and tongue rail should be checked w.r.t. correct curvature as shown in RDSO Drg and if required the same be adjusted by jim crowing
- v. The slide chairs should then be fixed to the sleepers in the switch portion with rail screws and single coil spring washers. Care should be taken to clean the dowel holes thoroughly using brush.
- vi. The stock rail should then be fixed on the chairs. Any holes required to be drilled in the stock rail should be drilled. The tongue rail should now be fixed to stock rail. The switch portion along with the stretcher bars should be fixed on the sleeper in such a manner that the tongue rail is housed properly at the toe of switch & up to sufficient length with stock rail.
- vii. Tie angle should be fixed at the toe of switch from sleeper no. 3 to 2AS to prevent sleepers going out of square.
- viii. The exact measurement of lead rails should then be taken and the same should be fitted on to the sleeper with the help of ERCs.
- ix. Crossing should be then fixed with the help of ERCs.

3.3.5 CHECKING OF THE PRE-ASSEMBLY: It is absolutely necessary to lay the sleeper at the correct spacing. For checking the accuracy of sleepers spacing following procedure should be followed:

- i. The center of both the outer inserts of the sleeper should be correctly marked by paint and a scratch mark should be made to denote at the exact center. The spacing of sleepers should be then be marked on both straight lead rails with paint. **The marking should be done on the non-gauge face of the rail** with a tape stretched from one end to the other marking the successive spacing precisely as given in the respective RDSO drawings. While marking the spacing of the sleeper the amount of gap at the heel joint should be taken into account since this will have a bearing on the final spacing. The sleepers should then be shifted/re- adjusted in such a way that scratch marks on the rails coincide with the scratch mark's on the center of inserts.
- ii Working of switch along with proper housing and Throw of switch should now be checked & got approved from Engineer-in-charge. Housing should also be to satisfaction of signal inspectors.

3.3.6 **INSERTION OF PREASSEMBLED TURNOUT.**

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The SRJ and the heel of crossing should be correctly marked taking before in hand, the insertion of turnout.

3.3.7 For insertion of turnout following care should be taken.

- i. Required skilled staff e.g. Black smith, Welder etc. and sufficient labour should be arranged well in advance to the satisfaction of Engineer in charge.
- ii. Block of adequate duration should be taken before starting the work, which will be 2.0 Hours approximately.
- iii. Through study of crossover should be done before planning block for laying to avoid kinks behind the crossings. TNC to TNC distance should be exact and have personal approval of Engineer in charge.
- iv. One rail ahead and behind the turnout should be provided with new rails.
- v. Gapless joints for CMS crossing should be ensured. For this purpose it must be appreciated that crossing is predrilled and position of holes in the rails adjoining the crossing should be therefore be carefully decided and in such a way that gapless joint is achieved. Drill bit of 26.5mm. dia to be used.

3.3.8 ALIGNMENT ON THE TURNOUT

The alignment in the turnout area from straight on one end to the straight on other end including switch and crossing has to be in one straight line For this purpose two good points on either side of turnout about 50m away should be selected. Centre of sleeper should then be precisely marked. Centre line of sleepers in between and including that of turnout should be suitably marked at every 3rd sleeper. A Theodolite should now be centered on one of the good sleeper and centre line of the other good sleeper should be sighted by keeping a pin at every 3rd sleeper. The sleeper if required should be slewed to fall in line with the straight line.

3.4 CHECK RAILS AND GUARD RAILS

Check rails and guard rails shall be provided at specified locations as per directions of the Engineer N.S. item for this work include cutting of rails land rails flanges drilling and chamfering of holes, bending of rails, coal tarring, fixing in position with distance blocks, bolts nuts and fastenings.

3.5 SWITCH EXPANSION JOINTS

Switch expansion joints shall be laid in accordance with RDSO approved drawing maintaining correct location of tongue rail and stock rail. Reference post shall be erected as prescribed in LWR manual. Before welding closure rails adjoining SEJ corrected gap setting at prevailing temperature shall be maintained in accordance with LWR manual.

4.0 RAILS FOR LINKING

Rails for linking shall be supplied un-drilled and contractor will have to drill the holes with proper chamfering as required for linking for which no extra payments for drilling chamfering of holes will be paid.

End cropping /cutting of SH serviceable rail if required shall be done by contractor and paid under relevant NS item.

5.0 TOOLS AND PLANTS

Necessary tools and plants required for the handling, assembling and linking fittings and fastening shall be provided by the Railway to the contractor on hire charge basis if readily available and as per requirement at the rates indicated below:

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01.	Crow Bar.	5/- each per month or part thereof
02	Keying/spiking hammer	5/- each per month or part thereof
03	Spanner double ended	1.50 each per month or part thereof
04	Track gauge cum level	25/-each per month or part thereof
05	Beater.	10/- each per month or part thereof
06	Ballast rake	5/- each per month or part thereof
07	Phawrah /shovel	5/- each per month or part thereof
08	Dip lorry.	500/- per set or part thereof
09	Jim crow.	100/- each per month or part thereof
10	Rail tongs	5/- each per month or part thereof
11	Wooden square.	2/- each per month or part thereof
12	Rail Thermometer.	5/- each per month or part thereof
13	Rail Dollies	100/- each per month or part thereof

- 5.1 The contractor shall be required to give security/Bank Guarantee of Rs.5000/- towards cost of tools issued to him. These tools shall be returned to the railway at the end of maintenance period i.e. after successful completion of this contract. Only normal wear and tear shall be accepted and it shall be finally binding on the contractor. The contractor shall have to pay for the tools damaged or lost. The recovery shall be made as per special conditions of contract.
- 5.2 The contractor shall be required to arrange for safe custody of tools and plants at all times. When the same are not being used and even when these are being used, the contractor shall ensure that labour does not use these tools and plants carelessly and/or infringes the running line in any manner. For this the contractor shall construct suitable tools boxes at a suitable location to be decided by the Engineer. Nothing extra in this account shall be payable to the contractor.
- 5.3 Tools and plants shall be supplied by the Railway in required quantity, if readily available. Contractor shall replace wooden handles broken in service, if any during the currency of this contract. He shall also maintain all these tools and plants in state of efficient repair and his rate shall be inclusive of all these incidental charges and tools and plants equipment. Other than the one mentioned in clause 5 above and all consumable stores shall be arranged by the contractor from the market at his own expense.
- 5.4 For the facility of work, Dip Lorries, Rail dollies to the extent available with railway shall be supplied on hire charges from the store of PWI on proper vouchers. These are to be returned to his store in good working condition after completion of the work. In case of damage or non return of such dip lorries to the stores, cost of the same will be recovered from the contractor at the market rate prevailing at the time of supply plus fixed departmental charges i.e. freight @ 5%, incidental charges @ 2%, added with supervision charges @ 12.5% on total cost arrived at as above.
- 5.5 Issue of all types of materials to the contractor will be on proper vouchers and materials thus issued are to be accounted for by the contractor and he will be held responsible for only shortage/breakage/damage/loose which leading or linking or other response what so ever till the track is taken over by the Railway. The materials remaining unconsumed should be returned to the Railway store or near site of the work (depending upon the place where from they were originally issued) at the contractor's cost.
- 5.6 Any lose damage or shortage to the Railway material including tools and plant and in the event of contractor's failure to return such materials, tools and plants in good conditions, cost of such shortage will be recovered from the contractors at twice the prevailing procurement cost at the time of last issue plus fixed freight @ 5%, incidental charges @ 2%, added with supervision charges @ 12.5% on total cost arrived at as above.

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5.7 **The track shall be taken over by the Railway on commissioning.**

6.0 **PROGRAMMING FOR DAY TO DAY WORK**

Programming for each day's work will be made by the contractor in consultation with the Engineer-in-charge at least two days in advance and he will draw all the P.way materials required for the days work and arrange to lead them to the site in advance. The contractor will also arrange sufficient labour, trained staff, blacksmith & fitter to the satisfaction of Engineer-in-charge for smooth execution of the works as per program fixed.

6.1 Normally the work will be done in traffic Block such as insertion of glued joints, T/outs in main line & loop line etc. Block/caution order will be given according to convenience of railway and no compensation etc. will be paid for idle labour/machinery due to non availability of Traffic Blocks. The contractor will has to arrange sufficient labour machine, i.e Disc cutters, Gas cutters etc with operator & consumable etc. well in advance, the cancellation of block will be done after the satisfaction of railway site engineer for safe movements of trains. **If contractor fails to complete the work within block period, penalty of Rs. 5000/- or as specified by the railway authorities will be imposed for any case of block bursting.**

6.2 The work which require to carry out under speed restriction is to be start after imposition of SR, the granting of speed restriction is the discretion of railway, no claim for this will be entertain.

7.0 **LABOUR CAMPS:**

The contractor shall accommodate all his men including supervisors labour etc. by arranging labour huts or tents at his own cost and as per contract obligations and shall take necessary action to ensure the implementation of the contractor labour rules 1989 in respect of accommodation amenities etc. for workmen.

8.0 The contractor shall engage sufficient technically qualified person **preferably an ex-P.way Inspector** having adequate experience and knowledge of the construction and maintenance of tracks.

9.0 **RESPONSIBILITY FOR ANY MISHAP, DERAILEMENT, ACCIDENT ARISING OUT OF THIS WORK**

In the event of any accident during handling, assembling and linking of P.way materials or any accident on existing running lines arising on account of contractor his own not observing safety precautions for the various operations required for the execution of this P.way work the contractor shall be fully responsible for all damages and also he shall have to pay for the accident relief train arranged, if any, at the following rates:-

- i) Accident involving use of accident relief trains, Rs.10000/- per 24 hours or part thereof or Any other latest rates specified by the Railway authority
- ii) Accident not involving use of accident relief train Rs.4,000/- per 24 hours or part thereof or Any other latest rates specified by the Railway authority

10.0 **GENERAL:**

10.1 The contractor(s) shall be required to nominate and arrange continuous attendance of his/their authorized agents along with list of technical staff, blacksmith, fitter etc at various locations of works.

10.2 The railway shall not be responsible for any loose or damage to contractor(s) men, materials, equipments, tools and plants etc. for any cause whatsoever.

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- 10.3 If any work(whether temporary or permanent) or other materials the value of which has been included in any on-account bill to be destroyed or damaged, or has /have for only other reasons to be replaced or restored by the contractor, the value of the work or other material so destroyed shall be recovered at any time from the contractor as debit due, provided always that no commission to deduct any amount from moneys due to or after the aforesaid amount become due and recoverable shall in any way prejudice or effect the right of the railway to make such deductions at any later time or otherwise to recover the amount as debit due.

10.4 PROTECTION OF EXISTING RUNNING TRACK:

- 10.4.1 The work is to be executed in close proximity of running track and as such the contractor will have to plan and execute the work in such a way so as to avoid interference with the existing running track. Contractor shall ensure all precautions measures so as not to danger the safety or running trains, no any material shall be left near the running track which may cause to infringement of running trains at any time and protect all men and materials which shall entirely be the responsibility of the contractor. The contractor should make a special note of this clause. Nothing extra shall be payable on this account.
- 10.4.2 At some places, contractor may be required to bring men and material etc., from or through the other side of the existing track and as such rates quoted by him will be inclusive of all protection measures, he has to take for the protection of his men and materials well as safety of the running track. No extra payment whatsoever on this account will be made to the contractor.
- 10.4.3 The contractor shall make his own arrangement for looking after safety of his labour & supervisor from the running trains & will compulsorily deploy Hooter /Alarm and banner flagmen of suitable capacity for alerting the labour on approach of the trains.
- 11 In case of any dispute regarding interpretation of any of the above clause, decision of the Chief Engineer/Const/North, North Central Railway, Prayagraj, shall be final and binding.

12.0 TENDER WILL CONSIST OF THE FOLLOWING DOCUMENTS.

- 12.1 The tenderer(s) must **submit the following documents** along with their tenders.

- i) Method statement, **CPM/PERT chart** including targets vis-à-vis deployment of resources.
- ii) Documents in support of financial stability.
- iii) List of technical staff with contractor.
- iv) List of machinery and plant available with the contractor as required for execution of the work. In additions tenderer(s) may submit any other documents reflecting of their credentials.

- 13.0 The contractors shall have to engage a retired P.W.I. or any other technical men well conversant with P.way linking work during the occupation of work.

14.0 SPREADING OF BALLAST.

- i) The ballast should be spread on leveled and rammed ground to get proper cushion and then linking will be started. For lead up to 65m, no extra payment will be made.
- ii) After linking, ballast will be spreaded & fill up the CRIB and HAUNCH, so that after subsequent packing, to make the track fit for 45 kmph. Ballast cushion should (required) obtaining with boxing and tiding along with cess cleaning. No extra payment should be made on this account.
- iii) After the completion of track laying, sleeper by sleeper inspection shall be done by PWI and AEN-in-charge who will record in the track laying register.

15. REQUIREMENT OF TRACK GEOMETRY:

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- i) Gauge : Sleeper to sleeper variation : upto 2mm
(Where PRC sleeper are being used, the gauge shall be checked only and all liner are to be correctly provided)
- ii) Cross level : ± 3 mm from the required level and super elevation. To be checked on every 4th sleeper.
- iii) Packing : Not more than 10% sleeper loose.
- iv) Alignment : On straight on 10m chord ± 2 mm
On Curves of radius more than 600m on 20m chord ± 5 mm
On Curves of radius less than 600m on 20m chord ± 10 mm
- v) Sleeper spacing : Variation from specified spacing ± 20 mm
- vi) Joints on curves within half of the pitch of the bolt holes.
Low joints are not permitted.
High joints should not be more than ± 2 mm.
Squareness of joints on Straight ± 10 mm

The above track geometry parameters are in floating conditions and shall be recorded, in prescribed proforma.

16. ACCOUNTAL OF NEW / RELEASED MATERIAL:

1. **SE/P.Way/Const** will maintain a register regarding P.way material brought at site and actually used in linking of track as per approved plan and as per specification. No material whether rejected or surplus shall be removed from site by the contractor without prior approval in writing from railway officials.
2. A joint assessment of fitting in the existing track will be made by the contractor and the nominated Railway official before commencement of the work.
3. Contractor will be responsible for collecting the released material and transporting it to the stores depot at site under PWI concerned and stacking as directed by Engineer in charge. For which no extra payment will be allowed. All released switches, xings and sleepers are to be stacked within 500 m from work site at the station from where the material is released. All other loose fittings are to be transported to nearest PWI depot.
4. The quantity of released material handed over at nominated depot should be same as assessed during joint inspection undertaken before commencement of work. **A wastage allowance of 2% for fittings.** Any quantity of material found short beyond the wastage allowance will be charged as Railway's rates and recovery shall be made as per norms from the contractor.

TRANSPOTATION OF P.WAY MATERIAL**SPECIAL CONDITIONS REGARDING SITE DATA AND SPECIFICATIONS****1.0 TRANSPORTATION :**

- a) The tenderer/s are advised that before tendering they must see the site of work including location of material to be brought after leading and see the road & space available and where work is to be done. Leading, lifting, ascend, descend, crossing of track and other factors which are required in connection with execution of work before tendering and tender rate should include all serves incidental charges & Taxes to be paid to the work. No extra charges whatsoever will be payable.
- b) Any service road required by the contractor/s for carting the materials etc. along with the alignment or else where required for the work, will be provided and maintained by the contractor/s at his/their own cost. However, the contractor/s will be permitted to use Railway service road free of cost but no claim will be entertained for non-provision of service road in any stage whatsoever.

No royalty, terminal octroi, sales tax or any other taxes imposed by the State Govt. / Central / local bodies etc. on any material/stores etc. will be paid by the Railway. The contractor will pay these charges direct to the Admn. Concerned.

- c) Every possible fluctuation in the market rates of labour, material and General conditions and other possibilities of such and every kind should be considered before quoting the rates and no claim due to any reasons whatsoever on this account will be entertained afterwards sales tax or any other tax, levied or leviable by the Central or Sales tax or any other taxes of State Govt. or Local bodies, shall be borne by the contractor which should also be kept in view before tendering, no such taxes, on contractors labour & materials will be paid by the Railway.
- d) The Contractor will be required to give no claim certificate at the time of signing the final bill. Thus no claim certificate furnished by the contractor constitute special agreement under which contractor admits and acknowledged that no money is due to him in connection with executing of the particulars contract by him. Thus after the contractor has given no claim certificate and his final bill has been finalized to him, the contractor can not turn round and ask for any more payment even if post audit records show that he had been paid less, hence after no claim certificate is given the contractor can not even ask for arbitration.
- e) The representative of IOW/PWI will hand over all materials meant for leading to the contractor under his clear acknowledgement.
- f) A proper challan will be prepared in four copies and will be signed jointly by the Railway and contractor's authorized representation. Three copies will be handed over to contractor who will to be acknowledgement of the Rly's representative at the unloading points and handover the materials under his clear signatures. The Railway representative at the site of unloading will check the materials as per challan and handed over two copies to the contractor duly received retaining one copy for his record.
- g) One copy of these challan will be hand over by the contractor to the Inspector concerned along with his bill for arranging payment. Any discrepancies due to any cause whatsoever between the material made over to the contractor for leading and received by the Railway at the site of unloading would be solely the responsibility of the contractor who would have to make good the same at his own cost.
- h) Once the materials have been handed over to the contractor for leading, the contractor will have to make all arrangements for their proper handling, loading/unloading and stacking etc. In case the**

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materials are damaged/theft during any of those operations the damage will have to be made good by the contractor. The decision of Engineer would be final and binding in this regard.

- i) Leading will be payable to the Contractor when the actual loading takes place Ex. Stock Yard and the material has actually lead. No payment will however, occur to the contractor during waiting period.
- j) Safe loading, unloading, leading, stacking material is contractor/s responsibility in case of its damage or loss/shortage. Cost of the same will be recovered from the contractor/s bill as per prevailing price rate of the material headed by 12.5% supervision charges and 2% incidental charges.
- k) Lead shall be calculated as per shortest standard distance mentioned between place to place on Indian Road Map issued by Survey of India.**
- l) The rates for non-schedule items occurring during the course of execution shall be payable after approval by the competent authority whose decision shall be final and binding on the contractor/s.
- m) The site inspection register will be maintained by the IOW/PWI deputed by the railway, who is also required to received all letters, notices etc. issued to him at the site of work failing which necessary action will be taken as per terms and conditions. The contractor will be bound to sign day to day entries made by IOW/PWI and other senior railway officers in this register.
- n) The contractor shall have to co-ordinate his work with other department i.e. Electric, S & T, Civil etc. which may be related to other contractor of these departments or doing the work departmentally. No claim of any kind whatsoever shall be entertained if the execution of any such work is being also done the department & contract is held up due to their interference or as a result of delay in any of these works.
- o) The contractor shall be entirely responsible of all work executed by him until it is finally taken over by the Railway and he will make good any damage or losses which occur to such work by inclemency of weather floods etc. or due to any other act of God until the work is taken over.
- p) The contractor/s shall make his/their own arrangement for the provision of sanitary, medical and water supply facilities according to the site, nature importance and location of the labour camp. If the contractor/s fails/fail to provide the requisite medical and sanitary arrangements, these will be provided at the contractor/s expenses.
- q) The Railway will not take any responsibility or make arrangements for supply of foodstuff to the contractor/s his/their staff or laborers.
- r) The contractor/s shall make his/their own arrangements at his/their own cost for supply of water to his/their staff and labour and the railway undertake no responsibilities for such supply of water to the contractor's staff or laborers.
- s) The contractor/s shall carry out the provision of any regulations that may be enforced in the area in which works is to be done prohibiting the recruitment of local labour.
- t) It will be responsibility of contractor/s to intimate direct to labour commissioner (Central)/Assistant labour Commissioner/Labour Enforcement Officer/Supervisor Labour of their area as case may be or other authorities of the Government in respective Department, the number of men employed by him/them which comes under payment of wages Act.
- u) The contractor shall take all precautionary measures in order to ensure protection of his own personnel moving about or working on the Railway premises, and shall have to conform to the rules and regulations of

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North Central Railway. If any un-foreseen accident or injury happens while on working the contractor shall be solely responsible for the same.

- v) The work must be carried out most carefully in such a way that they do not hinder the railway operation except agreed to by the railway in writing.
- w) The contractor shall see that no damage is caused to railway signaling and transmission wires, stations installations, communication lines, electric devices, trains of any kind fencing as well as any rolling stock and in general to all railway installations land equipment. In case of any damage is cause to these due to the fault of the contractor or on the part of any one on his behalf, all repairs there under required will be carried out by the railway at the entire cost of the contractor and the amount of expenses thus incurred will be recovered from the payment due to him/them.
- x) For day-to-day execution of the work if the contractor requires any clarification have to be obtained from CE/Const./North/HQ/NCR/Prayagraj in writing.
- y) In case of any dispute regarding interpretation of any of the above clauses, decision of the Chief Engineer (Const.) North/HQ/NCR/Prayagraj shall be final and binding on the contractor.

2.0 **Other Conditions for Transporting of P.way material**

- 2.1 The contractor has to transport with loading/unloading and stacking all the P.way material and also including loose fittings with his own truck /trailer, tools, plants & machinery and labour etc. at his own cost. While, the P.way material will be transported to the store at site of concern **SE/P.way/Const** and will be properly stacked with his own labour and cost, at the place indicated by concern SE/P.way/Const.
- 2.2 Though approach road is existing to the site of work, Railway does not take any responsibility of maintaining it in fit condition for movement of heavy/light transportation vehicles. Contractor will have to make his own arrangement at his own cost for maintaining motorability of approach road.
- 2.3 The contractor has to arrange wooden Gutaka / Sleepers to keep the material at least 12" above the ground level.
- 2.4 The contractor has to take all precaution during transportation/loading / unloading/stacking to avoid damage to fabricated material. If any damage to any of the members is caused, the particular components will be rejected by the Engineer-In-Charge at site or his representative. Any material found damaged during transit and/or unloading will be stacked separately & damaged portion shall be marked by white paint. Contractor will have to organize rectification/replacement of all such defective component at his own cost to the entire satisfaction of the Engineer or his Authorized Representative.
- 2.5 Under special arrangement with the purchaser it shall be permissible for approved portions of the work to be dispatched before complete erection of the first span provided the contractor satisfies the Inspecting Officer that such portions of the work are strictly interchangeable and will assemble correctly and accurately in the complete structure.
- 2.6 All trucks/trailer are to be loaded in such capacity so as to ensure safe transport of fabricated materials.
- 2.7 **QUANTITY :**
- 2.7.1 If the tenderers make use of any estimated quantity, which may be given to them in the Schedules or Tender drawings or in any other way, they do so at his own risk and will not be entitled to make any claim or demand or to raise any question whatsoever on account of any errors or miscalculations in the said quantity.

2.8 **Progress and Schedule of work :**

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The contractor shall submit to the Engineer a monthly report giving progress of works by the tenth of the following months.

- 2.9 It shall be ensured that the works are carried out according to the agreed program and no changes are made except with the prior approval or at the instance of the Engineer.
- 2.10 The contractor shall participate in periodical meetings with the Engineer to review the progress of the work. In case of a slippage in the time schedule due to the contractor's inability to perform as per the agreed program, the contractor shall taken such action as may be necessary to bring back his work to the schedule, without additional cost to the Railway, either by employing for extra time operations, increasing the number of shifts, capacity of construction plants, or as directed by the Engineer.

SPECIAL CONDITION FOR FUSION WELDING OF RAILS BY THE ALUMINO – THERMIC PROCESS

- 1.0 Welding of Rail joints should be done by Alumino – Thermic process and work shall be executed as per MANUAL FOR FUSION WELDING OF RAILS BY THE ALUMINO-THERMIC PROCESS – REVISED 2012.
- 2.0 Rails to be welded shall be conform to the tolerances stipulated in the relevant specification.
- 3.0 Rails shall be free from corrosion or excessive wear. The height of rail and width of rails head shall not be less than the values as indicated in table below:-

Rail Section	Normal ht. of new rail (mm)	Min. ht. of old rail (mm)	Width of head of new rail (mm)	Min. width of head of old rail (as measured at the gauge corner (mm))

- i) The limit of lateral wear in the rail head as laid down in above Table, viz. 6 mm may be followed subject to uniform gauge without any abrupt change.
- ii) Rails shall be tested before welding, with ultrasonic flaw detector apart from visual inspection, so that rails having cracks and internal flaws are excluded from welding. In order to achieve satisfactory running on welded rail panels, rails with excessive scabbing, wheel burns, corrugations and wear of rail seats shall not be used for welding. The rail flange bottom shall be visually inspected to ensure freedom from defects like dent, notch, corrosion etc.
- iii) Even where cracks/flaws have not been detected during visual! USFD examination before welding, the ends of second hand rails should be suitably cropped so as to eliminate fish bolt holes.
- iv) The rail ends shall be cut by sawing or using abrasive disc cutter and not by flame cutting.
- v) Second hand rails shall be match - marked before releasing from track to enable matching of the rail ends at the time of welding. Kinks, if *any*, in the rails shall be removed before welding.
- vi) The rolling marks on the web of rails shall be checked before welding to ensure that generally rails of

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different qualities are not welded together. However in unavoidable circumstances, where rails of Grade 710 (72UTS) rail chemistry and that of Grade 880 (90 UTS) chemistry are to be welded, the portion of Grade 880. (90 UTS) chemistry shall be utilized for welding.

- vii) While using. Second hand rail panels for secondary renewal, released from LWR!CWR sections, the ends should be cropped to eliminate fish_bolt holes. If rail ends do not have bolt holes, the ends may be cropped to a distance of minimum 150mm for AT welds and 85mm for Flash Butt welds from the centre of welded joint to eliminate heat affected zone of welds. End cropping may be suitably increased so as to ensure that rail ends are within the tolerances as specified.

4. **EXECUTION OF JOINTS AT SITE**

- 4..1 **Technique or welding :** Welding techniques approved provisionally or for regular adoption by Railway Board/RDSO should only be adopted for welding of rails. Present status of welding techniques, approved/provisionally approved for extended field trials, of various A.T. portion manufacturing firms.

- 4.1.1 Presently, only Four firms are approved for manufacturing of portion and execution of welding. Further, 12 firms are approved only for executing A.T. welds with portion and technique developed by **Thermit portion plant /N.Rly./Lucknow (TPP)**. Apart from this departmental welders are also trained and certified by TPP for AT welding of .rails with the technique developed by them. Following course of action may be adopted for welding of rails through approved portions manufacturers, labour contracting firms and by departmental welders: '

i) Large scale welding

- a) Approved portions manufacturing firms with their portions. consumables, equipments and RDSO certified welders/welding supervisors. .
- b) Labour contracting firms with portions, consumables of TPP and welders/welding supervisors certified by RDSO.
- c) Departmental Welders certified by TPP with portions and consumables manufactured by TPP only.

ii) Casual welding.:.:

- (a) Agencies as mentioned in para 4.1.1(i) (a) & (b) above.
- (b) TPP certified departmental welders for welds of 25mm gap using portion, consumables and preferably equipment also of approved portions manufacturers as per the approved welding parameters as given in Annexure-1 of AT welding Manual,.

iii) AT welding in case of Turn - Key contracts:

In case of turn-key contracts for gauge conversion, new lines, doubling, open line works, etc. in which A.T. welding also forms a small portion of work, suitable provisions may be kept in the contract conditions for executing welding by the agencies as mentioned in para 4.1.1 (i) (a).

4.2 **Portion for welding:**

- 4.2.1 The "portion" used for welding shall conform to the technical requirements as mentioned in IRST-19 - 1994. The suitability of the "portion" for the welding process in respect of the type and section of rails to be welded shall be ensured before commencing welding. Only RDSO certified/passed portions should be used for welding.

- 4.2.2 **Shelf life of portion:** No specific shelf life has been indicated for AT welding portions. Life of portions would depend on the quality of packing and storage condition. AT portion is sensitive to moisture. Once the portion absorbs moisture, the same cannot be removed even by drying as the ingredients react chemically. All such portion should not be used for welding. If packing is intact and there is no entry of moisture, the portion can be used even after a long time. However, following procedure may be adopted for permitting use of portions beyond two years after the date of manufacturing.

- (a) One random sample per batch of 300 or part thereof may be drawn from the portions available in stores.
- (b) The sample shall be tested for reaction test. If, the reaction is normal, the batch represented, by the sample can be used without further tests.
- c) In case the reaction is found to be quiet or boiling, a test joint should be made from one more sample selected from the batch. Following tests should be conducted on the test joints.
- (i) Aluminium content test (from riser of the joint)
 - (ii) Load deflection test

These tests should be conducted at Zonal CMTs organization and/or the Flash Butt Welding Plant. If the values obtained in above tests are within the specified values as given in para 4.1.3 and 4.2.3.1 of IRS T 19-94, the batch represented by the sample can be used otherwise batch should be rejected.

(d) The rejected portions are to be disposed-off by igniting five portions at a time in a pit away from the store.

4.3 **Equipment and staff for welding**

The list for one set of A.T. welding equipment by short preheating process is given in Annexure-2 of AT welding Manual. The composition of Thermit welding team is given in Annexure-3 of A.T. Welding Manual

4.4 **Preparation of rail ends to be welded**

The rail end face and adjacent sides at foot (top and bottom), web and head up to 50mm shall be thoroughly cleaned using kerosene oil and brushing with wire brush to remove all dirt, grease and rust before welding. Any burrs at the rail ends shall be removed by chiseling or grinding.

4.4.1 Normally, no alumino-thermic welded joint shall be located closer than 4 metre from any other welded or Fish plated joint.

4.5 **Gap between rail ends**

The two rail ends to be welded shall be held in position with a uniform and vertical gap as per gap specified in Annexure-1 of AT welding Manual. The uniformity and verticality of the gap shall be measured by a gauge prior to welding. In case of wide gap 75 ± 1 mm welding, for repairing fractured/ defective welds, it shall be ensured that the end faces are vertical. In LWR/CWR territory, hydraulic/mechanical rail tensor of suitable & approved design should be used for maintaining correct rail gap during welding.

4.6 **Preliminary work prior to welding**

4.6.1 In case of in-situ welding the rail fastenings for at least five sleepers on either side of the proposed weld shall be loosened. The sleepers adjacent to the joint to be welded shall be shifted to obtain a clear working space of 250 mm on either side to accommodate the moulds, clamps, preheating equipment, etc. The rails shall then be properly aligned, both horizontally and vertically. .

4.6.2 When the welding work is carried out on cess, full rail length shall be leveled by supporting on at least ten wooden blocks on either side. The rails shall be properly aligned in horizontal and vertical direction and held in position.

4.7 **Alignment of rail ends before welding**

The rail ends to be welded shall be aligned in horizontal and vertical planes to the dimensional limits indicated below:

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4.7.1.1 **Lateral alignment** : The two rail ends, after alignment shall be within ± 0.5 mm when checked with a 1.0m straight edge at rail ends [Fig. 4.7.1.1(a)&(b) of AT welding Manual]. Any difference in the widths of rail heads shall always be fully kept on the non-gauge side, correctly aligning the rail ends on the gauge face.

4.7.1.2 **Vertical alignment**: The joint shall be kept higher by 3 to 4mm for 72 UTS rails and 2 to 2.4 mm for higher UTS rails when measured at the end of 1m straight edge (as a compensation against sagging caused by differential shrinkage on cooling) [Fig. 4.7.1.2 of AT welding Manual]. This shall be achieved by wedges applied on the rail supporting blocks on both sides of the joint.

4.7.2 Gap between rail ends may be rechecked after completion of alignment. Datum marks shall be made on foot of both rails as well as on joint sleepers in order to observe any longitudinal movement of rails. If excessive longitudinal movement occurs during pre-heating and produces a welding gap outside the prescribed limits, the welding of joint shall be temporarily abandoned and joint allowed to cool.

4.8 **Fixing of mould**

4.8.1 Only prefabricated mould supplied by the portion manufacturer shall be used for welding. These are to be made by mixing high silica sand to IS: 1987 with sodium silicate to the required consistency, followed by passage of CO₂ gas. These prefabricated moulds shall have adequate permeability for escape of mould gases and adequate reinforcement to avoid mould crushing during transportation and welding. Three piece manufactured by manual pressing, three piece manufactured by core shorted technology (machine pressing) shall only be accepted.

4.8.2 Before mounting on the rail ends to be welded, each pair of moulds shall be examined for defects, dampness, cracks, blocked vents etc. and defective moulds discarded. The prefabricated moulds shall be handled with care as they are fragile and liable to breakage.

4.8.3 During fixing the moulds, it shall be ensured that the centre line of the rail gap coincides with the centre line of the mould to avoid cross joint. The mould jackets/shoes holding the pre-fabricated mould in a snug fit condition, after fixing, shall be tightened by the application of adequate pressure. Excessive pressure may cause breakage of mould and dropping of sand inside the mould cavity. Care shall be taken during application of adequate pressure. It is essential for the moulds to fit flush to each other across the bottom of the rail flange which can be checked by feeling with fingers across the junction of the two halves of the moulds and by looking down the riser aperture. The moulds should touch the bottom of rail foot to ensure proper size of collar at the bottom.

4.8.4 After fixing the moulds, the gap between mould and the rail shall be packed firmly with luting sand to prevent leakage of liquid weld metal. To protect the rail top table from metal splashes during reaction, the adjacent rail surface on either side of the moulds shall be covered with metal cover or smeared with luting sand up to 15 cm on either side.

4.9 **Preheating**

4.9.1 After fixing and luting of the moulds, the rail ends shall be uniformly pre-heated throughout the rail section with specially designed compressed air petrol mechanized pressurization /oxygen - LPG burner/ Oxygen propane or similar or superior as the case may be. The flame shall, be properly adjusted to achieve the desired rail temperature. The pre-heating shall be done from the top of the mould box for stipulated period for welding technique adopted, so as to achieve a temperature of around $600 \pm 20^{\circ}\text{C}$.

4.9.2 In welding process using compressed air petrol burner, the compressor tank pressure during operation of the burner shall be maintained at 7 ± 0.70 Kg/cm² (100 ± 10 lbs per sq. inch). In case of pre-heating by Oxy-LPG process, pressure for Oxygen and LPG cylinders shall be adjusted in the range of 7.0-8.0 Kg/cm² and 2.0-2.5 Kg/cm² respectively. While preheating with OXY-LPG burner LPG supply should be opened first and the gas ignited, thereafter Oxygen supply should be opened. While closing, Oxygen supply should be

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stopped first followed by LPG supply. The burner shall be properly adjusted during preheating to ensure that the head, web and foot of both the rail ends are heated uniformly.

4.9.3 **Preheating time** - Preheating time would be about 10 to 12 minutes and 2 to 2.5 minutes for compressed Air-petrol and Oxy-LPG preheating techniques respectively. The actual preheating time would depend upon the rail section and welding technique adopted.

4.9.4 Special emphasis shall be given to the tank pressure, efficiency of burner & flame condition for achieving required rail temperature within the stipulated time. From time to time or in case of any doubt with a view to maintain proper quality control, temperature measuring devices like Optical parameter, Contact type parameter or temperature indicating crayons may be used for measuring rail end temperature just after completion of preheating i. e. after removal of burner.

4.10 **Welding**

4.10.1 The single shot crucible lined with refractory material. (Magnetite /crushed alumina slag) and fitted with bottom stone and thimble shall be preheated before making the first weld of the day to ensure freedom from moisture.

4.10.2 Slag shall be cleaned from the crucible after each reaction, if necessary. During cleaning, care shall be taken not to damage the refractory crucible lining. The lining shall be examined regularly and patch repairing, or relining as necessary shall be carried out.

4.10.3 The single shot crucible shall be positioned relative to the pouring gate with respect to its height from the mould after it has been placed on the stand mounted on the rail head. The tap hole in the crucible shall be sealed with closing pin, asbestos powder and slag powder. The 'portion', for the required technique, shall be thoroughly hand mixed and poured into the crucible striking the crucible wall so that the bottom plugging remains undisturbed. The portion shall be coned to the centre of the crucible and a sparkler be placed at the top. The crucible shall then be brought to the proper position over the mould in line with the pouring gate of the mould with a vertical distance of about 50mm between the tap hole and sand core / top of the pouring gate.

4.10.4 After preheating the rail joint, the sparkler shall be ignited & inserted in the portion at the centre top to start the reaction. The reaction shall not be vigorous or boiling. By the time the reaction is complete, the burner shall be removed quickly and the gap closed with a dried sand core in case of central pouring to prevent loss of heat and turbulence during flow of metal. The time period between removal of burner and automatic tapping of metal should be as minimum as possible. After the reaction subsides, about 3 seconds shall be allowed for the separation of slag from the metal, which may be judged by looking into the crucible through coloured glass to IS:5983. Thereafter, the molten steel shall be automatic tapped into the mould by striking the closing pin with a tapping rod. It shall be ensured that since the commencement of the reaction, Thermit steel is tapped within the time limit as specified care shall be taken to ensure that the crucible does not move from its position during tapping. When pouring is over, the crucible and swivel stand shall be removed and kept aside without disturbing the joint. If the reaction is found to be boiling, the metal shall be out - tapped. Vigorous reaction and loose closing of crucible may cause self tapping. In this case also, the metal shall be out tapped. If, in any case, self tapped metal enters the mould, the joint shall be rejected, cut and re-welded. In cases of out tapping, the joint should be cooled to ambient temperature and the process of welding restarted a fresh. However if temperature can be measured, the rail end may be heated to an extent so as to achieve temperature of about 600 ± 20 o C and welding of joint may be completed.

4.10.5 After pouring, molten metal shall be allowed to cool and solidify with mould intact for the stipulated time (mould waiting time) depending upon the rail section and ambient temperature. In case of alloy steel rails, full rail section up to 300 mm on either side of the joint shall be heated by using burner during this period. The mould shoes shall be removed just prior completion of mould waiting time. The mould waiting time is generally 4 to 6 minutes for 25mm gap joints and 12 minutes for 75mm gap joints.

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After the mould waiting time has elapsed, the trimming should be done by using weld trimmer of suitable & approved design without knocking out the mould.

In the eventuality of sudden failure of weld trimmer manual Chipping may be resorted to. In case of welding of old rails, if it is not possible to use weld trimmer due to flow of metal at rail head, manual chipping should be done.

4.10.6 During the trimming operation, it shall be ensured that the wedges used in aligning are in their proper places .without loosening, and they are not removed for at least 20 minutes after stripping. The runner & riser must not be removed until cold, and. that too only by knocking towards the rail.

4.10.7 No welding shall be carried out if it is raining. In case, the rains start while the joint is under execution, immediate arrangement to adequately cover the site shall be made.

5. OPERATIONS SUBSEQUENT TO WELDING

5.1 Post weld cooling

5.1.1 110 UTS alloy steel rail joints (Chrome Manganese and Chrome Vanadium type.) are required to be slowly cooled immediately after trimming by fixing an insulation hood [Fig.5.1 of AT welding Manual] lined with asbestos, so as to control the cooling rate of the weld zone. The hood must be kept around the joint for at least 20 minutes.

5.1.2 In case of welding of Head Hardend rails, the average hardness of the HAZ of the rail becomes considerably less than the parent rail hardness. This lower hardness is due to transformation of rail steel occurring at .cooling rate much lower than that achieved during the original head hardening operation. Such a hardness difference can lead to differential plastic deformation during wheel rail contact which may cause localized cupping. Head Hardend rails, therefore, must be subjected to controlled quenching for a specific time by the arrangement approved for the technique.

5.2 Post weld packing of sleeper

Before the passage of traffic, the wedges used for aligning should be removed and joint sleepers which were shifted to obtain the clear gap of 250mm on either side as per clause 4.6.1 shall be re-shifted to the original location and repacked. Packing of these re-shifted sleepers should be carried out gently and carefully.

5.3 Passing of traffic

The first train should be allowed to pass on the newly welded joint only after 30 minutes have elapsed since pouring of weld metal. Necessary speed restriction shall be observed until the grinding operation is over.

5.4 Grinding

5.4.1 After the excess metal is trimmed off, the grinding of the remaining metal on the rail table and the sides of the rail head shall be carried out only with rail profile guided grinding trolley of approved design. Use of hand files should not be resorted to except in unavoidable circumstances. In the case of in situ joints, the grinding shall commence only after the sleeper fastenings are re-fixed; after the removal of wedges. The rail table shall first be ground down to original profile and checked by a 1 m straight edge. This should be followed by grinding of .the sides of rail head. The accuracy of grinding shall be checked by using 10 cm straight edge. While grinding, only light pressure should be applied and grinding wheel should be moved to and fro to avoid local over heating.

5.4.2 Tolerances On finished welds

All the finished joints shall be checked to ensure that the joint geometry is within the following tolerances:

i) Vertical alignment: Variation not more than +1. 0mm, - 0 mm measured at the end of one metre straight edge.

- ii) Lateral alignment: Variation not more than ± 0.5 mm measured at centre of one metre straight edge.
- iii) Finishing of top surface: + 0.4 mm, - 0 mm measured at the end of 10 cm straight edge.
- iv) Head finishing on sides ± 0.3 mm over gauge side of the rail head measured at the centre of 10 cm straight edge.

Note: In specific cases, for joint geometry, in case of old rails, dispensations may be permitted by Chief Engineer.

The method of checking the geometry of welded joints is illustrated with sketches in Fig. 5.4.2 of AT welding Manual.

5.5 **Record of Joint geometry**

The details of geometry of each joint shall be jointly signed by the firm's and Railway's representative and kept as record. Any joint found not conforming to the above stipulations shall be cut and re-welded, free of cost, by the firm.

5.6 **Marking**

Each joint shall have a distinctive mark indicating month, year, Agency, welder's code and weld number of the welded joint in the following manner:

**	**	***	***	***
Month	Last two digits of year;	Agency	Specific.	Weld
No.		person number.		

This should be done by punching on an Aluminum strip of suitable thickness and dimension of 30 mm x 100 mm which should be fixed to the web of the rail with epoxy adhesive at approximately 300 mm from the joint. The welded joints shall be serially numbered in a kilometer. Repair welds/additional welds done at a later date may be given continuing weld number in that kilometer. For example, the last Thermit weld number in a particular kilometer was 88 and subsequently a Thermit weld has been executed, it shall be numbered 89, irrespective of its location in that kilometer. PWI shall maintain 'THERMIT WELD REGISTER' as per proforma. No punch marking should be done on the rail. .

5.7 **PAINTING OF THERMIT WELDS**

- 5.7.1 Painting of weld collar should be done on all welds to protect them against corrosion immediately after the welding. The procedure of painting and specification of paint is outlined in 'Annexure-6 & Annexure -7 of A T welding manual.
- 5.7.2 In service painting (maintenance painting) of Thermit welds should be carried as per following frequency:
 - (i) Once in four years in areas not prone to corrosion.
 - (ii) Every year at locations prone to corrosion as defined in para 249 (i) Of. IRPWM. The frequency may be increased depending on the site conditions.
 - (iii) On condition basis at locations which are prone to severe corrosion (areas of severe corrosion to be decided by territorial Chief Engineer / CTE).
- 5.7.3 The procedure for painting of weld collar for Thermit welded rail joints to protect against normal corrosion and severe corrosion is outlined in Annexure-6 and Annexure-7 respectively of A T welding manual.

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6.0 ACCEPTANCE TESTS

6.1 **Visual Inspection** - All the welded joints shall be examined carefully to detect any visible defect like cracks, blow holes etc. Any joint, which shows any visible defect should be rejected.

6.2 **Dimensional Check** - All finished joints shall be checked for dimensional tolerances which should be within the tolerances as specified in para 5.4.2.

6.3 Ultrasonic Flaw Detection Test

All the fusion welded shall be ultrasonically. Tested and accepted by the purchaser or his representative as per the Procedure for ultrasonic testing of Thermit welded rail joints. This testing shall be completed as early as possible but in any case before the contractor/welding team leaves the welding site.

6.4 Re-welding of Defective joints

6.4.1 All the joints found to be defective as per acceptance tests as given in clause 6.1, 6.2, & 6.3 and/or joints failed in guarantee period as specified in para 7.3 will be cut and re-welded by the firm free of cost using their portions, equipments, labour & consumables.

6.4.2 Where one bad joint is required to be replaced by two new joints, the entire cost of both the joints shall be borne by the firm.

6.4.3 All the re-welded joints should meet the acceptance tests as indicated in Paras 6.1 to 6.3.

7.0 SAMPLE TEST JOINT

7.1 One out of every 100 joints welded shall be selected at random by the purchaser or by the inspecting officer within one month of welding and subjected to Hardness, Transverse load/deflection tests and Porosity as per clause 4.2 of IRST-19-1994 and the joint shall comply with the provisions laid down therein.

7.2 If the sample test joint fails to satisfy any of the requirements of specification IRST- 19 -1994, the Railway will be at liberty to suspend further welding. However, two more randomly selected joints from the same lot of 100 joints shall be subjected to retests as per clause 4.2 of IRST-19-1994. Both the joints should clear all the tests. If this report is also not satisfactory, further welding of joints shall be suspended until the firm's welding technique has been examined and the same satisfies the requirements of clause 4 of IRST-19-1994. The clearance for recommencement of welding shall be given by RDSO.

7.3 GUARANTEE

7.3.1 Rail joints welded by a firm shall be guaranteed against failure for a period of two years from the date of welding the joints in track or from the date such welded joints made in cess are inserted in the track. Any such welded joint which fails within the guarantee period shall be re-welded free of cost by firm as per stipulations of clause 6.4.

7.3.2 In case of failure of sample test joint {refer Clause 7}, the period of guarantee for 100 *joints* represented by the sample joint shall be extended for a further period of one year. In case of failure of joints or joints exhibiting signs of failure by cracking within extended period of guarantee, the joints shall be re-welded free of cost by the supplier as per stipulations of Clause 6.4.

7.4 The welded joints with the extended period of guarantee shall be marked 'X' with Yellow paint on the outer side of. the web of the rail near the joint in addition to the marking prescribed in clause 5.6. Such marked joints shall. be kept under careful observation by the purchaser.

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8.0 **OTHER REQUIREMENTS**

- 8.1 Welding shall be supervised by trained welding Supervisor and carried out by trained welder having valid competency certificate from RDSO/ TPP, NR, Lucknow in their possession.
- 8.2 A welding Supervisor shall supervise not more than two welding teams deployed within 50m distance at a time.
- 8.3 A copy of the Thermit welding Manual shall be available with each PWI and at each welding site.

9.0 **PRECAUTIONS**

While carrying out welding at site, the following precautions shall be observed:

- i) It should be ensured that the portion being used matches with type and chemistry of rail.
- ii) Rail ends should be square.
- iii) Alignment of rail ends should be perfect as checked by straight edge.
- iv) Rail ends should be properly cleaned with kerosene oil and wire brushes.
- v) Stop watch should be provided to the Welding Supervisor at each welding site.
- vii) Pressure in the tanks/cylinder should be properly maintained during pre-heating.
- vii) Correct gap between rail ends at head, web and foot shall be ensured.
- viii) Correct preheating time for rail ends shall be ensured.
- ix) Tightness of clips fitted with hose connections to Compressor tank and burner shall be checked before commencing preheating.
- x) Nozzles of burners shall be cleaned periodically to avoid back-fire.
- xi) The compressor tank shall be kept at least 2 to 3 metres away from the burner to prevent fire hazard.
- xii) The tapping shall be done within the time specified for that particular technique. Welding parameters for techniques presently being used. For special type of welding i.e. 75mm gap, Combination joint etc. the time of reaction & tapping shall be as stipulated by RDSO for that particular welding technique.
- xiii} Arrangements for giving first aid shall be available at site.
- xiv} Welders should be provided with gloves and. coloured glasses.
- xv) Boiling portion shall be out tapped.
- xvi} No moist portion/torned portion bag shall be used for welding.
- xvii) Dampness in moulds can lead to porosity and early fatigue failure of welds.
- xviii} Only those contractual agencies as have clearance from the RDSO/Railway Board can execute welding work. Supply of portions must be from sources approved by ROSO/Railway Board.
- xix} Many weld failures show evidence of badly cut rail ends. The evenness and vertically of a rail cut depends solely upon the skill of the welder. With portable disk cutters, very little skill *is* required to produce good cut.

[D] SPECIFICATION FOR TRACK BALLAST (JUNE-2016) (Corrected upto C.S.no.4)

1. **SCOPE:** These specifications will be applicable for stone ballast to be used for all types of sleepers on normal track, turnouts, tunnels and deck slabs etc on all routes.
2. **DETAILED SPECIFICATIONS:**
 - 2.1 **GENERAL**
 - 2.1.1 **Basic Quality:** Ballast should be hard durable and as far as possible angular along edges/corners, free from weathered portions of parent rock, organic impurities and inorganic residues.

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2.1.2 Particle shape: Ballast should be cubical in shape as far as possible. Individual pieces should not be flaky and should have generally flat faces with not more than two rounded/ sub rounded faces.

2.1.3 Mode of manufacture: Ballast for all BG main lines and running lines, except on 'E' routes but including 'E' special routes, shall be machine crushed. For other BG lines and MG/NG routes planned/sanctioned for conversion, the ballast shall preferably be machine crushed. Hand broken ballast can be used in exceptional cases with prior approval of Chief Track Engineer/CAO/C. Such approval shall be obtained prior to invitation of tenders.

On other MG and NG routes not planned/sanctioned for conversion hand broken ballast can be used for which no approval shall be required.

2.2 PHYSICAL PROPERTIES

2.2.1 Ballast sample should satisfy the following physical properties in accordance with IS:2386 Pt.IV-1963 when tested as per the procedure given in Annexure-I & II.

	BG, MG & NG(planned/sanctioned For conversion)	NG & MG(other than those planned for conversion)
Aggregate Abrasion value	30% Max*	35% Max.
Aggregate Impact value	20% Max*	30% Max.

* In exceptional cases, on technical and/or economic grounds relaxable upto 35% and 25% respectively by CTE in open line and CAO/C for construction projects. The relaxation in Abrasion and Impact values shall be given prior to invitation of tender and should be incorporated in the Tender document.

2.2.2 To Carry out Impact Test on ballast, a test sample of ballast pieces (about 5 kg in weight) of size 10 mm to 12.5 mm will be required. Appropriate care should be taken by the railways that ballast selected for breaking down to 10 mm to 12.5 mm size for Impact test should be random from the ballast supply to avoid any subjectivity in selection of test sample. Alternatively, the test sample in the recommended range of size be got manufactured along with the ballast in sufficient quantity required for this test.

2.2.3 The '**Water Absorption**' tested as per IS 2386 Pt.III-1963 following the procedure given in Annexure III should not be more than 1%. This test however, *to be prescribed at the discretion of CE/CTE in open line and CAO/Con. for construction projects.*

2.2.3.1 The power of relaxing for water absorption limit should be delegated to CTE in open line /CAO on construction for specified areas. However, maximum water absorption in any case should not be allowed more than 2.5%.

2.3 SIZE AND GRADATION

2.3.1 Ballast should satisfy the following size and gradation:

- Retained on 65mm Sq.mesh sieve : 5% Maximum
- Retained on 40mm Sq.mesh sieve* : 40%-60%
- Retained on 20mm Sq.mesh sieve : Not less than 98% for machine crushed
: Not less than 95% for hand broken

* For machine crushed ballast only.

2.3.1.1 In exceptional cases, where it is considered necessary on technical considerations, to reduce the

maximum size of ballast for NG lines, CTE may modify the size & gradation of the ballast as defined above. In case of such modifications, provision given in para 2.3.2 to 2.3.4 below shall also be suitably modified. This will be finalized before invitation of tenders and should be incorporated in the tender documents.”

2.3.2 Oversize ballast

i) Retention on 65mm square mesh sieve.

A maximum of 5% ballast retained on 65mm sieve shall be allowed without deduction in payment.

In case ballast retained on 65mm sieve exceeds 5% but does not exceed 10%, payment at 5% reduction in contracted rate shall be made for the full stack. Stacks having more than 10% retention of ballast on 65mm sieve shall be rejected.

ii) In case ballast retained on 40mm square mesh sieve (machine crushed case only) exceeds 60% limit prescribed in 2.3.1 (b) above, payment at the following reduced rates shall be made for the full stack in addition to the reduction worked out at i) above.

- 5% reduction in contracted rates if retention on 40mm square mesh sieve is between 60% (excluding) and 65% (including).
- 10% reduction in contracted rates if retention on 40mm square mesh sieve is between 65% (excluding) and 70% (including).

iii) In case retention on 40mm square mesh sieve exceeds 70%, the stack shall be rejected.

iv) In case of hand broken ballast supply, 40mm sieve analysis may not be carried out. The executive may however ensure that the ballast is well graded between 65mm and 20mm size.

2.3.3 Under Size Ballast: The Ballast shall be treated as undersize and shall be rejected if-

i) Retention on 40mm Sq. Mesh sieve is less than 40%.

ii) Retention on 20mm square mesh sieve is less than 98% (for machine crushed) or 95% (for hand broken).

2.3.4 Sieve Analysis of Ballast

2.3.4.1 The test sieves used for sieve analysis shall conform to the specifications given in Annexure-IV.

2.3.4.2 While carrying out sieve analysis, the screen shall not be kept inclined, but held horizontally and shaken vigorously. The pieces of ballast retained on the screen can be turned with hand to see if they pass through but should not be pushed through the sieve.

2.3.4.3 The percentage passing through or retained on the sieve shall be determined by weight. The weighing equipment used shall NOT have least count more than 100 grams.

3. CONDITIONS FOR SUBMISSION OF TENDER

3.1 Each tenderer at the time of tendering shall submit the test report of Impact Value. Abrasion Value, Water Absorption Value from approved laboratories and the list of these laboratories shall be mentioned in the tender documents.

3.2 The tenderer shall also furnish an undertaking as incorporated in the tender document that the ballast supply at all times will conform to Specifications for Track Ballast as specified by Railway.

4. METHOD OF MEASUREMENT

4.1 Stack Measurement

Stacking shall be done on a neat, plain and firm ground with good drainage. **The height of stack shall not be less than 1m** except in hilly areas where it may be 0.5m. **The height shall not be more than 2.0m. Top width of stack shall not be less than 1.0m.** Top of stack shall be kept parallel to the ground plane. The side slopes of stack should not be flatter than 1.5:1 (Horizontal :

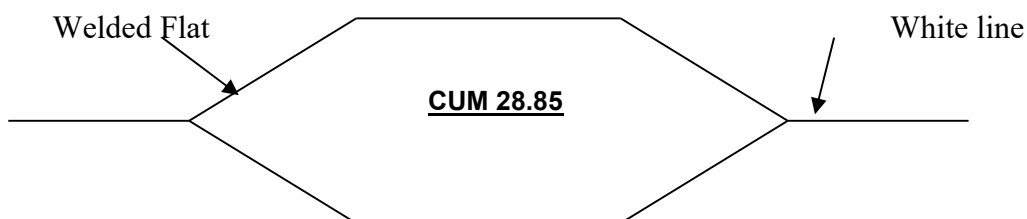
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Vertical). **Cubical content of each stack shall normally be not less than 30 cum in plain areas and 15 cum in hilly areas.**

4.2 Wagon Measurement

- 4.2.1 In case of ballast supply taken by direct loading into wagons, a continuous white line should be painted inside the wagon to indicate the level to which the ballast should be loaded. The cubical content in cubic meter corresponding to white line should also be painted on both sides outside the wagon.
- 4.2.2 In addition to painted line, mentioned in para 4.2.1, short pieces of flats (cut pieces of tie bars or otherwise) with cubical contents punched shall be welded at the centre of all the four sides as permanent reference. In case the supply is taken in general service wagon, actual measurements will be taken.



4.3 Shrinkage Allowance

Payment shall be made for the gross measurements either in stacks or in wagons without any deduction for shrinkage/voids. However, when ballast supply is made in wagons, shrinkage upto 8% shall be permitted at destination while verifying the booked quantities by the consignee.

5.0 SAMPLING AND TESTING

5.1 General

- 5.1.1 The samples shall be drawn with due diligence and adequate precaution so that they represent the true nature and condition of the ballast.
- 5.1.2 Being a heterogeneous material, the gradation of ballast loaded in wagons and/or dumped/inserted in the track may not remain same as that initially checked in stacks, due to lifting, loading, transportation, unloading etc. Similarly in case of direct loading into wagons, the gradation of ballast at destination may not remain same as that at source, due to loading, transportation etc. Therefore, the samples from wagons and track are not representative samples as far as gradation is concerned. Even in the same stack, results of two checks may not be same,
- 5.1.3 The samples from a stack taken after lapse of a long period of stacking are not representative samples of the ballast initially supplied in the stack, due to settling down of smaller size particles in voids underneath, dirt/dust getting accumulated in the stack, rains etc.

5.2 Sampling Frequency

In order to ensure supply of uniform quality of ballast, the following norms shall be followed in respect of sampling, testing and acceptance:

- 5.2.1 On supply of the first 100 cum, the tests for Size & Gradation, Abrasion Value, Impact Value and Water Absorption (if prescribed) shall be carried out by Railway. Further supply shall be accepted only after this ballast satisfies the specifications for these tests. Railway reserves the right to terminate the contract as per GCC at this stage itself in case the ballast supply fails to conform to any of these specifications.

5.2.2 Subsequent test shall be carried out as follows:

Type of Tests	Supply in Stacks	Supply in Wagons
a) Size and Gradation tests	One for each 100 cum or part thereof in any stack	One for each 100 cum or part thereof for quantity to be loaded in wagons
b) Abrasion Value, Impact Value and Water Absorption Value (*)	One Test for every 2000 cum	

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

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

5.2.3 All tests for Abrasion Value, Impact Value and Water Absorption should be got done through approved laboratories or Railway's own laboratories. (List of these laboratories shall be mentioned in the tender document). These tests, subsequent to award of contract, shall be done at Railway's cost.

5.3 Supply of ballast in Stacks

5.3.1 Sampling Procedure

- (i) At the time of formation of stacks, sufficient care should be taken to ensure that there is sufficient space around the stack to facilitate movement of JCB/Power Equipments. The length and width of each stack shall be kept in such a way that every part of the stack is accessible to the JCB or Power Equipment, to be deployed for drawing "Samples".
- (ii) In case of ballast supply in stacks, three "Samples" each of 0.3-0.5 cum volume, one sample each from two sides and one sample from top after removing outer layer (150-200 mm) should be collected from stack for every 100 cum or part thereof, by JCB or other suitable Power Equipment.
- (iii) The location (in plan) and depths of sampling points shall be varied for different "Samples" and different stacks in a lot.
- (iv) "Gross Sample" should be prepared by thoroughly mixing the three "Samples" collected as in (ii) above, using JCB bucket or any other suitable Power Equipment, on a clean, flat and hard surface.

Note: In exceptional cases of site specific constraints, approval of Competent Authority (Engineer-in-charge) shall be taken prior to invitation of tender, for using manual means for collection and mixing of "Samples", and this should be incorporated in the Tender Document.

- (v) A "Test Sample" of volume 0.027 cum shall be drawn from each of the "Gross Sample", by the method described in Para 5.3.1 (vi), for carrying out Size & Gradation tests.
- (vi) **Method for drawing "Test Sample"**: The ballast in "Gross Sample" shall be scooped into a cone shaped pile by taking care to drop each scoopful exactly over the same spot. After the cone is formed, it shall be flattened by pressing the top of cone with a smooth surface. Then it is cut into quarters by two lines which intersect at right angles at the centre of the cone. The bulk of the sample is reduced by rejecting any two diagonally opposite quarters. The remaining ballast shall be mixed and "test sample" shall be drawn for testing. After drawing "test sample", the left over ballast of "Gross Sample" shall be dumped back in the stack.

- (vii) In case clean, flat and hard surface is not available then a tarpaulin or any other suitable sheet may be used on a flat surface for mixing, drawing and sieve analysis of samples.

5.3.2 **In case of stacks of volume more than 100 cum**, more than one "Test Samples" will be tested for Size & Gradation. In such cases, the sieve analysis results of all the "Test Samples" shall individually conform to following gradation, for acceptance/ rejection of the whole stack:

- (i) Retention on 20mm Sq. Mesh Sieve shall not be less than 98% for machine crushed ballast (not less than 95% for hand broken ballast).
- (ii) Retention on 40mm Sq. Mesh Sieve shall be between 40 to 70%.
- (iii) Retention on 65mm Sq. Mesh Sieve shall not be more than 10%.

The full payment/reduced payment for the whole stack, as given in Para 2.3, shall be decided based on the average of the sieve analysis results of all the "Test Samples" for a stack.

5.4 **Supply of ballast in Heaps for loading directly in Wagons**

5.4.1 **Sampling Procedure**

Samples of ballast shall be collected from heaps of ballast proposed to be loaded into the wagons. For this, the contractor shall inform ADEN in-charge in writing sufficiently in advance before placement of rake, about the locations of ballast heaps from where it is to be loaded into wagons. ADEN in-charge shall decide the location of heaps from which sampling is to be done, judiciously covering the entire quantity of ballast to be loaded in the rake.

5.4.2 Based on the approx. quantity of ballast to be loaded in the rake, methodology for sampling of ballast to be followed shall be-the same as in Para-5.3.1 and 5.3.2 above.

ANNEXURE-(i)

**Aggregate Abrasion Value
(Based on IS:2386 Part IV-1963)**

1. Apparatus

1.1 The abrasion test for track ballast shall be carried out using **Los-Angles Machine** as per fig.1.

1.2 The **abrasive charge** shall consist of 12 nos. cast iron or steel spheres approx. 48mm dia and each weighing between 390 and 445 gm ensuring total weight of charge as $5,000 \pm 25\text{gm}$.

1.3 **IS sieves** of sizes 50mm, 40mm, 25mm and 1.70mm.

1.4 Drying Oven

2. Test Sample

2.1 The test sample of 10,000gm shall consist of clean ballast conforming to the following grading:

- Passing 50mm and retained on 40mm square mesh sieve 5,000 gm@
 - Passing 40mm and retained on 25mm square mesh sieve 5,000 gm@
- @ tolerance of $\pm 2\%$ permitted.

2.2 The sample shall be dried in oven at 100 – 110 °C to a constant weight and weighed (Weight ‘A’).

3. Test Procedure

The test sample and the abrasive charge shall be placed in the Los-Angeles abrasion testing machine and the machine rotated at a speed of 20-33 revolutions/minute for 1000 revolutions. At the completion of test, the material shall be discharged and sieved through 1.70mm IS sieve.

4. Analysis and reporting of the Result

4.1 The material coarser than 1.70mm IS sieve shall be washed, dried in oven at 100 - 110°C to a constant weight and weighed (weight B).

4.2 The proportion of loss between Weight “A” and Weight “B” of the test sample shall be expressed as a percentage of the original weight of the test sample. This value shall be reported as:

$$\text{Aggregate Abrasion Value} = \frac{A-B}{A} \times 100$$

.....
.....

ANNEXURE-(ii)

**Aggregate impact value
(Based on IS: 2386 Part IV-1963)**

1. Apparatus

The apparatus shall consist of the following

- a) **Impact testing machine** conforming to IS:2386 part IV-1963 as per fig.2.
- b) **IS Sieve** of sizes 12.5mm, 10mm and 2.36mm.
- c) **A cylindrical metal measure** of 75mm dia & 50mm depth.
- d) **A tamping rod** 10mm circular cross section and 230mm length, rounded at one end.
- e) **Drying Oven**

2. Test Sample

- 2.1 The test sample shall be prepared out of track ballast so as to conform to following grading:
 - Passing 12.5mm IS sieve 100%
 - Retention 10mm IS sieve 100%
- 2.2 The sample shall be oven dried for 4 hours at a temperature of 100-110°C and cooled.
- 2.3 The measure shall be filled about one-third full with the prepared aggregate and tamped with 25 strokes of the tamping rod. A further similar quantity of aggregate shall be added and a further tamping of 25 strokes given. The measure shall finally be filled to overflowing, tamped 25 times and the surplus aggregate struck off, using and tamping rod as a straight edge. The net weight of the aggregate in the measure shall be determined to the nearest gm (weight 'A').

3. Test Procedure

- 3.1 The cup of impact testing machine shall be fixed firmly in the position on the base of the machine and the whole of the test sample placed in it and compacted by 25 strokes of the tamping rod.
- 3.2 The hammer shall be raised 380mm above the upper surface of the aggregate in the cup and allowed to fall freely on to the aggregate. The test sample shall be subjected to a total of 15 such blows, each being delivered at an interval of not less than one second.

4. Analysis and Reporting of the result

- 4.1 The sample shall be removed and sieved through 2.36mm IS sieve. The fraction passing through shall be weighed (Weight 'B'). The fraction retained on the sieve shall also be weighed (Weight 'C') and if the total weight (B+C) is less than the initial weight (Weight 'A') by more than one gm, the result shall be discarded and a fresh test made.
- 4.2 The ratio of the weight of the fines formed to the total sample weight shall be expressed as a percentage.
Aggregate Impact Value = (B/A) X 100
- 4.3 Two such tests shall be carried out and the mean of the results shall be reported to the nearest whole number as the Aggregate Impact Value of the tested material.

.....

ANNEXURE-(iii)

**Water Absorption
(Based on IS: 2386 Part III-1963)**

1.

Apparatus

The apparatus shall consist of the following:

a)

Wire Basket- Perforated, electroplated or plastic coated, with wire hangers for suspending it from the balance.

b)

Water tight container for suspending the basket.

c)

Dry soft Absorbent cloth 75x45 cm size 2 nos.

d)

Shallow Tray of minimum 650 square cm area.

e)

Air tight container of capacity similar to basket.

f)

Drying Oven.

2.

Test Sample

A sample of not less than 2000gm shall be used.

3.

Test Procedure

3.1

The sample shall be thoroughly washed to remove finer particle and dust, drained and then placed in the wire basket and immersed in distilled water at a temperature between 22-32°C.

3.2

After immersion the entrapped air shall be removed by lifting the basket and allowing it to drop 25 times in 25 seconds. The basket and sample shall remain immersed for a period of 24 ± ½ hours afterwards.

3.3

The basket and aggregate shall then be removed from the water, allowed to drain for few minutes, after which the aggregate shall be gently emptied from the basket on to one of dry clothes and gently surface dried with the cloth transferring it to second dry cloth when the first will remove no further moisture. The stone aggregate shall be spread on the second cloth and exposed to atmosphere (away from direct sunlight) until it appears to be completely surface dry. The aggregate then shall be weighed (Weight ‘A’).

3.4

The aggregate shall then be placed in an oven at a temperature 100 - 110°C for 24 hours. It shall then be removed from oven, cooled and weighed (weight ‘B’).

4.

Analysis and Reporting of the Result

Water Absorption = {(A-B)/ B}x100

4.1

Two such tests shall be made and individual and mean results shall be reported.

.....

Specification of Test Sieves used for Sieve Analysis of Ballast

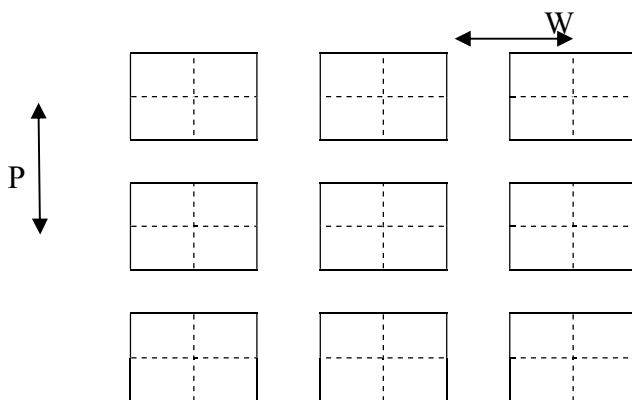
1. The test sieves shall be perforated plate sieve type with square holes/apertures, mounted on a frame. The test sieves are designated by the nominal size of holes/ apertures.
2. **Material of Perforated Plate:** The perforated plate for test sieves shall be manufactured from Brass Sheet or Steel Sheet or Stainless Steel Sheet or Galvanized Steel Sheet or Electroplated Steel Sheet.
3. **Plate Thickness:** The thickness of plate used for making test sieve and the tolerance permitted for this shall be as following:

For 65mm Square Mesh Sieve - 3mm (Plus 1.0mm Minus 0.5mm)

For 40mm Square Mesh Sieve - 2mm (Plus Minus 0.5mm)

For 20mm Square Mesh Sieve - 2mm (Plus Minus 0.5mm)

4. **Arrangement of Holes/Apertures:** The square holes/apertures of size "W" in the perforated plate shall be arranged at Pitch "P" as per the sketch given below:



5. **Sieve Opening Size, Pitch of Openings and tolerances:** The nominal size of individual hole/aperture at mid-section (W), the Pitch of holes/apertures (P) and permissible tolerance for them shall be as under:

Test Sieve of Square Mesh Size	W		P	
	Nominal Size	Tolerance	Distance	Tolerance
65 mm	65 mm	(±) 1.5 mm	80 mm	(+) 12.0 mm (-) 8.0 mm
40 mm	40 mm	(±) 1.5 mm	50 mm	(+) 7.5 mm (-) 5.0 mm
20 mm	20 mm	(±) 1.0 mm	25 mm	(+) 4.0 mm (-) 2.5 mm

6. **Sieve Frame:** The frame of test sieves shall be manufactured from Hardwood or Steel sheet or Brass sheet. The internal size of the frame (i.e. clear size of perforated plate mounted on frame) shall not be less than 100cm in length, 70cm in breadth and 10cm in height on sides.

7. **Marking on test sieves:** A label shall be fixed to the frame of each sieve, legibly marked with following information:

- (i) Nominal Aperture Size,
- (ii) Material of perforated plate,
- (iii) Material of sieve frame,
- (iv) Maker's Name or Trademark, and
- (v) An Identification Number for the sieve.

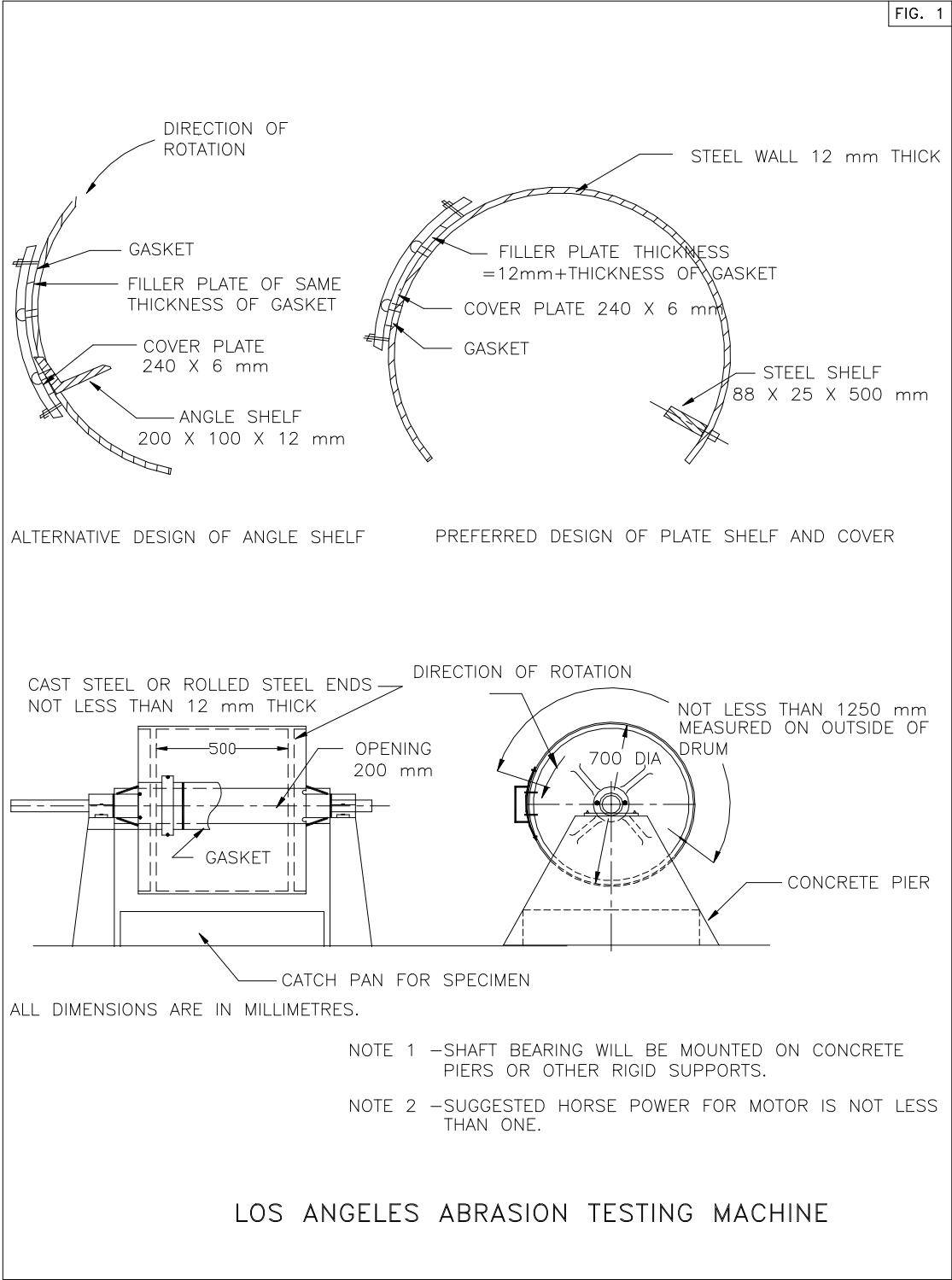
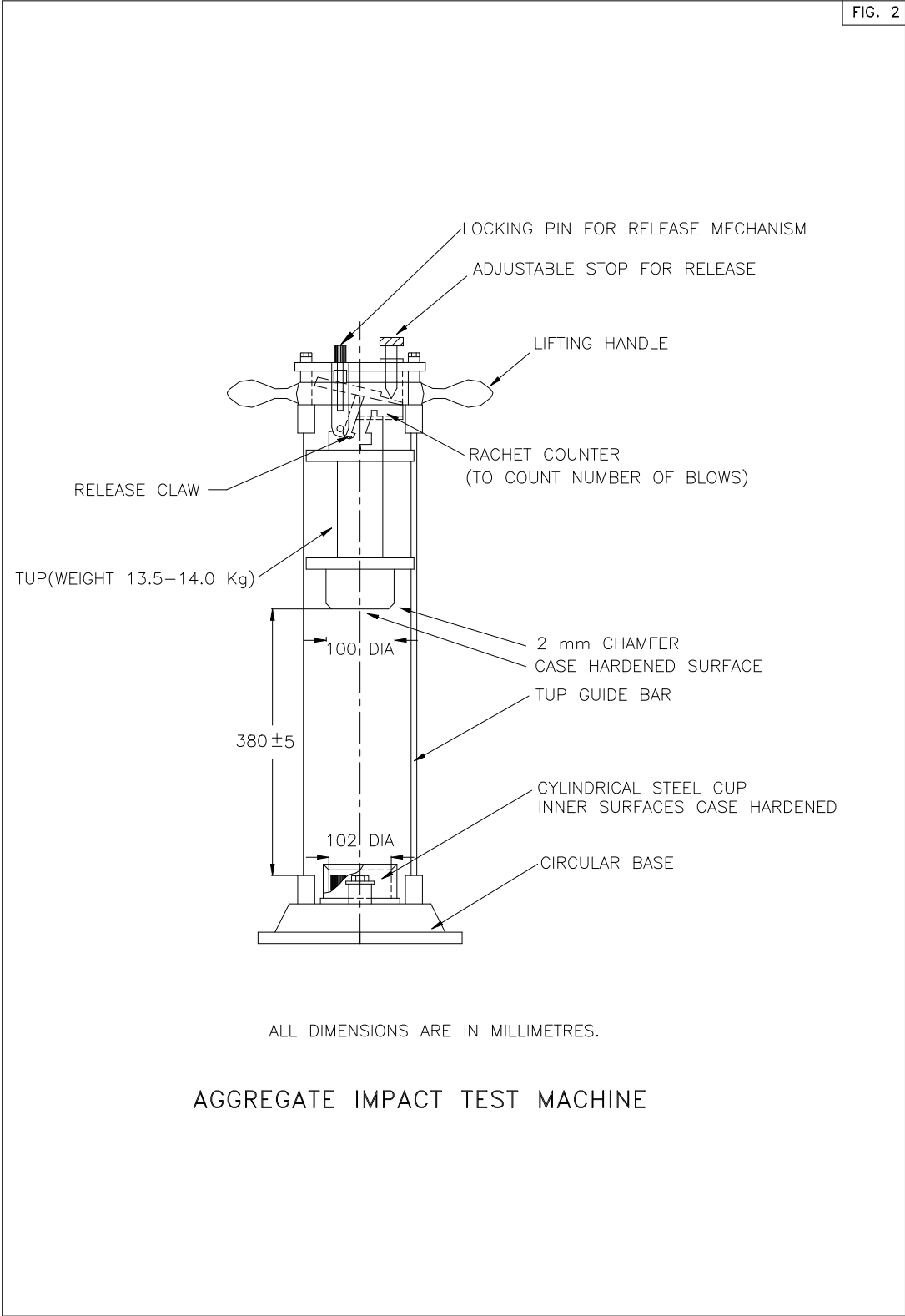


FIG. 2



.....

PROFORMA-I'**NORTH CENTRAL RAILWAY****(ENGINEERING / CONSTRUCTION DEPARTMENT)**

1. Full name of contractor/Construction firm and year of establishment.
2. Registered Head Office & Postal Addressed.
Telephone Nos. with STD No.
3. Branch Office address, if any.
Telephone Nos. with STDNo.
4. Constitution of firm (give full details including names of Partners/Executives /Power of Attorney holders, etc.)
5. Particulars of Registration with Government / Semi-Government Organization, Public Sector, Undertaking and Local Bodies etc.

PROFORMA - II**NORTH CENTRAL RAILWAY****(ENGINEERING / CONSTRUCTION DEPARTMENT)****DETAILS OF WORKS EXECUTED SIMILAR TO TENDERED WORK**

(Three works of 30% value each or two works of 40% value each or one work of 60% value of present tender completed during last 7 years to be given)

Sr. No.	Description of Work	Contract awarding authority	Agreement No. & Date	Cost of Work	Date of commencement of work	Date of completion as per agreement	Actual date of completion	Whether Arbitration Demanded or not

CONTRACTOR

FOR DY.CSTE/CTC/TDL

PROFORMA-III-A**NORTH CENTRAL RAILWAY****(ENGINEERING / Project DEPARTMENT)****DETAILS OF ALL CIVIL ENGINEERING WORKS COMPLETED****DURING PAST THREE YEARS**

S/ N	Descript ion of work	Contract awarding authority	Agree- ment No. & Date	Cost of Work awarded	Date of comm.- ence- ment of work	Date of comple- tion as per agreement	Actual date of commen- -cement	Actual date of compl e- tion	Value of work done	Whether arbitration demanded or not

PROFORMA-III-B**B) LIST OF WORKS IN HAND**

S/ N	Description of work	Contract awarding authority	Agreement NO. & date	Cost of work	Date of Commen- cement	Date of completion	Balance work yet to be done.

CONTRACTOR

FOR DY.CSTE/CTC/TDL

PROFORMA - IV

NORTH CENTRAL RAILWAY

(ENGINEERING/CONSTRUCTION DEPARTMENT)

DETAILS OF PLANTS & MACHINERY PROPOSED TO BE INDUCTED

Sr. No.	Particulars of equipments	No. / Unit	Kind / Make	Capacity	Age and Condition	Registration No.	Remarks

CONTRACTOR

FOR DY.CSTE/CTC/TDL

PROFORMA - V**NORTH CENTRAL RAILWAY****(ENGINEERING / CONSTRUCTION DEPARTMENT)****LIST OF PERSONNAL ORGANISATION IN HAND & PROPOSED
TO BE ENGAGED FOR THE SUBJECT WORK**

Sr. No.	Name & Designation	Qualification	Professional Experience	R e m a r k s

I hereby certify that no retired Engineer/Gazetted Officer of the Railways who has retired within 1 years of date of submission of tender and has not obtained permission of competent authority has been engaged by me/our firm. I also certify that none of my relative is engaged in Engineering Department in North Central Railway.

SIGNATURE OF CONTRACTOR

CONTRACTOR

FOR DY.CSTE/CTC/TDL

PROFORMA-VI

IDENTITY CARD

IDENTITY CARD SR.N0.		—	—
DATE OF ISSUE		—	—
CONTRACT AGREEMENT N0.		—	—
NAME OF THE CONTRACTOR AND ADDRESS.		—	—
		—	—
		—	—
<u>PARTICULARS OF EMPLOYEE</u> :			—

Space for photo

I) NAME OF THE _____ EMPLOYEE: _
DATE OF BIRTH/ AGE / : —

III PERSONAL IDENTIFICATION MARK

IV) PERMANENT ADDRESS :

SIGNATURE OF CONTRACTOR SIGNATURE / THUMBIMPRESSION Of EMPLOYEE
(The person who signed the Original
Tender document or the contract agreement)

CONTRACTOR

FOR DY.CSTE/CTC/TDL

PROFORMA - VII

ENGINEERING / CONSTRUCTION DEPARTMENT

DECLARATION OF SITE VISIT

I / we hereby solemnly declare that I/ se visited the site of works personally and have made myself/ourselves fully conversant of the conditions there in and in particular the following:

1. Topography of the area
2. Soil strata at site of work
3. Sourcess and availability of construction material.
4. Rates for construction material, water, electricity including all local taxes royalties ,octroi etc.

CONTRACTOR

FOR DY.CSTE/CTC/TDL

ANNEXURE – I-B**NORTH CENTRAL RAILWAY****(DETAILS OF BANK ACCOUNT NO.AND PAN NO.)**

S N	Name of contractor/firm	Bank Account No.	Bank's Name	PAN No.

ANNEXURE – I-A**STATEMENT OF DEVIATIONS FROM TENDER SPECIFICATIONS**

Item No.	Description	Particulars of Deviations

Signature and Seal of the Tenderer

CONTRACTOR

FOR DY.CSTE/CTC/TDL

Annexure-II**GUARANTEE BOND**

Name of the Bank
 President of India,
 Acting through --- (designation of finance officer)
 North Central Railway, Prayagraj
 Bank Guarantee Bond No. Date

In consideration of the President of India acting through (designation and address of contract signing Authority), North Central Railway, Prayagraj, (hereinafter called "the government") having agreed under the terms and condition of agreement /Contract Acceptance Letter No. date..... made between..... (designation and address of contract signing authority) and here in after called "then said Contractor(s)" for the work..... from the demand, under the terms and conditions of an Agreement No.-----made-----and-----for the work----- hereinafter called "the said agreement having agreed for submission of of an Irrevocable Bank Guarantee Bond for Rs..... (Rs. – Only/) as a Performance Security Guarantee Bond from the contractors for compliance of his obligations in accordance with the terms & conditions in the said Agreement.

1. We,.....(Name of Bank)(herein after referred to as " the Bank, undertake to pay to the Government an amount not exceeding Rs. ----- (Rupees----- only) on demand by the Government.
2. We.....(indicate the name of the bank), further agree that (and promise) to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Government through the (designation of finance officer)....., stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the Government by reason of any breach by the said contractor of any of the terms of conditions contained in the said agreement or by reason of the contract or failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees...Only).
3. (a) We(indicate the name of Bank) further undertake to pay to the Government any money so demanded notwithstanding any dispute or dispute raised by the contractor (s)in any suite or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.
 (b) The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We,------(indicate the name of bank) to further agree that the guarantee herein Contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged by..... (Designation & Address of contact signing authority on behalf of the Government, certify that the terms and conditions of the said agreement have been fully and properly carried out by the said contractors) and accordingly discharges this guarantee.
5. (a) Not withstanding anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Government or until (date of validity/ extended validity) whichever is earlier and no claim shall be valid under this guarantee unless notice in writing thereof is given by the Government within validity/ extended period of validity of guarantee from the date aforesaid.
 (b) Provided always that we...(indicate the name of the Bank) unconditionally undertakes to renew this guarantee on to extend the period of guarantee form year to year before the expiry of the period or the extended period of the guarantee, as the case may be on being called upon to do so by the Government. If the guarantee is not renewed or the period extended on demand, we..... (indicate the name of the Bank) shall pay the Government the full amount of guarantee on demand and without demur.
6. We... (indicate the name of Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without effecting in any manner our of obligations hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to

CONTRACTOR

FOR DY.CSTE/CTC/TDL

the powers exercisable by the Government against the said contractor (s) and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractors) or for any bearance act or omission on the part of the Government or any indulgence by the Government to the said contractors) or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relive us from the liability.

7. This guarantee will not be discharged by any change in the constitution of the Bank or the Contractor(s).
8. We..... (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
9. This guarantee shall be valid up to- (date of Completion plus 60 days). Unless extended on demand by Government. Notwithstanding anything to the contrary contained herein before, our liability under this guarantee is restricted to Rs.....only) unless a demand under this guarantee is made on us in writing on or before we shall be discharged from our liabilities under this guarantee thereafter.

Dated the -----day of
(Indicate the name of bank)

Signature of Banks Authorized official
(Name).....
Designation with code no.
Full Address.....

Witness (Name & Signature)

Full Address

1.
2.

.....

TENDER FORM (Third Sheet)

Name of Work: _____

BILL OF QUANTITIES

1. Standard Schedule of Rates (SSOR) Items:

SL	Item No. of SSOR	Description of Item of work	Approximate Quantity	Unit	Rates in Figures and Words to be filled by tenderer (₹)	Amount (₹)
1	2	3	4	5	6	7

2. Non Standard Schedule of Rates (SSOR) Items:

SL	Item No. of SSOR	Description of Item of work	Approximate Quantity	Unit	Rates in Figures and Words to be filled by tenderer (₹)	Amount (₹)
1	2	3	4	5	6	7

The quantities shown in above Bill of Quantities are approximate and are as a guide to give the tenderer(s) an idea of quantum of work involved. The Railway reserves the right to increase/ decrease and/or delete or include any of the quantities given above and no extra rate will be allowed on this account.

I/We undertake to do the work at _____ % above/below the Standard Schedule of Rates (SSOR) of the _____ Railway as applicable to _____ Division or at the rates quoted above for each item.

Dated _____

Signature of the Tenderer(s)

Note: Columns 1 to 5 shall be filled by the office of the Authority inviting tender. Columns 6 & 7 shall be filled by the Tenderer(s) only when percentage tenders are not invited.

CONTRACTOR

FOR DY.CSTE/CTC/TDL

ANNEXURE – II

AGREEMENT FOR ZONE CONTRACT

CONTRACT AGREEMENT No. _____ DATED _____. ARTICLES OF AGREEMENT made this _____ day of _____ between the President of India acting through the _____, _____ Railway hereinafter called the "Railway" of the one part and _____ hereinafter called the "Contractor" of the other part.

WHEREAS the Contractor has agreed with the Railway during the period of _____ months from _____ to _____ for the performance of:

(a) New Works, additions and alterations to existing structures, special repair works and supply of building materials subject to the contract value for such works not exceeding ₹ _____.

(b) All ordinary repair and maintenance works at any site between kilometer _____ and kilometre _____ as will be set forth in the work orders (which work orders shall be deemed and taken to be part of this contract) that will be issued during the said period at _____% above/below the Standard Schedule of Rates (SSOR) of the _____ Railway, corrected up to the latest correction slips and Standard Specifications of the _____ Railway corrected upto latest correction slips and the Special Conditions and Special Specifications, if any in conformity with the drawings (if any) that will be issued with the work order, aforesaid AND WHEREAS the performance of the said work is an act in which the public are interested.

NOW THIS INDENTURE PRESENTS WITNESSETH That in consideration of the payment to be made by the Railway, the Contractor will duly perform the works set forth in the said Work Order and shall execute the same with great promptness, care and accuracy, in a workman like manner to the satisfaction of the Railway and will complete the same on or before the respective dates specified therein in accordance with the said specifications and said drawings (if any) and said conditions of contract and will observe, fulfill and keep all the conditions therein mentioned, (which shall be deemed and taken to be part of this contract as if the same had been duly set forth herein), AND the Railway both here-by agree that if the Contractor shall duly perform the said work in the manner aforesaid and observe and keep the said terms and conditions, the Railway will pay or cause to be paid to the Contractor for the said works on the completion thereof the amount due in respect thereof at the rates specified above.

Contractor _____
Address _____

Designation _____
Railway _____

(For President of India)

Witnesses (to signature of Contractor):

Signature of witnesses with address _____

Date _____

Signature of witnesses with address _____

Date _____

CONTRACTOR

FOR DY.CSTE/CTC/TDL

ANNEXURE - III

WORK ORDER UNDER ZONE CONTRACT

WORK ORDER NO. _____, DATED _____ UNDER CONTRACT AGREEMENT

NO. _____, DATED _____.

Name of Work _____ (SITE) _____

Schedule of Drawings _____

Authority _____ Allocation _____

The Contractor(s) _____ is / are hereby ordered to carry out the following works at _____% above/below the Standard Schedule of Rates (SSOR) of _____, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents under Zone Contract Agreement here-in-before referred to:

SL	Item No.	Description of Item of work	Approximate Quantity	Unit	Rates in Figures and Words (₹)	Amount (₹)
1	2	3	4	5	6	7
Total Approximate Value of Work = ₹ _____						

The works herein mentioned are required to be completed on or before _____ (Date). The quantities provided herein are approximate and subject to variation under Clause 42 of the Standard General Conditions of Contract updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.

Divisional Railway Manager/Divisional _____ Engineer
 _____ Division
 _____ Railway
 for President of India

Date _____

I agree to complete the works herein set forth on or before the date specified under the Zone Contract Agreement herein before referred to in conformity with the drawings hereto annexed and in accordance with the General and Special (if any) Conditions of Contract updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Standard Specifications of _____ Railway updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents .

CONTRACTOR

FOR DY.CSTE/CTC/TDL

I also agree to maintain such works for the period specified below from the date of completion:

- (a) Repair and maintenance work including white/color washing: three calendar months from date of completion.
- (b) All new works except earth work: Six calendar months from date of completion.

Contractor _____ (Signature) Railway: Designation _____
Address _____

For President of India)

Date _____ Date _____

Signature of Witnesses (to Signature of Contractor) with address

1. _____

- _____

2. _____

- _____

ANNEXURE - IV

RAILWAY
CONTRACT AGREEMENT OF WORKS

CONTRACT AGREEMENT NO. _____ DATED _____

ARTICLES OF AGREEMENT made this _____ day of _____ 20____ between President of India acting through the Railway Administration hereafter called the "Railway" of the one part and _____ herein after called the "Contractor" of other part.

WHEREAS the Contractor has agreed with the Railway for performance of the works _____ set forth in the Bill(s) of Quantities hereto annexed upon the Standard General Conditions of Contract, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Specifications of _____ updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the applicable Standard Schedule of Rates (SSOR) of _____ updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Special Conditions and Special Specifications, if any and in conformity with the drawings here-into annexed AND WHEREAS the performance of the said works is an act in which the public are interested.

NOW THIS INDENTURE WITNESSETH that in consideration to the payments to be made by the Railways, the Contractors will duly perform the said works in the said Bill(s) of Quantities set forth and shall execute the same with great promptness, care and accuracy in a workman like manner to the satisfaction of the Railway and will complete the same in accordance with the said specifications and said drawings and said conditions of contract on or before the _____ day of _____ 20____ and will maintain the said works for a period of _____ Calendar months from the certified date of their completion and will observe, fulfill and keep all the conditions therein mentioned (which shall be deemed and taken to be part of this contract, as if the same have been fully set forth herein), AND the Railway, both hereby agree that if the Contractor shall duly perform the said works in the manner aforesaid and observe and keep the said terms and conditions, the Railway will pay or cause to be paid to the Contractor for the said works on the final completion thereof the amount due in respect thereof at the rates specified in the Bill(s) of Quantities hereto annexed.

Contractor _____ (Signature)	Railway: Designation _____
Address _____	(For President of India)
Date _____	Date _____

Signature of Witnesses (to Signature of Contractor) with address:
 Witnesses:

CONTRACTOR

FOR DY.CSTE/CTC/TDL

Annexure-V

Reference -Para 6.1 of ITT

FORMAT FOR CERTIFICATE TO BE UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

I..... (Name and designation)** appointed as the attorney/authorised signatory of the tenderer (including its constituents),
 M/s..... (hereinafter called the tenderer) for the purpose of the Tender documents for the work of as per the tender No. of (Railway), do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer(s), am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website www.ireps.gov.in. I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. **I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.**
6. **I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.**
7. I/we certify that I/we the tenderer(s) 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/JV/Society/Trust.
8. I/we understand that if the contents of the certificate submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid security besides banning of business for a period of upto two year. Further, I/we (*insert name of the tenderer*)**..... and all my/our constituents understand that my/our offer shall be summarily rejected.
9. I/we also understand that if the contents of the certificate submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of Bid Security/Security Deposit and Performance guarantee besides any other action provided in the contract including banning of business for a period of upto two year.
10. 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 TENDERER

Place:

Dated:

**The contents in Italics are only for guidance purpose. Details as appropriate are to be filled in suitably by tenderer.

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

ANNEXURE-V(A)
Reference -Para 6.1 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.)

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/JV/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 fulfil 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:

CONTRACTOR

FOR DY.CSTE/CTC/TDL

ANNEXURE – VI

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:

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 = Value of existing commitments and balance amount of ongoing works with the tenderer as on date one month prior to the tender closing date to be completed in next 'N' years.

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.

Annexure –VIA

Para 5 of the Instructions to Tenderers

(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: Railway

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 –

CONTRACTOR

FOR DY.CSTE/CTC/TDL

IFSC CODE	SBIN0000006
IFSC TYPE	BRANCH
BANK NAME	STATE BANK OF INDIA
BRANCH NAME	MAIN BRANCH
CITY NAME	PRAYAGRAJ
ADDRESS	KUTCHERY ROAD, PRAYAGRAJ
DISTRICT	PRAYAGRAJ
STATE	UTTAR PRADESH
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.

Annexure –VIB

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)

CONTRACTOR

FOR DY.CSTE/CTC/TDL

Annexure-T-11

COMPLETION CERTIFICATE

Name of Organization

Postal address, Phone No., Email ID, Fax No.

Letter No.....

Dated:-.....

1.	Name of work	
2.	Contract Agreement (C/A) No. and date	
3.	Name of Firm with address	
4.	Nature of entity (Sole Prop. / Partnership firm / company / LLP / Joint Venture firm / Registered Society / registered Trust etc.)	
5. (i)	In case of Partnership firm / JV / LLP, Name and % share of individual partners / members.	
(ii)	In case of Sole Proprietorship, the name of sole proprietor	
6.	Original value of contract agreement	
7.	Final value of contract as completed (if final bill paid)	
8.	Date of award of contract	
9.	Has the work physically been completed in all respect as per contract agreement?	(Yes / No)
10. (i)	If yes, then actual date of physical completion.	
(ii)	Whether extension to DOC given with penalty or without penalty	
11.	Total payment made in above contract till the date of opening of present tender along with financial year –wise break-up	
12.	In case of composite work, (See Note 2 below), payment made for relevant distinct component of work out of total payment made under Sr. No. 11 above	
13.	Performance of contractor (Satisfactory/Unsatisfactory)	

(Signature)

Date-

Name and Designation of officer

Mobile No. of officer

Seal of officer

Notes:-

1. Above format is for guidance only. Any certificate containing information asked for shall be considered.
2. Only those works will be treated as composite works which consist of more than one distinct component of work such as Civil Engg. works, S&T work, Electrical work, OHE work etc. and there is separate schedule for each such distinct components in the tender documents.
3. Payment made as indicated in above certificate (at S.No.11 / S.No.12) will be considered as value of completed work for the purpose of eligibility under Technical Eligibility Criteria.

CONTRACTOR

FOR DY.CSTE/CTC/TDL

SPECIAL NOTE FOR SCHEDULE OF ITEM AND QUANTITIES

1. The quantities mentioned are approximate Railway reserve the right to alter the quantities as per requirement. Nothing extra whatsoever shall be paid other than the rates quoted by the tenderer/s for complete job including for lead, lift, ascend, descend, crossing of nallah, obstructions including all crossing of tracks, for Blocks/ caution, level crossing paying octroi, taxes including GST, royalty and all other local taxes and charges incidental to the supply of materials.
2. All tax including GST, Income tax etc will be borne by the Tenderer/s.
3. All conditions mentioned in the tender conditions for the above work already signed by Tenderer/s are also applicable to this and the same is the integral part of the contract.
4. The contractor will take all safety precautions that will be necessary in consultation with concerning officials for working over the running line, nothing extra shall be paid on this account.
5. The contractor shall be fully responsible for any mishap that any occur as a result of the negligent working. Decision of the railway will be final in this matter and will be considered "EXCEPTED MATTER" in addition to other mater mentioned in Clause-63 of GCC.
6. Contractor has indemnify the railway from all kind of losses suffered by railway during execution of work or on account of poor work man ship.
7. Block/caution order will be given according to convenience of railways and no compensation etc. will be paid for idle labour / machinery due to non-availability of blocks. In case of block bursting Rs. 5000/- penalty will levies for every 15 minutes / part thereof block bursting.
8. The contractor will arrange and provide all temporary fencing ballies/wire, rope/rope manila for isolation of work site, endanger for travelling passengers workmen etc and remove material or debris etc. immediately from the site of work to avoid hindrance or inconvenience to the Railway and road traffic/traveling public and will remove/dump within the specific distance as per instructions of the Engineer in charge.
9. Contractor has to indemnify the Railway from all kind of loss suffered by Railway during execution of work or on account of poor workmanship.

I/we clearly understand that I/we, am/are not entitled to any other payment on any account whatsoever, except the tendered rates for fully complete job.

CONTRACTOR

FOR DY.CSTE/CTC/TDL

Sub : Public Procurement (Preference to make in India) Order 2017

Ref : Railway Board letter no. 2015/RS(G)/779/5 Dated 27-12-2017.

- 1.0 Vide letter referred at (i) above, instructions for implementation of public Procurement (Preference to make in India) order 2017, were issued for compliance. Some of the Railways/PUs have submitted the compliance also.
- 2.0 The subject order provides for constitution of a standing committee to oversee its implementation. The standing committee, while reviewing implementation of the order, during its meeting held on 6th December, 2017, observed that *“some of the government institutions/autonomous bodies/PSUs/JVs/ companies etc. had included certain restrictive conditions in the bid documents, which were highly discriminatory against the domestic manufactures”*.
- 3.0 Secretary, Department of Industrial Policy and Promotion, has conveyed the following message from the office of Prime Minister.
“It is very disturbing that the broad message has not been appreciated by various Departments. It should be the responsibility at the highest level in each Department to ensure that the tender conditions are strictly in sync with the public procurement order and each tender must be examined from the point of view of the interest of Indian manufacturers.”
- 4.0 The standing committee has further clarified the following:
“It is clarified that Public Procurement (Preference to make in India) Order 2017 is not limited in its scope to mere supply of either goods or services alone, and that the contracts for Procurement of works are also covered by this order as construction contracts entail rendering of both goods and services during course of execution.”
- 5.0 Regarding restrictive and discriminating terms and conditions against domestic manufacturers, attention is drawn to para 3.9.1(c) of standing committee minutes which is reproduced below:
“3.9.1c) Evolve an internal system of vetting the restrictive and discriminating terms & conditions against domestic manufacturers especially included in tenders or pre-qualification bids or expressions of interest floated by them or their Attached/Subordinate officers, Autonomous bodies, PSUs, JVs with state Governments and JVs formed among Central PSUs.”
- 6.0 In the light of above, it is reiterated that the instructions as contained in the subject order, as circulated by Railway Board, may be followed in letter and spirit, duly modifying tender conditions, where considered necessary. Compliance should be reported to Railway Board.

NOTE: IN CASE OF ANY DIFFERENCE BETWEEN THIS TENDER CONDITIONS AND GCC APR 2022 WITH LATEST AMENDMENTS, THE LATTER SHALL PREVAIL AND WILL BE FINAL

.....
“END of TENDER DOCUMENT”