

Name of Work: Execution of AT Welding between MD-IQB section from Ch. 1050.797 to Ch. 709.500 in jurisdiction of GM/Co-ord Ajmer Unit of WDFC.

Single Packet
OPEN E-TENDER

TENDER DOCUMENT (NOT TRANSFERABLE) June - 2024

Employer: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED (A GOVERNMENT OF INDIA ENTERPRISE) UNDER MINISTRY OF RAILWAYS

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Note: -Information as required as per various Forms/Annexures to tender document should be submitted by the tenderers without fail strictly as per formats. Offers submitted without Mandatory documents shall be summarily rejected.

Instructions to Bidders For Online Bidding& Check List

PART-I

A. Instructions to bidders for online bidding

General: - Submission of Online Bids is mandatory for this Notice Inviting Tender. E - Tendering is new methodology for conducting Public Procurement in a transparent and secured manner. Supplier/Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, DFCCIL has decided to use the portal (ireps.gov.in), a Government of India Undertaking. Benefits to Suppliers/service providers are outlined on the home page of theportal.

Instructions: -

- 1. BiddingMethodology: Online Bid System
- 2. Broad outline of activities from Bidders perspective: -
- a. Procure a Digital Signing Certificate(DSC)
- b. Register on Electronic Tendering System(ETS)
- c. Create Users and assign roles on ETS
- d. View Notice Inviting Tender (NIT) on(ETS)
- e. Download Official copy of Tender Documents from ETS.
- f. Clarification to Tender Documents on ETS Query to DFCCIL (Optional) view response to queries posted by DFCCIL throughaddenda.
- g. Bid Submission on ETS: Prepare & arrange all documents/ papers for submission of bid online.
- h. Attend Public Online Tender Opening Event (TOE) on ETS.
- i. Post TOE clarification on ETS (Optional). Respond to DFCCIL's post –TOEqueries. For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the ETS.

3. DigitalCertificate:

For integrity of data and its authenticity/ non repudiation of electronic records and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC) also referred to as Digital Signature Certificate (DSC) of class III issued by a Certifying Authority (CA) licensed by Controller of Certifying Authority (CCA) (refer http://www.cca.gov.in).

- **4.** The Tender documents can be downloaded from the website: ireps.gov.in and to be submitted in the e format, before the schedule date & time of submission of the tender otherwise the Bid will not be considered.
- **5.** Physical copy of the tender documents would not be sold/accepted.
- **6.** List of Contact persons for these tender details of DFCCIL

DFCCIL Contact- 1	Sh. Vivek Kala
Telephone/Mobile No.	9024464701
E-mail ID	vivek.kala@dfcc.co.in
DFCCIL Contact- 2	Sh. Vipin Parihar
Telephone/Mobile No.	8003899316
E-mail ID	vparihar@dfcc.co.in
DFCCIL Contact- 3	Sh. Nilesh Pareta
Telephone/Mobile No.	8003899308
E-mail ID	npareta@dfcc.co.in

7. Modification / Withdrawal ofbids:

- (i) The Bidder may modify/ withdraw its e- bid after submission prior to the Bid Due Date & time. No Bid shall be modified / withdrawn by the Applicant on or after the Bid Due Date & time.
- (ii) Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.
- (iii) For modification of e-bid, applicant has to detach its old bid from e-tendering portal and upload / resubmit digitally signed modified bid.
- (iv) For withdrawal of bid, applicant has to click on withdrawal icon at e-tendering portal and can withdraw its e-bid.
- 8. DFCCIL may issue addendum(s) / corrigendum(s) to the tender documents. In such cases, the addendum(s)/corrigendum(s) shall be placed on ireps.gov.in and www.dfccil.gov.in. The tenderer who has downloaded the tender documents from the website before issue of addendum(s)/corrigendum(s) must visit the website and ensure that such addendum(s) / corrigendum (s) (if any) is also downloaded by them. Such addendum(s) / corrigendum (s) (if any) shall also be submitted duly stamped and signed along with the submission of tenders. Any tender submitted without addendum(s) / corrigendum(s) (if any) shall be summarily rejected.

9. Other instructions

- a) It is recommended that the Tenderer/vendor should visit the portal (ireps.gov.in), peruse the information provided under the relevant links and login to it and upload documents of bid.
- b) DFCCIL reserves right to cancel the tender before submission / opening of tender, postpone the tender submission / opening date and to accept / reject any or all tenders without assigning any reason thereof. DFCCIL's assessment of suitability as per eligibility criteria shall be final and binding.

B. Check list for Mandatory Annexures:-

Information as required as per various Forms/Annexures to tender document should be submitted by the tenderers without fail strictly as per formats. Offers submitted without Mandatory documents shall be summarily rejected.

- **10.1**Annexure I (Firm Details), Annexure II (Tender Certificate), Annexure-II(A), Annexure IV-A/IV-B/IV-C (Completion Certificate) as applicable and any other Annexures as applicable.
- **10.2**In addition to above following documents are also mandatory as applicable. Annexures as per Clause 16.2 of General Instruction to Tenderers (As applicable)
- **10.2.1 For Sole Proprietorship Firm:** Annexure IX & Annexure XIV and also other documents as applicable as para 16.2.1
- **10.2.2 For HUF Firm:** Annexure XXIX & Annexure XXX As and also other documents as applicable as para 16.2.2
- **10.2.3** For partnership Firm: Annexure XIII (Annexure XXXI if newly formed partnership firm; Annexure XXXII for existing partnership firm and also other documents as applicable as para 16.2.3
- **10.2.4 For Companies registered under Companies Act 2013:** Annexure XV; Annexure XXXIII; and also, other documents as applicable as para 16.2.4
- **10.2.5 For LLP Firm registered under LLP Act 2008:** Annexure XXI; Annexure XXV; Annexure XXXII and also other documents as applicable as para 16.2.5
- **10.2.6** For registered Society & Registered Trust: Annexure XXII and also other documents as applicable as para 16.2.6
- **10.2.7** For JV Firm: Applicable for Tender value more than 10Cr (Please refer para 16.2.7)
 - **10.2.7.1 Sole Proprietorship firm participating as member of JV** Annexure-I & XII and also other documents as applicable as para 16.2.7.1.
 - **10.2.7.2 HUF (Hindu Undivided Family) participating as member of JV** Annexure-XXIX & XII also other documents as applicable as para 16.2.7.2
 - **10.2.7.3 Partnership Firm participating as member of JV-** Annexure XI & XVIII also other documents as applicable as para 16.2.7.3
 - **10.2.7.4 Company Participating as member of JV** Annexure XII & XVII also other documents as applicable as para 16.2.7.4
 - **10.2.7.5 LLP Firm participating as member of JV-** documents as applicable as para 16.2.7.5

GENERAL INFORMATION / DATA SHEET

PART - II GENERAL INFORMATION/DATA SHEET

Tender Notice No.	AII/EN/WDFC/AT WELD/MD-IQG/24
Name of the work	Execution of AT Welding between MD-IQB section in jurisdiction of GM/Co-ord Ajmer Unit of WDFC.
a) Tender Value	₹ 28,76,250.00 including 18% GST INR Twenty Eight Lac Seventy-Six Thousand Two Hundred Fifty Only
b) Completion Period	24 (Twenty Four) Months
c) Type of Bid	Single Packet System
d) Earnest Money	₹57,500/-
e) Last Date and Time of Downloading of Tender from website ireps.gov.in and www.dfccil.com	15:00 Hrs. of 12.07.2024
f) Last date and Time of online submission of Tender on website ireps.gov.in	15:00 Hrs. of 12.07.2024
g) Date and Time of Opening of Tender	15:30 Hrs. of 12.07.2024
h) Validity of offer	45 days for Single Packet & 60 days for Two Packet from the date of opening of tender.

NOTE:

- 1. Tenderer should bear the fact in mind while quoting the rates that GST will be paid by Contractor as per prevailing rate as applicable. Documentary evidence of deposition of GST will be produced by contractor for on account bill.
- 2. Information as required as per various Forms/Annexures to tender document should be submitted by the tenderers without fail strictly as per formats. Offers submitted without Mandatory documents shall be summarily rejected.

GENERAL INSTRUCTION TO TENDERERS

PART-III GENERAL INSTRUCTIONS

1.0	For the purpose of this tender in DFCCIL, stipulations and conditions as specified in Indian Railways Standard General Conditions of Contract slips (will be referred as GCC- 2022 in the document) as amended/corrected up to latest correction will be applicable, copies of which can be seen in the office of CGM, DFCCIL, Ajmer.
1.1	DEFINITIONS AND INTERPRETATION
	(A) Definition: -In these General conditions of Contract, the following terms shall have
	the meaning assigned hereunder except where the context otherwise requires: -
	a. "Railway" shall mean the President of the Republic of India or the Administrative
	Officers of the DFCCIL or of the Successor DFCCIL authorized to deal with any matters
	which these presents are concerned on hisbehalf.
	b. "Engineer" and Employer's Engineer shall mean the Dy. CPM of DFCCIL appointed by DFCCIL.
	c. "Engineer's Representative" shall mean the JPM/APM/DPM/PM of DFCCIL in direct
	charge of the work and shall include any Jr. Executive /Executive/Sr. Executive,
	JPM/APM/DPM/PMof DFCCIL of Civil Engineering / Signal & Telecommunication
	Engineering / Electrical Engineering Department appointed by the DFCCIL and shall
	mean and include the Engineer's Representative of the successor DFCCIL.
	d. "Contractor" shall mean the person / Firm / Company whether incorporated or not who
	enters into the contract with the DFCCIL and shall include their executors,
	administrators, and successors and permitted assigns.
	e. "Contract" shall mean and include the Agreement of Work Order, the accepted schedule of rates of the Schedule or Rates of DFCCIL modified by the tender percentage for items
	of work quantified, or not quantified, General Conditions of Contract, Special Conditions
	of Contracts, if any, Drawings, Specifications, Additional / Special Specifications, if any
	and tender forms, if any, and all other documents included as part of contract.
	f. "Works" shall mean the works to be executed in accordance with the contract.
	g. "Specifications" shall mean the Specifications for materials and works referred /
	mentioned in tenderdocuments.
	h. "Schedule of rates" shall mean the schedule of rates issued under the authority of the
	CGM/GM-Co from time to time and shall as contained in CPWD-DSR-2021& USSOR-
	2019also include Rates specified in tender document.
	i. "Drawing" shall mean the maps, drawings, plans and tracings or prints there of annexed
	to the contract and shall include any modifications of such drawings and further drawings
	as may be issued by the Engineer from time totime.
	j. "Constructional Plan" shall mean all appliances or things of whatsoever nature required
	for the execution, completion or maintenance of the works or temporary works (as
	hereinafter defined) but does not include materials or other things intended to form or
	forming part of the permanentwork.
	k. "Temporary Works" shall mean all temporary works of every kind required for the
	execution completion and/or maintenance of the works. 1. "Site" shall mean the lands and other places on, under, in or through which the works are
	to be carried out and any other lands or places provided by the Railway for the purpose of
	the contract.
	m. "Period of Maintenance" shall mean the defect liability period from the date of
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	completion of the works as certified by the Engineer.
	(B) Singular and Plural:- Words importing the singular number shall also include
	the plural and vice versa where the contextrequires.
	(C) Headings & marginal headings:-The headings and marginal headings in these general
	conditions are solely for the purpose of facilitating reference and shall not be deemed to be part
	thereof or be taken into consideration in the interpretation or construction thereof or the contract.
1.2	Schedule of Rates, CPWD Rates Vol I, II&USSOR as amended / corrected up to latest correction
	slips, IR specifications/Guidelines updated with correction slips, relevant BIS codes updated with
	correction slips. (Applicable for execution of Works based on CPWD Rates). Stipulations and
	conditions as specified in USSOR &CPWD-Specifications-2021 Volume 1 & 2 in the document as
	amended/corrected up to latest correction will be applicable, copies of which can be seen in the
	office of CGM/GM/Co, DFCCIL, Ajmer.
1.3	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.
2.0	Drawings for the Work: The Drawing for the work can be seen in the office of CGM, DFCCIL,
	Ajmer, at any time during the office hours. The drawings are only for the guidance of Tenderer(s).
	Detailed working drawings (if required) based generally on the drawing mentioned above, will be
	given by the Engineer or his representative from time to time.
	As per Clause No. 2 of tender form 2 nd sheet Annex.I Part-I of GCC APRIL-2022, with up to
	date correction slip
3.0	Tender Form: Tender Forms shallembodies the contents of the contract documents either directly
	or by reference, e-Tender Forms shall be issued free of cost to all tenderers.
	As per Clause No.3 of Part-I of GCC APRIL-2022, with up to date correction slip
3.1	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.
	As per Clause No. 1.2 (n) of Part-I of GCC APRIL-2022, with up to date correction slip
3.2	The Tenderer(s) shall quote his / their rates as a percentage above or below the Schedule of Rates
	of DFCCIL except where he/they are required to quote item rates and must tender for all the items
	shown in the Schedule of approximate quantities attached. The quantities shown in the attached
	Schedule are given as a guide and are approximate only and are subject to variation according to
	the needs of the DFCCIL. The DFCCIL does not guarantee work under each item of the Schedule.
	The tenderer(s) shall quote rates / rebates only at specified place in Tender Form supplied by
	DFCCIL. 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.
	As per Clause No. 3 of tender form2 nd sheet Annex. I Part-I of GCC APRIL-2022, with up to
	date correction slip.
4.0	Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any
	correction made by tenderer(s) in his/their entries must be attested by him / them.
	As per Clause No. 4 of tender form 2 nd sheet Annex. I Part-I of GCC APRIL-2022, with up to
	date correction slip.
5.0	EARNEST MONEY
5.1	For the subject tender, the Earnest Money deposit shall be Rs.57,500.00 and shall be governed by
	Para 5.1.1/ 5.1.2/5.1.3 below.

5.1.1 (a) The tenderer shall be required to deposit earnest money 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.

Note:

- (i) The earnest money shall be rounded off to the nearest Rs. 100. This earnest money 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 earnest money deposit detailed above.
- (iii) Labor Cooperative Societies shall deposit only 50% of above earnest money deposit 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 rescind 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 DFCCIL.
- (c) If his tender is accepted this earnest money mentioned in sub clause (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Earnest Money of other Tenderers shall, save as herein before provided, be returned to them, but the DFCCIL shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.

As per Clause No. 5-1 (a) of Part-I of GCC APRIL-2022, with up to date correction slip.

The Bid Security shall be deposited either in cash through e-payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per **Annexure- Z** and shall be valid for a period of 90 days beyond the bid validity period.

As per Clause No. 5 –(2) of Part-I of GCC APRIL-2022, with up to date correction slip

- 5.1.3 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 before closing date for 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

in the constitution of the Bidder.

document. viii. If the envelope is not sealed and marked as instructed above, the DFCCIL 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. As per Clause No. 6 of Tender Form (second sheet) Annex.I of Part-I of GCC APRIL-2022, with up to date correction slip Annexure –Z (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: -----CPM, DFCCIL/Ajmer, Acting through DFCCIL, Beneficiary: CPM DFCCIL AJMER Date: Bank Guarantee Bond No.: Date:----In consideration of the CPM, DFCCIL/Ajmer acting through General Manager/Co-ord, Ajmer (Designation & address of ContractSigning Authority), Ajmer, DFCCIL,, ... (hereinafter called "The DFCCIL") 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 authorized 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 CPM DFCCIL Aimer: 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 CPM DFCCIL Aimer 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 DFCCIL any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the DFCCIL 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 DFCCIL without any reference to the Bidder and without the DFCCIL 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

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 DFCCIL 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 DFCCIL 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 DFCCIL 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 DFCCIL. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758. 10. The Bank hereby confirms that it is on the SFMS (Structured Financial Messaging System) and shall invariably send the advice of this Bank Guarantee to the following bank details – IFSC CODE UBIN0546836 IFSC TYPE **BRANCH BANK NAME** UNION BANK OF INDIA **BRANCH NAME UBI MOTI BAGH CITY NAME** NEW DELHI-110066 11. The Guarantee shall be valid in addition to and without prejudice to any other security Guarantee(s) of Bidder in favour of the DFCCIL. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the DFCCIL. 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 Bank's Seal 2 Signature, Name& address & Seal [P/Attorney]No. Note: 1. All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document. 2. This bank detail only use for submission of Bid Security in the form of Bank Guarantee. 6.0 **Rights of the DFCCIL to deal with Tender:** The authority for the acceptance of the tender will rest with the DFCCIL. It shall not be obligatory on the said authority to accept the lowest tender or any other tender, and tenderer(s) shall neither demand any explanation for the cause of rejection of his/ their tender nor the DFCCIL to assign reasons for declining to consider or reject any particular tender or tenders. As per Clause No. 7 of Tender Form (second sheet)Annex.I of Part-I of GCC APRIL-2022, with up to date correction slip 6.1 If the tenderer(s) deliberately gives / give wrong information in his / their tender or creates / create circumstances for the acceptance of his / their tender, the DFCCIL reserves the right to reject such tender at any stage. As per Clause No. 8 of Tender Form (second sheet) Annex. I of Part-I of GCC APRIL-2022, with up to date correction slip

6.2	If the tenderer(s) expire(s) after the submission of his / their tender or after the acceptance of his /
	their offer, the DFCCIL shall deem such tender cancelled. If a partner of a firm expires after the
	submission of their tender or after the acceptance of their tender, the DFCCIL shall deem such
	tender as cancelled, unless the firm retains its character.
	As per Clause No. 9 of Tender Form (second sheet) Annex. I of Part-I of GCC APRIL-2022,
	with up to date correction slip
7.0	SYSTEM OF TENDERING
7.1	Two Packets System of Tendering: With a view to assess the tenders technically without being
	influenced by the financial bids, 'Two Packets System of tendering' shall be adopted for contract
	valuing more than Rs. 10 crores or as advised by DFCCIL Board time to time by updated policy
	guide lines.(Not Applicable in this Tender)
	For Works and Service tenders of value more than Rs. 50 Cr., the Clause no. 26.0 of Electronic
	Reverse Auction will be applicable. (Not Applicable in this Tender)
	As per (a) Clause No. 7A of Part-I of GCC APRIL-2022, with up to date correction slip
7.2	Single Packet Tender-: In case of tenders costing less than Rs. 10 Crore single packet tender
	system will be followed and technical & financial offer of the tenderer/s shall be opened and
	evaluated at the same time.(Applicable in this Tender)
7.3	Tenderer should submit the offer with due diligence after going through the tender documents.
7.4	Pre Bid Conference: Intenders having advertised value more than Rs 50 Crore or as mentioned in
	the tender document, DFCCIL shall conduct Pre Bid Conference(s) with the prospective
	bidders.(Not Applicable in this Tender)
7.5	Make in India:-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.
	As per Clause No. 7B of Part-I of GCC APRIL-2022, with up to date correction slip
7.6	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.
7.7	Clarification of Bids: To assist in the examination, evaluation & comparison and prequalification
	of the Tender, the DFCCIL 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 DFCCIL shall not be
	entertained or considered. The Railway request for clarification and the response of the bidder in
	this regard shall be in writing.

with up to date correction slip

8.0	Execution of Contract Document: The tenderer whose tender is accepted shall be required to appear in person at the office of CGM/GM-Co, DFCCIL, Ajmer, as the case may be, or if tenderer is a firm or corporation, a duly authorized representative shall appear and execute the contract agreement within seven days of notice from DFCCIL that the Contract Agreement is ready. The Contract Agreement shall be entered into by DFCCIL only after submission of valid Performance Guarantee by the Contractor. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender. In such cases the DFCCIL may determine that such tenderer has abandoned the contract and there upon his tender and acceptance thereof shall be treated as cancelled and the DFCCIL shall be entitled to forfeit the full amount of the Earnest Money 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. As per clause No. 8 of Part-I of GCC APRIL-2022, with up to date correction slip
8.1	In case, the particular work is charged to EBR (IF), than the Indian Railway Finance Corporation
	(IRFC) shall also be the party in the contract agreement. After submission of valid performance
	guarantee, the contract agreement shall be entered into between Indian Railways (IR), Indian
	Railways Finance Corporation (IRFC) and the tenderer, whose tender is accepted. The Contract
	Agreement shall be signed as per Annexure XXVIII of the STD. The format at Annexure IV of
	GCC APRIL-2022 shall not be applicable for Contract Agreement of EBR (IF) funded contracts.
	As per Railway Board's letters no 2018/AC-II/1/57(pt.) dated 20.03.20 for EBR(IF) funded
	contracts
9.0	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 / HUF/Company / Joint Venture (JV) / Registered Society / Registered Trust / LLP etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern, authorized signatory and copy of PAN Card along with their tender as per proforma given in Annexure I (mandatory). Tender shall be submitted and 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) The various documents to be submitted by the tenderer are as per clause 14 (ii) of the GCC APRIL-2022, the tenderer shall ensure submission of mandatory document as listed in para 16 below along with the offer.
	(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 etc. shall be neither asked nor considered, if not submitted. Further, no suo moto cognizance of any document available in public domain (i.e., on internet etc.) or in Railway/DFCCIL'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 DFCCIL will not be bound by any change in the composition of the firm made subsequent

changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor. As per Clause No. 14 of Tender Form (second sheet) Annex. I of Part-I of GCC APRIL-2022,

The tenderer whether sole proprietor/ HUF/ Company or a partnership firm / LLP / joint venture (JV) / registered society / registered trust 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 submit the tender, sign the agreement, receive money, co-ordinate measurements through contractor's authorized engineer, witness measurements, sign measurement books, compromise, settle, relinquish any claim(s) preferred by the firm and sign "No Claim Certificate" and refer all or any disputes to arbitration. The above power of attorney shall be submitted even if such specific person is authorized for above purposes through partnership deed / Memorandum of Understanding / Article of Association or such other document, failing which tender is liable to be rejected.

As per Clause No. 15 of Tender Form (second sheet) Annex. I of Part-I of GCC APRIL-2022, with up to date correction slip

11.0 Employment/Partnership etc. of Retired Railway/DFCCIL Employees:

(a) Should a tenderer

i) be a retired Engineer of the Gazetted rank or any other Gazetted officer working before his retirement, whether in the executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the Railways/DFCCIL owned and administered by the President of India for the time being, OR ii) being partnership firm / joint venture (JV) / registered society / registered trust etc have as one of its partners a retired Engineer of the Gazetted rank or any other Gazetted officer working before his retirement, OR iii) being an incorporated company have any such retired Engineer of the Gazetted rank or any other Gazetted officer working before his retirement as one of its directors

AND

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

THEN

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

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

	relative(s) of the shareholder(s) employed in gazetted capacity in the Engineering or any other department of the Railways/DFCCIL, the authority inviting tenders shall be informed of the fact at the time of submission of tender, failing which the tender may be disqualified/rejected or if such fact subsequently comes to light, the contract may be rescinded in accordance with provision in clause 62 of standard general conditions of contract. Note:-If information as required as per 11 (a), (b), (c) above has not been furnished, contract is liable to be dealt in accordance with provision of clause 62 of Standard General Condition of Contract. As per Clause No. 16, of Tender Form (second sheet) Annex. I of GCC APRIL-2022, with up to date correction slip.
12.0	Omissions & Discrepancies: Should a tenderer find discrepancies in or omissions from the
12.0	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 endeavor 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.
	As per Clause No. 4 of Part-I of GCC APRIL-2022, with up to date correction slip
13.1(A)	(i) Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all-inclusive in accordance with the provisions of Clause-37 of the General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer. (As per Clause No. 6 (a)(i) of G.C.C. 2022 Part-I with up to date correction slip) (ii) Tenderers will examine the various provisions of the Central Goods and Services Tax Act, 2017 (CGST)/Integrated Goods and Services Tax Act, 2017 (IGST)/ Union Territory Goods and Services Tax Act, 2017 (UTGST)/ respective State's State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt. & as amended from time to time and applicable taxes before bidding. Tenderer(s) will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates. (As per Clause No. 6 (a) (ii) of G.C.C. 2022 Part-I with up to date correction slip) (iii)The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act to DFCCIL immediately after the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to the concerned authority. (As per Clause No. 6 (a) (iii)of G.C.C. 2022 Part-I with up to date correction slip) (iv)In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the DFCCIL shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority. As per Clause No. 6(a)(iv) of Part-I of GCC APRIL-2022, with up to date correction slip.
13.1(B)	When work is tendered for by a firm or company, the tender shall be digitally signed by the individual legally authorized to enter into commitments on their behalf. As per Clause No. 6(b) of Part-I of GGC APRIL-2022, with up to date correction slip
13.1(C)	In E-tender, all submissions of documents are to be uploaded on web-site. There may be last minute hic-cups and delay in uploading the Documents and payment of Earnest Money etc. Tenderers/Prospective bidders are advised to upload their offer well in time. DFCCIL will not be responsible for any delay/non submission of offer due to any reason whatsoever.

13.1(D)	The DFCCIL 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.
	As per Clause No. 6 (c) of Part-I of GCC APRIL-2022, with up to date correction slip.
13.2	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 the certificate to be submitted by
	the bidder is enclosed as Annexure-II(Mandatory). In addition to Annexure-II, in case of other
	than Company/Proprietary firm, Annexure-II(A) (Mandatory) shall also be submitted by the each
	member of a Partnership Firm / Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited
	Liability Partnership (LLP) etc. as the case may be. Non submission of the 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 supportisng documents duly self-attested by which
	they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.
	As per Clause No. 6.1 of Part-I of GCC APRIL-2022, with up to date correction slip.
14	RIGHT OF DECIL TO DEAL WITH TENDERS
14.1	If, the DFCCIL decides to negotiate, in view to bring down the rates, the tenderer, who is called for
	negotiation, shall furnish the following form of declaration before commencement of the
	negotiation:
	I/we
	relating to Tender No
	tender shall remain open for acceptance on its original terms and conditions up to the date specified
14.2	in the tender or the date extended by mutual agreement from time to time. The tenderer/s are required to quote his/their rates as % (percentage) Above/Below /At Par
14.2	in figures on IREPS while submitting his/their offer.
15.0	ELIGIBLITY CRITERIA(Not Applicable in this Tender Except Similar Work Criteria)
15.1.1	Technical Eligibility Criteria
	The tenderer must have successfully 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, (NOT APPLICABLE)
	OR
	Two similar works, each costing not less than the amount equal to 40% of advertised value of the
	tender, NOT APPLICABLE)
	OR
	One similar work, each costing not less than the amount equal to 60% of advertised value of the
	tender. NOT APPLICABLE)
	Similar work Criteria: The Similar nature work is defined is as "Execution of AT Welding over HH(Head Hardened) rail with RDSO Certified Welder" (APPLICABLE)
	Note for similar work criteria: The bidder must have RDSO/TPP, NR, Lucknow /TWC,
	Vijayawada approved welder for HH rail, proof of their valid competency certificate of all HH rail
	welders to be submitted along with the offer available with the bidder.

15.1.2 **Technical Eligibility Criteria for JV** ('a' or 'b' mentioned hereunder): (Not Applicable in this Tender)

- (a) For Works without composite components: -The technical eligibility for the work as per para 15.1.1 above, shall be satisfied by either the 'JV in its own name & style' or 'Lead Manager of the JV'. Each other (non-lead) member(s) of JV, who is/ are not satisfying the technical eligibility for the work as per para 15.1.1 above, shall have technical capacity of minimum 10% of the cost of work i.e., each non-lead member of JV member must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of advertised value of the tender.
- (b) For works with composite components: Not applicable in this Tender

Note for Clause 15.1.2: Value of a completed work done by Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above-mentioned technical eligibility criteria in the tender underconsideration.

As per Clause No. 17.0-17.14 and clause 17.15 of Tender Form (second Sheet) of Annex. I of Part-I of GCC APRIL-2022, with up-to-date correction slip

Financial Eligibility Criteria: The tenderer must have minimum average annual contractual turnover of V/N or 'V' whichever is less; where (NOT APPLICABLE)

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-VIII**, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

Note: Client certificate from other than Govt Organization should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India.

As per Clause No. 10.2 of Tender Form (second Sheet) of Annex. I of Part-I of GCC APRIL-2022, with up to date correction slip.

15.2.1 Financial Eligibility for JV- (Not Applicable in this Tender)

Criteria The JV shall satisfy the requirement of "Financial Eligibility" mentioned at para 15.2 above.

The "financial capacity" of the lead partner of JV shall not be less than 51% of the financial eligibility criteria mentioned at para 15.2 above.

The arithmetic sum of individual "financial capacity" of all the members shall be taken as JV's "Financial capacity" to satisfy this requirement.

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

As per Clause No. 17.15.2 of Tender Form (second Sheet) of Annex. I of Part-I of GCC APRIL-2022, with up to date correction slip

above. The arithmetic sum of individual "Bid capacity" of all the members shall be taken as JV "Bid capacity" to satisfy thisrequirement. As per Clause No. 17.15.3 of Tender Form (second Sheet) of Annex.I of Part-I of GCC APE 2022, with up to datecorrectionslip No Technical and Financial credentials are required for tenders having value up to Rs 50 lakh. Note to Para 15 (i) Certificate issued by Chartered Accountants based on the audited balance sheets will also be accepted. (as per Annexure-VIII) The criteria for completed works shall be as under: (ii) Entire work has to be completed in all respects as per contract agreement. Part complete work shall not be considered. (iii) Completion certificate from following organizations shall only be considered: (a) The work(s) should have been directly awarded to the tenderer by Govt. Organization/ Ser Govt. Organization/ Public Sector Undertaking / Autonomous bodies/ Municipal Bodies/Publ listed company having average annual turnover of Rs. 500 crore and above in last 3 financial	15.3	Bid Capacity: The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-D.(Not Applicable in this Tender) As per Clause No. 10.3 of Tender Form (second Sheet) of Annex.I of Part-I of GCC APRIL-2022, with up to date correction slip.
15.5 Note to Para 15 (i) Certificate issued by Chartered Accountants based on the audited balance sheets will also be accepted. (as per Annexure-VIII) The criteria for completed works shall be as under: (ii) Entire work has to be completed in all respects as per contract agreement. Part complete work shall not be considered. (iii) Completion certificate from following organizations shall only be considered: (a) The work(s) should have been directly awarded to the tenderer by Govt. Organization/ Ser Govt. Organization/ Public Sector Undertaking / Autonomous bodies/ Municipal Bodies/Publ listed company having average annual turnover of Rs. 500 crore and above in last 3 financing years excluding the current financial year, listed on National Stock Exchange or Bombay Stock.	15.3.1	The JV shall satisfy the requirement of "Bid Capacity" requirement mentioned at para 15.3 above. The arithmetic sum of individual "Bid capacity" of all the members shall be taken as JV's "Bid capacity" to satisfy this requirement. As per Clause No. 17.15.3 of Tender Form (second Sheet) of Annex.I of Part-I of GCC APRIL-
(i) Certificate issued by Chartered Accountants based on the audited balance sheets will also be accepted. (as per Annexure-VIII) The criteria for completed works shall be as under:- (ii) Entire work has to be completed in all respects as per contract agreement. Part complete work shall not be considered. (iii) Completion certificate from following organizations shall only be considered:- (a) The work(s) should have been directly awarded to the tenderer by Govt. Organization/ Ser Govt. Organization/ Public Sector Undertaking / Autonomous bodies/ Municipal Bodies/Publ listed company having average annual turnover of Rs. 500 crore and above in last 3 financing years excluding the current financial year, listed on National Stock Exchange or Bombay Stock.	15.4	No Technical and Financial credentials are required for tenders having value up to Rs 50 lakh.
The credentials of a wholly owned subsidiary of a parent company will also be considered respect of works mentioned above if tender is submitted by the parent company. (b) Completion certificate should be as per proforma given in Annexure- IV-A or IV-B or IV as applicable or in the format containing all information required as per the Annexure- IV-A or IV-B or IV-C. (c) Work experience certificate issued by Public listed company shall 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 relevance copy of work order, bill of quantities bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received an copy of final/last bill paid by company in support of above work experience certificate. Details of works physically completed should be submitted in the proforma as per 'Annexure-III (iv) The total value of similar nature of work completed during the qualifying period and not the payments received within qualifying period alone, should be considered. In case, the final bill of similar nature of work has not been passed and final measurements have been recorded and work has been completed with negative variation, then also the paid amount including statutory deduction is to be considered. However, if final measurements have been recorded and work has been completed with positive variation, then also the paid amount including statutory deduction is to be considered.	15.5	(i) Certificate issued by Chartered Accountants based on the audited balance sheets will also be accepted. (as per Annexure-VIII) The criteria for completed works shall be as under:- (ii) Entire work has to be completed in all respects as per contract agreement. Part completed work shall not be considered. (iii) Completion certificate from following organizations shall only be considered:- (a) The work(s) should have been directly awarded to the tenderer by Govt. Organization/ Semi Govt. Organization/ Public Sector Undertaking / Autonomous bodies/ Municipal Bodies/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 opening of tender The credentials of a wholly owned subsidiary of a parent company will also be considered in respect of works mentioned above if tender is submitted by the parent company. (b) Completion certificate should be as per proforma given in Annexure- IV-A or IV-B or IV-C. (c) Work experience certificate issued by Public listed company shall be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such 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 by Chartered Accountant, TDS certificates for all payments received an copy of final/last bill paid by company in support of above work experience certificate. Details of works physically completed should be submitted in the proforma as per 'Annexure-III'. (iv) The total value of similar nature of work kas not been passed and final measurements have not been recorded, the paid amount including statutory deduction is to be considered. If final

- (v) The amount given at Sr. No. 11 in proforma vides Annexure-IV for the completion certificate will be the value of completed work, if nomenclature of work as given in completion certificate matches with similar nature work.
- (vi) The amount mentioned at Sr. No. 12 in 'Annexure-IV' for the completion certificate shall be the value of completed work if the nomenclature of completed work includes additional components of work which are not matching with similar nature of works.
- (vii) Certificate from private individuals for whom such works are executed shall not be considered for eligibility.
- (viii) Conditional tenders are liable to be rejected straight away. DFCCIL reserves the right to reject such tenders summarily without assigning any reasons whatsoever.
- (ix) The total value of similar nature of work completed during the qualifying period and not the payments received within qualifying period alone, should beconsidered.

In case, the final bill of similar nature of work has not been passed and final measurements have not been recorded, the paid amount including statutory deduction is to be considered. If final measurements have been recorded and work has been completed with negative variation, then also the paid amount including statutory deduction is to beconsidered.

However, if final measurements have been recorded and work has been completed with positive variation but variation has not been sanctioned, original agreement value or last sanctioned agreement value whichever is lower should be considered for judgingeligibility.

- (x) The amount given at Sr. No. 11 in proforma vide Annexure-IV for the completion certificate will be the value of completed work, if nomenclature of work as given in completion certificate matches with similar naturework.
- (xi) The amount mentioned at Sr. No. 12 in 'Annexure-IV' for the completion certificate shall be the value of completed work if the nomenclature of completed work includes additional components of work which are not matching with similar nature ofworks.
- (xii) Certificate from private individuals for whom such works are executed shall not be considered foreligibility.
- (xiii) Conditional tenders are liable to be rejected straight away. DFCCIL reserves the right to reject such tenders summarily without assigning any reasonswhatsoever.

As per Clause No. 10.1 of Tender Form (second Sheet) of Annex. I of Part-I of GCC APRIL-2022, with up to date correctionslip

15.6 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 for the relevant date. 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.

As per Clause No. 10.1 of Tender Form (second Sheet) of Annex. I of Part-I of GCC APRIL-2022, with up to datecorrectionslip.

15.7 If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to subcontractor by a Govt. organization or public listed company as defined in Note for Item 10.1 part-I of GCC, the same shall be considered for the purpose of fulfillment of credentials. 15.8 Explanation for clause 15 (clause 15.1 to 15.6) - Eligibility Criteria: 1) Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender. 2) In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials. 3) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials. 4) In case of completed work, the value of final bill (gross amount) including the PVC amount (ifpaid) shall be considered as the completion cost of work. In case final bill is pending, only thetotal 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) of GCC APRIL-2022, the same shall be considered for the purpose of fulfilment of credentials. 6) In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility. 7) In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of 0.3*0.2*value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No. (s) in case of dissolution of partnership firm(s) etc. 8) In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40%

respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc. 9) In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc. 10) Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A & B partners in any other partnership 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 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. 16.0 THE LIST OF DOCUMENTS TO BE UPLOADED FOR THIS TENDER (Note: -Information as required as per various Forms/Annexures to tender document should be submitted by the tenderers without fail strictly as per formats. Offers submitted without Mandatory documents shall be summarily rejected.) 16.1 Following documents are common for all types of firm i.e. Sole proprietorship, Partnership, Limited Liability Partnership Firm, Registered Society/ Trust, Limited Company or JV. (a) Firm details as per proforma given in Annexure-I (Mandatory). (b)(i) A Copy of the Certificate as per Performa given in Annexure-II (Mandatory). (b)(ii) In addition to Annexure-II, in case of other than Company/Proprietary firm, Annexure-II (A) (Mandatory) shall also be submitted by the each member of a Partnership Firm / Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. as the case may be. Non submission of the 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 by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. (Mandatory as applicable)

(c) (i)	List of similar nature of works physically completed in all respects during last 7 years, ending last day of month previous to one in which tender is invited, shall be submitted as per Performa given in Annexure-III for works (i) directly awarded by Govt./Semi Govt./Public sector undertaking / Autonomous bodies /Municipal bodies/ Railway Siding owners (ii)Concessionaire (to whom the work is awarded by Indian Railways/ DFCCIL/CPWD /NHAI/ PWD/State Road Development Corporation on PPP/DBFOT or any other mode) (iii) 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 opening of tender Note- Works under item (ii) are to be submitted only for tenders costing Rs.50.00 Cr. and above
(c) (ii)	Details of similar nature of works successfully during last seven years, ending last day of month previous to the one in which tender is invited as per Performa given in Annexure-III.
(d)	Attested copy of Completion Certificate of works mentioned in para (c) above from the Organizations with whom they worked as per proforma given in Annexure-IV-A or IV-B or IV-C as applicable.
(e)	Secondary Components-(Not Applicable in this Tender).
(f)	List of works on hand, existing commitments and balance amount of ongoing works as per format given in Annexure-V Duly verified by Chartered Accountant to evaluate bid capacity of the tenderer (Mandatory for tender value more than Rs. 20 crores)
(g)	A statement showing construction works executed and payment received during the previous three financial years and the current financial year (up to date of inviting tender), taking into account the completed as well as work in progress as per Annexure-XIX on the letter head of Chartered Accountant, to evaluate bid capacity of the tenderer (Mandatory for tender value more than Rs. 20 Crores)
(h)	List of plants & Machinery available on hand (own) and proposed to be inducted (own and hired to be given separately) for the subject work in Annexure–VI .
(i)	List of Personnel, Organization available on hand and proposed to be engaged for the subject work in Annexure –VII .
(j)	Earnest money should be in proper form. Earnest Money by the tenderer only through net banking or payment gateway in favour of CPM DFCCIL, Ajmer or as mentioned in the tender document.
(k)	Contractual Receipts for the last three years and current financial year with supporting documents required as per Annex. VIII.
(1)	Self-attested copy of Permanent Account Number (PAN) issued by Income Tax Department.
(m)	The tenderers are required to submit the test report of the stone ballast conforming to Railway specifications as given in RDSO specification. (Applicable only for the tenders of supply of ballast). The test report is required for this tender.
(n)	The tenderers are required to submit the information and particulars regarding retired Railway/DFCCIL Engineer(s)/Officer(s) of the Gazetted rank and regarding Relative(s) employed in Gazetted capacity on DFCCIL as per proforma given in Annexure XXIII .
16.2	In addition to Para 16.1 above certain more documents are to be submitted by tenderers as per status of their firms and are Mandatory . These documents are listed below

16.2.1 FOR SOLE PROPRIETORSHIP FIRM a) Affidavit as per proforma given of Annexure -IX (duly executed on stamp paper and notarized). b) Special power of Attorney to be submitted by sole proprietor firm as per proforma given in Annexure XIV(duly registered with the Registrar or notarized). (Not required if tender documents are submitted by proprietor himself as per (a) above) 16.2.2 FOR HUF (HINDU UNDIVIDED FAMILY) (a) Affidavit as per proforma given of Annexure -XXIX (duly executed on stamp paper and notarized). (b) Special power of Attorney to be submitted by the HUF as per proforma given in Annexure XXX (duly registered with the Registrar or notarized). (Not required if tender documents are submitted by Karta of the HUF, himself as per (a) above) 16.2.3 FOR PARTNERSHIP FIRM a) A copy of Partnership Deed (Notarized or duly registered with the Registrar prior to date of tender opening as per the Indian Partnership Act) (b) Special Power of attorney to be submitted by Partnership firm in favour of the individual to sign the tender on behalf of the firm and create liability against the firm as per proforma given in Annexure-XIII (duly registered with the Registrar or notarized). (Required even if one or more partners are authorized in Partnership deed itself to sign on behalf of the firm as given in (a) above. (c) Declaration by the newly formed partnership firm as per proforma given in Annexure-XXXI. (mandatory if tenderer is newly formed partnership firm) (d) Declaration by the existing partnership firm as per proforma given in Annexure-XXXII. (mandatory if tenderer is an existing partnership firm) (e) With respect to the declaration above, in case of Newly formed partnership firm has/ have as one or more partner(s) from previous propriety firm(s) or dissolved previous partnership firm(s) or LLP firm or split previous partnership firm(s) or LLP firm, Existing partnership firm (a)joining of new one or more partner(s) in the existing partnership firm, (b) quitting of new one or more partner(s) from the existing partnership firm – Following additional documents are required to be furnished (mandatory as applicable) a) Details of previous Propriety firm / Partnership Firm/ LLP firm as per annexure I b) A copy of previous partnership Firm (Notarized or duly registered with the Registrar) c) Affidavit as per proforma given of Annexure –IX for previous Propriety firm (duly executed on stamp paper and notarized). d) Copy of previous LLP agreement and certificate of incorporation. e) Dissolution deed/ splitting deed of the previous partnership deed or LLP agreement (in case of dissolution of previous partnership firm/ LLP firm) f) Proof of surrender of previous PAN no (in case of dissolution of previous partnership firm, g) LLP firm or propriety firm) h) Documents for the technical, financial criteria, bid capacity as claimed w.r.t. such partner(s) joining the new/ existing partnership firm, as per para 16.1 (c), (d), (f),(g), (k) above.

As per Clause No. 14(ii)(c), 15, 18 & explanation to Clause 10.1 to 10.5 of Annex. I Part-I of

GCC APRIL-2022, with up to date correction slip)

16.2.4 FOR COMPANY REGISTERED UNDER COMPANIES ACT 2013

- a) Copy of Memorandum of association/ Articles of Association of Company.
- b) Copy of Certificate of Incorporation
- (c) Copy of resolution passed by Board of Directors authorizing its Director/Employee to deal with tender on behalf of company
- (d) Special Power of Attorney/ Authorization issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender, sign the MOU/ JV agreement on behalf of the company and create liability against the Company, as per proforma given in **Annexure-XV** (duly registered with the Registrar or notarized). (Required even if tender documents are submitted by the authorized/ power of attorney holder himself as per (c) above)
- (e) Declaration regarding constitution of the Company, for merging of another company, details required for the entire period for last seven years as per proforma given in Annexure-XXXIII. (mandatory)
- (f) Following additional documents are required to be furnished (mandatory in case of merger with another company)
- (1) Details of company getting merged as per annexure I
- (2) Copy of Memorandum of Association/ Articles of Association of the Company getting merged
- (3) Copy of certificate of incorporation of previous company getting Merged
- (4) Resolution by the Board of Directors for the Merger of the company(s) with the tenderer
- (5) Proof of surrender of previous PAN no
- (6) Document for the technical, financial criteria, bid capacity as claimed w.r.t. such Company(s) joining the new/Existing Company as per para 16.1 (c), (d), (f), (g), (k) above.

As per Clause No. 14 (ii)(e), 15 & explanation to Clause 10.1 to 10.5 of Annex. I Part-I of GCC APRIL-2022, with up to date correction slip

16.2.5 FOR LLP FIRM REGISTERED UNDER LLP ACT 2008

- (a) A copy of LLP Agreement.
- (b) A copy of certificate of Incorporation and
- (c) A copy of resolution passed by partner of LLP firm for submitting tender by LLP firm and to deal with tender on behalf of the firm as per proforma given in **Annexure-XXI**.
- (d) Special Power of Attorney/ Authorization issued by LLP firm in favor of the individual to sign the tender on behalf of the LLP firm and create liabilities against the LLP as per proforma given in **Annexure-XXV** (duly registered with the Registrar or notarized). (Required even if tender documents are submitted by the authorized/ power of attorney holder himself as per (c) above) (e) Declaration by the newly formed LLP firm as per proforma given in **Annexure-XXXI**.

(mandatory if tenderer is newly formed partnership firm)

- (e) Declaration by the existing LLP firm as per Performa given in **Annexure-XXXII.** (mandatory if tenderer is an existing partnership firm)(f) With respect to the declaration above, in case of
- (i) Newly formed LLP firm has/ have as one or more partner(s) from previous propriety firm(s) or dissolved previous partnership firm(s) or LLP firm or split previous partnership firm(s) or LLP firm, existing LLP firm (a)joining of new one or more partner(s)in the existing LLP firm,
- (ii) quitting of new one or more partner(s) from the existing LLP firm –

Following additional documents are required to be furnished(mandatory as applicable)

- (1) Details of previous Propriety firm / Partnership Firm/ LLP firm as per annexure I
- (2) A copy of previous partnership Firm (Notarized or duly registered with the Registrar)
- (3) Affidavit as per proforma given of Annexure –IX for previous Propriety firm (duly executed on stamp paper and notarized).
- (4) (4) Copy of previous LLP agreement and certificate of incorporation.
- (5) Dissolution deed/ splitting deed of the previous partnership deed or LLP agreement (in case of dissolution of previous partnership firm/ LLP firm)
- (6) Proof of surrender of previous PAN no (in case of dissolution of previous partnership firm, LLP firm or propriety firm)
- (7) Documents for the technical, financial criteria, bid capacity as claimed w.r.t. such partner(s) joining the new/ existing partnership firm, as per para 16.1 (c), (d), (f),(g), (k) above.

As per Clause No. 14(f), 15 & explanation to Clause 10.1 to 10.5 of Annex. I Part-I of GCC APRIL-2022, with up to date correction slip

16.2.6 FOR REGISTERED SOCIETY & REGISTERED TRUST

- (a) A copy of the certificate of registration.
- (b) A copy of Memorandum of Association of Society/Trust Deed
- (c) A copy of Rules & Regulations of the Society
- (d)A copy of Special Power of Attorney/ Authorization in favor of the individual to sign the tender and create liabilities against the Registered Society/ Trust as per proforma given in **Annexure-XXII** (duly registered with the Registrar or notarized). (Required even if tender documents are submitted by the authorized/ power of attorney holder himself as per (a), (b) above)

As per Clause No. 14(g), 15 Annex. I Part-I of GCC APRIL-2022, with up to date correction slip

1607	FOR WEIDM (N. (A. P. II.) (I. T. I.)
16.2.7	FOR JV FIRM:-(Not Applicable in this Tender)
	Following documents are mandatorily to be submitted by constituents of the JV firm depending
	upon their status
	As per clause no. 14(d), 17.0 Annex. I Part-I, GCC APRIL-2022, with up to date correction
	slip
	a) Memorandum of Understanding of JV as per pro forma given in Annex. X(duly executed on
	stamp paper and notarized)
16.2.7.1	DOCUMENTS MANDATORY FOR SOLE PROPRIETORSHIP FIRM PARTICIPATING
	AS MEMBER OF JV
	(a) Affidavit as per proforma given of Annexure –IX (duly executed on stamp paper and
	notarized).
	(b) Special Power of Attorney to be submitted by Sole Proprietor participating as member of JV
	firm as per proforma given in Annexure-XII (duly registered with the Registrar or notarized) (Not
	Required if MOU/JV agreement is signed by the sole Proprietor himself as per (a) above).
	As per Clause No.15 Annex.I of Part-I GCC APRIL-2022, with up to date correction slip
16.2.7.2	DOCUMENTS MANDATORY FOR HUF (HINDU UNDIVIDED FAMILY)
	PARTICIPATING AS MEMBER OF JV
	(a) Affidavit as per proforma given of Annexure –XXIX (duly executed on stamp paper and
	notarized).
	(b) Special Power of Attorney to be submitted by HUF participating as member of JV firm as per
	proforma given in Annexure-XII(duly registered with the Registrar or notarized) (Not required if
	MOU/JV agreement is signed by the Karta of HUF himself as per (a) above).
	As per Clause No. 17.14.2, 15 Annex. I of Part-I GCC APRIL-2022, with up to date
16.5.5.5	correction slip
16.2.7.3	DOCUMENTS MANDATORY FOR PARTNERSHIP FIRM PARTICIPATING AS
	MEMBER OF JV
	(a)Copy of Partnership Deed (duly registered with the Registrar or notarized prior to date of tender
	opening as per the Indian Partnership Act.).
	(b) Copy of letter of consent of all the Partners or individual authorized by partnership firm to
	enter into JV Agreement as per Performa given in Annex-XI (duly executed on stamp paper). (c)Special Power of attorney to be submitted by Partnership firm in favor of the individual to sign
	the tender, to sign the MOU/JV agreement on behalf of the Partnership Firm and to create liability
	against the firm as per Performa given in Annexure-XVIII (duly registered with the Registrar or
	notarized). (Required even if MOU/JV agreement is signed by one or more partners authorized in
	Partnership deed, letter of consent to sign on behalf of the firm is given in (a), (b) above)
	As per Clause 17.14.1, 15 & 18.2 of Annex. I Part-I GCC APRIL-2022, with up to date
	correction slip
16.2.7.4	DOCUMENTS MANDATORY FOR COMPANY PARTICIPATING AS MEMBER OF JV
10.2.7.1	
	a) A Copy of Memorandum of Association/ Articles of Association of Company.
	b) A Copy of certificate of Incorporation
	c) A Copy of resolutions passed by Board of Directors of the Company permitting the Company to
	enter into a JV agreement, to be submitted as per Annexure-XVII.
1	
	d) Special Power of Attorney/ Authorization issued by the Company (backed by the Resolution of Board of Directors) in favor of the individual to sign the tender, to sign the MOU/JV agreement on

by the authorized/power of attorney holder himself as per (c) above)

As per Clause No. 17.14.3, 15 of Annex. I Part-I GCC APRIL-2022, with up to date correction slip

16.2.7.5 **DOCUMENTS MANDATORY FOR LLP FIRM PARTICIPATING AS MEMBER OF JV**

- (a) A copy of LLP agreement.
- (b) A copy of Certificate of incorporation of LLP
- (c) A copy of Resolution passed by the partners of LLP firm permitting the firm to enter into a JV agreement to be submitted as per Performa given in **Annexure-XXIV**
- (d) Special Power of Attorney/ Authorization issued by LLP firm (backed by resolution of partners) in favor of the individual to sign the tender, sign the MOU/ JV agreement on behalf of the LLP firm and create liabilities against the LLP firm as per proforma given in **Annexure XX** (duly registered with the Registrar or notarized). (Required even if MOU/JV agreement is signed by the authorized/power of attorney holder himself as per (c) above)

16.27.6 DOCUMENTS MANDATORY FOR REGISTERED SOCIETY AND TRUST PARTICIPATING AS A MEMBER OF JV

- (a) A copy of Deed of Formation
- (b) A copy of certificate of Registration.
- (c) A copy of Resolution passed by the executive members of Registered Society/Trust permitting the registered society/Trust to enter into a JV agreement as per proforma given in **AnnexureXXVI**.
- (d) Special Power of Attorney/ Authorization issued by the registered society/ trust (backed by resolution of partners) in favour of the individual to sign the tender, to sign the MOU/ JV agreement and create liabilities against the Registered Society/ Trust as per proforma given in **Annexure-XXVII** (duly registered with the Registrar or notarized). (Required even if tender documents are submitted by the authorized/ power of attorney holder himself as per(c) above)
- (e) A copy of Rules & Regulations of the Society.

Note to Para 16

- 1. The tenderers shall submit a 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-II as mentioned in clause No. 16.1(b). Non submission of a certificate by the bidder shall result in summarily rejection of his/their bid. And it shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.
- 2. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.
- 3. The DFCCIL 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 DFCCIL, make available all such information, evidence and documents as may be necessary for such verification.
- 4. Any such verification or lack of such verification by the DFCCIL shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the DFCCIL there under.
- 4.1 In case of any wrong information submitted by tenderer, the contract shall be terminated, Earnest Money Deposit (EMD), Performance Guarantee (PG) and Security Deposit (SD) of

	contract forfeited and agency barred for doing business on entire DFCCIL for 5(five) years. 4.2 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. Earnest Money Deposit (EMD), Performance Guarantee and Security Deposit available with the DFCCIL shall be forfeited. In addition, other dues of the contractor, if any, under this contract shall be forfeited and agency shall be banned for doing business for a period of up to five years. 5. No post tender submission of documents shall be permitted in respect of tender. However, only clarification can be called for by DFCCIL in respect of any part / document submitted by the tenderer which shall be responded to by the tenderer within 10 working days of the date of issue of such letter for clarifications, failing which the offer shall be dealt with as per available documents. 6. The documents mentioned 'mandatory' in clause No. 16 above are required to be uploaded by the contractor with tender document. If any of these documents is not uploaded along with the tender, the offer shall be summarily rejected. 7. In addition to above Tenderer have to certify that neither I /We (name of the sole Proprietor firm/ Partnership Firm/Limited Company/ LLP/Registered Society/Trust / JV firm) nor any of the partner or partnership firm/ LLP /Member of Registered Society/ Trust / Constituent of JV firm including partner of partnership firm in JV has/ have been black listed or debarred by DFCCIL or any other Ministry /Department/ Public Sector Undertaking of the Government of India/ any State from participation in tenders/contract on the date of opening of bids either in our individual capacity or in any firm in which we are partners.
	As per Clause No. 11(v),11(vi) Annexure 1 part I of GCC APRIL-2022, with up to date
	correction slip
17.0	Participation of Partnership Firms in works tenders The partnership firm shall be governed as per Clause No. 18.1 to 18.12 of Tender Form (second Sheet) Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.
18.0	Participation of Joint Venture (JV) in Works Tender shall be governed as per Clause No. 17
	of Tender Form (second Sheet) Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.:
19.	The tenderer shall submit the original copies of the documents as per Annexure II, IX, X, XI, XII, XIII, XIV, XV, XVII, XVIII, XX, XXII, XXIII, XXIV, XXV, XX
20.0	Security Deposit:
20.1	The Earnest Money deposited by the Contractor with his tender will be retained by the DFCCIL as part of security for the due and faithful fulfillment of the contract by the Contractor. The Security

	value of the contract.
	Further, in case of contracts having value equal to or more than Rs. 50 crore(Rs Fifty crore) the Security Deposit may be deposited as Bank Guarantee Bond also, issued by a scheduled bank after execution of contract documents, but before payment of 1st on account bill. Provided further that the validity of Bank Guarantee Bond shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17 of the Standard General Conditions of Contract. Further, in case Security Deposit has been submitted as Term Deposit Receipt/Bank Guarantee Bond in full amount, the Earnest Money deposited by the Contractor with his tender will be returned by the DFCCIL. Note: Security Deposit deposited in cash by the Contractor or recovered from the running bills of a Contractor or submitted by contractor as Term Deposit Receipt(s) can be refunded/returned to the contractor, in lieu of irrevocable Bank Guarantee bond issued from scheduled commercial bank of India, to be submitted by him, for an amount equal to or more than the already available Security Deposit, provided however that, in a contract of value less than Rs. 50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times and in a contract of value equal to or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times. As per Clause No. 16.(1) Part-II of GCC APRIL-2022, with up to date correction slip
20.2	Refund of Security Deposit: Security Deposit mentioned in sub clause (1) above shall be returned
20.2	to the Contractor along with or after the following:
	(a) Final Payment of the Contract as per clause 51.(1) and
	(b) Execution of Final Supplementary Agreement or Certification by Engineer that DFCCIL has No Claim on Contractor and
	(c) Maintenance Certificate issued, on expiry of the maintenance period as per clause 50 (1), in case applicable.
	As per Clause No. 51.(1) and 16.2(i) Part-II of GCC APRIL-2022, with up to date correction slip
20.3	Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of GCC, the Security Deposit already with DFCCIL under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of GCC, the Security Deposit shall not be forfeited. As per Clause No. 16.2(ii) Part-II of GCC APRIL-2022, with up to date correction slip
21.0	No interest shall be payable upon the Earnest Money and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub Clause 16.(4)(b) of GCC APRIL-2022with up to date correction slip will be payable with interest accrued thereon.
	As per Clause No. 16.3, Part-II of GCC APRIL-2022, with up to date correction slip
22.0	Performance Guarantee The procedure for obtaining Performance Guarantee is outlined below: (a)The successful bidder shall have to submit a Performance Guarantee (PG) within 21 (Twentyone) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (Twentyone) days and up to 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21(Twentyone) days, i.e., from 22 nd day after the date of issue of LOA. Further, if the 60 th day happens to be a declared holiday in the concerned office of the DFCCIL, submission of PG can be accepted on the next working day. In
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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 DFCCIL shall be entitled to forfeit Earnest Money Deposit and other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit 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;
- (iii) Government Securities including State Loan Bonds at 5% below the market value;
- (iv) Deposit Receipts, Pay Orders, Demand Drafts and Guarantee Bonds. These forms of Performance Guarantee could be either of the State Bank of India or of any of the Nationalized Banks:
- (v) Guarantee Bonds executed or Deposits Receipts tendered by all Scheduled Banks;
- (vi) Deposit in the Post Office Saving Bank;
- (vii) Deposit in the National Savings Certificates;
- (viii) Twelve years National Defense Certificates;
- (ix) Ten years Defense Deposits;
- (x) National Defense Bonds and
- (xi) Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of CPM, DFCCIL, Ajmer (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 up to 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. (Completion certificate shall be governed as per As per Clause No.48.(1) & 48.(2), Part-II of GCC APRIL-2022, with up to date correction slip
- (f) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encased.
- (g) The Engineer shall not make 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 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 the GCC

	As per Clause No.16.(4), Part-II of GCC APRIL-2022, with up to date correction slip
23	MEASUREMENTS OF CONTRACTOR WORKS.
23.1	The tenderer whether sole proprietor, a company or a partnership firm / joint venture (JV) / registered society / registered trust 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 favor of the specific person whether he/they be partner(s) of the firm or any other person specifically authorizing him/them to submit the tender, sign the agreement, receive money, co-ordinate measurements through contractor's authorized engineer, witness measurements, sign measurement books, compromise, settle, relinquish any claim(s) preferred by the firm and sign "No Claim Certificate" and refer all or any disputes to arbitration. As per Clause No. 15 of Annexure I part 1 of GCC APRIL-2022, with up to date correction slip
23.2	Measurement of works by DFCCIL:
23.2	The contractor shall be paid for the works at the rates in the accepted Schedule or Rates and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Engineer or the Engineer's representative in accordance with the rules prescribed for the purpose by the DFCCIL. The quantities for items the unit of which in the accepted Schedule of Rates is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one, for items the unit of which in the accepted Schedule of Rates is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Engineer shall be proper having regard to the progress of works. The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the contractor who shall be present at the site and shall sign the results of the measurements (which shall also be signed by the Engineer or the Engineer's representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measurements. Failing the contractor's attendance, the work may be measured up in his absence and such measurements shall notwithstanding such absence, be binding upon the contractor whether or not he shall have signed the measurement books provided always that any objection made by him to measurement shall be duly investigated and considered in the manner set out below:
	a) It shall be open to the contractor to take specific objection to any recorded measurements or Classification on any ground within seven days of the date of such measurements. Any remeasurement taken by the Engineer or the Engineer's representative in the presence of the Contractor or in his absence after due notice has been given to him in consequence of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurements.
	b) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor
	shall be liable to pay the actual expenses incurred in measurements.
	(As per Clause No. 45 (i), Part-II of GCC APRIL-2022, with up to date correction slip)
23.2.1	Measurement of Works by Contractor's Authorized Representative (In case the contract
	provides for the same): (a) The contractor shall be paid for the works at the rates in the accepted Schedule of Rates and for extra works at rates determined under Clause 39 part II of GCC APRIL-2022, with up to date correction slip on of these conditions on the measurements taken by the contractor's authorized engineer in accordance with the rules prescribed for the purpose by the DFCCIL. The quantities for

items the unit of which in the accepted schedule of Rates is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted Schedule of Rates is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time. The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the Engineer.

The date and time of test checks shall be communicated to the contractor who shall be present at the site and shall witness the test checks, failing the contractor's attendance the test checks may be conducted in his absence and such test checks shall not withstanding such absence be binding upon contractor provided always that any objection made by contractor to test check shall be duly investigated and considered in the manner set out below:

- i) It shall be open to the contractor to take specific objection to test checks of any Recorded measurement within 7 days of date of such test checks. Any re-test check done by the concerned DFCCIL's authority in the presence of the Contractor or in his absence after due notice given to him in consequent of objection made by the contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurements.
- ii) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.
- **(b)** Incorrect measurement, actions to be taken: If in case during test check or otherwise, it is detected by the Engineer that agency has claimed any exaggerated measurement or has claimed any false measurement for the works which have not been executed; amounting to variation of 5% or more of claimed gross bill amount, action shall be taken as following:
- (i) On first occasion of noticing exaggerated/false measurement, engineer shall recover liquidated damages equal to 10% of claimed gross bill value.
- (ii) On any next occasion of noticing any exaggerated/false measurement, DFCCIL shall recover liquidated damages equal to 15% of claimed gross bill value. In addition the facility of recording of measurements by contractor as well as release of provisional payment shall be withdrawn. Once withdrawn, measurements shall be done by DFCCIL as per clause 45(i) of GCC APRIL-2022.

The detailed procedure for recording of measurements, provisional payment, test check, final payment etc. shall be as per para 1316 A of the Indian Railway Code for Engineering Department.

As per Clause No. 45 (ii), Part-II of GCC APRIL-2022, with up to date correction slip

Note:- 'Contractor's authorized engineer' shall mean a graduate engineer or equivalent, having more than 3 year experience in the relevant field of construction work involved in the contract, duly approved by Executive/Sr. Executive/JPM/APM/DPM/PM/Dy.CPM /CPM/GM-Co/CGM.

As per Clause No. 1(1)(q), Part-II of GCC APRIL-2022, with up to date correction slip (Measurement of works by authorized representative) shall be applicable only for those contracts where specifically mentioned in additional special conditions of contract.)

24 PAYMENT OF COTRACTUAL WORKS

24.1	"On-Account" Payments: The contractor shall be entitled to be paid from time to time by way of "On-Account" payment only for such works as in the opinion of the Engineer he has executed in terms of the contract. All payments due on the Engineer's/Engineer's Representative's certificates of measurements or Engineer's certified "Contractor's authorized engineer's measurements" shall be subject to any deductions which may be made under these presents and shall further be subject to, unless otherwise required by Clause 16 of these Conditions, a retention of ten percent by way of Security Deposits, until the amount of Security Deposit by way of retained earnest money and such retentions shall amount to 6% of the total value of the contract provided always that the Engineer may be any certificate make any correction or modification in any previous certificate which shall have been issued by him and that the Engineer may withhold any certificate, if the works or any part thereof are not being carried out to his satisfaction.
24.2	Rounding off Amounts: - The total amount due on each certificate shall be rounded off to the nearest rupee, i.e. sum less than 50 paisa shall be omitted and sums of 50 paisa and more up to₹1 will be reckoned as ₹ 1.
24.3	On account Payments Not Prejudicial To Final Settlement "On-Account" payments made to the Contractor shall be without prejudice to the final making up of the accounts (except where measurements are specifically noted in the Measurement Book as "Final Measurements" and as such have been signed by the Contractor and Engineer's/ Engineer's Representative) and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such accounts nor of any particular quantity of work having been executed nor of the manner of its execution being satisfactory.
24.4	Final Payment: On the Engineer's certificate of completion in respect of the works, adjustment shall be made and the balance of account based on the Engineer or the Engineer's representative's certified measurements or Engineer's certified "contractor's authorized engineer's measurements" of the total quantity of work executed by the Contractor up to the date of completion and on the accepted schedule of rates and for extra works on rates determined under Clause 39 of these Conditions shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contractor having signed delivered to the Engineer enclosing either a full account in detail of all claims he may have on the DFCCIL in respect of the works or having delivered No Claim Certificate and the Engineer having after the receipt of such account given a certificate in writing that such claims are not covered under excepted matter i.e. Clauses 7(j), 8, 18, 22(5), 39, 43(2), 45(a), 48(1), 48(2), 48(3), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1)(i) to xv (B) of Standard General Conditions of Contract or in any Clause(stated as excepted matter) of the Special Conditions of the Contract, that the whole of the works to be done under the provisions of the Contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things, removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the DFCCIL for or in the respect of damage or loss by from or in consequence of the works, have been satisfied agreeably and in conformity with the contract.
25.0	INSTRUCTIONS OF MODE OF PAYMENT IN WORKS TENDERS OR SERVICE
	TENDER THROUGH LETTER OF CREDIT (LC)
25.1.1	For all the tenders having advertised cost of Rs. 10 lakh or above, the contractor shall have the option to take payment from DFCCIL through a letter of credit (LC) arrangement.

- This option of taking payment through LC arrangement has to be exercised in IREPS (Indian Railways Electronic procurement System the e-application on which tenders are called by DFCCIL) 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.
- 25.1.3 The option so exercised, shall be an integral part of the bidder's offer.
- 25.1.4 The above option of taking payment through LC arrangement, once exercised by tenderer at the time of biding, shall be final and no change shall be permitted, thereafter, during execution of contract.

In case tenderer opts for payment through LC following shall be the procedure to deal release of payment through LC:

- (a) The LC shall be a sight LC,
- (b) The contractor shall select his Advising/Negotiating bank for LC. The incidental cost towards issue of LC and its operation thereof shall be borne by the contractor.
- (c) SBI, New Delhi, Main Branch will be the nodal branch for issue of LCs based on online requests received from DFCCIL Accounts Units for tenders opened in financial year 202019. SBI branches where the respective DFCCIL Accounts Office has its Account (local SBI branch) will be the issuance/reimbursing branch for LC issued under this arrangement. The Bank shall remain same for this tender till completion of contract. The incidental cost @ 0.15% per annum of LC value, towards issue of LC and operation thereof shall be borne by the contractor and shall be recovered from his bills.
- (d) The LC shall be opened initially for duration of 180 to 365 days in consultation with contractor. The LC shall be extended time to time as per the progress of the contract, on the
- e) The LC terms and conditions shall inter-alia indemnify and save harmless the DFCCIL from and against all losses, claims and demands of every nature and description brought or recovered against the DFCCIL 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 DFCCIL on this account shall be considered as reasonable compensation and paid by contractor.
- (f) The LC terms and conditions shall inter-alia provide that DFCCIL will issue a Document of Authorization (format enclosed as *Annexure-'B'*) after passing the bill for completed work, to enable contractor to claim the authorized amount from their bank.
- (g) The acceptable, agreed upon document for payments to be released under the LC shall be the Document of Authorization.
- (h) The Document of Authorization shall be issued by DFCCIL Accounts Office against each bill passed by DFCCIL.
- (i) On issuance of Document of Authorization, a copy of Document of Authorization shall be posted on IREPS for download by the contractor. A digitally signed copy of Document of Authorization shall also be sent by DFCCIL Accounts Office to DFCCIL's bank (Local SBI Branch).
- (j) The contractor shall take print out of the Document of Authorization available on IREPS and present his claim to his bank (advising Bank) for necessary payments as per LC terms and conditions. The claim shall comprise of copy of Document of Authorization, Bill of Exchange and Bill.
- (k) The payment against LC shall be subject to verification from DFCCIL's Bank (Local SBI Branch).
- (l) The contractor's bank (advising bank) shall submit the documents to the DFCCIL's Bank (Local SBI Branch).
- (m) The DFCCIL's bank (issuing bank) shall, after verifying the claim so received with reference to

	the digitally signed Document of Authorization received from DFCCIL
	Accounts Office, release the payment to contractor's bank (advising bank) for crediting the same to
	contractor's account.
	(n) Any number of bills can be dealt within one LC, provided the sum total of payments to contractor
	is within the amount for which LC has been opened.
	(o) The LC shall be closed after the release of final payment including PVC amount, if any to the
	contractor.
	(p) The release of performance guarantee or security deposit shall be dealt directly by DFCCIL with
	the contractor i.e., not through LC.
	For opening of LC, executive department shall make a request letter to concerned Accounts
• • •	Department on a format, placed as <i>Annexure-'A'</i> .
26.0	GUIDELINES FOR ELECTRONIC REVERSE AUCTION FOR WORKS, SERVICE
264	<u>CONTRACT</u>
26.1	SERVICE CONTRACTS (For tenders valued more than Rs. 50 Cr. in each case): (Not
	Applicable in this Tender)
(a)	Selection criteria for tender cases of Works and Services proposed through Reverse Auction (eRA) route:
(b)	Following method of purchase through Reverse Auction shall be adopted for Works and Service tenders valued more than Rs. 50 Cr. in each case.
(0)	The process of procurement through Reverse Auction shall be followed only in case of tenders
(c)	where there are at least three technically eligibleoffers.
26.2	
26.2	Financial Bids in single currency/parameter only shall be allowed.
(a)	Procedure for award of contracts through Reverse Auction
(b)	The procedure discussed herein shall be fully implemented through IREPS. Any reference to Reverse Auction in these instructions shall implye-RA.
(c)	Conduct and reporting of Reverse Auction shall be as per Annexure-C .
26.2.1	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 bidform.
(a)	Technical Bid and Initial Price Offer:
(b)	In case of Works and Services related tenders, e-RA shall be adopted only for those cases
	where evaluation is on the basis of singleparameter/currency.
(c)	Bidder shall be simultaneously required to electronically submit a Technical & Commercial Bid
(C)	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.
(d)	Offers not complying with essential technical & commercial requirements of the tender shall
(u)	be declared as Ineligible for award of contract.
26.2.2	Initial Price Offer of only those bidders categorized as Qualified for Award of contract shall be opened and tabulated by systemseparately.
(a)	Financial Bid
(a)	Financial Bid Financial Bid shall comprise of Final Price Offer obtained through Reverse Auction. Following

(b)	Selection of vendors for Reve	rse Auction for award	of Contract in Works and Services tenders
	:		
	Number of tenderers	Number of tenderers	Remarks
	Qualified for Award	to be selected for	
	Ofcontract/ Bulk order	Reverse Auction.	
	< 3	NIL*	The bids disallowed from participating in
			the Reverse Auction shall be the highest
	3 to 6	3	bidder(s) in the tabulation of Initial Price
			Offer. In case the highest bidders quote the
	More than 6		same rate, the Initial Price Offer received
		"	last, as per time log of IREPS, shall be
		Order/ award of	removed first, on the principle of last in
		contract (rounded off	first out, by IREPS systemitself.
		to next higher integer).	
	Note:- (i)* If the number of	tenderers qualified for A	ward of Contract is less than 3 RA shall not
	be done and tender may be d	ecided on the basis of Ini	tial Price Offer(s).
	(ii) Make in India criteria: A	all bidders eligible for be	nefits under Public Procurement (Preference
	to Make in India) Order -	2017, found Qualified	for Award of Contract and are within the
	specified range of price pref	erence of lowest Initial I	Price Bid shall be permitted to participate in
	the Reverse Auction, irrespe	ctive of their inter-se rai	nking on the basis of Initial Price Bid. Such
	bidders shall be over and about	ove the number of vendo	ors selected for Reverse Auction, as per Para
	24.2.2(a) above. During Re	verse Auction process,	bidders shall not be allowed to bid a rate
	higher than the lowest Initial	PriceOffer.	

SPECIAL CONDITIONS OF CONTRACT (GENERAL)

PART-IV SPECIAL CONDITIONS OF CONTRACT (GENERAL)

1.0	These special conditions and the work schedule shall govern the works to be executed under this
	contract in addition to and/or in part supersession of the General Conditions of Contract-2020 and
	Standard Specifications as laid down in the CPWD Specifications 2019 Vol I & II and Indian
	Railways Unified Standard Specifications (Works and Material) -2010 / 2020 as amended/ updated
	by correction Slips on or before the opening of tender.
2.0	Order of Precedence of Documents: In a tender/contract, 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. Schedule of Items, Rates & Quantities
	iii. Special Conditions of Contract
	iv. Technical Specifications as given in tender documents
	v. Drawings
	vi. Indian Railways Standard General Conditions of Contract
	vii. CPWD Specifications-2019 as amended/ updated by correction Slips on or before the opening
	of tender.
	viii.IR Specifications/Guidelines
	ix. Relevant B.I.S. Codes
3.0	Any special condition stated by the tenderer(s) in the covering letter submitted along with the
	tender shall be deemed as part of contract to such extent only as have explicitly been accepted by
	the DFCCIL.
4.0	USE OF DFCCIL LAND
4.1	Use of DFCCIL land required by the contractor(s) for constructing temporary offices, quarters,
	hutments etc. for the staff and for storing materials etc. would be permitted to him/them free of
	charge by DFCCIL, if available. The location of these offices, hutments, stores etc., will be subject
	to the approval of the engineer or his authorized representative. The land will be restored to
	DFCCIL by the contractor(s) in the same condition as when taken over or in vacant condition as
	desired by the engineer, after completion of the work or at any earlier day, as specified by the
	Engineer. The failure to do so will make the contractor(s) liable to pay the cost incurred by the
	DFCCIL for getting possession of land.
4.2	The tenderer(s) shall also acquaint himself /themselves with the availability of land, working space
	for his/their works etc. The DFCCIL will not acquire any land for the purpose of movement of
7.0	vehicles of the Contractor/s for executing the work by the contractor/s.
5.0	USE OF PRIVATE LAND
	The Contractor will have to make his/their own arrangements for use of private land, outside
	DFCCIL limits for due fulfillment 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.
6.	FIGURES, DIMENSIONS ETC.
	Figures, dimensions and drawings shall supersede measurements by scale and drawing to larger
	scale shall take precedence over those to a smaller scale. Special dimensions or directions in the
	specification shall supersede all else.

7.	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
8.0	SEIGNIORAGE CHARGES
8.1	The contractor/s shall comply with all the instructions issued by the Chief Inspector of Mines in
0.1	respect to the safety of the workmen and the working of quarries and maintain register in which
	shall be recorded, such information/s for supply annually to Chief Inspector of Mines of the
	Government of India, as required by him. Final payment will be released after producing the no
	dues certificate from Mining department or any other concerned office of the area. The contractor/s
	are required to produce necessary documentary proof regarding payment of royalty to Mining
	Department of the stone ballast supplied, as and when demanded by the DFCCIL administration.
	Final Bill shall be released only after production of "No Dues" certificate from the Mines
	Department, by the contractor.
8.2	The rates quoted by the tenderer shall be inclusive of seigniorage charges on all items of work to be
0.2	executed under the contract, applicable as on the last date of submission of tender.
9.0	TAXES -The accepted rates should be deemed to include all taxes direct or indirect Including
7.0	Income Tax leviable under Central/State or Local Bodies Act or Rules, Octroies, Tolls, Royalties,
	Seigniorages, Cess and similar imposts that may be prevailing from time to time in respect of land,
	structures and all materials supplied in the Performance of this Contract.
10.0	The Building and Other Construction workers (Regulation of Employment and conditions of
10.0	service) Act, 1996 and the Building and Other Construction Workers Welfare Cess Act, 1996: The
	tenderers for carrying out any construction work must get themselves Registered with the
	Registering Officer under section 7 of the "Building and other construction workers act, 1996" and
	rules made there to by the concerned state Govt. and submit certificate of Registration issued from
	the Registering Officer of the concerned State Govt. (Labour Department). The Cess shall be
	deducted from contractor's Bills as per provision of Act.
11.0	DEDUCTION OF INCOME TAX AT SOURCE
11.0	In terms of new section 194 inserted by the Finance Act 1972 in the Income Tax Act 1961, the
	DFCCIL shall at all the time arranging payment to the contractor sub-contractor (in case of sub-
	contractor only when the DFCCIL responsible for payment of the consideration to him under the
	contract) for carryout any work (including supply of labour for carryout the work under the
	contract) be entitled to deduct income tax at source or income comprised in the sum of such
	payments. The deduction towards income tax to be made at source from the payments due to non-
	residents shall continue to be governed by section 195 of the Income Tax Act, 1961.
12.0	ROYALTIES AND PATENT RIGHTS
12.0	The contractor shall defray the cost of all royalties, fees and payment in respect of patents, patent
	rights and licenses which may be payable to patentee, license 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 DFCCIL 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 inconsequence of
	directly or indirectly or any such breach and against payment of any royalties, damages or other
	monies which the DFCCIL may have to make to any person or paid in total to patent rights in
	respect of the users of any machine, instrument, process, articles, matters of thing constructed,
	manufactured, supplied or delivered by the contractors to his order under this contract.

13.0	NOTICE TO PUBLIC BODIES
	The Contractor(s) shall give to the municipality, police and other authorities all notices that may be required by 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 operations in executing the
	contract. He should make good any damage to adjoining premises whether public or private and
	supply and maintain any lights, etc., required at night.
14.0	DAMAGE BY ACCIDENTS, FLOODS OR TIDES
	The contractor shall take all precautions against damage from accident, floods or tides. No compensation shall be paid to the contractor for his plant or material lost or damaged by any cause whatsoever. The contractor shall make good the damages at his cost to any structure or part thereof by any cause during the course of the work.
15.0	SERVICE ROADS
	The Contractor/s will be permitted to make use of existing service roads, or service roads constructed by the DFCCIL for its use free of cost. New service roads required by the contractor/s either near the work site or elsewhere within or outside DFCCIL 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 DFCCIL land, permission will be given free of charge. If any land other than DFCCIL 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 DFCCIL, however, reserves the right to make use of such service roads as may be constructed by the contractor/s without payment of any charges.
16.0	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 DFCCIL 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 CGM, DFCCIL, to the contractor.
17.0	MAINTENANCE PERIOD/DEFECT LIABILITY PERIOD:-
	(a) The Contractor shall guarantee that all the works executed under this contract shall be free from all defects and faults in material, workmanship and manufacture and shall be of acceptable standards for the contracted work and in full conformity with the technical specifications, drawings and other contract stipulations,
	(b) During the period of guarantee the Contractor shall keep available an experienced engineer /
	man power to attend to any defective works / installations resulting from defective erection and/or defect in the installation supplied by the Contractor. This engineer shall not attend to rectification of defects which arise out of normal wear and tear and come within the purview of routine maintenance work. The contractor shall bear the cost of modifications, additions or substitutions that may be considered necessary due to faulty materials or workmanship for the satisfactory working of the equipment. The final decision shall rest with the Engineer his successor(s)/Nominee.
	(c) During the period of Guarantee the Contractor shall be liable for the replacement at site of any parts which may be found defective in the executed work whether such parts / structural elements of his own manufacture or those of his sub-contractor / supplier whether arising from faulty materials, workmanship or negligence in any manner on the part of the

Contractor provided always that such defective parts as are not repairable at site are promptly returned to the Contractor if so required by him at his (Contractor's) own expenses. In case of parts of executed work detected during guarantee period, contractor should replace all such items irrespective of the fact whether all such items have failed or not. The Contractor shall bear the cost of repairs carried out on his behalf by the Employer at site. In such a case, the contractor shall be informed in advance of the works proposed to be carried out by the Employer.
(d) If it becomes necessary for the Contractor to replace or renew any defective portion of the structural elements until the expiration of six month from the date of such replacement or renewal or until the end of the above mentioned period whichever is later. Such extension shall not apply in case of defects of a minor nature, the decision of the Chief General Manager or his successor/nominee being final in the matter. If any defect be not remedied within a reasonable time during the aforesaid period the Employer may proceed to do work at the Contractor's risk and expense, but without prejudice to any other rights and remedies which the Employer may have against the Contractor in respect of such defects or faults. (e) The repaired or renewal parts structure shall be delivered / supplied and erected / executed on site free of charge to the Employer.
(f) Any materials, fittings, components or equipment / structure supplied under items for supplying / providing and fixing in schedule shall also be covered by the provisions of this paragraph. The liability of the Contractor under the guarantee will be limited to re-supply of components / structure installation and fittings.
INSTRUCTIONS/DIRECTIVES OF THE ENGINEER'S REPRESENTATIVE
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 DFCCIL 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.
The contractor shall always execute the work under this contract in strict compliance with the instructions/directives by the Engineer's representative. Any act of non-compliance with the instruction/directives issued by the Engineer's representative shall be considered as a default of the contractor where after the DFCCIL shall be free to take further appropriate action as provided in the contract for dealing with such defaults of the contractors. The decision of the Engineer-in-charge whether there has been an act of noncompliance with the instruction/directives of the Engineer's representative for the purpose of this clause shall be final and conclusive.
The instructions/directives by the Engineer's representative shall not, however, absolve the contractor of his responsibility or reduce his responsibility in any manner whatsoever in regards to maintaining at all times the safe working conditions at the work site.
Any instructions or approval given by the Engineer's representative to Contractor in connection with the works shall bind the Contractor as though it had been given by the Engineer provided always as follows: (a) Failure of the Engineer's representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or material and to order the removal or breaking up thereof. (b) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's representative, he shall be entitled to refer the matter to the Engineer who shall there upon confirm or vary such decision.

19.0	NON-COMPLIANCE WITH THE INSTRUCTIONS/DIRECTIVES OF THE ENGINEER'S REPRESENTATIVE
19.1	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 DFCCIL as specified herein above the Engineer's representative may employ at the works DFCCIL's workmen with necessary equipment as considered appropriate and adequate by him to provide the requisite conditions for the safe and unhampered movement of DFCCIL traffic. The decision of the Engineer's representatives in regard to the need of appropriateness and adequacy of the deployment of the DFCCIL Workmen with necessary equipment shall be final and conclusive.
19.2	When the DFCCIL 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 DFCCIL under this contract. The recovery for the total DFCCIL Workmen Hours employed at the rate of Rs. 100/- (Rupees Hundred only) per Workmen-Hour irrespective of the type and grade of the DFCCIL Employee actually employed. The aggregate period of the Workman-Hours for the above recoveries shall be reckoned from the time the DFCCIL 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.
19.3	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.
20.0	<u>WARRANTY</u> The Contractor(s) shall warrant the materials supplied under this contract to be free of any defects in material and workmanship under ordinary use and service.
21.0	SHIFTING OF ELECTRICAL/TELEGRAPH WIRES
	In some stretches, high-tension grid towers /electric telegraph/telephones wires or posts etc. are to be shifted. 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 date of completion will be considered and given to the contractor for only the effected 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 of earthwork so as not to cause any damage to existing structure lines etc.
22.0	HANDING OVER OF SITE FOR WORK The entire land required for this work is available. However, DFCCIL 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.

23.0	Working during Night: The Contractor shall have to carry out dewatering round the clock if
	required. But will not carry out any other work between sun-set and sun-rise without the previous
	permission of the Engineer. However, if the Engineer is satisfied that the work is not likely to be
	completed in time except by resorting to night work, he may order the same without confirming any
	right on the Contractor for claiming any extra payment for the same. (Authority Clause No. 23
	Part-II of GCC APRIL-2022, with up to date correction slip)
24.0	MODE AND TERMS OF PAYMENT
24.1	All payments will normally be made only for finished works on the basis of mode and terms of
	payments agreed upon and provided in the contract.
24.2	MANNER OF PAYMENT
	Payment to the contractor will be made through Electronic Fund Transfer (EFT) for payment of
	running and final bills. The tenderer (s) will also fill the Annexure-I indicating the bank account
	number, name of bank and bank specific code number (MICR/IFSC) as enclosed. The conditions
	and Annexure-I will be part of the tender document.
25.	ACCIDENT/NATURAL CALAMITIES
25.1	Vehicle and equipment of the contractor can be drafted by DFCCIL Administration in case of
	accidents/natural calamities involving human lives.
25.2	For payment purpose, the item may be operated as New Non-Schedule (NS Item) as per existing
	norms and powers delegated.
25.3	Contractor may submit list of vehicles and equipment available with him.
26.0	MOBILIZATION ADVANCE (For Contract Value Rs. 25 Crores and Above) (Not applicable in
	this Tender)
26.1	Stage-I: -5% of Contract Value on signing of the contract agreement.
	Stage-II: - 5% on mobilization of site-establishment, setting up offices, bringing in
	equipment and actual commencement of work.
	The 1 st stage of advance shall be payable immediately after signing of contract documents. The 2 nd
	stage of advance shall be payable at the time of mobilization, after submission of a utilization
	certificate by the contractor that the Stage 1 advance has been properly utilized in the contract.
26.2	The advance shall carry an interest at the rate to be decided by Railway Board and communicated
	at the beginning of every financial year, to be applicable for the tenders to be opened in that
	financial year.
26.3	The Mobilization Advance Clause shall be restricted only for high value tenders of Rs. 25 crore and
	above.
26.4	The Mobilization Advance except, those against machineries and equipment's shall be payable
	against an irrevocable Bank Guarantee (Bank Guarantee, FDRs, KVPs, NSCs) of at least 110% of
	the value of sanctioned advance amount (covering principal plus interest). The bank guarantee
	shall be from a Nationalized Bank in India of State Bank of India in a form acceptable to the
	Railways.
	(a) For works costing less than Rs. 50.00 Crore
	The mobilization shall be granted against irrevocable bank guarantee Which will be released only
	after full Mobilization advance with interest will be recovered.
	(b) For works costing Rs. 50.00 Crore & above.
	Mobilization advance can be granted against several bank guarantees. Individual Bank Guarantee
	can be refunded after the amount mentioned in the part B.G. has been recovered along with
	interest. BG will not be accepted in more than 5 parts. However, amount of each BG shall not be

	less than Rs. 1Cr.
26.5	Method of Recovery of Interest Interest shall be recovered on the advance outstanding for the period commencing from the date of payment of advance till date of particular on-account bill (through which recovery of principal is effected) and adjusted fully against on-account bill along with pro-rata principal recovery. In the event of any short-fall, the same shall be carried forward to the next on account bill and shall attract interest. The recovery shall commence when the value of contract executed reaches 15% of original contract value and shall be completed when the value of work executed reaches 85% of the original contract value. The installments on each "on account bill" will be on pro-rata basis; The Rate of Interest Shall be RBI Bank Rate+5%(Five %) simple interest for the tenders to be opened in the financial Year 2022-23 onwards.(As per Railway board's letter No 2018/CE-I/CT/1 dated 10.03.2022)
26.6	Advances for accelerating progress of the work during course of execution of Contract—This advance is to be decided on the merits of each case and shall be restricted to a maximum of 5% of contract value. This is to be granted by the General Manager for contracts where the progress of the contract work has been as per milestones/targets laid down and no extension to date of completion of the contract has been given on contractor's account.
26.7	Advances in Exceptional Cases — The power to grant advances in exceptional cases upto a maximum of Rs. 20 lacs in respect of even contracts of value less than Rs. 25 crore, considered absolutely essential, depending on the merits of each case and circumstances in each situation, lies with Chief General manager/General Manager-Co. Advance Correction slip no 56 for Indian railway Code for Engineering
27.0	Department dated05.03.2019. STAGE PAYMENT ON SUPPLY OF STEEL IN WORKS CONTRACT (For contract value
27.0	Rs. 15.00 crores &above):(Not applicable in this Tender)
27.1	Stage payment for steel physically brought by the contractor to the site (even before its actual use in work) can be made subjected to following conditions:- (a) The material shall be strictly in accordance with the contractspecifications.
	(b) The material shall be delivered a site and properly stored under covered sheds in measurable stacks.
	(c) The quantities of materials shall be brought to the site only in such installments that would facilitate smooth progress of work and consumed in reasonabletime.
	(d) Proper accountal in the material register to be maintained in the prescribed format at the site for the receipt and use of thematerial.
	(e) Ownership of such material shall be deemed to rest with the DFCCIL for which the contractor should submit an indemnity bond in prescribedformat.
	(f) Before releasing the stage payment, the contractor shall insure the material at his own cost in favour of DFCCIL against theft, damages, fireetc.
	(g) Stage payment in all such cases shall not be more than 75% of the rate of steel awarded in the contract. The balance payment shall be released only after the material is actually consumed in thework.
	(h) The price variation claim for steel would continue to be governed as per extant PV clause and with reference to delivery atsite.

28.0	BONUS FOR EARLY COMPLETION OF WORK: (Not applicable in this Tender) In case of
	open tenders having value more than Rs. 20 crore and original period of completion 12 months or
	more, when there is no reduction in original scope of work by more than 10%, and no extension
	granted on either DFCCIL or Contractor's account, Contractor shall be entitled for a bonus of 1%
	for each 30 days early completion of work. The period of less than 30 days shall be ignored while
	working out bonus. The maximum bonus shall be limited to 5% of original contract value. The
	completion date shall be reckoned as the date of issuance of completion certificate by Engineer.
	As per Clause No. 17(c) Part-II of GCC APRIL-2022, with up to date correction slip
29.0	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.
30.0	DEPLOYMENT OF QUALIFIED ENGINEERS AT WORK SITES BY THECONTRACTOR
	(As per Clause No.26-A of G.C.C. April-2022 Part-II with up to date correction slip)
30.1	The contractor shall also employ Qualified Graduate Engineer or Qualified Diploma Holder
	Engineer, based on value of contract, as may be prescribed by the DFCCIL through separate
	instructions from time to time.
30.2	In case the contractor fails to employ the Engineer, as aforesaid in Para 30.1, he shall be liable to pay
	liquidated damages at the rates, as prescribed in the tender document penalty at the rates, as may be
	prescribed by the DFCCIL (Para 30.4) through separate instructions from time to time for the default
	period for the provisions, as contained in Para 30.1.
30.3	No. of qualified Engineers required to be deployed by the Contractor for various activities contained in this works contract shall be as under:-
	(i) For tenders costing below Rs.50.00 Cr.
	1) Graduate Engineer – Minimum 1 Nos.
	2) Diploma Engineer – Minimum 1 Nos.
	(ii)For tenders costing Rs.50.00 Cr. and above.
	1) Graduate Engineer – Minimum 2 Nos.
	2) Diploma Engineer – Minimum 2 Nos.
30.4	In case the contractor fails to employ the Qualified Engineer, as aforesaid in Para 30.1 above, he, in
	terms of provisions of Clause 30.2 to the Conditions of Contract, shall be liable to pay an amount of
	Rs. 40,000/- and Rs. 25,000/- for each month or part thereof for the default period for the provisions,
	as contained in Para 30.3 above respectively.
31.0	PRICE VARIATION CLAUSE (As per Clause No. 46 A of GCC APRIL-2022 with up-to-date
	correction slip.(Not Applicable)
	For this contract, the PVC shall bepaidas "94" in this contractas mentioned in table 46A-6 (I) for
31.1	Civil Engineering Works of GCC April-2022 for calculation of price variation.
	Price Variation Clause shall be applicable only for works contracts having advertised value
	aboveRs. 2 Crores. Provided further that, in a contract where PVC is applicable, following
	shall be outside the purview of price adjustments (i.e. shall be excluded from the gross value of
	the work for the purpose of price variation): Materials supplied free of cost by Railway to the
	contractors and any extra NS items included in subsequent variations falling outside the purview of
	the Schedule of Items of tender shall fall outside the purview of PVC. If, in any case, accepted offer
	includes some specific payment to be made to consultant or some materials supplied by Railway

	free or at fi of payment For calcula	s/ recovery	of Pricevan	riation.					the purpose as under:
	1 ' '	ent date a	_						onsidered. If n MB will
	` ′	ease of fin is earlier, v			ompletion o	or 1 st date	of measure	ment recor	ded in MB,
31.2	+	h: The Bas of tender, un from the m	e Month for a less otherworth follow	or 'Price Va wise stated wing the Ba	ase month.	The quarte	r for applic	ability of P	VC shall
31.3	Validity: R no additio increase/de Contract as (b) Paymen	nal indivi crease in C per Clause	dual clain GST on wo 37 of GCC	n shall b orks contra C April-202	ct or impos 22,	ole except sition/remo	t: (a) Pay val of any	ment/recov tax/cess o	very for n Works
31.4	Component besteel, cer labour,plan these items	ment, ferro t& machine	ous materia ery, fuel, e	nl, non-ferr xplosives,	rous materi detonators	al, insulate etc. Adjust	ors, zinc a	nd other n	naterials,
31.5	No price va	riation shal	ll be admiss	sible for fix	ked compon	ents.			
31.6	_	of Quanti	ties in ten		arious type nent and th			-	
	Classification	Fixed Component	Labour Component	Steel Component	Cement	Plant Machinery & Spares	Fuel & Lubricants Component	Other Materials	Detonators & Explosive Component
	-	-	-	-	-	-	-	-	-
		all not be co							
31.8	mentioned published in	above in Ondices shall	Clause 46 <i>A</i> be made a	A.7. Any a s and when	they become	needed to ne availabl	be done be.	ased on th	e finally
	Special No input prices payment or 2. General	s and theref	fore price vs the case n	variation du nay be.	aring the cu	rrency of t	he contract	may result	in extra
	decision of								7

	Sr.No.	Classificatio	n	Rates to be used for calculating SQ or SB				
	1	Reinforcement bars		Average of per tonne rates of 10mm dia TMT & 25mm dia				
		and other rounds All types and sizes of		TMT; confirming IS1786; Fe 500				
	2	angles, channels and joists		Average of per tonne rates of 'Angle 75x75x6mm, Mild Steel Plate 10mm thickness and Channel 150x75mm; confirming IS2062, E250 Gr "A"				
	3	All types and sizes of plates		Average of per tonne rates of 'MS Plates 10mm thickness and 25mm thickness; confirming IS2062, E250 Gr "A"				
	4	Any other section steel not covered above categoria	in the Av	verage of prio	ce for the 3 cates		ander SL 1, 2 &	
31.9	(a) RB	I has published Co	nsumer Pri	ce Index for	Industrial Wor	kers, CPWI(IW), with the base	
	base ye	01 upto August 20 ar 2016. The base nanged from year 2 d a linking factor o	year of Con 2001 to yea	nsumer Price r 2016 with	e Index for Indu effect from Sej	strial Workers in ptember 2020.	i.e. CPI(IW) has	
	calculati	Clause 46A of GCC on of the amount of	of variation	in the price	for labour com			
					n RBI Bulletin. ded by Board (1	MI. MF) to ado	pt above linking	
	(c) The facto	issue has been exa r of 2.88 for linking under :-	mined. It ha	as been decid	ded by Board (N			
	(c) The facto	issue has been exa r of 2.88 for linking under :-	mined. It has g index of B	as been decidase year 200	ded by Board (Nand 2016. Exa	mple for applying Price Index for	ng linking factor	
	(c) The facto	issue has been exam r of 2.88 for linking	mined. It ha	as been decid	ded by Board (Nand 2016. Exa	Price Index for Workers	ng linking factor	
	(c) The facto is as	issue has been exa r of 2.88 for linking under :- Item	mined. It has gindex of B Base Year	Linking Factor	Consumer July-2020	Price Index for Workers Aug.,2020	ng linking factor	
	(c) The facto is as	issue has been exar of 2.88 for linking under :- Item mer Price Index ustrial Workers —	mined. It has g index of B	as been decidase year 200 Linking	ded by Board (Nand 2016. Exa	Price Index for Workers	ng linking factor	
	Consum for Indu	issue has been exar of 2.88 for linking under :- Item mer Price Index astrial Workers — CPI(IW) CPI (IW) of Base of 2.88 = 339.84	Base Year 2001 2016 year 2001 =	Linking Factor 2.88	Consumer July-2020 336 - CPI(W) of Base	Price Index for Workers Aug.,2020 338 - Year 2016 x Lin	Sept., 2020 118 hking Factor i.e.	
21.10	Consum for Indu	issue has been exar of 2.88 for linking under :- Item mer Price Index astrial Workers — CPI(IW) CPI (IW) of Base a 2.88 = 339.84 y: Rly Bd's letter N	Base Year 2001 2016 year 2001 =	Linking Factor 2.88 Sept 2020 C	Consumer July-2020 336 - CPI(W) of Base	Price Index for Workers Aug.,2020 338 - Year 2016 x Linux Index dated 6	Sept., 2020 118 hking Factor i.e. 26.09.2021)	
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	applicable to the last month of original/ extended period of completion under Clause 17-A, as the case may be; then the lower indices shall be adopted for the price adjustment for the period of extension under Clause 17-B of the Standard General Conditions of Contract. As per Clause No. 46A.10 Part-II of GCC APRIL-2022, with up to date correction slip
32.A	Communications to be in Writing: All notices, communications, reference and complaints made by the DFCCIL or the Engineer or the Engineer's Representative or the Contractor inter-se concerning the works shall be in writing or email on registered e-mail IDs i.e. the email 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. (As per Clause No. 4 Part-II of GCC APRIL-2022, with up to date correction slip)
32.B	Assignment or subletting of the contract: (a) In case contractor intends to subcontract part of work, he shall submit a proposal in writing seeking permission of CGM for the same. While submitting the proposal to DFCCIL, contractor shall ensure the following: (As per Clause No. 7 Part-II of GCC APRIL-2022, with up to date
	correction slip) (i) Total value of work to be assigned to sub-contractor(s) shall not be more than 50% of total contract value.
	(ii) 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 sub-letted, in last 5 years through a works contract directly given to him by a Govt. Department; or by a 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, registered at least 5 years back from the date of submission of proposal by contractor to DFCCIL and work experience certificate issued by a person authorized by the Public Listed Company to issue such certificates.
	Note: For subletting of work costing up to Rs 50 lakh no previous work experience shall be asked for by the DFCCIL.
	In case contractor submits subcontractor's work experience certificate issued by public listed company, the contractor shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate. The details shall be furnished as per the annexure IV A, IV-B, IV-C as applicable to the Engineer in charge. (iii)There is no banning of business with the sub-contractor in force over IR/DFCCIL.
	(b) The Contractor shall provide to the Engineer a copy of the agreement to be entered into by Contractor with subcontractor. No subcontractor shall be permitted without a formal agreement between Contractor and subcontractor. This agreement shall clearly define the scope of work to be carried out by subcontractor and the terms of payment in clear & unambiguous manner. (c)On receipt of approval from CGM, Contractor shall enter into a formal agreement legally enforceable in Court of Law with subcontractor and submit a copy of the same to the Engineer. (d)The Contractor shall intimate to the Engineer not less than 7 days in advance, the intended date of
	commencement of subcontractor's work. (e)Once having entered into above arrangement, Contractor shall discontinue such arrangement, if he intends to do so at his own or on the instructions of DFCCIL, with prior intimation to CGM. (f)The Contractor shall indemnify DFCCIL against any claim of subcontractor. (g)The Contractor shall endeavor to resolve all matters and payments amicably and speedily with the

subcontractor.
(h) In addition to issuance of work experience certificate to Contractor, the Engineer, when, based on documents, is satisfied that subcontracted work has been carried out by subcontractor, shall issue work experience certificate to the subcontractor also for the portion of work subcontracted and successfully completed by the sub-contractor. Note: Work Experience Certificate to the subcontractor shall be issued only when the contractor's work is complete and contractor is entailed for the issuance of Work Experience Certificate. However, in the same contract, when the Chief Engineer, based on documents, is satisfied that the subcontractor has successfully carried out subletted work, without issuance of work experience certificate to subcontractor at this stage, the Chief Engineer can, only once, consider the successfully completed subletted work for the fulfilment of eligibility for further subletting of work to the subcontractor in the same contract. When the contractor's work is complete and contractor is entitled for the issuance of work experience certificate, the subcontractor shall be issued one Work Experience Certificate for the total scope of work executed by the subcontractor in the contract. (i)The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the
Contract. (j)Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. No claim of Contractor whatsoever on this account shall be entertained by the DFCCIL and this shall be deemed as 'excepted matter' (matter not arbitrable). (k)The permitted subcontracting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the DFCCIL and shall not relieve the Contractor of any responsibility under the Contract.
Display Board: The Contractor shall be responsible for displaying the details of works i.e. name of work, approximate cost, expected date of completion, name and address of the Contractor and address of Engineer on a proper steel Board of size not less than 1m x 1m. As per Clause No. 34.(5) Part-II of GGC-2022with up to date correction slip
VARIATIONS & MODIFICATION IN EXTENT OF CONTRACT
Modification to Contract to be in Writing: In the event of any of the provisions of the contract required to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the Railway and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the Railway unless and until the same is incorporated in a formal instrument and signed by the Railway and the Contractor, and till then the Railway shall have the right to repudiate such arrangements. As per Clause No. 41 Part-II of GGC-2022 with up to date correction slip
Powers of Modification to Contract: The Engineer on behalf of the Railway shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be

	As per Clause No. 42(1) Part-II of GGC-2022 with up to date correction slip
34.2.2	 (i) Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be upto 25% of the quantity originally contracted, except in case of foundation work. (ii) The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual item of works. (iii) In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates
	 (a) Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender; (b) Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender; (c) Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
	(d) Variation to quantities of Minor Value Item: The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original agreement value. d.(i) Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the
	rate awarded for that item in that particular tender; d.(ii) Quantities operated in excess of 100% but upto 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender;
	d.(iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
	(iv) In case of earthwork, the variation limit of 25% shall apply to the gross quantity of earthwork and variation in the quantities of individual classifications of soil shall not be subject to this limit. As far as Standard Schedule of Rates (SSOR) items are concerned, the variation limit of 25% would apply to the value of SSOR schedule(s) as a whole and not on individual SSOR items. However, in case of Non Standard Schedule of Rates (SSOR) items, the limit of 25% would apply onthe individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).
	As per Clause No. 42(2) Part-II of GGC-2022 with up to date correction slip
34.3	Valuation of Variations: The enlargements, extensions, diminution, reduction, alterations or additions referred to in Sub-Clause (2) of this Clause shall in no degree affect the validity of the contract; but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations and obligations as if they had been originally and expressively included and provided for in the Specifications and Drawings and the amounts to be paid therefor shall be calculated in accordance with the accepted Schedule of Rates. Any extra items/quantities of work
	falling outside the purview of the provisions of Sub-Clause (2) above shall be paid for at the rates

	detern	nined under Clause-39 of these Condition	ns.	
34.4	Rates instruct execute items n before t at least accepte payable Contrac In case settlem	for Extra Items of Works: Any items of the Engineer which is not include at the rates set forth in the "IR-USSO of contained in the latter, at the rate ago the execution of such items of work and a seven days before the necessity arises of Schedule of Rates does not include a for such items shall be decided at actor, in as short a period as possible after the Contractor fails to attend the meeting arrived at, the DFCCIL shall be	em of work carried out by the Contractor on the cluded in the accepted Schedules of Rates shall be DR" modified by the tender percentage, and for such greed upon between the Engineer and the Contractor the Contractors shall be bound to notify the Engineer is for the execution of such items of works that the rate or rates for the extra work involved. The rates the meeting to be held between the Engineer and in the need for the special item has come to the notice. In after being notified to do so or in the event of no be entitled to execute the extra works by other means or damage that may result from such procedure. The	
	assessment of rates for extra items shall be arrived at based on the prevailing rates and by taking guidance from the following documents in order of priority: (i) Analysis of Delhi Schedule of Rates issued by CPWD (ii) Analysis of Unified Schedule of Rates of Indian Railways.			
35.0	- ` ′	larket Analysis	TION IN CONTRACT QUANTITIES	
	I	ntract shall be considered "vitiated" only ue between tenderers are noticed to have Value of contract	when, the following percentage variation in contract been exceeded. Percentage difference bet. Present contractor and new L1 as a result of variation. (Percentage shall be calculated with base as the revised contract quantities multiplied by the rates of the present contractor).	
	1	Small value contracts (Tender value less than Rs. 50 lakh)	10	
	2	Other than small value contracts (Tender Value equal to or more than Rs. 50 lakh).	5	
35.1		nen the percentage difference between prond the values specified above, the follows:	resent Contractor and new L-1 is noticed as becoming owing action shall be taken.	
35.1.1	new a accord will b agence	agency to carry out the extra quantity of dance with the original contract and the re- tie no serious practical difficulty in meet y, then fresh tenders for the extra quanti- cisting contractor for arriving at a reason	tely examine whether it is practicable to bring in a f work keeping in view the progress of the work in nature and layout of the work. If it is found that there ing the additional quantity of work done by another ity maybe invited otherwise negotiating the rate with nable rate for the additional quantities of work, may	

The above shall be regulated as under:

- (a) 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.
- (b) These instructions will be similarly applicable to earning contracts with H-1, H-2 Substituted for L-1, L-2 and so on.
- (c) Executives while executing the work shall make all efforts to ensure that no Vitiation takes place in normal circumstances. Vitiation should be exceptions rather than a routine affair. Efforts should be made to invite bids on the basis of percentage above/below/at Par.
- (d) Vitiation 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 Vitiation.

36.0 <u>EXTENSION OF TIME WITH LIQUIDATED DAMAGE (LD)</u>: <u>FOR DELAY DUE TO</u> CONTRACTOR

The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the Contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in Clause 17 and 17-B, of Part-II of GCC APRIL-2022, with up to date correction slip the DFCCIL may, if satisfied that the works can be completed by the Contractor within reasonable short time thereafter, allow the Contractor for further extension of time as the Engineer may decide. On such extension the DFCCIL will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the Contractor as agreed damages and not by way of penalty for each week or part of the week, a sum calculated at the rate of Liquidated Damages as decided by Engineer, between 0.05% to 0.30% of contract value of the works for each week or part of the week.

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

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

NOTE:

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

As per Clause No. 17(B) Part-II of GCC APRIL-2022 with up to date correction slip

37.0	Quarterly Statement of Claims: The Contractor shall prepare and furnish to the Engineer once in
	every quarter commencing from the month following the month of issue of Letter of Acceptance,
	an account giving full and detailed particulars of all claims for any additional expenses to which the
	Contractor may consider himself entitled to and of all extra or additional works ordered by the
	Engineer which he has executed during the preceding quarter and no claim for payment for such
	work will be considered which has not been included in such particulars.
38.0	Settlement of disputes – Indian Railways Arbitration & Conciliation Rules
	(As per Clause 63 & 64 and its Sub Clauses GCC APRIL-2022 with up to date correction slip).
	Conciliation of Disputes:
	1. This clause is applicable in the tender having advertised value less than or equal to Rs 50 Crore.
	2. All disputes and differences of any kind whatsoever arising out of or in connection with the
	contract, whether during the progress of the work or after its completion and whether
	before or after the determination of the contract, shall be referred by the Contractor to the
	"Chief General Manager" or " General Manager/Co-ord" through "Notice of Dispute"
	provided that no such notice shall be served later than 30 days after the date of issue of
	Completion Certificate by the Engineer. Chief General Manager or General Manager/Co-
	ordshall, within 30 days after receipt of the Contractor's "Notice of Dispute", notify the
	name of conciliator(s) to the Contractor.
	3. The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent
	and impartial manner within the terms of contract.
	4. If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a
	written settlement agreement duly signed by Engineer In-charge, Contractor and
	conciliator(s). When the parties sign the settlement agreement, it shall be final and binding
	on the parties.
	5. The parties shall not initiate, during the conciliation proceedings, any arbitral or judicial
	proceedings in respect of a dispute that is the subject matter of the conciliation
	proceedings.
	6. The conciliation proceedings shall be terminated as per Section 76 of 'The Arbitration and
	Conciliation Act, 1996.
38.1	Matters Finally Determined by the DFCCIL:All disputes and differences of any kind
	whatsoever arising out of or in connection with the contract, whether during the progress of the
	work or after its completion and whether before or after the determination of the contract, shall be
	referred by the Contractor to the CGM/GM-Co-ord and the CGM/GM-Co-ord shall, within 120
	days after receipt of the Contractor's representation, make and notify decisions on all matters
	referred to by the Contractor in writing provided that matters for which provision has been made in
	Clauses 7(j), 8, 18, 22(5),39.1, 39.2, 40A,43(2), 45(i)(a), 55, 55-A(5), 57, 57A,61(1), 61(2),62(1),
	63(iv) and 63.2.11of the Standard General Conditions of Contract or in any Clause (stated as
	excepted matter) of the Special Conditions of the Contract, shall be deemed as 'excepted matters'
	(matters not arbitrable)and GCC April 2022 decisions of the DFCCIL authority, thereon shall be
	final and binding on the Contractor; provided further that 'excepted matters' shall stand specifically
	excluded from the purview of the Dispute Adjudication Board (DAB) and Arbitration.
39.0	All the Provisions as illustrated in clause 54 to 60 of GCC APRIL-2022, related to 'Labour' shall
39.0	have to be complied with, by the contractor.
	have to be complied with, by the confractor.

40.0

Accepted Program of Work: The Contractor who has been awarded the work shall as soon as possible but not later than 30 days after the date of receipt of the acceptance letter in respect of contracts with initial completion period of two years or less or not later than 90 days for other contracts have to submit the detailed program of work indicating the time schedule of various items of works in the form of Bar Chart/PERT/CPM. He shall also submit the details of organisation (in terms of labour and supervisors), plant and machinery that he intends to utilize (from time to time) for execution of the work within stipulated date of completion. The program of work amended as necessary by discussions with the Engineer, shall be treated as the agreed program of the work for the purpose of this contract and the Contractor shall endeavor to fulfill this program of work. The progress of work will be watched accordingly and the liquidated damages will be with reference to the overall completion date. Nothing stated herein shall preclude the Contractor in achieving earlier completion of item or whole of the works than indicated in the program.

In Contracts for works of New Line/Gauge Conversion/Doubling/Railway Electrification, finalized through Tenders having advertised value more than Rs.100 crores, the Contractor shall submit a detailed time programme to the Engineer within 30 days after issue of LOA. The program shall include the physical and Financial Progress vis-à-vis program and forecast cash flow adopting Project Management Software such as Primavera/Sure Track/MS Project etc. The program must identify the milestones, interface requirements and program reporting elements. The Contractor shall supply, free of cost one set of authorized software to the Engineer and the soft copy of structured program for the project. This shall be updated every month. The Contractor shall also submit a revised

programme whenever the previous programme is inconsistent with actual progress. Each programme shall include:

The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage, Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing, each of these stages for work by each Subcontractor, if any, the sequence and timing of inspections and tests specified in the Contract, and a supporting report which includes:

a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and details showing the Contractor's reasonable estimate for the number of each class of Contractor's Personnel & Equipment, required on the Site for each major stage.

Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Engineer shall be entitled to rely upon the programme when planning their activities.

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer within 15 days in accordance with this Sub-Clause.

As per Clause No. 19(3) Part-II of GCC APRIL-2022 with up to date correction slip

41.0	Commencement of Works : The Contractor shall commence the works within 15 days after the receipt by him of an order in writing to this effect from the Engineer and shall proceed with the same with due expedition and without delay. The Contractor shall establish a quality control mechanism before execution of the work,
	(i) Contractor shall submit a QAP "Quality Assurance Plan" for the scope of work to be executed. The QAP shall be submitted within 15 days of the issue of LoA and which shall be approved by the Engineer In charge. The QAP shall extensively include the organization, duties and responsibilities, procedures, inspections, documentation and quality control mechanism including sampling and testing of Materials, test frequencies, standards, acceptance criteria, testing facilities, reporting, recording and interpretation of test results, approvals, check list for site activities, and proforma for testing and calibration in accordance with the Specifications and Standards etc.
	(ii) Prior to the commencement of any construction activity, a method statement, proposed to be adopted for executing the Work shall be submitted to Engineer in Charge. The method statement shall include details of material acceptance, execution procedures, checks at various levels, quality parameters, equipment/ machineries, quality assurance, quality control measures, traffic management, inspection checklist, documentation and remedial works etc. As per Clause No. 19(2) Part-II of GCC APRIL-2022 with up to date correction slip
42.0	Workmanship and Testing: The whole of the works and/or supply of materials specified and
	provided in the contract or that may be necessary to be done in order to form and complete any part
	thereof shall be executed in the best and most substantial workman like manner with materials of
	the best and most approved quality of their respective kinds, agreeable to the particulars contained
	in or implied by the specifications and as referred to in and represented by the drawings or in such
	other additional particulars, instructions and drawings given during the carrying on of the works
	and to the entire satisfaction of the Engineer according to the instructions and directions which the
	Contractors may from time to time receive from the Engineer. The materials may be subjected to
	tests by means of such machines, instruments and appliances as the Engineer may direct and wholly
	at the expense of the Contractor
43.0	As per Clause No. 27(1) Part-II of GCC APRIL-2022 with up to date correction slip
43.0	A. Improvement of Quality in Constructions works – Regarding submission of invoices of materials, the provision of Clause 51 A of GCC is reproduced below:-
	(i) For a contract of more than one crore of rupees, the Contractor shall, whenever required,
	produce or cause to be produced for examination by the Engineer any quotation, invoice, cost or
	other account, book of accounts, voucher, receipt, letter, memorandum, paper of writing or any
	copy of or extract from any such document and also furnish information and returns verified in
	such manner as may be required in any way relating to the execution of this contract or relevant for
	verifying or ascertaining cost of execution of this contract (the decision of the Engineer on the
	question of relevancy of any documents, information or return being final and binding in the
	parties). The Contractor shall similarly produce vouchers etc., if required to prove to the Engineer,
	that materials supplied by him, are in accordance with the specifications laid down in the contract.
	(ii) If any portion of the work in a contract of value more than one crore of rupees be carried out by
	a sub-contractor or any subsidiary or allied firm or company (as per Clause 7 of the Standard
	General Conditions of Contract), the Engineer shall have power to secure the books of such sub-
	contract or any subsidiary or allied firm or company, through the Contractor, and such books shall
	be open to his inspection.
	(iii) The obligation imposed by Sub Clause (i) &(ii) above is without prejudice to the obligations
1	of the Contractor under any statue rules or orders binding on the Contractor.

(Authority: Rly Bd's letter No.2021/CE-I/CT/SI/1 dated 04.03.2021)
(As per Clause No. 51-A of Part-II GCC-2022, with up to date correction slip)

B. Post Payment Audit: It is an agreed term of contract that the DFCCIL reserves to itself the right to carry out a post-payment audit and/ or technical examination of the works and the Final Bill including all supporting vouchers, abstracts etc. and to make a claim on the Contractor for the refund of any excess amount paid to him till the release of security deposit or settlement of claims, whichever is later, if as a result of such examination any over-payment to him is discovered to have been made in respect of any works done or alleged to have been done by him under the contract.

44.0 **Infringement of patents:**

The Contractor is forbidden to use any patents or registered drawings, process or pattern in fulfilling his contract without the previous consent in writing of the owner of such patent, drawing pattern or trade mark, except where these are specified by the Employer himself. Royalties where payable for the use of such patented processes, registered drawings of patterns shall be borne exclusively by the Contractor. The contractor shall advise the Employer of any proprietary right that may exist on such processed drawings or patterns which he may use of his own accord.

In the case of patent taken out by the Contractor of the drawings or patterns registered by him, or of those patents, drawings, or patents for which he holds a license, the signing of the Contract automatically gives the Employer the right to repair by himself the purchased articles covered by the patent or by any person or body chosen by him and to obtain from any sources he desires the component parts required by him in carrying out the repair work. In the event of infringement of any patent rights due to above action of the Employer, he shall be entitled to claim damages from the contractor on the grounds of any loss of any nature which he may suffer e.g. in the case of attachment because of counter feiting.

Indemnification by contractor:- In the event of any claim or demand being made or action being brought against the Employer for infringement of later patent in respect of any equipment, machine, plant, work or thing used or supplied by the Contractor under this contract or in respect of any methods of using or working by the Employer of such equipment machine, plant work or thing, the contractor shall indemnify the employer and keep him indemnified and harmless against all claims, costs, charges and expenses arising from or incurred by reason of such claim provided that the Employer shall notify the contractor immediately any claim is made and that the contractor shall be at liberty, if he so desires with the assistance of the Employer if required but at the Contractor's expense, to conduct all negotiations for the settlement of the same or any litigation that may arise there from and provided that no such equipment, machine, plant work or thing, shall be used by the Employer for any purpose or in any manner other than that for which they have been supplied by the Contractor and specified under this contract.

45.0 **Insurance (CAR Policy)-**

Before commencing of works, it shall be obligatory for the contractor to obtain, at his own cost, insurance cover (CAR policy) in the joint name of the contractor and employer from reputed companies under the following requirements:

- (A) Liability for death of or injury to any person/ employer's staff / animals or things or loss of or damage to any property / things / the work of other contractor (other than the work) arising out of the performance of the Contract.
- (B) Construction Plant, Machinery and equipment brought to site by the Contractor.
- (C) Any other insurance cover as may be required by the law of the land.

The contractor shall provide evidence to the employer / Engineer before commencement of work

at site that the insurances required under the contract have been effected and shall within 60 days of the commencement date, provide the insurance policies to the Employer/Engineer, the contractor shall, whenever, called upon, produce to the engineer or his representative the evidence of payment of premiums paid by him to ensure that the policies indeed continue to be in force.

The Contractor shall also obtain any additional insurance cover as per the requirements of the Contract.

The Employer/Engineer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or his subcontractor or petty contractor / other contractor working there.

The Contractor shall indemnify and keep indemnified the employer / Engineer against all such damages and compensation for which the contractor is liable.

The Policies of the contractor shall remain in force throughout the period of execution of the works and till the expiry of the defect liability period except for any specific insurance covers necessary for shorter period.

If the Contractor fails to effect or keep in force or provide adequate cover as acceptable to the engineer in the insurance policies mentioned above, then in such cases, the engineer may effect and keep in force any such insurance or further insurance on behalf of the Contactor. The recovery shall be made at the rate of 1.5 times the premium/premiums paid by the engineer in this regard from the payment due to the Contractor or from the contractor's Performance security. However, the Contractor shall not be absolved from his responsibility and /or liability in this regard.

46.0 Accident:-

- (a) The contractor shall, in respect of all staff engaged by him or by his sub-contractor, indemnify and keep the employer at all times indemnified and protected against all claims made and liabilities incurred under Workman's Compensation Act, the Factories Act and the Payment of Wages Act, and rules made there under from time to time or under any other labour and Industrial Legislation made from time to time.
- (b) The contractor shall indemnify and keep the employer indemnified and harmless against all actions, suits, claim demands, costs, charges or expenses arising in connection with any death or injury sustained by any person or persons sustained due to the acts or omission of the contractor, his sub-contractors, his agents or his staff during the executions of this contract irrespective of whether such liability arises under the Workman's Compensation Act, or Fatal Accident Act or any other statute in force for the time being.
- (c) The contractor' liability to meet third party claims of the type outlined above will be applicable only in cases where accidents have been caused by workmanship, material, execution or negligence on the part of the contractor.
- (d) The contractor shall be responsible for all repairs and rectification of damages to completed works or works under execution due to DFCCIL accidents, thefts, pilferage or any other cause, without delay to minimize or to avoid traffic detentions, in a section until the installation are provisionally handed over to the employer.

47.0	GST
	GST as applicable from time to time on taxable value of each running account bill shall be paid by Contractor. Tenderer should bear the fact in mind while quoting the rates that GST will be paid by Contractor as per prevailing rate as applicable. Documentary evidence of deposition of GST will be produced by contractor for on account bill.
48.0	PERMITS, FEES, TAXES &ROYALTIES
	Unless otherwise provided in the contract documents, the contractor shall secure and pay for all permits, Government fees and licenses necessary for the execution and completion of the works. The contractor shall pay all taxes and duties.
	The DFCCIL authorities will not take any responsibility of refund of such taxes/fees. Any violation, in the legal provision of taxes, duties, permits and fees, carried out by the Contractor and detected subsequently shall be sole responsibility of the Contractor and his legal heirs.
49.0	STATUTORY INCREASE IN DUTIES, TAXES ETC.
	Tenderers will examine the various provisions of the central Goods and services Tax Act, 2017 (CGST)/ Integrated goods and service tax Act, 2017 (IGST)/ Union Territory Goods and services tax Act, 2017/(UTGST)/respective state's state Goods and services tax Act (SGST) also, as notified by central/state Govt & as amended from time to time and applicable taxes before bidding. Tenders will ensure that full benefit of input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.
	All the taxes and duties levied by the State and Central Govt. and by Local Bodies at the prevailing rates applicable on the date of receipt of tender shall be fully borne by the Contractor and shall not be reimbursed to him on any account. The tender shall be inclusive of all taxes levies as mentioned in 1.7above.
	Further DFCCIL shall not honour any claim arising out of any increase in any of the prevailing statutory duties, taxes, levies, octroi, etc. At the time of quoting/bidding contractor should bear the above fact in mind. The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to DFCCIL immediately after the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to the concerned authority.
50.0	EXCISE DUTY OR ANY OTHERTAXES/DUTIES:
	The contractor shall bear full taxes /duties levied by state government and / or Central Government/ Local bodies from time to time. This would be entirely a matter between the contractor and the State / Central Government/ Local bodies. No claim, what so ever, on this account shall be entertained by DFCCIL.
51.0	ROAD TAXCHARGES:
	Road Tax/Charges levied by Government for movement of vehicles of contractor, used in transportation, shall be borne by the contractor and no re-imbursement on this account will be made by the DFCCIL.
	FOREIGN EXCHANGE REQUIREMENTS:
52.0	Any demand of foreign exchange for importing of equipment's and materials shall not be accepted.

	ANTI PROFITEERING CLAUSE: - The contractor should adhere to anti profiteering provisions as per section 171 of the CC	GST Act.		
53.0	Where due to change in the rates GST/Change in law, the contractor gets any credits/ben			
	same shall be passed on to DFCCIL by way of reduction in prices.	,		
54.0	INTEGRITYPACT:-			
	As per office memorandum no F.No DPE/13(12)/11-Fin Dated 09.09.2011 issued by Ministry of			
	Heavy Industries (DPE) all PSU should enter into Integrity pact in the required proforma in their			
	procurement transaction/ Contracts with suitable changes specific to the situation in which the pact			
	is to be used. The pact, entering into which would be a preliminary qualification for an	y bidder,		
	essentially envisages an agreement between the prospective vendors / bidders and the I			
	committing the persons/ officials on both sides not to resort to any corrupt practices in any	_		
	stage of the contract. A copy of pre contract integrity pact is enclosed as form no 4 for sig	nature of		
	bidder as acceptance, as and when Independent External monitor is appointed.			
55.0	TOOLS-			
	Tools required for this work will be arranged by the contractor. a. All the tools and plants as required to execute the work will be arranged by contract	tor at his		
	cost and nothing extra shall be paid on this account.	tor at ms		
	b. The contractor will ensure reconditioning / repair of the tools and plants at his own cos			
	them fit for use. He will repair the worn out tools at his own cost and nothing extra will be paid			
	on this account.			
	c. The contractor should ensure that labour on work removes their tools clear of the track on the			
	approach of the train. After the day's work the contractor should secure tools in pro-	approach of the train. After the day's work the contractor should secure tools in proper tool		
	boxes and in no case the labour be permitted to take tools to their homes. Tools shou	ld not be		
		allowed to fall in unwanted hands who can tamper with the Railway/DFCCIL track.		
	In the event of accident at the work site the departmental enquiry will be held and in case it is			
	established that derailment/accident has occurred on account of the contractor's negligence or			
56.0	the negligence of his men, damages as mentioned in the clause of penalty will be recov PENALTY –	erea.		
30.0		in case it i		
	established that derailment/accident has occurred on account of the contractor's ne	(a) In the event of accident at the work site the departmental enquiry will be held and in case it is		
	or the negligence of his men, damages at the following rates will be recovered from			
	contractor: -			
	Accident involving use of accident Relief train = Rs.50000/-			
	Nominal accident not involving use of accident relief train Rs. 10000/-			
	Tronmar accident not involving use of accident rener train Rs. 10000/			
	(b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat	isfactory		
	(b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions:	isfactory		
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. 	isfactory		
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. Discourteous behavior towards any officer or staff of DFCCIL. 	isfactory		
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. Discourteous behavior towards any officer or staff of DFCCIL. Not wearing proper Safety PPE Kit. 	·		
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. Discourteous behavior towards any officer or staff of DFCCIL. Not wearing proper Safety PPE Kit. Not carrying out the duties listed in the scope of work in a satisfactory Manner 			
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. Discourteous behavior towards any officer or staff of DFCCIL. Not wearing proper Safety PPE Kit. Not carrying out the duties listed in the scope of work in a satisfactory Manner Damage or stealing of any asset or property of DFCCIL or officers and staff of 			
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. Discourteous behavior towards any officer or staff of DFCCIL. Not wearing proper Safety PPE Kit. Not carrying out the duties listed in the scope of work in a satisfactory Manner Damage or stealing of any asset or property of DFCCIL or officers and staff of (c) Penalty for some of the breaches in services will be as follows: - 			
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. Discourteous behavior towards any officer or staff of DFCCIL. Not wearing proper Safety PPE Kit. Not carrying out the duties listed in the scope of work in a satisfactory Manner Damage or stealing of any asset or property of DFCCIL or officers and staff of (c) Penalty for some of the breaches in services will be as follows: - S.N Type of breaches Amount of Penalty 			
	 (b) Penalty for an amount of Rs. 500/- to Rs.2000/- depending on the nature of unsat service, will be deducted from the due amount in the following conditions: Any undisciplined behavior by the staff. Discourteous behavior towards any officer or staff of DFCCIL. Not wearing proper Safety PPE Kit. Not carrying out the duties listed in the scope of work in a satisfactory Manner Damage or stealing of any asset or property of DFCCIL or officers and staff of (c) Penalty for some of the breaches in services will be as follows: - 	FDFCCIL		

	Failure to provide replacement
	Rs.100/- per staff per day
57.0	WORKING HOURS OF PERSONS/ SUPERVISOR :-
	Contractor shall provide the staff on all days of the months. The working hours of workman shall
	be 8 hrs in 24 hours or as specified in the schedule, However, timings may be advised without any
70.0	overall impact on the period of duty as per DFCCIL requirement.
58.0	DFCCIL not to Provide Quarters for Contractors: No quarters shall normally be provided by the
	Railway for the accommodation of the Contractor or any of his staff employed on the work. In exceptional cases where accommodation is provided to the Contractor at the Railway's discretion,
	recoveries shall be made at such rates as may be fixed by the Railway for the full rent of the
	buildings and equipments therein as well as charges for electric current, water supply and
	conservancy.
	In case the services of the Contractor are not found satisfactory, or there is a breach of any of the
59.0	terms & conditions of the contract and/or fails/neglects to carry out any instruction issued to it by
	DFCCIL from time to time the same can be terminated by DFCCIL on giving of a notice of one
	month. In case of unsatisfactory performance of the contract, a warning letter will be issued to the
	Contractor. In case corrective action is not taken, DFCCIL shall have the right to terminate the
	agreement without any further notice. Unsatisfactory service in this case would be frequent absence or poor attendance of workman, inability to provide replacement, lackadaisical work in
	maintaining cleanliness, indiscipline in the premises (which includes taking alcohol, using foul
	language, getting involved in objectionable activities, etc.) or any other non-compliance of the
	provisions of the Agreement.
	The Contractor shall not terminate the services of hired staff unilaterally. In case any hired staff is
	proposed to be replaced/ terminated by the Contractor, such action should be taken only with
	approval of DFCCIL.
60.0	SITE OFFICE:- (NOT APPLICABLE)
	The Contractor shall establish the camp office at site and keep on the works at all times efficient
	and competent staff to give the necessary directions to his workmen and to see that they execute
	their work in sound proper manner and shall employ only such supervisors, workmen & laborers
	in or about the execution of any of these works as are careful and skilled in the various trades. The
	Camp office shall be completely equipped for office working with provision of sufficient T&Ps,
	Office Equipment, accessories including advance version of PCs, printer, Fax, mail, phone etc and also with facilities like sitting, drinking water etc. The area of the office and facilities required
	must be sufficient enough to ensure effective office working at site office itself without any
	difficulties and issues. Suitable site on railway land, if conveniently available, may be allowed to
	the contractor for setting up the site office, site laboratory, either free of charge or on such terms
	and conditions that may be prescribed by DFCCIL.

SPECIAL CONDITIONS OF CONTRACT (SAFETY PRECAUTIONS)

PART-V

SPECIAL CONDITIONS OF CONTRACT (SAFETY PRECAUTIONS)

1.0	MEASURES TO BE ENSURED PRIOR TO START OF WORK
1.1	The contractor shall not start any work without the presence of DFCCIL supervisors at site.
1.2	The methodology in detail for execution of the work at site shall be approved by engineering in charge of the organization executing the work and copies of the same shall be available with contractor's supervisor, DFCCIL supervisor of the section in whose jurisdiction the work falls.
1.3	Before permitting the execution of certain works like earthwork in formation, bridge work, supply of ballast, transportation of rails, sleepers and other material, track linking, platform/any other civil work close to the running track etc. for new/existing rail lines, gauge conversion, doubling, traffic facility work, ROB/RUB, DFCCIL engineer-in-charge (APM/DPM/PM/Dy. CPM) of the section shall ensure that he received the prior intimation/confirmation of the following aspects from representative of contractor.
1.4	Name and address of the contract assigned to execute the work.
(i)	Name of the Contractor's supervisor
(ii)	Name of the supervisor/assistant engineer/assistant officer of the construction organization/other organizations who are going to be site in charge/in charge of work site.
(iii)	List of the number(s) of individual vehicle(s)/ machineries, names and license particulars of the driver(s) proposed to be used by contractor.
(iv)	Information regarding location, duration and timings during which the vehicles/machinery are planned to be plied/worked.
(v)	The supervisors and operators of the contractor proposed to be deployed at work site which is close to the running track, shall be imparted training by the DFCCIL trainer at contractor own cost about the safety measures to be adopted while working in the vicinity of running track. Further competency certificate to the individual supervisors/operator shall be issued as in Annexure-A by a DFCCIL officer not below the rank of Assistant level officer who is in charge of site. No supervisor/operator of the contractor shall work or allowed to work in the vicinity of running track who is not possession of valid competent certificate.
(vi)	Survey of site by supervisor of contractor and DFCCIL to assess the precautions to be taken at site for working of trains and materials required for protection.
(vii)	Written advice to sectional APM/DPM about the detailed planning of work including protection of track and safety measures proposed to be adopted.
(viii)	A copy of the approved methodology (to be approved by engineer in charge) proposed to be adapted by the contractor with a view to ensure safety of trains passengers and workers.
(ix)	Assurance that the methods and arrangements are actually available at site before start of the work and the contractors supervisors and the workers have clearly understood the safety aspects and requirement to be adapted/followed while executing the work.
(x)	An assurance register has been kept at site duly signed by both DFCCIL supervisor as well as by the contractor supervisor as a token of their having understood the safety precautions to be observed at site.
(xi)	No work shall which is to be done near running track shall commence unless permitted by sectional APM/DPM/PM/Dy.CPM
(xii)	Supplementary site specific instructions, wherever considered necessary shall be issued by the Engineer in Charge

(xiii)	Standard Check list on Safety at Work Sites shall be used to ensure that all the requisite measures have
	been taken before start of work.
2.0	PLYING OF ROAD VEHICLES AND WORKING OF MACHINERIES CLOSE TO RUNNING
	<u>TRACKS</u>
(i)	Normally, the road vehicles shall be run or machinery shall be worked so as not to come closer
	than 6.0 m from center 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 DFCCIL'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 center line of track.
b.	Demarcation of land shall be done by bright colored ribbon/nylon cord suspended on 120 cm high
0.	wooden/bamboo posts at distance of 3.5 m from center line of nearest running track.
c.	Presence of an authorized DFCCIL's representative shall be ensured before plying of vehicle or
.	working of machinery.
d.	DFCCIL'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. Lookout
	man shall be deputed for Safety at Work Sites.
f.	On curves where visibility is poor, additional lookout men shall be posted.
(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
1	protected as per provisions of Para No. 806 & 807 of P-Way Manual as case may be.
b.	Presence of a DFCCIL's Supervisor shall be ensured at worksite.
c.	DFCCIL'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.
(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 DFCCIL's
	representative. The road vehicle driver shall always face the DFCCIL track during the course of
	turning/reversing his vehicle. Presence of an authorized DFCCIL 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 DECCII's representative and where adequate lighting arrangements are made and where
	authorized DFCCIL'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
(vII)	read remotes/machinery/plant etc. when stabled hear fullning tracks shall be properly secured against

	any possible roll off and always be manned even during off hours.
3.0	EXECUTION OF WORKS CLOSE TO OR ON RUNNING LINES Any work close to or on running tracks shall be executed under the presence of a DFCCIL's Supervisor only.
(i)	Precaution to be taken to ensure safety of trains while execution of work close to the running line or on running lines.
(a)	Contractor has deputed trained supervisors in required number at worksites duly certified by APM/DPM/PM/Dy. CPM in charge of the works.
(b)	Drivers of vehicle/operators of the machines have been briefed about the safety and precautions to be taken while moving / working close to traffic.
(c)	Contractor shall ply road vehicles/working of machinery only between sunset and sunrise. In case of emergency where it is necessary to work during night hours sufficient lighting shall be ensured in the complete work area for the safety of public and passengers. Also additional staff shall be posted as necessary for night working and taking safety precautions.
(d)	The contractor shall not change the approved vehicle/machinery and driver/operator for working at site. Contractor shall not induct any new vehicle/machinery and driver/operator without prior written approval of APM/DPM and the list of such changes with numbers of individual vehicle, name and license particulars of the driver shall be given to APM/DPM/PM/Dy. CPM of the section.
(e)	Contractor shall ensure that road vehicle/machinery ply/work in a way so that these do not infringe the line of demonstration.
(f)	Lookout men with required safety equipment shall be posted where necessary.
(g)	In unusual circumstances, where operator apprehends danger to track while working truck/machinery near running track, following action shall be taken.
a)	The contractor/supervisor/vehicle operator immediately advice the situation to DFCCIL official/officials of the organization executing the work and assist him/them in protecting the track.
b)	Protection shall be done as done for other emergencies
(h)	Individual vehicle/machinery shall not be left unattended at site of work. If it is unavoidable and becomes necessary to stable the road vehicle/machinery at site near the running track, these shall be properly secured against any possible roll off and always be manned even during non-working hours. In addition the road vehicle / machinery should be stabled parallel to track only so that incase of failure of any securing arrangement, it may not roll towards the track.
(i)	All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimensions do not infringe. Necessary checks shall be exercised by site in charge from time to time.
(j)	During the hours of night, lamps of temporary indicators which are not of reflective type should be lit at sun-set and kept burning till sun rise, where trains run at night.
(ii)	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.
(iii)	Precaution to be taken during execution of works requiring traffic blocks.
a)	Any work, which infringes the moving dimensions or causes discontinuity in the track any activity making the existing track unsafe for passage of trains etc. Shall be started only after the traffic block has been imposed, DFCCIL servant in charge of the work is present at the worksite, engineering signals are exhibited at specified distance and flagmen are posted with necessary equipment to man them etc
b)	Before closing the work, the track shall be left with the proper track geometry so that the trains run safely and flagmen are kept in the night with safety and track protection equipment to patrol the stretch and take action to protect the track, if so warranted and inform the DFCCIL supervisors.
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 etc. have been kept clear of moving dimensions.
(iv)	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.
(v)	Precautions to be taken to ensure safety of workers while working close to running lines.
a)	Any work close to or on running tracks shall be executed under the presence of a DFCCIL's supervisor only.
b)	Precaution to be taken to ensure safety of trains while execution of work close to the running line or on running lines.
	 (i) 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. (ii) All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimension do not infringe. (iii) Suitable speed restriction shall be imposed or Traffic block shall be ensured as required. (iv) The site shall be protected as per provisions of Para No. 806 & 807 of P.Way Manual as case may be.
	(v) Necessary equipment for safety of trains during emergency shall be kept ready at site.
c)	A 'first aid kit' shall always be kept ready at site.
(vi)	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.
(vii)	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.

	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 DFCCIL's representative and contractor's
	representative.
b)	The selected locations shall be marked by lime in advance.
c)	Presence of an authorized DFCCIL'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.
(viii)	Precaution for handling of departmental material trains Instructions for working of material trains
	are contained in Chapter XII of IRPWM which should be brought to the notice of the supervisors and
	other staff working on the material trains. In addition to this, following precautions should be taken:
(a)	Issue of 'fit to run' certificate. As per Para 1207 before a material train is allowed to work, the complete
	rake should be examined by the Carriage and Wagon staff and a 'fit to run' certificate issued to the
	Guard.
(b)	As per Para 1208 of IRPWM, a qualified Engineering official should be deputed on thetrain to ensure
	working of the material train as the Guard is not qualified to carry out such duties like Supervising of
	loading and unloading of materials.
(c)	As per Para 1204 of IRPWM, the material train should not be permitted to work during the period of
	poor visibility due to fog, storm or any other cause except with the permission of the
	APM/DPM/PM/Dy. CPM. Working of the material trains carrying labour should not be permitted
(-1)	between sunset and sunrise except in an emergency. While unloading rail panels by the side of the running track, placement of the panels, clear of the
(d)	maximum moving dimensions should be ensured.
(e)	Unloading of rail panels should be done by a team of trained staff under the active supervision of
(6)	competent Supervisor/Officer.
(f)	Before unloading of rail panels, site should be prepared by way of leveling/removing extra ballast, if any,
(-)	from the crib and shoulder with the objective to ensure requisite lateral and vertical clearances so as to
	prevent slippage of rail panels due to vibration during the passage of trains.
(g)	Reasonably adequate block should be asked and provided for unloading of the material and the work
	should be done preferably in day light to avoid shortcut in haste which may infringe the safety
	requirements.
(ix)	SAFETY ASPECTS TO BE OBSERVED WHILE WORKING IN OHE AREA
(a)	No electrical work close to running track shall be carried out without permission of DFCCIL
	representative.
(b)	A minimum distance of 2m has to be maintained between live OHE wire andbody part of worker or tools
	or metallic supports etc.
(c)	No electric connection etc. can be tapped from OHE.
(d)	Authorized OHE staff should invariably be present when the relaying work or any major work is carried
()	out.
(e)	Power block is correctly taken and 'permit to work' is issued.
(f)	The structure bonds, track bonds, cross bonds, longitudinal rail bonds are not disturbed and
(g)	If disconnected for the work, they are reconnected properly when the work is completed.
(h)	The track level is not raised beyond the permissible limit during the work.
4.0	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 DFCCIL
	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 after which he shall further proceed for not less than 1200m from the place of obstruction
	from BG 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 DFCCIL 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 to be taken if more than one track is obstructed.
a)	In case of single line protection as above shall be done in both the directions from place of danger.
b)	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.
c)	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.
	DFCCIL will arrange to provide detonators, whereas Contractor shall arrange other equipment at his own
	cost.
(v)	Arrangement of lookout men and competency required for lookout man to warn labour about
<u>a)</u>	approaching train. Contractor will provide lookout men
a) b)	The lookout men shall be properly trained in warning to staff at worksite about approaching train.
c)	Only those lookout men shall be provided at site who have been issued with a competency certificate by
	the DFCCIL's Supervisor.
d)	In case, it is felt necessary to provide lookout men by DFCCIL, the charges for the same as fixed by
u)	DFCCIL Administration shall be recovered from Contractor.
5.0	TRAINING TO SUPERVISORS AND OPERATORS OF CONTRACTOR
	The Supervisors and Operators of the contractor proposed to be deployed at wok site, which is close
	to the running track, shall be imparted mandatory training by the DFCCIL at site free of cost about
	the safety measures to be adopted while working in the vicinity of running track. Engineer-in
	charge of the work shall decide the scale, extent & adequacy of training. In case training is imparted
	at a recognized DFCCIL training institute, the charges for the same, as decided by DFCCIL, shall be
	recovered from contractor. A competency certificate to this effect to the individual Supervisor/
	Operator shall be issued as given below by a DFCCIL Officer not below the rank of Project
	Manager. No Supervisor/Operator of the Contractor shall work or 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
	DFCCIL, charges at the rate of Rs. 500/- per man day shall be recovered from Contractor.
6.0	SPECIAL CONDITIONS FOR WORKING OF ROAD CRANES
	To ensure safe working of road cranes used in works in connection with provision of
	ROB/RUB/Subways, following items shall invariable be ensured before putting the cranes to use:-
	(i) 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.
	(ii) The contractor shall ensure that a valid Certificate of Fitness is available before use of Road
	Cranes.
	(iii) Contractors should utilize the services of any competent person as defined in Factories Act,
	1948 and approved by Chief Inspector of Factories.
	(iv) 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.
	(v) 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.
7.0	Contractor shall indemnify DFCCIL against any loss/damage to public property, travelling
7.0	public, DFCCIL or his own staff due to his (contractor's) negligence. In case there is any mishap, a fact
	finding inquiry will be conducted by DFCCIL. A show cause notice will be issued to the contractor, in
	case he is prima-facie held responsible. Contractor's reply to show cause notice will be considered by the
	Engineer in Charge before taking final decision. In case contractor is found responsible for the mishap,
	recovery from him will be affected for only tangible direct losses.
	Competency Certificate
	Certified that Shri Supervisor/Operator of M/s.
	has been trained and examined in safety measures to be
	followed while working in the vicinity of running DFCCIL track for the work
	. His knowledge has been found satisfactory and he is capable of
	supervising the work safely.
	This certificate is valid only for the work mentioned in this certificate only.
	-y ··y ·
	Signature and designation of the officer
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SPECIAL CONDITIONS OF CONTRACT (TECHNICAL)

PART-VI

	SPECIAL CONDITIONS OF CONTRACT (TECHNICAL)
	TECHNICAL CONDITIONS
1.	Execution of Joints at Site
	Technique for welding: Welding techniques approved provisionally or for regular adoption by Railway Board/RDSO should only be adopted for welding of rails. For details of approved welding techniques and vendors. Master list of approved vendors issued biannually by Quality Assurance (Civil) Dte of RDSO may be referred. Significant advancements have taken place in pre-heating techniques, type of moulds, type of crucibles and process automation in the field of A.T. Welding. These advancements offer significant benefits in terms of service life of A.T. welds. In order to absorb these technological advancements, use of compressed air-petrol or better pre heating, single shot crucible, automatic tapping of molten metal and three piecemoulds shall be increasingly used for rails of 52Kg and higher sectional weight with 90UTS and higher grades. Air-petrol pre heating with manual pressurization and/or manual tapping of molten metal and/or use of two piece moulds shall be phased out for such rails.
2	Training and certification of welders:
	Training and Certification of welders/Supervisors of labour contracting firms shall be done by RDSO as per provisions of IRST-19-2021, Specifications for Fusion Welding of Rails by Alumino Thermic Process.
3.	Equipment, staff and Traffic block for welding
	The list for one set of A.T. welding equipment by short pre-heating process is given in Annexure 2. The composition of thermit welding team is given in Annexure 3. A minimum traffic block of 70-75 minute duration, depending upon the type of preheating technique adopted, should be obtained for complete operation of welding of first joint and to ensure good quality of A.T. weld.
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 50 mm 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.
	Normally, no alumino-thermic welded joint shall be located closer than 4 m from any other welded or fish plated joint.
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 for the particular welding technique. The uniformity and verticality of the gap shall be measured by a gauge prior to welding. In case of wide gap $50\pm1/75\pm1$ 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 and approved design should be used for maintaining correct rail gap during welding.
6	Preliminary work prior to welding

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.
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.
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:
7.1	Lateral alignment
7.1.1	The two rail ends, after alignment shall be within +0.5 mm when checked with a 1.0 m straight edge at rail ends [Fig. 4.7.1.1 (a) & (b)] 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.
7.1.2	Vertical alignment The joint shall be kept higher by 3 to 4 mm for 72 UTS rails and 2 to 2.4 mm for higher UTS rails when measured at the end of 1.0m straight edge (as a compensation against sagging caused by differential shrinkage on cooling) (Fig. 4.7.1.2). This shall be achieved by wedges applied on the rail supporting blocks on both sides of the joint.
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.
8	Fixing of mould
8.1	Only prefabricated moulds 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 carbon dioxide gas. The prefabricated moulds shall have adequate permeability for escape of mould gases and adequate reinforcement to avoid mould crushing during transportation and welding.
8.1.1	Three piecemoulds supplied by A.T. portion manufacturer shall conform to 'Specification of 3 piece Pre-fabricated mould manufactured by A.T. portion manufacturers for use during A.T. welding rails given at Annexure 3 of IRS: T-19-2021."
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.
8.3	During fixing the moulds, it shall be ensured that the center line of the rail gap coincides with the center 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. In case of three piecemoulds, care should taken to ensure proper fixing of bottom plate to avoid formation of fin at the edges of bottom flanges of weld.
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.
9	Preheating
9.1	After fixing and luting of the moulds, the rail ends shall be uniformly pre-heated throughout the rail section with specially designed air petrol/compressed air petrol/Oxygen-LPG bumer 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+20° C.
9.2	In welding process using Air petrol burner, the compressor tank pressure during operation of the burner shall be maintained at 7+0.70 kg/cm² (100±10 lb per sq in). For A.T. welding with compressed Air-petrol pre-heating technique, the Air pressure. during operation of the preheating equipment, should be in the range of 0.2 to 0.3 Kg/cm². 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 pre-heating 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 stopped first followed by LPG supply. The burner shall be properly adjusted during preheating to ensure that the head, web and foot of both rail ends are heated uniformly.
9.3	Preheating time: Preheating time would be about 10 to 12 minutes, 4.0 to 4.5 minutes and 2.0 to 2.5 minutes for Air-petrol, compressed Air-petrol and Oxy-LPG preheating techniques respectively. The actual preheating time would depend upon the rail section and welding technique adopted.
9.4	Special emphasis shall be given to the tank pressure, efficiency of burner and 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 pyrometer, contact type pyrometer or temperature indicating crayons may be used for measuring rail end temperature just after completion of preheating ie, after removal of burner.
10	Welding
10.1	The crucible lined with refractory material (magnesite / 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.
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.
10.3	The 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 50 mm between the tap hole and sand core/top of the pouring gate.

10.4

After pre-heating the rail joint, the sparkler shall be ignited and 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, In case of manual tapping, the time period between removal of burner and tapping of metal should be as minimum as possible. After the reaction subsides, about three 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 when manual tapping of molten metal is employed. Thereafter, the molten steel shall be 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 specified. In case of automatic tapping of molten metal, these aspects are taken care of automatically 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 outtapped. 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 afresh. However, if temperature can be measured, the rail ends may be heated to an extent so as to achieve temperature of about 600+20° C and welding of joint may be completed.

10.5

After pouring, molten metal shall be allowed to cool and solidify with mould intact for 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 to completion of mould waiting time. The mould waiting time is generally four to six minutes for 25 mm gap joints and 12 minutes for 75 mm gap joints. After the mould waiting time has elapsed, the trimming should be done by using weld trimmer of suitable and approved design without knocking out the mould. List of approved suppliers of weld trimmers and rail profile weld grinders as on 22-12-2003 is given at Annexure-4. For current status of firms borne on approved list of Railway Board for small track machines, the latest list circulated by Railway Board may be referred to.

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.

10.6

During the trimning 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 and riser must not be removed until cold, and that too only by knocking towards the rail.

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.

NOTE

For upgraded A.T. Welding Techniques approved in terms of Part E of IRS:T:19:2021, the parameters such as preheating time, pressure, type of moulds, crucibles, tapping system etc. shall be mentioned in the approval letter issued by RDSO. These shall be ensured while welding.

10A **Operations subsequent to welding**

10A.1 Post weld cooling

10A.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) 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. (Applicable for HH Rail in this tender)

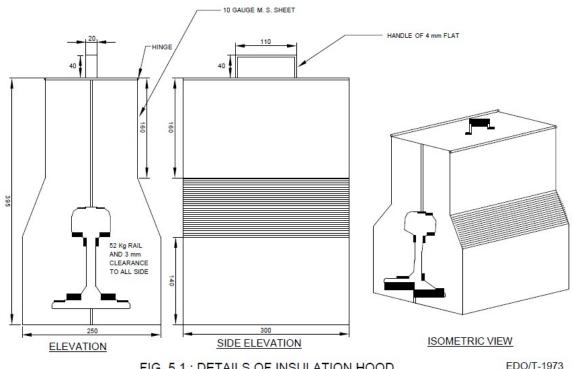


FIG. 5.1: DETAILS OF INSULATION HOOD ALL DIMENSIONS ARE IN MILLIMETRES

EDO/T-1973

10A.1.2 In case of welding of head hardened 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 hardened rails, therefore, must be subjected to controlled quenching for a specific time by the arrangement approved for the technique.

10A.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 para 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.
	10A.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.
11	Grinding
	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 refixed, after the removal of wedges. The rail table shall first be ground down to original profile and checked by a one metre straight edge. This should be followed by grinding of the sides of the 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.
12	Tolerances on finished welds:
	All the finished joints shall be checked to ensure that the joint geometry is within the following tolerances:
12.1	Vertical alignment :- Variation not more than +1.0mm, -0.0mm measured at the end of one metre straight edge.
12.2	Lateral alignment :- Variation not more than +0.5mm measured at centre of one metre straight edge.
12.3	Finishing of top surface:-+0.4 mm, -0.0mm measured at the end of 10cm straight edge
12.4	Head finishing on sides:- + 0.3 mm over gauge side of the rail head measured at the centre of 10cm straight edge.
13	Weld Records: Executive./Civilshall maintain 'Thermit Weld Register' as per proforma given in Annexure 5 (Research Designs & Standards Organisation Lucknow- MANUAL FOR FUSION WELDING OF RAILS BY THE ALUMINO-THERMIC PROCESS Revised-2021). The welded joints shall be serially numbered in a kilometre. Repair welds/additional welds done at a later date may be given continuing weld number in that kilometre. For example, the last thermit weld number in a particular kilometre was 88 and subsequently a thermit weld has been executed, it shall be numberd 89, irrespective of its location in that kilometer.
14	Acceptance tests
14.1	Visual inspection: All the welded joints shall be cleaned and examined carefully to detect any visible defect like cracks, blow holes, shrinkage, mismatch, surface finish (smooth surface finish required) etc. Any joint, which shows visible defect, shall be declared defective.
	The bottom of the joint shall be checked by feeling with fingers as well as inspected with the help of a mirror for presence of 'fins' at the parting line of the mould. If fin is observed in any joint, the joint shall be declared defective.
14.2	Dimensional check: All finished joints shall be checked for dimensional tolerances which should be within the tolerances as specified in para 12.

14.3

Ultrasonic flaw detection test: All the fusion welded joints shall be ultrasonically tested as per the provisions of 'Manual for Ultrasonic testing of rails and welds'. This testing shall be completed as early as possible but in any case before the welding team is shifted. The cumulative number of A.T. welds defective in ultrasonic testing and in other criteria shall be limited to as per clause 7.3.1. A thermit welding done in-situ shall be joggle fish plated with two clamps till tested as good by USFD. (ACS-1)

For upgraded A.T. welding techniques approved in terms of Part E of IRS:T:19:2021, cumulative number of failed A.T. welds in ultrasonic testing and in other criteria shall be limited to as per clause 15.3.1.1

14.3.1

Subsequent USFD testing of A.T. welds shall be done as per the provisions given in Manual for Ultrasonic Testing of Rails and welds, Revised-2021.

Note: For upgraded A.T. welding techniques approved in terms of Part E of IRS:T:19:2021, the A.T. welds shall exhibit less than 0.4% cumulative failure rate during execution, acceptance, acceptance ultrasonic testing and during service upto 120GMT or 3 years whichever is earlier including weld failures and welds declared defective during regular ultrasonic testing up to 120GMT or 3 years of installation whichever is earlier. A penalty of three times the unit rate of supply and execution of joints shall be payable by the firm for each joint failing in above criteria.

14.3.2 Defective/ Fractured joints:

In case, cumulative number of A.T. welds failed in criteria given in clause 15.3.1/15.3.1.1 exceed stipulated percentage in respective clauses, following action shall be taken:

- i) Action as per contract conditions be initiated.
- ii) DFCCIL shall be at liberty to suspend further welding.
- iii) The Details of welds executed against a particular contract , % defective / Fractures welds against total no. of welds executed to compiled as per the following format:

Sr.No.	Name of welding agency/ welders	Total no. of welds for which contract was awarded	No. of weld executed against a particular contract	No. of fractured welds and their % w.r.t.(3)	No. of USFD defective welds and their % w.r.t.(3)	Total % defective/ fractured (5)+(6)
		(Rail section wise)		-		7
1	2	3	4	5	6	7

- iv) All defective joints shall be broken with the help of jim crow in presence of firm's representative and a joint report be prepared. Defects observed on fractured faces shall be recorded in form of photograph/ sketch.
- v) Sectional PM/ Dy.CPM shall carry out investigation/analysis for all in track fractured joints and joints broken as per iv) above Information shall be complied in the format indicated below;

S	KM/Post	Rail section/	Year of	Joint No.	USFD Defective Joints (In initial	Fractured	Remarks	
N		UTS	rolling	(Marking	acceptance testing)	Joints	ļ	
				punched on				l

				the weld)					
						pattern (travel & peak	Defects observed (if any) on fractured faces of defective A.T Weld (broken with the help of jim crow)		
1	2	3	4	5	6	7	8	9	10

If defective in flange testing, supporting calculation be also enclosed in terms of Note in Chapter 8 of 'Manual for Ultrasonic testing of rails and welds, Revised 2021

- vi) The investigation report prepared by sectional PM/ DyCPM be sent to Executive Director/Track-I, RDSO, Lucknow through Chief Track Engineer for appraisal and suggesting further action.
- vii) The defective joints taken out of track and fractured joints be preserved for undertaking investigation by RDSO, if required

14.4 Rewelding of defective joints

- **14.4.1** All the joints found to be defective as per acceptance tests as given in paras 14.1, 14.2 & 14.3 and/or joints failed in guarantee period as specified in para 15.3 will be cut and welded by the firm free of cost using their portions, equipment, labour and consumables.
- **14.4.2** 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.
- **14.4.3** All the rewelded joints should meet the acceptance tests as indicated in paras 14.1 to 14.3.

15. Sample test joint

- **15.1** 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 IRS T-19-2021 (reproduced partly as Annexure 8 for ready reference) and the joint shall comply with the provisions laid down therein.
- **15.2** If the sample test joint fails to satisfy any of the requirements of specification IRST 19-2021, the Railway will be at liberty to suspend further welding However, two more rand

omly selected joints from the same lot of 100 joints shall be subjected to retests as per clause 4.2 of IRS T-19-2021. 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 IRS T-19-2021. The clearance for recommencement of welding shall be given by RDSO.

15.3 Guarantee

15.3.1 Rail joints welded by a firm shall be guaranteed against failure which includes failures in execution, acceptance, acceptance & regular ultrasonic testing and during service up to 2 years from the date of welding the joints in track or from the date such welded joints made in cess and inserted in the track are open to traffic. Any such welded joints which fail in the criteria given above within the guarantee period shall be re-welded free of cost by firm as per stipulations of clause 14.4.

However, cumulative number of failed A.T. welds including rewelded joints in criteria given above up to 2 years, shall not exceed 2% of the total quantity of joints in a particular contract. A penalty of three times the rate of supply and execution of joints shall be payable by the firm for each joint failing in above criteria.

15.3.1.1 For upgraded AT. welding techniques approved in terms of Part E of IRS T:19:2021, the joints welded by a firm shall be guaranteed against failure which includes failures in execution, acceptance, acceptance & regular ultrasonic testing and during service up to 120GMT or 3 years whichever is earlier, from the date of welding the joints in track or from the date such welded joints made in cess and inserted in the track are open to traffic. Any such welded joints which fail in the criteria given above within the guarantee period shall be re-welded free of cost by firm as per stipulations of clause 14.4.

However, cumulative number of failed A.T. welds including rewelded joints of upgraded AT. welding technique in criteria given above up to 120 GMT or 3 years whichever is earlier, shall not exceed 0.4% of the total quantity of joints in particular contract. A penalty of three times the rate of supply and execution of joints shall be payable by the firm for each joint failing in above criteria

15.3.2 In case of failure of sample test joint (refer para 15), the period of guarantee for 100 joints represented by the sample joint shall be extended for a further period of ane year. In case of failure of joints or joints exhibiting signs of failure by cracking within extended period of guarantee, the joints shall be rewelded free of cost by the supplier as per stipulations of para 14.4.

16 Other Condition :-

- (1) Welding shall be supervised by trained Welding Supervisor and carried out by trained Welder having valid competency certificate issued from RDSO/TPP, NR, Lucknow/TWC, Vijayawada in their possession suitable for HH Rails.
- (2) Portion for AT welding was provided by DFCCIL only and no extra payment is given to contractor regarding the same.
- (3) 80% payment will be release after Welding, Grinding, Numbering and Painting of AT Weld and remaining 20% payment release after USFD Testing.
- (4) Payment to the contractor shall be done on montly basis with respect to cumulative no. of welds done on that month subjected to following condition below:

- I. If the cumulative number of welds executed by the contractor in a calendar month is less than 60 weld, the contractor will be paid for 60 welds only.
- II. If no welds are executed in a calendar month, no payment will be made to the contractor.
- III. If the cumulative number of welds executed exceeds 60 weld in a calendar month, the contractor will be paid for each weld executed beyond 60 weld, in addition to the payment for the initial 60 welds.

The conditions mentioned as above are applicable only for the calendar month in which the welder is called for welding.

- (5) A welding Supervisor shall supervise not more than two welding teams deployed within 50 m distance at a time.
- (6) A copy of the thermit welding manual shall be available with each Welder at each welding site.
- (7) No hole should be made within heat affected zone of AT weld i.e 75mm from centre of AT weld in the new SKV welds of 25mm gap.
- (8) At the time of bill submission, contractor/firm must submit the performa verified by executive along with portion detail & batch no. used at the time of welding as mentioned below:

S.	Date of	f Portion detail	Location of	Section	USFD test	Remarks
N	welding	& batch no.	weld		result	
-						

(9) As and when intimation from DFCCIL by any means, The welding team must arrived on site location within 36 hours. In case of failure by welding team to reach at site location within 36 hours, the penalty will be imposed as mentioned in table below:

S.No	Time at which welder team take to	Penalty
	arrive on site after being notified.	
1	Less than 36 hours	Nil
2	After 36 hours- Before 48 hours	Cost of 20 welds should
		be deducted from
		available monthly bill.
3	After 48 hours- Before 60 hours	Cost of 40 welds should
		be deducted from
		available monthly bill
4	Beyond 60 hours	Payment of only one
		weld is paid in place of
		60 welds.



GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

MANUAL FOR FUSION WELDING OF RAILS BY THE ALUMINO-THERMIC PROCESS

Research Designs

& Standards Organisation Lucknow-226011

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CORRECTION SLIPS

S.No.	Correction Slip No.	Date of Issue	Subject	Para No(s) affected	Remarks

MANUAL FOR FUSION WELDING OF RAILS BY THEALUMINO-THERMIC PROCESS

1. Introduction

This manual supercedes "Manual for welding of rail joints by the Alumino-Thermic process, Revised - 2021".

There have been many technological improvements in the process of Alumino- Thermic (A.T.) welding which have necessitated revision of manual issued in 1987, 1998 and 2021. Same considerations also led to revision of Indian Railway Standard specification for fusion welding of rails by Alumino-Thermic process which has now been revised and issued under the serial no. IRS T-19-2021. Specification IRS T-19- 2021 referred in manual should be considered with latest amendments.

On Indian Railways Alumino-Thermic welding with short pre-heating process by using high silica sand mould (carbon dioxide dried) is being followed at present for welding rails of different chemistry and sections. Short pre-heating is mostly being done by Oxy-LPG and compressed air petrol fuel mixture as these techniques take less time for pre-heating the rail ends to desired temperature resulting in saving of block time with improved quality of joint.

A.T. welding is required to be done to convert flash butt welded panels into long panels and for repair of fracture. Normally new single rails shall not be welded by A.T. welding.

Conventional A.T. welding process which utilized green sand mould has been banned on Indian Railways. Alumino-Thermic welding techniques with short pre-heat processhave been standardised for 75R, 90R and higher rail sections and not standardised for 60R rails. The welding of 60R rails will be done by conventional A.T. welding process using green sand mould, as the scope of such welding is very limited for which the provisions laid down in 'Manual for welding of rail joints by the Alumino-Thermic process, April 1987' will continue to be applicable.

Presently, A.T. welding technique with short pre-heat process using 3-piece mould, single shot crucible with auto tapping thimble is adopted and already developed for existing 90UTS (52kg/60kg) / R260 rails. Same A.T. welding technique/process will be adopted for newly developed rails also i.e. NCC rails, 1080HH/1175HT rails.

2. Scope: This manual outlines the method of welding and the precautions and steps to be taken before, during and after welding by short pre-heating process for achieving satisfactory weld.

3. Selection of rails to be welded

For both new as well as second hand rails, before welding, it should be ensured that the end bends of the rails are within +0.5 mm, -0 mm in vertical and ± 0.5 mm in lateral direction, when checked with one meter straight edge as shown in Fig. 3.1(a), (b) and (c).

Further, fish bolt holes must be eliminated as far as possible before welding of rails tomake the weld amenable for USFD testing for lack of fusion, in case of welding ofnew rails as well as repair/maintenance welding.

New rails: Rails to be welded shall conform to the tolerances stipulated in the relevant specification as stated in Table 1 below:

TABLE 1

Tolerances in new rail dimensions

S.	Grade of	Rail	Specificat-	Head	Height	Flange	Thick-	End
N.	rail	section	ion	width		width	ness	square-
							of web	ness
1.	880	52 kg	IRS:T-12-	<u>+</u> 0.5	+0.8mm	<u>+</u> 1.0mm	+1.0	<u>+</u> 0.6
	(90 UTS)		2009	Mm	-0.4 mm		mm	mm
	rails						-0.5	
							mm	
		60 kg	IRS:T-12-	-do-	-do-	+1.2mm	-do-	-do-
		(UIC)	2009			-1.0 mm		
2.	R-260	60E1	IRS:T-12-	<u>+</u> 0.5	<u>+</u> 0.6	<u>+</u> 1.0mm	-do-	-do-
	rails		2009	Mm	mm			
3.	1080	60E1	IRS:T-12-	-do-	-do-	<u>+</u> 1.0mm	-do-	-do-
	Head		2009					
	Hardened							
	rails							
4.	1175 HT	60E1	IRS:T-12-	<u>+</u> 0.5	<u>+</u> 0.6	<u>+</u> 1.0mm	-do-	-do-
	rails		2009	Mm	mm			
5.	Nickel	60E1	IRS:T-12-	<u>+</u> 0.5	<u>+</u> 0.6	<u>+</u> 1.0mm	-do-	-do-
	Chromium		2009	Mm	mm			
	Copper							
	(NCC)							
	rails							

Second hand rails: For conversion of existing single rails/short welded panels into SWP/LWR/CWR or during secondary rail renewal, old serviceable rails may be welded subject to the following conditions:

- (i) Obsolete rail sections and rails older than 50 years shall not, normally, be welded. Specific approval of the Railway Board may, however, be obtained in special cases.
- (ii) The Chief Track Engineer shall satisfy himself that second hand rails have a substantial rail life to make it a safe and economical proposal.
- (iii) Rails shall be free from corrosion or excessive wear. The height of rail and width of rail head shall not be less than the values as indicated in Table 2 given below.

TABLE 2

Rail Section	Normal height	Min. height	Width of	Min. width of head of
	of newrail	of old rail	head of new	old rail (as measuredat
	(mm)	(mm)	rail (mm)	the gauge corner)
				(mm)
60 kg/ 60E1	172	163	72	66
52 kg	156	150	67	61
90 R	143	139	67	61
75 R	129	126	62	56
60 R	114	112	57	51

The limit of lateral wear in the rail head as laid down in Table 2, viz. 6 mm may be followed subject to uniform gauge without any abrupt change.

- (iv) 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.
- (v) 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.
- (vi) The rail ends shall be cut by sawing or using abrasive disc cuter and not by flame cutting.
- (vii) 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.

- (viii) The rolling marks on the web of rails shall be checked before welding to ensure that generally rails of different qualities are not welded together. However, in unavoidable circumstances, where rails of Grade 710 (72 UTS) 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.
- (ix) 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 A.T. welds and 85 mm for flash butt welds from the center 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 in para 3.1.
- (x) In case of repair of fractured rail/defective weld with wide gap (75mm gap) weld, the rail shall be cut from center of rail fracture/defective weld 37-38mm each side for making suitable gap of 75mm, provided bolt holes do not fall within 40mm from cut faces.

4. Execution of joints at site

Technique for welding: Welding techniques approved provisionally or for regular adoption by Railway Board/RDSO should only be adopted for welding of rails. For details of approved welding techniques and vendors/firms, vendor directory available of RDSO available in U-VAM portal of www.ireps.gov.in website may be referred. Significant advancements have taken place in pre-heating techniques, type of moulds, type of crucibles and process automation in the field of A.T. Welding. These advancements offer significant benefits in terms of service life of A.T. welds. In order to absorb these technological advancements, use of compressed air-petrol or better pre heating, single shot crucible, automatic tapping of molten metal and three piece moulds shall be increasingly used for rails of 52Kg and higher sectional weight with 90UTS and higher grades

Thermit welding portions and consumables to be used for welding shall be from RDSO approved firms only.

Alumino -Thermic Welding of Rails may be carried out through any of the following means:

(a) RDSO approved portion manufacturing firms with their own portion, consumables, equipment and welders/ supervisors. These welders/ supervisors are certified by RDSO. The list of certified welders/supervisors is issued by M&C Dte. of RDSO and uploaded bi-annually on website www.rdso.indianrailways.gov.in under button activity of Metallurgical and Chemical Directorate. Copy of Welder's competency certificate of the firm is also uploaded on TMS by Track Design Directorate, RDSO. In addition, such welders/ supervisors carry a certificate issued by RDSO.

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- (b) Labour contracting firms with TPP/Lucknow certified welders/ supervisors with portions and consumables of Thermit Portion Plant (TPP), NR, Lucknow. The list of such firms is circulated by TPP/Lucknow annually.
- (c) Departmental welders certified by TPP/Thermit Welding Center (TWC), Vijayawada with TPP portions.
- (d) Departmental welders certified by TPP/Thermit Welding Center (TWC), Vijayawada with Portions, consumables and preferably equipment also, supplied by an RDSO approved portion manufacturer. This is applicable for 25mm gap welding only.

In case of turn-key contracts for gauge conversion, new lines, doubling etc. in which A.T. welding also forms a small portion of the work, suitable provisions shall be kept in the contract conditions for executing the welding by means specified in 4.1.1.1(a) and 4.1.1.1(b) above.

Training and certification of welders:

Certification of Welders/Supervisors of Approved portion manufacturing firms shall be done by RDSO as per provisions of IRST-19- 2021, Specification for Fusion Welding of Rails by Alumino-Thermic Process.

Training and Certification of welders/Supervisors of labour contracting firms shall be done by Thermit-Portion Plant (TPP), Northern Railway, Lucknow as per procedure for certification given in Annexure-1.

Training and certification of Departmental welders and supervisors shall be done by Thermit Portion Plant (TPP), Northern Railway, Lucknow and Thermit Welding Centre (TWC), South Central Railway, Vijayawada as per procedure forcertification given in Annexure-1.

Portion for welding

The portion used for welding shall conform to the technical requirements as mentioned in IRST-19- 2021. 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 forwelding.

Shelf life of portion: No specific shelf life has been indicated for A.T. welding portions. Life of portions would depend on the quality of packing and storage condition. A.T. 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.

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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 / 600 or part there-of 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) Weld Metal Chemistry Test
 - (ii) Load deflection test

These tests should be conducted at Zonal CMTs organisation and/or the Flash Butt Welding Plant. If the values obtained in above tests are within the specified values asgiven in para 4.5 and 4.4.3.1 of IRST-19- 2021, 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 pit away from the store.

Storage and transportation of Portions:

'General guidelines for storage and transportation of A.T. Portion' representing best practices with respect to storage of materials, are contained in **Annexure-4**.

Equipment, staff and Traffic block for welding: The list for one set of A.T. welding equipment by short pre-heating process is given in **Annexure-2**. The composition of thermit welding team is given in **Annexure-3**. A minimum traffic block of 70-75 minute duration, depending upon the type of preheating technique adopted, should be obtained for complete operation of welding of first joint and to ensure good quality of A.T. weld. Additional time of 5-8 minutes may be needed for controlled cooling/ air-quenching in case of heat treated rails, as per approved A.T. welding technique.

Preparation of rail ends to be welded: The rail end face and adjacent sides at foot(top and bottom), web and head up to 50 mm 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.

Normally, no Alumino-Thermic welded joint shall be located closer than 4 m from anyother welded or fish plated joint.

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 for the particular welding technique. The uniformity and verticality of the gap shall be measured by a gauge prior to welding. In case of wide gap $50\pm1/75\pm1$ mm welding, for repairingfractured/defective welds, it shall be ensured that the end faces are vertical. In LWR/CWR territory, hydraulic/mechanical rail tensor of suitable and approved design should be used for maintaining correct rail gap during welding.

Preliminary work prior to welding

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.

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.

Alignment of rail ends before welding

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

Lateral alignment: The two rail ends, after alignment shall be within ± 0.5 mm when checked with a 1.0 m straight edge at rail ends [Fig. 4.7.1.1 (a) & (b)]. 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.

Vertical alignment: The joint shall be kept higher by 3 to 4 mm for 72 UTS rails and 2 to 2.4 mm for higher UTS rails when measured at the end of 1.0m straight edge (as a compensation against sagging caused by differential shrinkage on cooling) (**Fig. 4.7.1.2**). This shall be achieved by wedges applied on the rail supporting blocks on both sides of the joint.

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 preheating and produces a welding gap outside the prescribed limits, the welding of joint shall be temporarily abandoned and joint allowed to cool.

Fixing of mould

Only prefabricated moulds 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 carbon dioxide gas. The prefabricated moulds shall have adequate permeability for escape of mould gases and adequate reinforcement to avoid mould crushing during transportation and welding.

4.8.1.1 Three piece moulds supplied by A.T. portion manufacturer shall conform to 'Specification of 3 piece Pre-fabricated mould manufactured by A.T. portion manufacturers for use during A.T. welding rails' given at Annexure-2 of IRST-19- 2021.

Shelf life of mould shall be 12 months minimum from the date of manufacturing. Retest of one pair of the mould will be carried out after expiry of 12 months to ascertain the soundness of the mould.

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 fragileand liable to breakage.

During fixing the moulds, it shall be ensured that the center line of the rail gap coincides with the center 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. Careshall 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. In case of three piece moulds, care should taken to ensure proper fixing of bottom plate to avoid formation of fin at the edges of bottom flanges of weld.

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 tablefrom 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.

Preheating

After fixing and luting of the moulds, the rail ends shall be uniformly pre-heated throughout the rail section with specially designed air petrol/compressed air

petrol/Oxygen-LPG burner 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 minimum temperature of around 650 0 C. Temperature range of about 650

-850 $^{\circ}$ C is normally observed in various RDSO approved A.T. welding techniques.

In welding process using Air petrol burner, the compressor tank pressure during operation of the burner shall be maintained at 7±0.70 kg/cm² (100±10 lb per sq in). For A.T. welding with compressed Air-petrol pre-heating technique, the Air pressure, during operation of the preheating equipment, should be in the range of 0.2 to 0.3 Kg/cm². 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 pre-heating 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 stopped first followed by LPG supply. The burner shall be properly adjusted during preheating to ensure that the head, web and foot of both railends are heated uniformly.

Preheating time: Preheating time would be about 10 to 12 minutes, 4.0 to 5.5 minutes and 2.0 to 2.5 minutes for Air-petrol, compressed Air-petrol and Oxy-LPG preheating techniques respectively. The actual preheating time would depend upon the rail section and welding technique adopted.

Special emphasis shall be given to the tank pressure, efficiency of burner and 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 pyrometer, contact type pyrometer or temperature indicating crayons may be used for measuring rail end temperature just after completion of preheating i.e. after removal of burner.

Welding

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

Slag shall be cleaned from the crucible (multiple use 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.

The crucible (multiple use 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. In case of single shot crucible, crucible is placed directly above the mould on mould shoe duly positioned centrally. 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 50 mm between the tap hole and sand core/top of the pouring gate.

After pre-heating the rail joint, the sparkler shall be ignited and 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. In case of manual tapping, the time period between removal of burner and tapping of metal should be as minimum as possible. After the reaction subsides, about three 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 when manual tapping of molten metal is employed. Thereafter, the molten steel shall be 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 specified. In case of automatic tapping of molten metal, these aspects are taken care of automatically. 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 andloose 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 afresh. However, if temperature can be measured, the rail ends may be heated to an extent so as to achieve minimum temperature of about 650°C and welding of joint may be completed. Temperature range of about $650 - 850^{\circ}$ C is normally observed in various RDSO approved A.T. welding techniques.

After pouring, molten metal shall be allowed to cool and solidify with mould intact for 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 to completion of mould waiting time. The mould waiting time is generally five to seven minutes for 25 mm gap joints and 12 minutes for 75 mm gap joints. After the mould waiting time has elapsed, the trimming should be done by using weld trimmer of suitable and approved design without knocking out the mould. List of approved vendors/suppliers of weld trimmers and rail profile weld grinders is available in vendor directory of TMM Directorate, RDSO in U-VAM portal on www.ireps.gov.in website.

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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.

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 and riser must not be removed until cold, and that too only by knocking towards the rail.

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

Note: For upgraded A.T. Welding Techniques approved in terms of Part E of IRS T-19- 201 2021, the parameters such as preheating time, pressure, type of moulds, crucibles, tapping system etc. shall be mentioned in the approval letter issued by RDSO. These shall be ensured while welding.

5. Operations subsequent to welding

Post weld cooling: In case of welding of head hardened / heat treated 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 hardened rails, therefore, must be subjected to controlled quenching for a specific time by the arrangement approved for the technique.

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 para 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.

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.

Grinding

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 refixed, after the removal of

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wedges. The rail table shall first be ground down to original profile and checked by a one metre straight edge. This should be followed by grinding of the sides of the 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.

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, -0.0mm

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, -0.0mm 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 10cm 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 in **Fig. 5.4.2**.

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 rewelded, free of cost, by the firm.

TRACEABILITY OF WELDS:

MARKING: Each joint shall have a distinctive mark indicating month, year of welding, agency and welder/supervisor identification code number (as appearing on his competency certificate) at non-gauge face side of A.T. weld on head as shown in Fig. 1 given below:

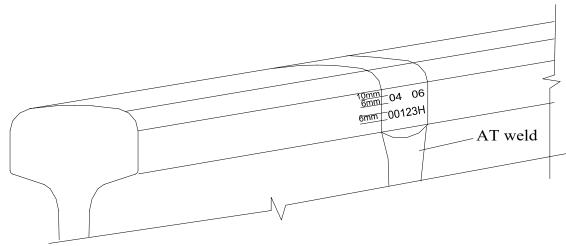


Figure 1: Location of marking on non-gauge face of welds

M	M			Y	Y			
Month Last two digits of y							year	
A	A	В	В	В	С	С	С	

Identification code

where,

A A Code number for the agency to which the welder/supervisor belongs i.e.00 for

- A.T. portion manufacturing firms
- 01 for departmental welders
- 02-99 for welders of welding contractors. The codes shall be allotted for different contractual agencies undertaking A.T. welding of rails (other than portion manufacturers)
- B B B Specific person number (from 001 to 999) The specific person number will be continuous for a Zonal Railway/Firm.
 - C <u>For welders/supervisors of Zonal Railways</u>: First two/three initials of the Railway to which the supervisor or welder belongs

or

<u>For welders/supervisors of portion manufacturing firms and welding contractors</u>: Code allotted for the portion manufacturing firms, for whom welders/ supervisors of portion manufacturing firms and welding contractors are approved.

Alphabetic codes allotted to the portion manufacturing firms are given below:

In case of welders belonging to the welding contractors, this code will signify the portion manufacturing firm for which the competency certificate of welder is valid.

The marking should be embossed on the non-gauge face side of A.T. weld by punchingafter finishing of the weld in letters/digits of 6mm height located as indicated in Figure.

In addition to this, alphabetic code allotted to portion manufacturing firm as mentioned above e.g. T, H, N etc. and year of manufacture (last two digits of the year) shall also be embossed on the mould to appear on web collar.

For example, 01001ECo would indicate a departmental welder/supervisor of East Coast Railway with specific person number 001. Similarly, 00001T would indicate a welder/supervisor with specific person no. 001 of portion manufacturer whose code is 'T'

i.e. ITC. 02001H would indicate a welder, belonging to welding contractor whose code is 02, having specific person number of 001 and having competency for welding with portion/technique of portion manufacturing firm with code 'H'.

WELD RECORDS:

PWI shall maintain 'Thermit Weld Register' as per proforma given in **Annexure-5**. The welded joints shall be serially numbered in a kilometre. Repair welds/additional welds done at a later date may be given continuing weld number in that kilometre. For example, the lastthermit weld number in a particular kilometre was 88 and subsequently a thermit weld has been executed, it shall be numbered 89, irrespective of its location in that kilometre.

Painting of thermit welds

Painting of weld collar should be done on all welds to protect them against corrosion immediately after the welding.

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 613(2) of IRPWM,2020. The frequency may be increased depending on the site conditions.
- (iii) On condition basis at locations which are prone to severe corrosion (areas of severecorrosion to be decided by territorial Chief Engineer/Chief Track Engineer).

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 7** respectively.

6. Acceptance tests

Visual inspection: All the welded joints shall be cleaned and examined carefully to detect any visible defect like cracks, blow holes, shrinkage, mismatch, surface finish (smooth surface finish required) etc. Any joint, which shows visible defect, shall be declared defective.

The bottom of the joint shall be checked by feeling with fingers as well as inspected with the help of a mirror for presence of 'fins' at the parting line of the mould. If fin is observed in any joint, the joint shall be declared defective.

Dimensional check: All finished joints shall be checked for dimensional tolerances which should be within the tolerances as specified in para 5.4.2.

Ultrasonic flaw detection test: All the fusion welded joints shall be ultrasonically tested as per the provisions of 'Manual for Ultrasonic testing of rails and welds'. This testing shall be completed as early as possible but in any case before the welding team is shifted. The cumulative number of A.T. welds defective in ultrasonic testing and in other criteria shall be limited to as per clause 7.3.1. A thermit welding done in-situ shall be joggle fish plated with two clamps and supported on wooden blocks of 300-450mm length until tested as good by USFD.

For upgraded A.T. welding techniques approved in terms of Part E of IRS:T:19:2021, cumulative number of failed A.T. welds in ultrasonic testing and in other criteria shall be limited to as per clause 7.3.1.1

Subsequent USFD testing of A.T. welds shall be done as per the provisions given in Manual for Ultrasonic Testing of Rails and welds, Revised-2021.

Defective/ Fractured joints:

In case, cumulative number of A.T. welds failed in criteria given in clause 7.3.1/7.3.1.1 exceed stipulated percentage in respective clauses, following action shall betaken:

- i) Action as per contract conditions be initiated.
- ii) Railway shall be at liberty to suspend further welding.
- iii) The details of welds executed against a particular contract, % defective /fracturedwelds against total no. of welds executed be compiled as per the following format:

S.	Name of	Total no. of welds	No. of welds	No. of	No. of USFD	Total %
No	welding	for which contract	executed against a	fractured welds	defective welds	defective/
	agency/	was awarded	particular	and their %	and their %	fractured
	welders	(Rail section wise)	contract	w.r.t. (3)	w.r.t. (3)	[(5)+(6)]
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- iv) All defective joints shall be broken with the help of Jim Crow in presence of firm's representative and a joint report be prepared. Defects observed on fractured faces shall be recorded in form of photograph/ sketch.
- v) Sectional DEN/Sr. DEN shall carry out investigation/analysis for all in track fractured joints and joints broken as per iv) above. Information shall be compiled in the format indicated below:

S.	Km	Rail	Year	Joint no.	USFD defective joints (in Initial			Fractured	Remarks
N.	/	section	of	(marking	acceptance testing)			joints	
	Po	/ UTS	rolling	punched	Probe *	Peak		Defects	
	st			on the weld)		pattern	on fractured faces of		
				weid)		(travel &	defective A.T. welds	fracture races	
						peak height) *	(broken with the help of Jim crow)	(if any)	
						neight)	Jili ciow)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

^{*} If defective in flange testing, supporting calculation be also enclosed in terms of Note in Chapter 8 of 'Manual for Ultrasonic testing of rails and welds, Revised – 2022'.

- vi) The investigation report prepared by sectional DEN / Sr.DEN be sent to Executive Director/Track-I, RDSO, Lucknow through Chief Track Engineer for appraisal and suggesting further action.
- vii) The defective joints taken out of track and fractured joints be preserved for undertaking investigation by RDSO, if required.

Rewelding of defective joints

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

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.

All the rewelded joints should meet the acceptance tests as indicated in paras 6.1to 6.3.

7. Sample test joint

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 as per clause 4.4.2 and 4.4.3 of IRS:T-19-2021 (reproduced partly as **Annexure-8** for ready reference) and the joint shall comply with the provisions laid down therein.

If the sample test joint fails to satisfy any of the requirements of specification IRS:T- 19-2021 mentioned in Para 7.1 above, 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 4.4 of IRS:T-19- 2021. 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 has examined the welding technique and satisfies the requirements of clause 4 of IRS:T-19- 2021 by welding one test joint. The clearance for recommencement of welding shall be given by RDSO.

Guarantee

Rail joints welded by a firm shall be guaranteed against failure which includes failures in execution, acceptance, acceptance & regular ultrasonic testing and during service up to 2 years from the date of welding the joints in track or from the date such welded joints made 'in cess' and inserted in the track are open to traffic. Any such welded joints which fail in the criteria given above within the guarantee period shall be re-welded free of cost by firm as per stipulations of clause 6.4.

However, cumulative number of failed A.T. welds including rewelded joints in criteria given above up to 2 years, shall not exceed 2% of the total quantity of joints in a particular contract. A penalty of three times the rate of supply and execution of joints shall be payable by the firm for each joint failing in above criteria.

For upgraded A.T. welding techniques approved in terms of Part E of IRS T-19- 2021, the joints welded by a firm shall be guaranteed against failure which includes failures in execution, acceptance, acceptance & regular ultrasonic testing and during service up to 120GMT or 3 years whichever is earlier, from the date of welding the joints in track or from the date such welded joints made 'in cess' and inserted in the track are open to traffic. Any such welded joints which fail in the criteria given above within the guarantee period shall be re-welded free of cost by firm as per stipulations of clause 6.4.

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However, cumulative number of failed A.T. welds including rewelded joints of upgraded A.T. welding technique in criteria given above up to 120 GMT or 3 years whichever is earlier shall not exceed 0.4% of the total quantity of joints in a particular contract. A penalty of three times the rate of supply and execution of joints shall be payable by the firm for each joint failing in above criteria.

In case of failure of sample test joint (refer para 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 rewelded free of cost by the supplier as per stipulations of para 6.4.

The welded joints with the extended period of guarantee shall be punch marked 'X' on the right of markings for month/year in addition to the markings prescribed in Clause 5.6. Such marked joints shall be kept under careful observation by the purchaser.

8. Other requirements

Welding shall be supervised by trained welding supervisor and carried out by trained welder having valid competency certificate from RDSO/TPP, NR, Lucknow/TWC, Vijayawada in their possession.

A welding supervisor shall supervise not more than two welding teams deployed within 50 m distance at a time.

A copy of the thermit welding manual shall be available with each PWI and at each welding site.

No hole should be made within heat affected zone of AT weld and therefore, any hole should be made beyond 75mm from centre of AT weld in the new SKV welds of 25mm gap.

- **9. 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.
- (vi) 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 m away from burner to prevent fire hazard.
- (xii) The tapping shall be done within the time specified for that particular technique or automatically. For special type of welding i.e.75mm gap, combination joint etc. the time of reaction and 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 bag portion 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 RDSO/Railway Board.
- (xix) Many weld failures show evidence of badly cut rail ends. The evenness and verticality of a rail cut depends solely upon the skill of the welder. With portable disc cutters, very little skill is required to produce good cut.

10. Defects in A.T. welding:

The major types of defects which can cause weld failure because of improper weldsexecution are given in **Annexure-9**.

11. Check list for inspection of A.T. welds:

A check list for reference of the officials inspecting A.T. Welds is given in Annexure-10.

PROCEDURE FOR TRAINING AND CERTIFICATION OF DEPARTMENTAL WELDERS BY THERMIT PORTION PLANT / LUCKNOW

- **1. Scope:** Thermit Portion Plant (TPP), Lucknow shall impart initial and refresher training to departmental welders and supervisors for execution of A.T. welds and issue necessary competency certificates to welders/supervisors whose training performance is satisfactory.
- **2. Training Courses**: Following training courses shall be organized by TPP for welders and supervisors.

S. No.	Type of Course	Duration
1	Initial Course for Welders (TW1)	Two weeks
2	Refresher Course for Welders (TW2)	One week
3	Course for supervisors (TW3)	One Week
4	Refresher Course for supervisors (TW4)	Two days

TPP shall organize sufficient number of each of the above courses to cater for the annual requirement of training on Indian Railways. TPP shall maintain a data base of training undergone by welders/supervisors, which will be updated from time to time.

The assessment of training requirement shall be done based on the information available with TPP (database) and the advise received from zonal railways. For this purpose, zonal railways shall send their requirement of training to TPP by 30th September for next calendar year. TPP shall draw an annual calendar of training courses and advise the same to Zonal Railways by end of November every year for enabling zonal railways to send course-wise nominations.

- **3. Training Module:** The training module shall be drawn by TPP in consultation with M&C Dte. of RDSO. The module shall cover theoretical and practical aspects of various A.T. welding techniques developed by TPP and approved portion manufacturing firms.
- **4.** Procedure for awarding Competency Certificates:

Welders:

Provisional Competency Certificate

The welders whose performance is adjudged satisfactory in initial course (TW1) shall be awarded Provisional Competency Certificate valid for executing 100 joints in presence of trained Supervisor. Provisional Competency Certificate shall be valid for executing 100 joints or six months whichever is earlier.

Note: Zonal Railways desirous of training their welders in the technique of particular firm(s), shall also send portions and consumables for that firm for 2 welds/ trainee to TPP.

Regular Competency Certificate

On execution of 100 joints in the field by the Welders or six months from date of Provisional Competency Certificate, whichever is earlier, the welder shall be deputed to TPP/Lucknow along with one test piece (2m long having weld at the center), USFD testing reports of welds executed by him, working performance certificate of SSE/SE(P.Way) and relevant welding records as per proforma for thermit weld register (Annexure -5), duly signed by SSE/SE(P.Way) with counter signature of concerned DEN/ADEN. For the purpose of evaluation the welder should have executed at least 50 welds.

If the defective weld percentage is less than 1% of the welds executed by the welder, the results of test weld and the welder's performance in TW2 course is satisfactory then the welder will be given regular competency certificate valid for 2 years.

In case the welders fails to execute the minimum number of 50 welds within six months or is not certified successful by the TPP in the above manner, he shall be treated is incompetent. He will have to repeat the Module TW1 and the procedure described at Para 4.1.2.1 and 4.1.2.2 above.

The trained welders shall attend refresher course (TW2) within 2 years of issue of regular competency certificate. In case welders fail to attend the refresher course by the end of validity of their certificate, their competency certificate shall become invalid. The welders, who attend TW2 course after expiry of the validity of their competency certificate but within three years of issue of competency certificate, will be permitted to attend TW2 course for revalidating their competency certificate. However, welders turning up for TW2 course after 3 years of issue of competency certificate shall have to attend initial course (TW1) again as fresher.

4.2 Welding Supervisors

SE/SSE/JE (P.Way) shall be issued competency certificate after successful completion of training course for Supervisors (TW3) with validity period of 5 years. Supervisors shall be required to undergo a refresher course (TW4) at every 5 years to be conducted in TPP/NR/Charbagh, Lucknow again and after successful completion of refresher course validity of competency certificate shall be extended for further 5 years period.

Note: Thermit welding centre (TWC), South Central Railway, Vijayawada is also authorized for training and certification of departmental welders and supervisors following the complete procedure indicated in Annexure-1 for TPP.

LIST OF EQUIPMENT FOR ALUMINO –THERMIC WELDING OF RAIL JOINTS BY SHORT PREHEATING PROCESS PER WELDING TEAM

S.	Description	Quai	Life in		
No.		Mass	Repair	terms of	
		welding	welding	No. of	
				joints	
A.	PRE-HEATING EQUIPMENT				
A 1.	Air- Petrol Pre-heating				
1.	Pressure tanks with pressure gauges* Complete	2 Nos.	1 No.	500*	
2.	Vaporisers (burner) complete	2 Nos.	1No.	500	
3.	Nozzle prickers	4 Nos.	2 Nos.	50	
4.	Nozzle keys	1 No.	1 No.	500	
5.	Vaporiser stand	2 Nos.	1 No.	1000	
6.	Goose neck attachment to vaporiser	4 Nos.	2 Nos.	50	
A2.	Compressed Air-Petrol Pre-heating				
1.	Suitable compressor system* with pressure gauges**	2 Nos.	1 No.	Periodical maintenance half yearly* 500**	
2.	Torch(Burner) complete	2 Nos.	1 No.	300	
3.	Torch (burner) keys	1 No.	1 No.	500	
4.	Torch (burner) stand	2 Nos.	1 No.	1000	
A3.	Oxy- LPG Pre-heating				
1.	Oxy- LPG torch (burner)	2 Nos.	1 No.	150-200	
2.	Oxygen cylinder with pressure gauge	2 Nos.	1 No.	100	
3.	LPG cylinder with pressure gauge	2 Nos.	1 No.	100	
4.	Torch (burner) stand	2 Nos.	1 No.	500	
5.	Connecting Hose pipe	4 Nos.	2 Nos.	75-100	
В.	OTHER EQUIPMENTS				
1.	Crucible complete- Crucible shell* & Crucible lining**	2 Nos.	1 No.	*500 & **50	
2.	Crucible caps	2 Nos.	1 No.	50	
3.	Crucible forks	2 Nos.	1 No.	500	
4.	Crucible stands	2 Nos.	1 No.	1000	
5.	Crucible rings	2 Nos.	1 No.	500	
6.	Mould pressure (clamp)	2 sets	1set	1000	

S.	Description	Quar	ntity	Life in
No.		Mass	Repair	terms of
		welding	welding	No. of
				joints
7.	Cleaning rod round	2 Nos.	1 No.	500
8.	Tapping rod	1 No.	1 No.	1000
9	Straight edge 1m long	2 Nos.	1 No.	
10.	Straight edge 10 cm. long	2 Nos.	1 No.	
11.	Aluminium/steel rod for thermal plugging	2 Nos.	2 Nos.	
12.	Leather washers for pump	4 Nos.	2 Nos.	100
13.	Gap gauges and height gauge	2 Nos.	1 No.	
14.	Filler gauge	2 Nos.	1 No.	
15.	Tools for punching the marking	2 Sets.	1 Set	
16.	Mould shoes	6 Pairs	2 Pairs	100
17.	Stop watch	1 No.	1 No.	
18.	Pyrometer/Thermal chalk for	1 No.	1 No.	
	measurement of rail temperature			
19.	Wooden wedges for rail alignment	24 Nos.	12 Nos.	
20.	First aid box filled with medicines	1 No.	1 No.	
	bandages, cotton etc.			
21.	Mirror 150 x 100mm with handle	2 Nos.	1 No.	
22.	Tool box containing –			
	Hot sets (chisels) (for Emergency use	2 Nos.	2 Nos.	
i)	only)			
ii)	Funnel tin (for pouring petrol)	1 No.	1 No.	
iii)	Adjustable spanner	1 No.	1 No.	
iv)	Hammer 1 kg	1 No.	1 No.	
v)	Sledge hammer double panel 5 kg.	2 Nos.	2 Nos.	
vi)	Steel wire brush	1 No.	1 No.	
vii)	Blue goggles	2 Pairs.	1 Pair.	
viii)	Paint brush 50mm	1 No.	1 No.	
ix)	Slag container (bowl)	2 Nos.	1 No.	500
x)	Asbestos gloves	4 Pairs.	2 Pairs.	500
xi)	Hose clips	4 Nos.	4 Nos.	
xii)	Pliers	1 No.	1 No.	
xiii)	Rail file 350x40x6mm (For Emergency	4 Nos.	2 Nos.	
	use only)			

S.	Description	Qua	Life in	
No.		Mass welding	Repair welding	terms of No. of joints
23.	Weld trimmer(Cutter*)	1 No.	1 No.	100*
25.	Rail profile guided grinding trolley (Grinding wheel*).	1 No.	1 No.	50*
26.	To ensure quality, protective clothing, shoes g	ear & Leather	r gloves.	

- Note: 1. Items 1 to 5, 7 to 8 and 11 in **B. Other Equipments** are for multi-use crucible. For crucible lining, Magnesite powder and sodium silicate should always be available.
 - 2. Expected life of the equipments have been given as guide lines for initiating action for procurement by zonal railways depending upon their requirement. The expected life of various equipments may vary depending upon site conditions and its use.
 - 3. The items for which, expected life has not been given, they should be replaced on condition basis.

COMPOSITION OF THERMIT WELDING TEAM (COMPRESSOR TANK-WISE)

Designation	Numbers
Welder Grade I/Grade II	1
Welder Grade III/Skilled Artisan	2
Helper Khalasi /Khalasi	5
Gangman	As per work load

Note: The composition of welding team has been framed taking into account that trimming and grinding operation would be done by weld trimmer and rail profile grinder.

GENERAL GUIDELINES FOR STORAGE AND TRANSPORTATION OF A.T. PORTION

These guidelines represent "Best Practice" with respect to storage of materials.

Stores should be dry, well ventilated, and where required light, power and running water should be available. In all cases building construction should be in compliance with the Fire regulations applicable to the substances being stored. Consideration shall also be given to the relevant regulations issued in this respect.

The appropriate notices should be displayed where material such as Thermit Portions and Igniters are stored.

Storage of Thermit Portions

Portions should be stored in a secure, non-combustible building. While it is preferable that they should be stored separately, they may be stored with other non inflammable materials, such as equipment and small tools, mould, luting sand in sealed bags, etc. in which case ideally they should be segregated. The store should be dry with ventilation to prevent excess humidity or dampness, and should be designated as a non-smoking area, with no naked flames.

Portions must not be stored in the same building as explosive or flammable items (e.g. Fuel, fuel gases, igniters).

The sealed boxes must not be opened until immediately prior to use. Any spillages should be immediately swept up and the material disposed in accordance with safety data sheets. Steel shovels should not be used on concrete floors, which might create a spark.

Portions should be used in rotation i.e. first in-first out.

Proper notices should be displayed inside and outside the building together with the standardwarning sign, which should read "Metallic Powder: In case of fire DO NOT USE WATER".

The Local Fire Brigade should be informed of exact location of store and nature of contents. Only dry powder extinguishers of appropriate class should be used in the proximity of Thermitpowders.

Storage of Igniters

Tubes of igniters should be stored in a locked steel cupboard, or other secure steel container. On no account must these be stored in the same building as the portions.

Transportation of A.T. Portion

A.T. Portion should not be transported in passenger coaches. The package containing igniters should be kept in tin cases/steel containers.

Manufacturer of portion shall provide a sheet containing best safety practices with every package for guidance of the user covering various aspects in safe handling, storage, transportation and disposal of thermit materials.

PROFORMA FOR THERMIT WELD REGISTER

S.	Date of	Location details						ail	Bolt hole
No	welding	Block Stn.	Cess /	Km	U/D	L/R	Sec-	UTS	distance
			Situ	TP			tion		(mm)
1	2		3				4	4	

	Portion	details			Weld	ling details		
Agency	Batch	Portion	Date of	Agency	Process	Supervisor	Welder	
code	No.	No.	Manufac	code		code	code	
			turing					
		5		6				

Weld	Block tin	me	Date of	Dimensional tolerances on			USFD to	esting	
No.	From	То	finish	finished joint			after we	lding	
			grinding	On 1m		Im On 10cm		Date	Result
				Lateral	Vertical	Top	Side		(Pass/
									Failed)
7	8		9		10				11

In servi	ce failure	Test joint	Replace	ment W	eld Refere	Sign. of	Date of	
de	etails	date	Wel	d1	Weld 2		PWI	sending
Fa	ilure	removed					Welding	test joint
			S. No.	Date	S. No.	S. No. Date		with
Date	Type							reference
	12	13		1	14		15	16

Test joint results										
Date of receipt of results with	Hard	ness (Bl	HN)	Transv	erse load	Porosity (%)	Date of marking 'X' for extended guarantee	Remarks	Chainage of weld	ence point for chainage
referen ce	Rail	Weld	HAZ	Load	Deflection (mm)	Por	guarantee	R	Chai	Reference chair
					17				18	19

PROCEDURE FOR PAINTING OF WELD COLLAR FOR THERMIT WELDED RAIL JOINTS TO PROTECT AGAINST NORMAL CORROSION

A. NEW WELDED JOINT

Surface preparation

Remove dust, loose rust and mill scale by wire brushing.

Scrub welded area with water to make it free from slag and other watersoluble compounds. Make it dry.

2. Painting Procedure

Apply one coat of ready mixed paint, brushing, bituminous black, lead free, acid, alkali, water and chlorine resisting, conforming to IS: 9862-1981 (with latest amendments) on the welded area and 10cm on either side.

After eight hours drying, apply a second coat of the same paint.

Painting should be carried out by brush only.

B. MAINTENANCE PAINTING (FOR OLD PAINTED JOINTS)

1. Surface preparation

Remove dust, dirt and flaked paint from the welded joint by wire brushing.

Degrease the surface by petroleum hydrocarbon or any other suitable solvent, if oil or grease is present. Allow it to dry.

2. Painting procedure

Apply one coat of ready mixed paint, brushing bituminous black, lead free, acid, alkali and chlorine resistant, conforming to IS:9862-1981 (with latest amendments) or bituminous emulsion to IRS: P-30- 2020 or latest on welded area and 10 cm on either side.

If required, a second coat of the same paint may be applied after a minimum of eighthours drying.

Painting should be carried out by brush.

PROCEDURE FOR PAINTING OF WELD COLLAR FOR THERMIT WELDED RAIL JOINTS TO PROTECT AGAINST SEVERE CORROSION

A. NEW WELDED JOINTS

1. Surface preparation

Remove dust, loose rust and mill scale by wire brushing.

Scrub welded area with water to make it free from slag and other water solublecompounds. Make it dry.

2. Painting procedure

Apply one coat of high build epoxy paint (two pack) conforming to RDSO specificationNo. M&C/PCN-111/2018 or latest on the welded area up to 10 cm on either side.

B. MAINTENANCE PAINTING (FOR OLD PAINTED JOINTS)

1. Surface preparation

Remove dust, dirt and flaked paint from the welded joint by wire brushing.

Degrease the surface by petroleum hydrocarbon or any other suitable solvent, if oilor grease is present. Allow it to dry.

2. Painting procedure

Apply one coat of high build epoxy paint (two pack) conforming to RDSO specificationNo. M&C/PCN-111/2018 or latest on the welded area up to 10 cm on either side.

3. RDSO specification No. M&C/PCN-111/2018 is issued by M&C Directorate, RDSO and available at RDSO website www.rdso.indianrailways.gov.in.

NOTE:

- 1. The epoxy based paint recommended is a two pack system with a pot life of around five hours. Hence prepare only that much quantity of paint which can be consumed in less than five hours.
- 2. The paint should be procured along with the thinner recommended by the manufacturer of the paint. No other thinner i. e. kerosene oil etc. should be used.
- 3. The painting shall be carried out by brush only. Brush shall be cleaned by the thinner after use.

EXTRACTS FROM IRST-19- 2021 CLAUSE 4.4 ON MECHANICAL AND METALLURGICAL TESTS ON TEST WELDS AND CLAUSE 18.4 SAMPLE TEST **JOINT**

Mechanical and Metallurgical tests on test welds

Two new rail pieces of same section and grade, each minimum 650 mm long, shall be used to make test weld joints. The welded joint shall be made as per the technique offered by the manufacturer. The rail table and sides of the rail head shall be finished to the geometrical tolerances specified in Clause 18.2.

Hardness test

Brinell hardness test shall be carried out at the welded zone, heat affected zones and parent metal of the rails in accordance with IS: 1500, "Method for Brinell Hardness test for steel". The test shall be done on the top surface of the head of the test weld with a ball of 10 mm Dia. and a test load of 3000 kg maintained for 10 secs. The average hardness values of different rail chemistry on rail running surface of unaffected parent rail as per testing procedure and provisions specified in IRS/T-12-2009 along with its latest revision and updated correction slips are given in Table 1A for reference –

Table - 1A

1080 Head Hardened rail

72 UTS 90 UTS R260 rail Type of 1175 HT grade rail rail Rail rail 229* 260-300 340-390 350 - 390 Running Min Surface 260 Hardness (BHN)

* For 72 UTS rail, average hardness (BHN) is 229

<u>Fig.1</u> COF W.M. HAZ PM PM HAZ W.M ⊕ P ⊕н \bigoplus w ⊕ н ⊕ P ⊕н \oplus w ⊕н ⊕ P ⊕ P RAIL HEAD PLAN

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The average hardness number (of two readings) determined for the weld metal (WM), heat affected zone (HAZ) and parent metal (PM) at location shown as 'W' 'H' & 'P' respectively infig. 1 shall be as per table – 1B given below:

- (i) For 25mm gap SKV welding & for any preheating device used.
 - (a)For 52 Kg SectionX
 - =40 mm
 - Y = 100 mm
 - (b) For 60 Kg / 60 E1 Section X
 - =45 mm
 - Y = 100 mm
- (ii) For 50mm gap combination joint welding & for any preheating device used $X = \frac{1}{2}$
 - Y = 120 mm
- (iii) For 75 mm wide gap welding & for any preheating device usedX =
 - 80 mm
 - Y = 150 mm

Table 1B

			Hardness BHN
S.		Weld Metal	Heat affected zone(H) (at
No.	Rail Section/ Grade	(W)	locations shown in Fig. 1
140.		(Weld	above)
		centre-line)	
1.	72 UTS rail of all sections with	229 + 20	± 20 of actual parent metal
1.	normal & wide gap	- 0	hardness (location 'P')
	90 UTS (880 grade) rails of all	265 + 30	+30 to -10 of actual parent
2.	sections with normal & wide gap	- 0	metal Hardness (Location
			'P')
	52 kg (90 UTS) Vs 90R (72 UTS)	265 + 30	+30 to -10 of actual parent
3.	combination joint with 50mm gap	- 0	metal Hardness (Location
			'P')
	60 kg (90 UTS) Vs 52kg (90 UTS)	265 + 30	+30 to -10 of actual parent
4.	combination joints with 50mm gap	- 0	metal Hardness (Location
			'P')
	60kg, 1080 H.H. rail,		Not less than [actual parent
5.		321 (min.)	metal hardness (Location
			'P') – 60] BHN
6.	60 kg / 60 E1, R260 grade rail	265 + 30	+30 to -10 of actual parent
0.		- 0	metal hardness (location'P')
	60 kg / 60 E1, 1175 HT grade rail		Not less than [Actual parent
7.		350±20	metal hardness (location
			'P')-60] BHN
8.	60kg/90UTS / NCC Rail	265 + 30	+30 to -10 of actual parent
0.		- 0	metal hardness (location'P')

Note: For Combination Joint of 60kg (R260) Vs 52kg (90UTS) rail with 50mm gap or Joint of 60kg (R260) Vs 60kg (90UTS) rail with 25mm nominal gap, Hardness values corresponding to R260 grade rail as specified above shall be considered.

Similarly, for AT welding Joints of 60kg (90UTS) Vs 60kg/60E1 (1175 HT grade) rails and 60kg/60E1 (R260) Vs 60kg/60E1 (1175 HT grade) rails, with 25 mm Nominal gap, Hardness values corresponding to 60kg/60E1 (1175 HT grade) rail as specified above shall be considered.

Rail used for AT welding shall be confirming to IRST-12-2009 along with its latest revision and updated correction slips. Certificate issued by Rail inspecting agency regarding parent metal hardness shall be provided by AT weld portion manufacturer firms at the time of approval of AT welding technique and whenever required by RDSO.

Transverse breaking load test

The test weld shall be supported on cylindrical or semi cylindrical supports having adistance of one meter between them from centre to centre. The weld shall be at the centre of the span and loaded in such manner that the foot of the rail is in tension. The diameter of mandrel and the supports shall be between 30 to 50mm. The load shall be gradually increased (rate of loading shall not exceed 2.5 t/sec) till rupture occurs. The test weld shall withstand minimum transverse breaking load as indicated in column 4 of Table-2. The deflection at center at the actual transverse breaking load shall not be less than that specified in column 5 of Table-2.

Table - 2

S.			Min.	Min. deflection in mmat
No.	Doil Toma	Rail Section	transverse	the centre at the actual
	Rail Type		breaking load	transverse
			in tonnes	breaking load
1	2	3	4	5
	72 UTS to IRS T-12 for	60R	50	15
	normal gap welding &	75R	55	15
A.	wide gap (75 mm)	90R	65	15
	welding	52Kg	85	18
		60 Kg	95	18
	90 UTS to IRS T-12 for	75R	60	15
D	normal & wide	90R	80	15
В.	gap(75mm) welding	52kg	90	15
		60 kg	115	15

C.	Combination joint	*52kg (90 UTS)/	70	15
	(50mm gap)	90R (72 UTS)		
		60kg (90 UTS)/		
		52kg (90 UTS)	90	15
D.	1080 Head Hardened	60kg	115	12
	Rails to IRS T-12 for			
	normal gap welding			
E.	60 kg / 60 E1, R260 grade	60kg / 60 E1	122.5	15
	rail for Normal & wide gap			
	(75mm) welding			
	60 kg / 60 E1, 1175 HT	60kg / 60 E1	122.5	12
F.	grade rail for Normal &			
	wide gap (75mm) welding			
G.	90UTS/NCC Rails to IRST-	60Kg	115	15
	12 for Normal & Wide gap			
	(75mm) welding			

* 90UTS portion shall be used in 52Kg/90R combination joints.

Note: For Combination Joint of 60kg (R260) Vs 52kg (90UTS) rails with 50mm gap – transverse breaking load and min. deflection values corresponding 52kg (90UTS) joint and for Joint of 60kg (R260) Vs 60kg (90UTS) rails with 25mm nominal gap - transverse breaking load and min. deflection values corresponding to 60kg/60E1, R260 grade rail as specified above shall be considered.

Similarly, for AT welding Joints of 60kg (90UTS) Vs 60kg/60E1 (1175 HT grade) rails and 60kg/60E1 (R260) vs 60kg/60E1 (1175 HT grade) rails, with 25 mm Nominal gap, transverse breaking load and min. deflection values corresponding to 60kg/60E1, 1175 HT grade rail as specified above shall be considered.

If the fracture does not occur through weld, a slice shall be cut transversely at the weld and etched in boiling 1:1 Hydrochloric acid for about 20 minutes to determine casting defects if any.

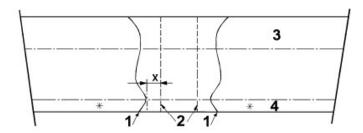
Macro Examination:

The fractured surface of the weld, or in case where macro - etching is done on transverse section through the joint, shall not show defects such as blow holes, porosity and inclusions etc. having individual size greater than 2mm dia. There shallnot be more than three defects of size \leq 2mm dia. The distance between two defects of size \leq 2mm dia. shall not be less than 20mm. The macro - etched transverse section shall not show cracks of length 2mm or greater. The defects shall not be interconnected and none of these shall extend up to the outer surface of the weld. There shall not be any lack of fusion and clustered porosities. The

fractured surface shall also not show the presence of accretions or mirror likesurface and shall be crystalline in appearance.

Fusion Zone-Shape and dimension

After macro examination, measurements of the fusion zone shall be made on the cuts illustrated in Fig. 2 the minimum distance X (Fig. 2) between the parent rail ends before welding and the fusion line shall be equal to or greater than 3mm. The measurement of X shall be made using datum marks to locate the original position of the rail ends.



Key

- * Datum marks on foot tip
- 1 Fusion line
- 2 Rail ends before welding
- 3 Rail head
- 4 Rail foot

Figure-2: Shape of fusion zone on the etched longitudinal vertical section

The fusion zone shall exhibit a symmetrical shape about the welding gap. The visible heat affected zones on each side of the weld shall be measured on the rail running surface centre line. The visible heat affected zone shall be symmetrical about the longitudinal axis of the rail and transverse axis of the weld.

Sample Test Joint:

One out of every 100 joints welded per batch shall be selected at random by the purchaser or by the inspecting officer within one month of welding and subjected to hardness and transverse load test as per clause 4.4.2 and 4.4.3 of this specification respectively and the joint shall comply with the provisions laid down therein.

In the event of the failure of sample test joint in any of the requirements of this specification, 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 re-tests as per clause 4.4. Both the joints shall clear all the tests. If the report is also

not satisfactory, further welding of joints shall be suspended until the firm has examined the welding technique and satisfies the requirements of Clause 4 by welding one test joint. The clearance for re-commencement of welding shall be given by RDSO.

MAJOR DEFECTS IN A.T. WELDING BECAUSE OF IMPROPER WELD EXECUTION

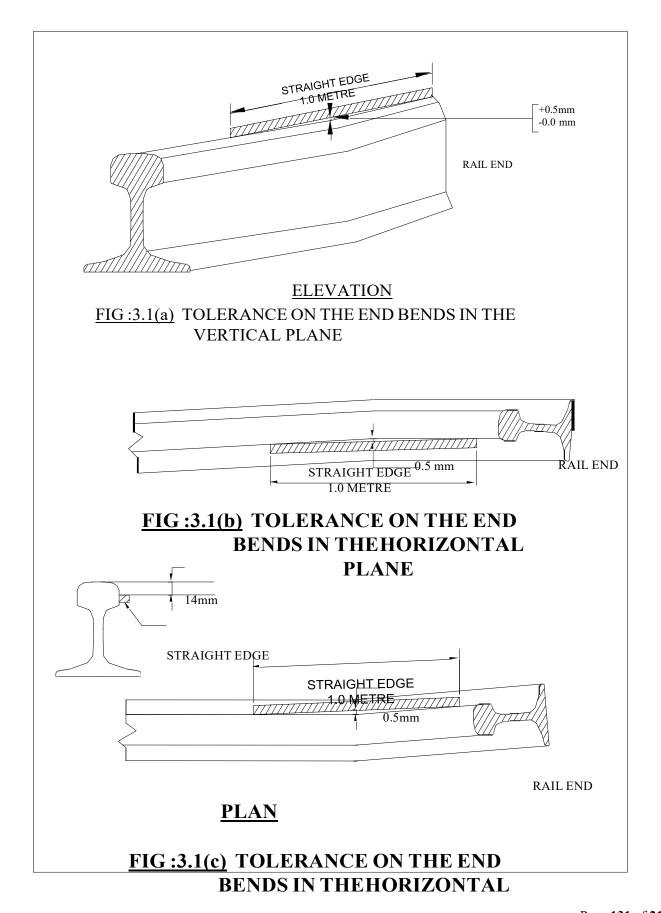
S.	Type of defect	Cause of defect	Preventive steps to be			
No.			taken to avoid the defect			
1.	Longitudinal crack in rail web	Cutting of wear resistant grade rails by flame cutting.	Flame cutting of rail ends is prohibited due to likelihood of cracking in web			
2.	Lack of fusion in rail foot	Flame cutting of rail ends.	When producing the welding gap, never flame cut rail ends without using a cutting guide.			
3.	Cold spots-lack of fusion.	Gap between rail ends too wide-rail ends outside the collar formation	Maintain the welding gap between rail ends specified in the approved parameters of the technique. Never attempt to weld a gap which is too wide, with standard mould.			
4.	Cold spot-lack of fusion and associated local porosity.	Mould fitted vertically but offcenter to the weld gap.	Take care to centralise the mould to the gap. Never try to fit both mould halves simultaneously.			
5.	Lack of fusion on foot of one rail end.	Moulds fitted centre to the gap but inclined to the vertical.	Take care to fit mould both vertical and central to the weld gap. Do not incline mould to the vertical.			
6.	Gross lack of fusion on rail end	Standard moulds fitted to rails of dissimilar depth	Do not try to weld worn to new rail, or rails dissimilar depth with standard mould.			
7.	Porosity in the thermit steel	Luting sand too wet.	Luting sand must be moist but not too wet. Never use wet luting sand.			
8.	Sand inclusion in the rail foot and sandburn marks transversely across the rail head	sand into the mould	Take care when sealing the mould with luting sand. It must not be allowed to drop into the mould.			
9.	Gross porosity throughout the whole weld section	Use of damp crucible is detrimental to thermit reaction and results in gross porosity of weld metal.	Carefully dry out the crucible lining using the preheating burner.			

S.	Type of defect	Cause of defect	Preventive steps to be		
No.			taken to avoid the defect		
10.	Gross porosity throughout the whole weld section	Use of damp portion. Moisture present in portion reacts with aluminum and its characteristics thereby affecting thethermit reaction andresultant steel. This change cannot be reversed by drying out.	It is essential only to use dry thermit portions. Never use portions which have been damped and driedout.		
11.	Gross inclusion of slagin the rail head.	Pouring without the plug in the position.	After preheating, fit the sand core with the riser aperture of the mould and press own lightly.		
12	Gross slag inclusion in rail head on one side.	Pouring off centre to the plug.	Ensure that the crucible is positioned centrally the over the sand core and the crucible does not move during the thermit reaction. Never allow the thermit steel to pour directly into either pouring gate.		
13.	Fracture through weld centre	Immediate imposition of tensile forces on weld metal cause internal tearing of weld metal which leads to total transverse fracture.			
14.	Cracking of weld after cooling at rail ends.	Failure to use the correct thermit portion and welds. Procedure as approved for specific rail section/rail chemistry.	and type of rail to be welded and use correct type of portion and adopt correct welding parameters at the time of welding of rail joints.		
15.	Presence of fin in bottom parting line	Improper mould fixing and improper Luting	Proper mould fixing and proper luting as given in Para 4.8		

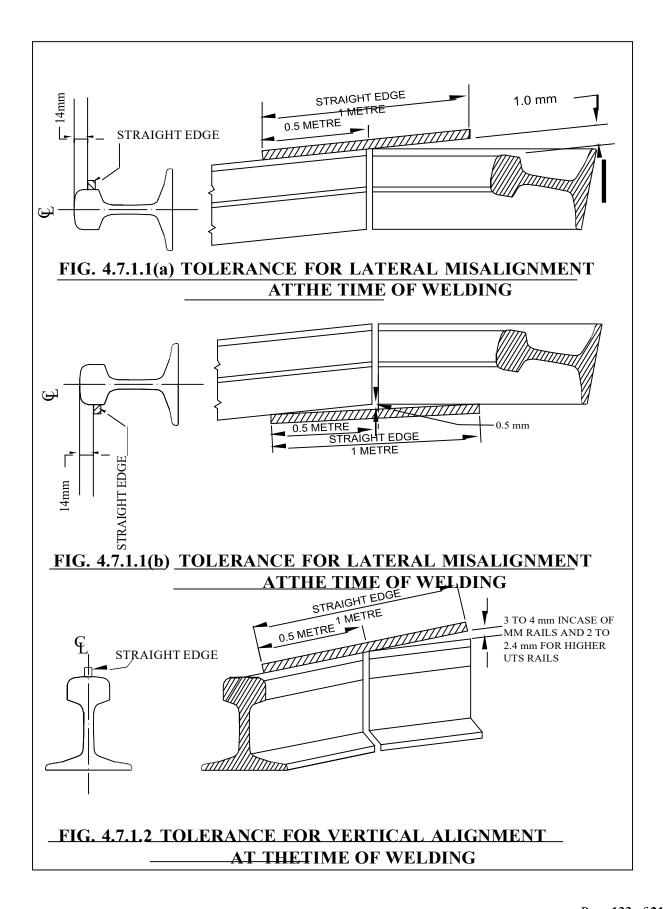
CHECK LIST FOR INSPECTION OF A.T. WELD

SECTIONDIVISION	KM/TP
LINE: UP/DN/SINGLE	DATE
BLOCK TIME	
 Equipment are complete as per Annexure – 2 of A.T. welding Manual–2021 If no then deficiencies are 	
2. Composition of welding team:-	
 a) Welder having competency certificate b) Welding Supervisor having competency certi c) Welding being done departmental or through contractual agency d) Name of Welder 	Yes/No ficate Yes/No Departmental/Contractual
3. Details of Rails being welded:	
 i) Section & UTS ii) Old or new iii) Whether rail is free from corrosion or excess viv) Whether rails has been USFD tested before If yes, result of USFD testing. v) If old then GMT carried out vi) Condition of rails 	wear Yes/No welding. Yes/No O.K./Not O.K Good/Satisfactory/Not Satisfactory
 4. Condition of Rail ends: a) Battering in mm b) Hogging in mm c) End cuts are truly vertical d) Ends are cleaned by K-oil & wire brush e) Whether fish bolt holes have been eliminated of 	
5. Portions details:	
a) Manufacturerb) Date of manufacturec) Condition of polythene packingd) Condition of portione) Portion no. & UTS	 Sealed/Broken Wet/Dry

6. Gap in mm (25 ± 1) :		mm
7. Alignment of rail with 1m straig	tht edge:	
a) Lateral ± 0.5 mm	_	
b) Higher by		
i) For 72 UTS (3-4mm)		
ii) For higher UTS (2-2.5mm)		
8. Whether fastening of 5 adjacent slo	eepers removed:	Yes/No
9. Mould shoes are fixed correctly	-	Yes/No
(Should be perfectly vertical shall n	ot be skew)	
10. Pressure in compressor tank (7±0	0.7kg/sq.cm):	
11. Preheating time (in minutes):		
12. Tapping time in seconds (20 ± 3)		
13. Mould waiting time (4-6 minutes		
14. Trimming is done by:	Weld tr	immer/Manual
15. Wedge was removed after (20 mi	nutes	Minutes
,		
17. First train was passed with speed	restriction	Kmph
18. Grinding is done with the help of	Mech. (Grinder/Manual
19. Tolerances of finished weld:		
a) Vertical alignment with 1n	n st.edge (+1.0, - 0.0mm)	
b) Lateral alignment with 1m	st. edge (<u>+</u> 0.5mm)	
c) Finishing of top surface at	the	
end of 10cm st.edge(+0.4,-	0.0mm)	
d) Finishing on sides of Rail l	nead at the	
centre of 10cm st.edge(± 0	0.3mm)	
20. Weld is serially numbered as per		Yes/No
(Para 5.6 of A.T. Welding Manua	al)	
If yes, then give the no.		
21. Whether USFD testing of weld d	one or not	Yes/No
If yes, result of USFD testing		O.K./Not O.K
22. Whether painting of thermit weld	l done or not	Yes/No
23. Whether sample test joint made a	and	Yes/No
sent for testing or not (one out or		
24. Weld register is maintained as pe	r manual (Annexure-5)	Yes/No
	Signature	
	Name of Inspecting authority	
	Designation:	
	Date:	



PLANE



STRAIGHT EDGE 1 METRE +1.0mm -0.0 mm

WELDED JOINT

TOLERANCE FOR VERTICAL MISALIGNMENT OF WELDED JOINT

WELDED JOINT

0.5 mm

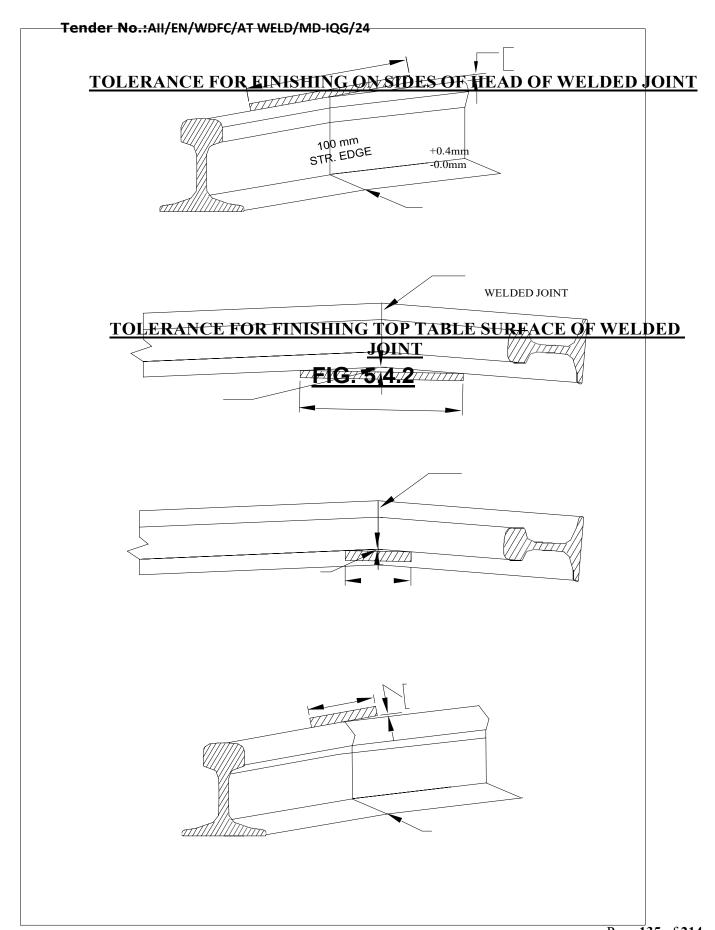
STRAIGHT EDGE1 METRE

TOLERANCE FOR LATERAL MISALIGNMENT OF WELDED JOINT

WELDED JOINT

 $\begin{array}{cc} 0.30 \text{ mm} & \underline{100 \text{ mm}} \\ \text{STR. EDGE} \end{array}$

Page 134 of 214



TENDER FORMS & ANNEXURES

PART- VII TENDER FORMS

FORM No. SUBJECT

Form No.1 Schedule of items

FormNo.2 Standing indemnity bond for on account payment.

FormNo.3 Format of Integrity Pact

FormNo.4 Anti-profiteering

&

ANNEXURES (I to XXXIV& A to D)

FORM No. 1

Schedule of Items

Name of Work : Execution of AT Welding between Madar-Iqbalgarh section in Jurisdiction of GM/Coord Ajmer Unit of WDFC.

	Schedule					
SN	Item	Description	Qty.	Unit	Rate	Amount
1.		25mm gap ' <i>In-situ'</i> welding and finishing of rail joints as per IR's AT Welding Manual with latest correction slips, RDSO approved welding portion and competent welder ,labour, tools, equipments complete during <i>traffic block</i> . {Item includes use of weld trimming machine and grinding of weld finished to meet the weld tolerances and also anti corresive painting to weld & marking of welded joint, as directed by Engineer in charge}.				
		For 60 kg Rail, Single shot crucible fitted with Automatic Tapping Thimble Technology, 3 pieces mould (Zircon washed) and compressed Air Petrol heating technique	1	Each	5000	18,00,000.00
2.	NS2	25 mm gap <i>Cess welding</i> and finishing of rail joints as per IR's AT Welding Manual with RDSO approved welding portion and competent welder, labour, tools equipments complete. Item also includes use of weld trimming machine and grinding of weld finished to meet the weld tolerances and also anti corrosive painting & marking of welded joint as directed by engineer in-charge;				
		For 60kg Rail, single shot crucible fitted with automatic tapping thimble technology, 3 pieces Mould (Zircon washed) and compressed Air Petrol heating technique		Each	4250	6,37,500.00
				To	tal	24,37,500
				GST	18%	4,38,750
				Grand	Total	28,76,250

Explanatory Notes for Schedule of items:-

(i) Contractor should bear the fact in mind while quoting the rates that rates are including all taxes (including GST). GST will be paid by Contractor as per prevailing rate as applicable. Documentary evidence of deposition of GST will be produced by contractor for on account bill.

- (ii) The above quantity is approximate: -The DFCCIL reserves the right to increase / decrease the same.
- (iii) The contractor should adhere to **Anti Profiteering Provisions** as per section 171 of the CGST Act. Where due to change in the rates of GST / Change in law, the contractor gets any credits / benefits, the same shall be passed on to DFCCIL by way of reduction inprices

Name of witness in Block letter. Address.

FORM No. 2

SAMPLE STANDING INDEMNITY BOND FOR "ON ACCOUNT" PAYMENTS

(On paper of requisite stamp value)

We,M/s		hereby undertake that we hold at our stores
Depot/s at	for and on	behalf of the Managing Director/ DFCCILacting
	rough	the Chief General Manager/Co /
DFCCIL/Ajmer or his successor (h	ereinafter referred	to as "The Employer") all materials for which "On Account"
payments have been made to us ag		
5) onthesection
•	mployer for the pu	cceptance of Tender dated and material arpose of execution of the said contract, until such time the
are duly delivered as erected equip employer against any loss /dama possession and against disposal of	ment to the employage or deterioration surplus materials. I,DFCCIL/Ajmer in	and protection of the said materials against all risk till they yer or as he may direct otherwise and shall indemnify the n whatsoever in respect of the said material while in our The said materials shall at all times be open to inspection by a charge of Dedicated Freight Corridor Corporation of India e).
due, the Employer shall be entitled also compensation for such loss of	to recover from us damage if any long deduction from an	occur or surplus material disposed off and refund becomes the 85% of supply portion of the Contract (as applicable) and ng with the amount to be refunded without prejudice to any ny sum due or any sum which at any time hereafter becomes
Dated this day	davof	200 For and on behalfof
M/s_		actor) Signature of witness

PRE CONTRACT INTEGRITY PACT

General

WHEREAS the CLIENT proposes to procure (Name of the Stores/Equipment/Item, Name of the Consultancy Service, Name of Works Contract, Name of Services) and the BIDDER is willing to Offer/has offered for stores orworks.

WHEREAS the BIDDER is a private company/ public company/ Government undertaking/ partnership/ registered export agency, constituted in accordance with the relevant law in the matterandtheCLIENTisaPSUperformingitsfunctionsorbehalfofthePresidentofIndia.

NOW, THEREFOR,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a viewto:-

Enabling the CLIENT to obtain the desired said (Name of the Stores/Equipment/Item, Name of the Consultancy Service, Name of Works Contract, Name of Services) at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERs to abstain from bribing or indulging in any corrupt practice in order to secure Contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the CLIENT will commit to prevent corruption, in any form, by its Officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows: Commitments of the CLIENT

1.0 The CLIENT undertakes that no official of the CLIENT, connected directly or indirectly with the Contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER either for themselves or for any person, organization or third party related to the Contract, in exchange for an advantage in the biddingprocess, bidevaluation, contracting or implementation process related to the Contract.

- 1.1 The CLIENTwill, during the pre-contract stage, treat all BIDDERs alike, and willprovidetoallBIDDERsthesame information and will not provide any suchinformation to any particular BIDDER which could afford an advantage tothatparticularBIDDER in comparison to other BIDDERs.
- 1.2 All the officials of the CLIENT will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such abreach.
- 2. Incaseanysuchprecedingmisconductonthepartofsuchofficial(s)inreported by the BIDDER to the CLIENT with full, and verifiable facts and the same is prima facie found to be correct by the CLIENT, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the CLIENT and such a person shall be debarred from further dealings related to the Contract process. In such a case while an enquiry is being conducted by the CLIENT the proceedings under the Contract would not bestalled.

Commitments of BIDDERS

- 3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage) in order to secure the Contract or in furtherance to secure it and in particular committee itself to the following:-
 - 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission fees, brokerage or inducement to any official of the CLIENT, connected directly or indirectly with the bidding process, or toany person, organization or third party related to the (B] in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
 - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour. any Material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the CLIENT or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining execution of the Contractor any other Contract with the Government for showing of the Contractor and the Contract with the Government for showing of the Contract with the Contracrforbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.
 - 3.3 *BIDDER shalldisclosethenameandaddressofagentsandrepresentativesandIndian BIDDER shall disclose their foreign principals orassociates.
 - 3.4 * BIDDER shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with

thisbid/contract.

- 3.5 The BIDDER further confirms and declares to the CLIENT that the BIDDER is the original manufacturer/ integrator/ authorized government sponsored export entity of the defense stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the CLIENT or any of its functionaries, whether officially or unofficially to the award of the Contract to the BIDDER nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation orrecommendation.
- 3.6 The BIDDER either while presenting the bid or during pre-contract negotiations or before signing the Contract shall disclose any payments he has made, is committed to or intends to make to officials of the CLIENT or their family members, agents, brokers or any other intermediaries in connection with the Contract and the details of services agreed upon for suchpayments.
- 3.7 The BIDDER will not collude with other parties interested in the Contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the Contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegalactivities.
- 3.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the CLIENT as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supportingit with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit anyof the actions mentioned above.
- 3.12 If the, BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or Indirectly, is a relative of any of the officers of the CLIENT, or alternatively, if any relative of an officer of the CLIENT has financial.
 - Interest/stake in the Bidder's firm, the same shall be disclosed by the BIDDER at the time of filling oftender.
 - The term 'relative' for this purpose would be as defined in section 6 of the companies' act 1956.
- 3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealingsortransactions, directly

orindirectly, with any employee of the CLIENT.

4. Previous Transaction

- 4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any public sector enterprise in India or any Government department in India that could justify BIDDER's from the tenderprocess.
- 4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the ender process or the contact, if already awarded, can be terminated for suchreason.

5. Earnest Money (SecurityDeposit)

- 5.1 Whilesubmittingcommercialbid,theBIDDERshalldepositanamount (to be specified in RFP) as Earnest Money/Security Deposit, with the CLIENT through any of the following instruments:
 - i. Bank draft or a pay orderinfavourof .
 - ii. A confirmed guarantee by an Indian nationalized bank, promising payment of the guaranteed sum to the CLIENT on demand within three working days without any demur whatsoever and without seeking any reasons whatsoever. The demand for payment by the CLIENT shall be treated as conclusive proof orpayment.
 - iii. Any other mode or through any other instrument (to be specified in the RFP).
- 5.2 The earnest money/Security deposit shall be valid up to a period of five years or the contractual obligations to the complete satisfaction of both the BIDDER and the CLIENT, including warranty period, whichever islater.
- 5.3 In case of the successful BIDDER a clause would also be incorporated in the article pertaining to performance Guarantee in the Contract that the provisions of sanctions for violation shall be applicable for forfeiture of performance bond in case of a decision by client to forfeit the same without assigning any reason for imposing sanction for violation of thispact.
- 5.4 No interest shall be payable by CLIENT to the BIDDER on earnest Money/Security Deposit for the period of its currency.

6. Sanctions for Violations

- 6.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER shall entitle the CLIENT to take all or any one of the following actions, wherever required:-
 - (i) To immediately call off the pre-contract negotiations without

- assigning any reason or giving any compensation to the [A]. However, the proceedings with the other BIDDER(s) wouldcontinue.
- (ii) The earnest money deposit (in pre-contract stage) and/or security Deposit/performance Bond (after the Contract is signed) shall stand forfeited fullyandtheCLIENTshallnotberequiredtoassignanyreasontherefore.
- (iii) To immediately cancel the Contract, if already signed, without giving any compensation to the [A].
- (iv) TorecoverallsumsalreadypaidbytheCLIENT, and in case of an Indian [A] with interest thereon at 2% higher that the prevailing prime lending rate of state bank of India, while in case of a BIDDER from the country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to BIDDER from the CLIENT in connection with any other Contract, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- (v) Toencashtheadvancebankguaranteeandperformancebond, iffurnis hed by the [A], in order to recover the payments, already made by CLIENT, along withinterest.
- (vi) To cancel all or any other contracts with the BIDDER. The BIDDER shall be liable to paycompensationforanylossordamagetotheClientresultingfromsuch cancellation/rescission and the client shall be entitled to deduct the amount so payable from the money(s) due to theBIDDER.
- (vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of theCLIENT.
- (viii) To recover all sums paid in violation of this pact by BIDDER to any middleman or agent or broker with a view a view to securing Contract the contract.
- (ix) In cases where irrevocable letters of credit have been received in respect of any Contractsignedbytheclientwith the BIDDER, the shall not be opened.
- (x) Forfeiture of Performance Bond in case of a decision by the clienttoforfeit the same without assigning any reason for imposing sanction for violation of thispact.
- 6.2 The client will entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this pact also on the commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the [A], of an offence as defined in chapter IX of the Indian penal code, 1860 or prevention of Corruption Act, 1988 or any other statute enacted

forpreventionofcorruption.

6.3 The decision of the CLIENT to the effect that a breach of the provisions of this pact has been committed by the BIDDER shall be final and conclusive on the [A]. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

7. FallClause

7.1 The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India **PSU** and it or foundatanystagethatsimilarproduct/systemorsubsystemswaysuppliedby BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the CLIENT, if the Contract has already been concluded.

8. IndependentMonitors

- 8.1 The CLIENT has appointed Independent Monitors (hereinafter referred to as Monitors) for this pact in consultant with the central vigilance commission (Names and addresses of the Monitors to be given)
- 8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.
- 8.3 The monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes ofmeetings.
- As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the CLIENT
- 8.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the CLIENT including that provided by the BIDOER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid Interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be und 'contractual obligation to treat the information and documents ofthe

[A] Withconfidentiality.

8.7 The client will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.

- 8.8 The monitor will submit a written report to the MD/DFCCIL within 8 to 10 weeks from the date of reference or intimation to him by the CLIENT/BIDDER and, should the occasion arise, submit proposal for correcting problematic situations.
- 9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the CLIENT or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall exte4nd all possible help for the purpose of such examination.

10. Law and Place of Jurisdiction

This pact is subject to Indian law. The place of performance and jurisdiction is the seat of the CLIENT.

11. Other Legal Actions

The actions stipulated in this integrity pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

- 12. Validity
 - 12.1 The validity of this integrity pact shall be from date of its signing and extend up to 5 years or the complete execution of the Contract to the satisfaction of both the CLIENT and the BIDDER including warranty period, whichever is later. In case BIDDER is unsuccessful, this integrity pact shall expire after six months from the date of the signing of the Contract.
 - 12.2 Should one or several provisions of this pact turn out to be invalid; the remainder of this pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

13. Thepartiesherebysignthisintegritypact	tatOn
CLIENT	BIDDER
Name oftheOfficer	
Designation	
Deptt./Ministry/PSU	
Witness	Witness
1	1
2.	2.

ANTI-PROFITEERINGDECLARATION TO WHOMSOEVER IT MAYCONCERN

	I, age, years, Son/Daughter of, residentof
1)	That Iam the < Designation of the authorized signatory > of
	And I am duly authorized to furnish this undertaking/declaration on behalf of
	(Name of the company).
2)	That (Name of the company) has been awarded the work
	(Name of Work) vide Letter of Award number
	Dated by M/s Dedicated Freight Corridor Corporation of IndiaLimited.
3)	That the Company is fully aware of the anti-profiteering provision under the Goods & Services Tax
45	("GST")Law(s),
4)	That the Company
	availableonthe(good/services)havingHSN
	supplied to M/s Dedicated Freight Corridor Corporation of India Limited which it is getting on
	account of reduced tax liability and input tax credit because of enactment of GST Laws after
	introduction of Goods and Service Tax w.e.f. 1 ^{s1} July, 2017. The details and amounts being passed
	on to DFCCIL are providedinAnnexure
	applicable GST Laws. These are true and correct to the best of my knowledge, information and belief.
5)	Further, it is to confirm also that in case (name of the organization) will receive any
3)	further benefit in future after 1 st July, 2017 by way of availment of input tax
	creditswhichwerenotallowedtobeavailedbefore1 ^{sl} July,2017orreductionintaxrates
	•
	or in any other manner which results in reduction of cost of the goods/services supplied to M/s
	Dedicated Freight Corridor Corporation of India Limited, then Company will pass that benefit to
6	M/s Dedicated Freight Corridor Corporation of India Limitedalso.
6)	That I declare that the foregoing is true and correct and the same is a legal obligation and failure to

fulfil it could result in penalties under thelaw.

7) I confirm that I am aware of the implication of the above undertaking and our liability on account of incorrect/misleading declaration under the GSTLaws.

Signature of the Authorized signatory/ person

Name and Designation of the Auth. Sign/person of the person

Name of the Organization and Seal

Executed on a non-judicial stamp paper of Rs.100/- duly notarized by notary public

ANNEXURE-I

(Para 16.1(a) of General Instructions) & clause No. 14 (i), (ii) Part-I of GCC APRIL-2022, with up to date correction slip

1.	Full name of the firm
2.	Registered Head Office Address
3.	Branch Office in India (If any)
4.	Constitution of firm (whether Sole proprietorship firm/Partnership firm/Limited Company/Joint Venture (JV)/Registered Society/ Registered Trust /LLP/HUF etc.)
5.	Bank account details of the firm i.e. Account No., name of bank and bank specific code number (MICR &IFSC) to facilitate electronic payment
6.	Detail of PAN of the firm
7	E Mail ID

I/we declare that the is not blacklisted or debarred by Railway/DFCCIL or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which HUF was / is a partner/member. I/ We are aware that concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.

Note:-	1	Please	ana	اممما	4
Note:-	- 1	Please	enc	iose	п-

- (i) Attested copy/copies of the constitution of their firm (ii) Copy of PAN CARD.
- (ii)
- 2. Tender document has to be signed by such persons as may be legally competent to sign on behalf of the firm, company, association, HUF, LLP, trust or society as the case m

Date:	Signature of Tenderer/s
	With Seal

ANNEXURE-II

(Para 16.1(b) of General Instructions) & clause No. 6.1 &11(iv) Part-I of GCC APRIL-2022, with up to date correction slip

FORMAT FOR CERTIFICATETO BE SUBMITTED / UPLOADED BYTENDERERALONGWITH THE TENDER DOCUMENTS

I				. (Na	me and de	esignation) *	* appo	inted as	s the
attorney/	authorized	signatory	of	the	tenderer	(including	its	constitue	ents),
M/s					(hereina	after called the	he tend	lerer) fo	r the
purpose o	of the Tender	documents	for th	ne wor	k of				
As	per theter	nder No			of	(DFCCIL), o	do here	by sole	mnly
affirm an	d state on the l	oehalf of the	tende	erer in	cluding its	constituents a	ıs unde	r:	

- 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 Electronic procurement Systemwebsitewww.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 DFCCIL 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 up to five 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 up to five 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 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 TENDERER

Place: Dated:

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

This certificate is to be given by each Bidder or each member of JV or each member of Partners of Partnership firm/LLP etc.

ANNEXURE-II (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(tenderering 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:

"ANNEXURE -III"

(Para 16.0(c) and Note to para 15 Note No.(iii) cof General Instructions) & Clause No. 10.1(a) and explanation to clause 10 -part I of GCC APRIL-2022

Details of works of similar nature physically completed in all respect as per contract agreement during last seven years, ending last day of month previous to the one in which tender is invited

		whom work	vhom	& Date	greement	ompleted	opening of /final bill)	Time tak completion work	on of	k in brief
SN	Name of work	Name of organization for whom work physically completed	Type of organization for whom work executed	Contract Agreement No. & Date	Original value of contract agreement	Final value of contract as completed	Payment received till opening present tender (On account/final bill)	Date of award of contract	Date of actual completion	Principal feature of the work in brief
1	2	3	4	5	6	7	8	9	10	11
1.										
2.										

Date:	Signature of Tenderer/
	With Sea

Note:-

- (i) Above detail should be given only for works which have been physically completed in all respects, for the similar nature work defined in clause 15.5 above. Part completed work shall not be considered.
- (ii) Certificate from Private individual for whom such works are executed shall not be considered for eligibility of tenderers.
- (iii) The tenderers should attach self-attested copy of certificate issued by the organizations for whom the work was carried out in the proforma as per Annexure-IV-A, IV-B, IV-C as applicable.

- (iv) In column 4 type of organization is to be mentioned viz. Central/ State Governments /Public Sector Undertaking/Public Funded Institutions/Municipal Bodies /DFCCIL Siding owners /Concessionaire/ Public listed company.
- (v) In case of JV firm, these details are also required for all the members of the JV firm for one similar single work for a minimum of 10 % of advertised value of the tender (for works without composite components).
- (vi) No technical and financial credentials are required for tenders having value up to Rs.50 lakhs.
- (vii) In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.
- (viii) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials.
- (ix) If a part or a component of work is completed but the overall scope of contract is not completed, this work shall not be considered for fulfillment of technical credentials even if the cost of part completed work/component is more than required for fulfillment of credentials.
- (x) In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.
- (xi) For col no 7, the value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of work.
- (xii) In case, the Secondary Component(s) has/ have been defined in clause 15.5 above, the details of successfully completed works of similar nature (that defined for the Secondary Component), executed by tenderer himself / the subcontractor (fully by any one or jointly i.e. partly by tenderer and remaining through subcontractor) during last five years, shall also be submitted in above performa.

Attested copy of Completion Certificate of works mentioned in para (c) above from (xiii) the Organizations with whom they worked as per performa given in **Annexure-IVA or IV-B or IV-C** as applicable.

(Para 16.1 (d) and Note to para 15 Note No.(iii) b of General Instructions)

Clause No. 11(i), and explanation to clause 10 of part I of GCC APRIL2022

COMPLETION CERTIFICATE

Name of Organization

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

Letter No. Date:-....

	Name of work	1
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/Joint Venture firm/Registered Society /registered Trust etc.)	
5. (i)	In case of Partnership firm/JV/ 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	Completion Cost of Work	
7.1	in case final payments have been made- Contract Cost in last approved variation statement plus PVC amount paid	
7.2	in case final bill is pending -	
(i)	the contract cost in last approved variation statement plus PVC amount paid	
(ii)	cumulative amount paid up to last on-account bill including PVC amount and statutory deductions	
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 inviting of present tender along with financial year –wise break-up	
12	In case of composite work: (See note (vii) below) Payment made for relevant distinct component of the work, out of total payment made under Sr. No. 7 above.	
12.1	In case final payments for the component have been made- Cost of component in contract in last approved variation statement plus PVC amount paid	

12.2	In case final bill is pending -	
(i)	The Cost of component in contract in last approved variation statement plus PVC amount paid	
(ii)	Cumulative amount paid for the component up to last on account bill including PVC amount and statutory deductions	
13	Performance of Contractor (Satisfactory/Unsatisfactory)	

I hereby certify that above mentioned work has been physically completed in all respect as per contract agreement. Performance of the contractor while executing the work had been satisfactory.

(Signature)

Date-

Name and Designation of officer
Mobile No. of officer
Seal of officer

Note:-

- (i) Submission of false certificates by tenderer shall lead to, forfeiture of EMD and other action including penal action (Annexure-II).
- (ii) Copy of certificate duly self-attested shall be submitted along with tender document.
- (iii) Payment made as indicated in above certificate (At Sr. No. 11/ Sr. No. 12) will be considered as value of completed work for the purpose of eligibility under special technical criteria.
- (iv) Above format is for guidance only. Any certificate containing information asked for shall be considered.
- (v) In case of JV firm, these details are also required for all the members of the JV firm for one similar single work for a minimum of 10 % of advertised value of the tender (for works without composite components).
- (vi) In case of JV firm, these details are also required for all the members of the JV firm for one similar single work for a minimum of 10 % of cost of any component of work in separate sheet (for work with composite components).
- (vii) 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.
- (vii) No technical and financial credentials are required for tenders having value uptoRs. 50 lakhs.
- (viii) In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.
- (ix) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials.
- (x) If a part or a component of work is completed but the overall scope of contract is not completed, this work shall not be considered for fulfillment of technical credentials even if the cost of part completed work/component is more than required for fulfillment of credentials.
- (xi) In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.

- (xii) For col 7 & 12 -The value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of work/component.
- (xiii) In case, the Secondary Component(s) has/ have been defined in clause 15.5 above, the Attested copy of Completion Certificate of works executed by tenderer himself / the subcontractor (fully by any one or jointly i.e. partly by tenderer and remaining through subcontractor) during last five years, shall also be submitted in above performa.

ANNEXURE-IV-(B)

(Para 16.1(d) and Note to para 15 Note No.(iii) b of General Instructions) Clause No. 11.(i), and explanation to clause 10 of part I of GCC APRIL-2022

COMPLETION CERTIFICATE

(If the work is awarded by

Concessionaire)

Name of Concessionaire

Address and Contract details i.e.

Phone No.FAX, e-mail.

Letter No. Date:-....

1.1	Name of work /Project executed by the Concessionaire	
1.2	Name and Address of Authority which awarded work to the Concessionaire.	
1.3	Name of work awarded by the Concessionaire to the firm.	
2.	Contract Agreement (C/A) No. and date	
3.	Name of Firm with address	
4.	Nature ofentity (Sole Prop./Partnership firm/company/Joint Venture firm/Registered Society /registered Trust etc.)	
5. (i)	In case of Partnership firm/JV/ 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	Completion Cost of Work	
7.1	in case final payments have been made- Contract Cost in last approved variation statement plus PVC amount paid	
7.2	in case final bill is pending -	
(i)	the contract cost in last approved variation statement plus PVC amount paid	
(ii)	cumulative amount paid up to last on-account bill including PVC amount and statutory deductions	
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 (vii) below) Payment made for relevant distinct component of the work, out of total payment made under Sr. No. 7 above.	
12.1	in case final payments for the component have been made- Cost of component in contract in last approved variation statement plus PVC amount paid	
12.2	in case final bill is pending -	
(i)	the Cost of component in contract in last approved variation statement plus PVC amount paid	
(ii)	cumulative amount paid for the component up to last on account bill including PVC amount and statutory deductions	
13.	Performance of Contractor (Satisfactory/Unsatisfactory)	

I hereby certify that above mentioned work has been physically completed in all respect as per contract agreement. Performance of the contractor while executing the work had been satisfactory.

Signature & Name of Authorized Person of the Concessionaire with

Mobile No. of Issuing Person.

Note:-

- (i) Submission of false certificates by tenderer shall lead to, forfeiture of EMD and other action including penal action (Annexure-II).
- (ii) Copy of certificate duly self-attested shall be submitted along with tender document.
- (iii) Payment made as indicated in above certificate (At Sr. No. 9/ Sr. No. 10) will be considered as value of completed work for the purpose of eligibility under special technical criteria.
- (iv) Above format is for guidance only. Any certificate containing information asked for shall be considered
- (v) A self-attested copy of LOA and concessionaire agreement executed between concessionaire & Authority at Sr. No 1 above shall be submitted along with this completion certificate.
- (vi) In case of JV firm, these details are also required for all the members of the JV firm for one similar single work for a minimum of 10 % of advertised value of the tender (for works without composite components).
- (vii) In case of JV firm, these details are also required for all the members of the JV firm for one similar single work for a minimum of 10 % of cost of any component of work in separate sheet (for work with composite components).
- (viii) Only those works will be treated as composite works which consist of more than one distinct component 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
- (ix) No technical and financial credentials are required for tenders having value uptoRs. 50 lakhs

- (x) In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.
- (xi) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials.
- (xii) If a part or a component of work is completed but the overall scope of contract is not completed, this work shall not be considered for fulfillment of technical credentials even if the cost of part completed work/component is more than required for fulfillment of credentials.
- (xiii) In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.
- (xiv) For col 7 & 12 -The value of final bill including PVC amount-if paid, or otherwise, Incase final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of work/ component.
- (xv) In case, the Secondary Component(s) has/ have been defined in clause 15.5 above, the Attested copy of Completion Certificate of works executed by tenderer himself / the subcontractor (fully by any one or jointly i.e. partly by tenderer and remaining through subcontractor) during last five years, shall also be submitted in above performa.

ANNEXURE-IV-(C)

(Para 16.1 (d) and Note to para 15 Note No.(iii) b of General Instructions) Clause No. 11(i), and explanation to clause 10 of part I of GCC APRIL-2022

COMPLETION CERTIFICATE

(If the work is awarded by Public listed company)

Name of the public listed company

Address and Contract details i.e. Phone No. FAX, e-mail.

Letter No.Date:-....

1.1	Name of work /Project	
1.2	Name and Address of the public listed company	
1.3	Number as incorporated/ registered in the National stock exchange or Bombay stock exchange	
1.4	Date of getting listed in NSE/BSE (document to be attached as per note (vi) below).	
1.5	Average Annual turnover of the public listed company in last three financial years excluding current financial year. (details to be attached as per proforma in annexure VIII as per note (vii) below)	
2.	Contract Agreement (C/A) No. and date	
3.	Name of Firm with address	
4.	Nature of entity (Sole Prop./Partnership firm/company/Joint Venture firm/Registered Society /registered Trust etc.)	
5. (i)	In case of Partnership firm/JV/ 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	Completion Cost of Work	
7.1	in case final payments have been made- Contract Cost in last approved variation statement plus PVC amount paid	
7.2	in case final bill is pending -	
(i)	the contract cost in last approved variation statement plus PVC amount paid	
(ii)	cumulative amount paid up to last on-account bill including PVC amount and statutory deductions	
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 (vii) below)
	Payment made for relevant distinct component of the work, out of total payment made
	under Sr. No. 7 above.
12.1	in case final payments for the component have been made- Cost of component in
	contract in last approved variation statement plus PVC amount paid
12.2	in case final bill is pending -
(i)	the Cost of component in contract in last approved variation statement plus PVC amount paid
(ii)	cumulative amount paid for the component up to last on account bill including PVC amount and statutory deductions
13	Performance of Contractor (Satisfactory/Unsatisfactory)

I hereby certify that above mentioned work has been physically completed in all respect as per contract agreement. Performance of the contractor while executing the work had been satisfactory.

Date

Signature & Name of Person Authorized
By the Public listed Company with Seal and
Mobile No. of Issuing Person.

Note:-

Following documents regarding the **Public listed company** are required to be submitted along with the certificate (**Mandatory**)

- 1. Details of Average Annual turnover of the public listed company in last three financial years excluding current financial year (should be 500 Cr and above) issued by Chartered Accountant. These details need to be submitted as per the proforma of Annexure VIII.
- 2. The copy of the documents regarding listing in the National stock exchange or Bombay stock exchange with details of status of listing as on date of opening of tender, duly self-attested.
- 3. The copy of the document of incorporation/ registration of the Public listed company (should be at least 5 years prior to date of opening of tender), duly self-attested.
- 4. The copy of document regarding Person Authorized by the Public listed Company to issue such certificate, duly self-attested.
- 5. 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 a copy of final/last

bill paid by the public listed company in support of above work experience certificate duly self-attested.

- (i) The certificate shall not be taken into consideration if any of the above conditions, prerequisites is not fulfilled or required supporting mandatory documents are found deficient. Submission of false certificates by tenderer shall lead to, forfeiture of EMD and other action including penal action (Annexure-II).
- (ii) Above format is for guidance only. Any certificate containing required information asked for shall be considered
- (iii) In case of JV firm, these details are also required for all the members of the JV firm for one similar single work for a minimum of 10 % of advertised value of the tender (for works without composite components).
- (iv) In case of JV firm, these details are also required for all the members of the JV firm for one similar single work for a minimum of 10 % of cost of any component of work in separate sheet (for work with composite components).
- (v) Only those works will be treated as composite works which consist of more than one distinct component 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 document
- (vi) In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.
- (vii) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for **fulfillment** of credentials.
- (viii) If a part or a component of work is completed but the overall scope of contract is not **completed**, this work shall not be considered for fulfillment of technical credentials even if the cost of part completed work/component is more than required for fulfillment ofcredentials.
- (ix) In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.
- (x) For col 7 & 12 -The value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of work/ component.
- (xi) In case, the Secondary Component(s) has/ have been defined in clause 15.5 above, the Attested copy of Completion Certificate of works executed by tenderer himself / the subcontractor (fully by any one or jointly i.e. partly by tenderer and remaining through subcontractor) during last five years, shall also be submitted in above performa.

ANNEXURE-V

Para 16.1 (f) of General Instructions) (Clause No.10.3 and explanation to clause 10 of Part-I of GCC APRIL-2022, with up to (date correction slip)

LIST OF AWARDED WORKS UNDER EXECUTIONAND/OR WORK AWARDED BUT NOT YET STARTED TILL DATE OF OPENING OF TENDER

(Mandatory for tenders more than Rs. 20 Cr value wherein eligibility criteria includes Bid Capacity also, to evaluate Bid Capacity of tenderer)

Sr. No	Name & place of work	Organization for whom work is being carried out	Date of award of contract, Contract Agreement No. & Date		Date of Completion (Origina Extended)	Payment ReceivedTill Date of opening of present tender	Balance amount of the work to be executed	Balance period of work to be executed	'B'Value of work to be done in 'N' years (See notebelow)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (5)-(7)	(9)	(10)
1									
2									
3									
4									
								Total	

Date

Signature of Chartered Accountant

Signature of Tenderer/s with seal

NOTE:-

- (a) This statement should be submitted duly verified by Chartered Accountant.
- (b) In case of no works in hand, a 'NIL' statement should be furnished duly verified by charted Accountant.
- (c) In case of JV firm, the details of works with each member of JV is required to be submitted duly verified by Chartered Accountant.
- (d) 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**.
- (e) N for column 10 –Number of years prescribed for completion of work for which bids has been invited.
- (f) 'B' is the value of existing commitments and balance amount of ongoing works with the tenderer to be completed in next 'N' years.
- (g) For N equal or more than column (9), Value of 'B' will be same as column (8)

- (h) For contracts not having any defined part financial /physical completion stages /milestones, and N < column (9) then the value of 'B' will be as per formula B=(8)*N/(9)
- (i) In case part financial / physical completion stages / milestone is defined in the contract's value of 'B' shall be calculated accordingly.
- (j) No technical and financial credentials are required for tenders having value uptoRs. 50 lakhs

(Para 16.1 (h) of General Instructions)

Clause No.11(iii) Annex.I of Part-I of GCC APRIL-2022, with up to date correction slip.

LIST OF PLANTS & MACHINERY AVAILABLE ON HAND AND PROPOSED TO BE INDUCTED (OWN AND HIRED TO BE GIVEN SEPARATELY) FOR SUBJECT WORK.

Sr.	Particulars of	No.	Kind	Capacity	Age &	Owned	Proposed to be	
No.	Plants/Machinery	of Unit	and make		Conditions	by firm	Date of placing order	Likely date of receipt
1	2	3	4	5	6	7	8	9
1								
2								
3								
4								
5								
6								
7								

Note:

- (a) Indicate clearly, whether (i) Owned by firm, or (ii) To be purchased by firm giving date of placing order and likely date of receipt.
- (b) Optimum Plants and Machineries required to be deployed during execution of work.
- (i) Earthwork in formation of New Line / Doubling/ Gauge Conversion Project: Poclain, JCB, Vibratory Roller, Grader, Dumpers, Tractors, Water tank etc.
- (ii) Concreting work for bridge work: Concrete pump, Transit mixer as per requirement, Batching plant of suitable capacity, JCB, Needle vibrator 60/40mm etc.

Signature of Tenderer/s	
Dated:	

ANNEXURE-VII

(Para 16.1 (i) of General Instructions) Clause No.11 (iii) Annex.I of Part-I of GCC APRIL-2022, with up to date correction slip.

LIST OF PERSONNEL ORGANIZATION AVAILABLE ON HAND AND PROPOSED TO BE ENGAGED FOR THE SUBJECT WORK.

Sr. No.	Name & Designation	Qualification	Professional experience	Remarks
1.	2	3	4	5
1				
2				
3				
4				
5				
6				
7				
8				

Signature of Tenderer/s
Dated:

Reference -Para 10.2 & 17.15.2 of Tender Form (Second Sheet) of Annexure I of ITT of GCC April-2022

Each Bidder or each member of a JV must submit this Annexure separately:

NAME OF BIDDER/JV PARTNER:

Annual Contractual Turnover Data for the Previous 3/4 Years(ContractualPaymentonly) AmountCurrenc **ExchangeRate** Indian National RupeesEquivalent Year

AverageAnnual Contractual Turnoverforlast 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.
- 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:

RegistrationNo:

(Seal)

Note: Client certificate from other than Govt Organization should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India.

Note: -

(Para 16.2.1(a)& 16.2.7(a) of General Instructions& Para 9.0 (ii) of General Instructions)

CERTIFICATE

(For sole proprietorship firm / Sole proprietorship firm participating as member of JV)

I(Indicate Name of Sole prop) S/o(Full address of
Sole prop) Proprietor of M/s
1. That I, who is submitting the tender on behalf of the SOLE PROPRIETOR is the Proprietor of the firm working in the name & style of M/s
(Indicate Name – Proprietary firm) at
Deponent
Signature and Seal
VERIFICATION
I, the above named deponent do hereby solemnly affirm & verify that the contents of my above affidavit are true & correct. Nothing has been concealed and no part of it is false.
Deponent
Signature and Seal
Place:-
Date: The stamp duty shall be governed by the provision of the Law relating to stamp in Force in that State at the time when such AFFIDAVIT is being executed. Affidavit shall be affirmed before the Notary Public.

ANNEXURE-X

(Para 16.2.7 (a) of General Instructions)
Clause No. 17.6 of Annex.I Part-I of GCC APRIL-2022, with up to date correction slip)

MEMORANDUM OF UNDERSTANDING FOR JV

(The Memorandum of Understanding shall be submitted in following format on the nonjudicial stamp of Rs.500/- duly notarized by Notary Public)

	NOW THIS Memorandum of Understanding is executed at(Name of Place) on this date
	(Name of first constituent and address) as the first party represented by Shri
	Shri
	WHEREAS all the parties are engaged mainly in the business of execution of Civil Engineering and general contracts for various Government Departments and organizations.
	AND WHEREAS the parties herein above mentioned are desirous of entering into a joint venture for carrying out civil engineering and/or contract works in connection with Tender No.
1.	That we M/s
2.	That under this MOU, the work will be done jointly by M/s
3.	That we JV firm M/s on behalf of all the members of JV firm shall be legally liable, severally and jointly responsible/ liable for the satisfactory/ successful execution/completion of the works including maintenance period in all respects and in accordance with terms and conditions of the contract.
4.	That we M/s JV firm

10.

accordance with Indian Laws.

JV members shall also be liable jointly and severally for the loss, damages caused to the DFCCIL during the course of execution of the contract or due to non-execution of the contract or part thereof.

5.	M/s(Name of Lead Firm) of JV firm shall be the lead member of the JV firm who shall have a majority% share of interest in the JV firm. The other (One/Two) members shall have following share: - M/s (Name of Second Firm) have% and M/s% share of interest in the JV Firm.
6.	That this JV 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.
7.	That we all the Joint Venture members authorize Mr./Ms
	one of the members on behalf of the JV firm to deal with the tender, sign the agreement or enter into contract in respect of the said tender, to receive payment to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/ correspondence with respect to the contract would be sent to this authorized member
8.	digitally submitted the offer then our offer shall be deemed to be summarily rejected. That no member of the JV 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 (DFCCIL)
9.	in respect of the said tender/contract. That we all the members of the JV certify that we have not been black listed or debarred by DFCCIL or any other Ministry/Department /PSU (Public Sector Undertaking) of the Govt. or India/ State Govt. from participation in tenders/contract in the past either in our individual capacity or as a member of the JV firm or partnership firm in which they were members/partners I/ We are aware that concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.

That this Joint Venture MOU shall in all respect be governed by and interpreted in

In witness thereof all/both the above named parties have set their respective hands on this MOU on the day, month and year first above mentioned, in the presence of the following witnesses:-

1. First party (authorized signatory) 2. Second party (authorized signatory) 3. Third party (if any) (authorized signatory) With Seal of parties Witnesses with name & full address: 1......

2.....

Date.....

Place.....

NOTE: - Should MOU be in more than one separate page, each page shall be Signed by the authorized signatory.

(Para 16.2.7.3(b) of General Instructions) Clause No. 17.14.1 of Annex. I Part-I GCC APRIL-2022)

"LETTER OF CONSENT"

(To be submitted by Partnership Firm participating as member of JV)

We the following partners of M/s	(Indicate name of firm)
(1)	(2)
(3)	(4)
office atherohero(Indicate name of firm) i	(6)
· ·	icate name of other firm's) having office at
	ement and all other required documents pertaining to above
Name & Signature of Partner/s	
(Signature of Sh)	
DATE 1.	
2	
3	
Place 4.	
5.	
Seal of th	he Firm

Seal of the Firm

Note:- The stamp duty of Rs. 500/- or shall be governed by the provision of the Law relating to stamp in force in that State at the time.

Annexure-XII

(Para 16.2.7.1 of General Instructions) & clause No. 17.14.2, 17.14.3 © and cl.15 of Annex I Part-I of GCC APRIL-2022, with up to datecorrection slip

SPECIAL POWER OF ATTORNEY

(To be submitted by Private/Limited Companies, Sole Proprietor or HUF participating as member of JV)

BE IT KNOWN to all that I(Indicate name of Director/Sole
Prop.) at the Company/Proprietary firm/HUF (Indicate Name of Company / Sole Proprietary firm/ HUF)
at
in connection with the following tender invited by DFCCIL:-
"T.NoName of work"
We/ I have read the content of this Special Power of Attorney & accept the same, and we/ I hereby agree to ratify & confirm & do hereby ratify & confirm all acts, deeds & things lawfully done or caused to be done by our said Attorney.
In witness where of I
For M/s
(Sign. of Shri) (Sign& Seal) Place Date:

The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

(For private/ limited company as member of JV- the annexure XII is required even if MOU/JV agreement is signed by the authorized/ Power of attorney holder himself as per the Copy of Resolution)

(For sole proprietor firm/HUF as member of JV- Not required if MOU/JV agreement is signed by the proprietor of the sole proprietor firm/ karta of HUF himself)

Annexure-XIII

(Para 16.2.3 (b) of General Instructions)& clause No. 14 (a)(ii), 15 Annex I Part-I of GCC APRIL-2022, with up to date correction slip

SPECIAL POWER OF ATTORNEY (For Partnership Firms only)

BE IT KNOWN to all that we (1) (2)
(3)(4)(5)
the firm having its registered office at do
hereby, for and on behalf of the said firm appoint Shri (Name&
designation) Special Attorney of the said firm and authorize the said Shri
(name), whose specimen signature are appended below, to do all or any of the following acts deeds
and/or things on behalf of the said firm and to represent the firm in respect for the tender
No
DFCCIL.

- 1. To appear before office of DFCCIL related to the process of tendering for the above said tender.
- 2. To procure/download the tender documents for the above said tender.
- 3. To digitally sign the above said tender document and for uploading the offer on www.ireps.gov.in for the said Tender. In case the offer is submitted by the person other than those who is appointed as above and there is difference between the name of the person authorized as above and the person who digitally submitted the offer then our offer shall be deemed to be summarily rejected.
- 4. To attend meetings and submit clarifications including negotiations, if any, called by DFCCIL.
- 5. To sign the agreement and other relevant documents & receive payment on behalf of firm,
- 6. To co-ordinate measurement through contractor's authorized engineer, witness measurement, sign measurement books on behalf of firm.
- 7. To compromise, settle, relinquish any claim(s) preferred by the firm, sign no claim certificate and refer all or any disputes to arbitration.

We/ I have read the content of this Special Power of Attorney & accept the same and We/I hereby agree to ratify & confirm & do hereby ratify & confirm all acts, deeds & things lawfully done or caused to be done by our said Attorney.

	Executants Partner			
(Signature of Sri)	(Name & signature)			
DATE	1			
	2			
	3			
Place :-	4			
Seal of Firm	Seal of Firm			

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

(Required even if one or more Partners are authorized in the Partnership Firm to sign on behalf of the Firm)

1. 2. 3.

4. 5.

6.

7.

Annexure-XIV

(Para 16.2.1 (b) of General Instructions) & clause No. 15 Annex I Part-I of GCC APRIL-2022, with up to date correction slip

SPECIAL POWER OF ATTORNEY

(For Sole Proprietor Firm only) BE IT KNOWN
to all that I Sole Proprietor of the firm
To appear before office of DFCCIL related to the process of tendering for the above said tender.
To procure/download the tender documents for the above said tender.
To digitally sign the above said tender document and for uploading the offer on www.ireps.gov.in for the said Tender.
To attend meetings and submit clarifications including negotiations, if any, called by DFCCIL.
To sign the agreement and other relevant documents & receive payment on behalf of firm,
To co-ordinate measurement through contractor's authorized engineer, witness measurement, sign measurement books on behalf of firm.
To compromise, settle, relinquish any claim(s) preferred by the firm, sign no claim certificate and refer all or any disputes to Arbitration Tribunal. I have read the content of this Special Power of Attorney & accept the same and I hereby agree to ratify & confirm & do hereby ratify & confirm all acts, deeds & things lawfully done or caused to be done by our said Attorney.
(Signature with name of Power attorney Holder) (Name & signature of sole proprietor Dated
Place (Seal of Firm)

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

(Not required if tender is uploaded by Proprietor himself)

Annexure-XV

(Para 16.2.4 (D) of General Instructions)

& clause No. 14(c) (ii) and 15 of Part-I of GCC APRIL-2022, with up to date correction slip

SPECIAL POWER OF ATTORNEY

(For Private/Limited companies only)

BE IT KNOWN To all that (Name of firm) having its registered office at
Shri
the said Shri (name) whose specimen signatures are appended below, to
do all or any of the following acts deeds and/or things on behalf of the said firm and to represent the
firm in respect for the tender No(Name of
work) invited by DFCCIL.
1. To appear before office of DFCCIL related to the process of tendering for the above said
tender.
2. To download the tender documents for the above said tender.
3. To digitally sign the above said tender document and for uploading the offer on www.ireps.gov.in for the said Tender.
4. To attend meetings and submit clarifications including negotiations, if any, called by DFCCIL.
5. To sign the agreement and other relevant documents & receive payment on behalf of Company,
6. To co-ordinate measurement through contractor authorized engineer, witness measurement, sign measurement books on behalf of Company.
7. To compromise, settle, relinquish any claim(s) preferred by the firm, sign no claim certificate and refer all or any disputes to arbitration.
We have read the content of this Special Power of Attorney & accept the same and we hereby agree to ratify & confirm & do hereby ratify & confirm all acts, deeds &things lawfully done or caused to be done by our said Attorney.
(Signature of Shri)
Authorized signatory of the firm
Dated
Place Seal of Firm

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

Required even if tender documents are submitted by the authorized/ power of attorney holder himself as per resolution passed by Board of Directors

6. We.....

..... (name, address and branch)

ANNEXURE-XVI

MODEL FORM OF BANK GUARANTEE BOND FOR PG

To
CPM
DFCCIL, Ajmer
1. In consideration of the President of India acting through (indicate designation of concerned 2. CPM (hereinafter called "the Government") having agreed to exempt – (Name & address)(hereinafter called "the said Contractor(s)" from the demand, under the terms and conditions of an Agreement dated made between for (hereinafter called "the said Agreement"), of Performance Guarantee for the due fulfillment by the said Contractor(s) of the terms and conditions contained in the said Agreement, on production of a bank Guarantee for Rs (Rupees(contractor(s) do hereby undertake to pay to the Government an amount not exceeding Rsagainst any loss or damage caused to or suffered or would be caused to or suffered by the Government by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement. 3. We
terms of conditions contained in the said Agreement or by reason of the contractor(s) 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
4. We under-take to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/supplier (s) in any suite or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal.
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)/supplier(s) shall have no claim against us for making such payment.
5. We
or before the we shall be discharged from all liability under this guarantee thereafter.

(Indicate

government that the Government shall have the fullest liberty without our consent and without

name

the

of

further agree with the

affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor(s) from time to time or to post opens for any time or from time to time any of the powers exercisable by the Government against the said, Contractor(s) and to further or enforce any of the terms and conditions relating to 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 Contractor(s) or for any forbearance, act or commission on the part of the Government or any indulgence by the Government to the said Contractor(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

such matter or thing whatsoever which under to provision, have effect of so relieving us.	he law relat	ting to s	sureties	would,	but for	this
7. This guarantee will not be discharged due to	the change i	in the co	nstitutio	n of the	e bank or	r the
contractor(s)/Supplier(s).						
8. We	(indicate	the	name	of	bank)	i.e.
(Name, add	dress and br	ranch co	de) lastl	y unde	ertake no	ot to
revoke this guarantee during its currency except writing.	with the pre-	vious co	onsent of	the Go	overnmei	nt in
Dated the day of2020						
For(indicate the	e name of bar	nk)				
i.e(Name, a	address and b	oranch co	ode)			

1.

2.

ANNEXURE-XVII

(Para 16.2.7.4 (c) of General Instructions &

Clause No. 17.14.3 (a) of Annex.I Part-I of GCC APRIL-2022, with up to date correction slip)

SPECIMEN BOARD'S RESOLUTION OF A PRIVATE/LIMITED COMPANY FORENTERING INTO JV WITH OTHER ENTITIES

Extract from the minutes of meeting of Board of Directors of the company held on (Date) at the office of the company situated at
(Address of the company).

RESOLVED THAT
FURTHER RESOLVED THAT Shri
Signed by Managing Director/
Director/ Company Secretary
Of the Company Note:-
Stipulations in the above specimen Board's Resolution are for guidance only. Companies can incorporate other stipulation /stipulations relevant with the tender and formation of JV, if required.

The above Annexure should be executed on the Letter Head of the company.

Annexure-XVIII

Clause No. 16.2.7.3(c) of General Instructions & Clause No. 17.14.1 (c) and 15 of Annex.I Part-I of GCC APRIL-2022, with up to date correction slip

SPECIAL POWER OF ATTORNEY (For Partnership Firms participating as a member of JV only)

We the following partners of M/s	(Indicate name of firm)
(1)2	
34	
5	ent on behalf of M/s (Indicate
M/s	Name of work
We have read the content of this Special Power of Attor to ratify & confirm & do hereby ratify & confirm all acts be done by our said Attorney.	
	Executants Partner
(Signature of Sri)	(Name & signature)
DATE	1
	2
Place	3
	4
Seal of Firm	Seal of Firm

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized. Required even if MOU/JV agreement is signed by one or more partners authorized in the Partnership Firm as per the Partnership deed, letter of consent.

ANNEXURE-XIX

Clause No. 16.1(g) of General Instructions & Clause No. 10.3 Annex.I Part-I of GCC APRIL-2022, with up to date correction slip

(ON THE LETTER HEAD OF CHARTERED ACCOUNTANT)

(Mandatory	and applicable	for tenders	valuing more	e than Rs 20	Cr to cal	culate l	Bid
Capacit	y of tendere	r- For value of	A)					

1 2
То
CPM
DFCCIL, Ajmer.
Sub: -Construction works executed and payment received

It is to certify that construction works executed and payment received through construction works of M/s (Name of firm)..........during the previous three financial years and the current financial year (up to date of inviting tender), as extracted from, Balance sheet/certificate issued by the employer/ client, Form 16, Form 26AS etc. are as under:-

Sr.	Financial year	Work executed And Payment received
No.		through construction works
1.	Current year (Say A)	
2.	A-1	
3.	A-2	
4.	A-3	

Yours	sincere	ly,
-------	---------	-----

Date: ... (Name & Sign. Of Authorized Signatory)

Seal of firm

Registration No:-

E-Mail:-

Note:

- (a) In case of JV firm details of construction works executed by each member of JV is required to be submitted
- (b) In case, the tenderer/s failed to submit the above statement (for tenders valuing more than 20 Cr) along with offer, their/his offer shall be considered as incomplete and will be rejected summarily.

1. 2. 3.

Annexure -XX

Clause No. 16.2.7.5(d) of General Instructions & Clause No. 14(f)(iii) and 15 of Annex.-I Part-I of GCC APRIL-2022, with up to date correction slip

SPECIAL POWER-OF-ATTORNEY

(For LLP Firm incorporated under LLP Act)

KNOW ALL MEN BY THESE PRESENTS: WHEREAS M/S
registered under the LLP Act, 2008, and having its registered
office at
'LLP').
AND WHEREAS by its resolution No passed in the meeting held
on
participate in the tender No invited by DFCCIL for
the work namely
" "
I(name and designation) the authorized
representative of M/S (name
of LLP) duly authorized in this behalf by aforesaid resolution do hereby irrevocably constitute,
nominate, appoint and authorize Mr./Ms.
(designation)(address)& Mr./
Ms./Mr./Ms(designation)(address) who is/are
presently holding the above mentioned position in the LLP as our true and lawful attorney
(hereinafter referred to as "Attorney") of the LLP to jointly or severally exercise all or any of the
following powers for and on behalf of
M/S (name of LLP & LLPIN
number) in respect of the aforesaid tender Invited by the DFCCIL:
To appear before office of DFCCIL related to the process of tendering for the above said tender.
To download the tender documents for the above said tender.
To digitally sign the above said tender document and for uploading the offer on
www.ireps.gov.infor the said Tender.
To attend meetings and submit clarifications including negotiations, if any, called by DFCCIL.
To sign the agreement and other relevant documents & receive payment on behalf of firm.

- 4.
- 5.
- 6. To co-ordinate measurement through contractor authorized engineer, witness measurement, sign measurement books on behalf of firm.
- 7. To compromise, settle, relinquish any claim(s) preferred by the firm, sign no claim certificate and refer all or any disputes to arbitration
 - The LLP agrees and undertakes that in the event of any change in the constitution of the LLP, the rights and obligations of the LLP shall continue to be in full force without any effect thereof. The LLP undertakes that it shall not cancel or amend this power of Attorney without obtaining previous written consent of DFCCIL.
 - AND the LLP hereby agrees that all acts, deeds or things lawfully done by the said Attorneys or either of them under the authority of this power shall be construed as acts, deeds and things done by

the LLP and the LLP hereby undertakes to confirm and ratify all and whatsoever the said Attorneys or either of them shall lawfully do or cause to be done by virtue of the powers hereby given.

IN WITNESS WHEREOF this deed has been signed and sealed by WITNESSES:

Signature Name:	Signatures of authorized representative & Seal					
Address:	of LLP: authorized representative					
Name of (Executants):						
Designation:						
Signature Name:						
Address:						
Specimen Signatures of Attorney Holder(s) in token of acceptance:					
(1)Name	Signature					
(2Name)	.Signature					
Executed and Signed before me	on thisday of					
At	(place).					
(Seal and signature of Notary Public)						

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

Required even if tender documents are submitted by the authorized/ power of attorney holder himself as per resolution passed by Partners of the LLP

Annexure -XXI

Clause No. 16.2.5(c) of General Instructions &

Clause No. 14(f)(iii) Annex.I Part-I of GCC APRIL-2022, with up to date correction slip

Partner's Resolution of LLP Firm incorporated under LLP Act for submitting Tender by
LLP firm (To be printed on Firm's letter head)
EXTRACT OF THE RESOLUTION PASSED AT THE MEETING OF THE PARTNERS
OF (LLP Name) having LLPIN of 20
(Hereinafter referred to as LLP) HELD ON (Date) AT (Address)
Whereas the Board has been described about NIT
No issued by DFCCIL for the work
name" Partners
discussed the matter and after discussion following resolution was passed:
RESOLVED THAT the LLP (LLP name) shall participate in the above tender
Resolved further that the LLP/Partners authorize(s), Mr./ Ms&
Mr./ Ms (name and designation) of the LLP, to jointly or severally
sign and submit all the necessary papers, letters, forms, quotes, bids etc., negotiate, discuss, agree to
make any amendments, alterations or modifications thereto and to make representations, submit
papers, affidavits and to do any other act and complete requisite formalities on behalf of the LLP in
connection with completion of aforesaid tender work and to enter into liability against the LLP.
Resolved further that LLP/Partners authorize(s) Mr./Ms(Name and
Designation) of the LLP to execute Power of Attorney in terms of this resolution in favour of
Mr./Ms & Mr./Ms the person(s)
above named.
The acts done and documents executed by such above named authorized person(s) shall be binding
on the LLP.
For the Organization,
(Seal of LLP & Signature of authorized person)
Name of authorized person:
Designation:
Place:
Dated:
Executed and Signed before me on thisday of
At(place).
71tpiace).
(Seal and signature of Notary Public)
Note:-
Stimulations in the above specimen Desolution are for guidence only LLD firm can incorporate

- 1. Stipulations in the above specimen Resolution are for guidance only. LLP firm can incorporate other stipulation /stipulations relevant with the tender and formation of JV, if required.
- 2. The above Annexure should be executed on the Letter Head of LLP firm.

 Required even if tender documents are submitted by the authorized/ power of attorney holder himself as per resolution passed by Partners of LLP firm.

Annexure -XXII

Clause No. 16.2.6(c) of General Instructions &

Clause No. 14(e)(iii) and 15 of Annex.I Part-I of GCC APRIL-2022, with up to date correction slip

SPECIAL POWER-OF-ATTORNEY

(For Registered Society & Registered Trust)

KNOW	ALL	MEN	BY	THESE	PRES	SENT	S: W	HEREAS	S	M/S		
					(Nan	ne of	Register	ed Societ	y / F	Registe	ered	
Trust) is a I the at	Registered act vi	l Society de wl	/ Regis	tered Trugistered),	st regi	stered h	l under the	ie reg	gister	Act	(Name of office	f
Registered T	Trust ').											
AND WHER	EAS by it	s resolut	ion No		р	assed	in the me	eeting hel	ld			
on	of	the Exec	cutive M	ember of	the Reg	gister	ed Societ	y / Regis	stere	d Tru	st the	
Registered S	Society / R	egistere	d Trust			(I	Registere	d Society	/ R	egistei	red	
Trust	name	e)	have	decide	d	to	part	icipate		in	the	tender
No				i	nvited	by	DFCCIL "	for th	ne '	work	namely	
Iauthorized in appoint and a	this beh	nalf by	(nan	ne of Regi s	stered S	Socie	ty / Regis	tered Tr	ust)	duly		
	(designa	ition)		(addres	ss)			&	2	Mr./ 1	Ms./Mr./M	S.
(design										esently	holding tl	ne
above mention (hereinafter severally executive	referred to ercise all	o as "At or any o	ttorney") of the fo	of the Rollowing p	legister powers	ed So	ociety / l and on be	Registere chalf of	ed T M/S	rust t	o jointly	or
aforesaid ten	der Invited	d by DFC	CCIL:									
1. To appetender.								ndering	for t	he abo	ove said	
A T 1	1 1 1			0 1 1		4						

- 2. To download the tender documents for the above said tender.
- 3. To digitally sign the above said tender document and for uploading the offer on www.ireps.gov.in for the said Tender.
- 4. To attend meetings and submit clarifications including negotiations, if any, called by DFCCIL.
- 5. To sign the agreement and all other required documents & receive payment.
- 6. To co-ordinate measurement through contractor authorized engineer, witness measurement, sign measurement books on behalf of Registered Trust/Society.
- 7. To compromise, settle, relinquish any claim(s) preferred by the firm, sign no claim certificate and refer all or any disputes to arbitration

The Registered Society / Registered Trust agrees and undertakes that in the event of any change in the constitution of the Registered Society / Registered Trust, the rights and obligations of the Registered Society / Registered Trust shall continue to be in full force without any effect thereof. The Registered Society / Registered Trust undertakes that it shall not cancel or amend this power of Attorney without obtaining previous written consent of DFCCIL.

	e Registered Soc done by the said	•						_	
	d as acts, deeds a	•					•		
	ed Society / Regis	•	•	_		•	_		
_	Attorneys or either		•				•		
hereby g	•	. 01	u					nie pewers	
IN	WITNESS	WHEREOF	this	deed	has	been	signed	and sea	led
Shri							_		
	20			desig	nacion),	on u		day	
	Signature Name:			S	ignatures	of autl	horized represe	entative	
	Address:				_		ered Society /		
					egistered				
					ame	of	authorized	rep	
				,	Executant				
				D	esignatio	n:			
	Signature	Name:							
	Address:	rume.							
Specime	n Signatures of Att	corney Holder(s)	in token	of acce	eptance:				
(1)Name	·	S	ignature.						
(2Name))		Signatur	e					
Event	1 and Ciarra	d hafana	0.00	th:	.1	lov.	of		
Executed	_	d before me			d (place)	•	of		
••••		At		• • • • • • • • •	(ріасе).				
			(S	eal and	signatur	e of No	otary Public)		

Notes:-

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

(Required even if tender documents are submitted by the authorized/ power of attorney holder himself)

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b

Annexure-XXIII

Clause No. 16.1(n) of General InstructionsInformation and particulars in terms of Para 11(a) and11(b) of General Instructions and Clause No. 16 of Annexure-I Part-I of GCC APRIL-2022, with up to date correction slip.

(i) Information and particulars regarding employed retired Railway/DFCCIL Engineer (s)/ Officer(s) of the Gazetted rank.

Sr.No.	Name of retired gazette Officer/ Engineer	Date of	Details of permission
	with Designation	Retirement	obtained (wherever
			applicable)
1.			
2.			
3.			

(ii)Information and particulars regarding retired Railway/DFCCIL Engineer (s)/ Officer(s) of the Gazetted rank being one of the partner in the partnership Firm/ Joint venture/registered Society/ registered firm/ LLP etc

Sr.No.	Name	of	retired	gazette	Officer/	Date of Retirement	Details	of	permission
	Engine	er wit	h Design	ation			obtained a	pplicable)	(wherever
1.									
2									
2.									
3.									

(iii)Information and particulars regarding retired Railway/DFCCIL Engineer (s)/ Officer(s) of the Gazetted rank being director in the company

Sr.No.	Name of retired gazette Officer/	Date of Retirement	Details of	permission
	Engineer with Designation		obtained applicable)	(wherever
1.				
2				
2.				
3.				

- Note:- 1. Details as per the above format shall be furnished by the tenderer. The format should not be left blank. In case of there being no such retired Gazetted Railway/DFCCIL Officer/ Engineer, Nil to be furnished in the format.
 - 2 In case details are not submitted in terms of Para 11(a) by the tenderer, their offer shall be summarily rejected.
 - 3 Also submit the document of permission from the President of India or any officer, duly authorized by him in this behalf, in case (i) where such Engineer or officer had not retired from government service at least 1 year prior to the date of submission of the tender (ii) where such Engineer or officer is a partner or director as the case, in partnership firm or an incorporated company,.
 - (iv)Information and particulars in terms of Para 11(b) of General instructions regarding Relative(s) employed in gazette capacity on Railway/DFCCIL

Sr. No.	Name	of	the	relative	who	is	employed	in	gazette	capacity	on	Relation	
---------	------	----	-----	----------	-----	----	----------	----	---------	----------	----	----------	--

	Railway/DFCCIL with Designation	
1.		
2.		
3.		

Note:- 1. Details as per the above format shall be furnished by the tenderer. The format should not be left blank. In case of there being no such relative, Nil to be furnished in the format.

2. In case details are not submitted in terms of Para 11(b) of General Instructions by the tenderer, their offer shall be summarily rejected.

their offer shall be summarily rejected.	
Signature of the tenderer	
Name	

Annexure-XXIV

Clause No. 16.2.7.5(c) of General InstructionsPartner's Resolution of LLP Firm for entering into JointVenture (To be printed on LLP Firm's letter head)

EXTRACT											\
	2 1						•		_	LLPINof	
(hereinafter	referred	to	as	LLP)	HELD	ON	(Dat	e)		AT	(Address)
Whereas	the	Parti	ners	hav	re b	een	desc	cribed	about	NIT	
No					issued 1	by DFC	CCIL fo	r the wor	k namely		
										discussed th	e
matter and af	ter discussi	on fol	lowin	g resolut	tion was p	assed:					
RESOLVED	THAT the	e LLP		(LLl	P name)	shall p	articipa	te in the	above te	ender in Joir	ıt
Venture and	-	-						•	_	reement, wit	h
M/S				_& M/	S				(nam	e of othe	r
constituent(s)) of joint ve	nture)).								
Resolved fur											
Ms											
venture agree		_					-		-		
formalities o				n connec	ction with	comp	letion o	of aforesa	aid tender	work and t	0
enter into lial	bility again	st the l	LLP.								
Resolved fu											
designation)	of the LLP	to ex	xecute	Power	of Attor	ney in	terms	of this	resolution	in favour	of
Mr./Ms				_ Mr./Ms	S		the	person(s)	above na	med.	
The acts don	e and docu	ments	execu	ited by s	uch abov	e name	d autho	rized per	rson(s) sh	all be bindin	g
on the LLP.											
For the Organ	nization,										
(Seal of LLP	& Signatur	e of a	uthori	zed pers	on)						
Name of auth	norized pers	son:						Desi	gnation:		
		ace:							C		
Dated:											
Executed	and Sig	ned b	efore	me	on	this	d	lay	of		
		A	\t				(place)				
(Seal and si	gnature of l	Notary	Publ	ic)							
	-	-									

Annexure: XXV

Clause No. 16.2.5(d) of General Instructions

POWER-OF-ATTORNEY BY A LLP Firm (incorporated under LLP Act) for entering into JOINT VENTURE AGREEMENT.

(to be executed non judicial stamp paper of appropriate value as per law of state concernedNon Judicial stamp paper should be purchased in the name of the LLP)

KNOW	ALL	MEN	BY	THE	SE	PRE	SENTS:	WH	EREAS	M/S	
									(nam	e of LLI	P & LLPIN
number)	is a LI	LP regi	stered	under	the Ll	LP Act	2008,	and 1	naving	its regist	tered office
											resolution
No		passed	l in the	meet	ing	held	on			of	the
Partn	ers	of	the	LLP,	the						
LLP				(LLP	name)	has	decided	to	participa	ite in	the tender
No					iss	sued by	DFCCIL	for the	work na	ımely	
"							" in	Joint `	Venture	and for	the purpose
the	LLP	shall	enter				ute			ure agree	
with	M/S				&	M/S				(na	me of other
constituen											of the lead
member o											
т						,	1			1	.1 • 1
						(nam	e and	aes	ignation _,) the	authorised
representa									,	C	TTD) 1.1
									,		LLP) duly
					solution	do her	eby irrev	ocably	constitu	te, nomin	nate, appoint
and	author		Mr./							/	
											s. Mr./ Ms.
											e presently
_			-						-	*	ıfter referred
		f the LL	P to jo	intly or	several	ly exerc	ise all or	any of	the follo	owing pov	wers for and
on behalf	of M/S										
									(Name	of LLP	& LLPIN
number) ii	n connect	ion with	afores	aid bid:							

- 1. To enter into and execute and sign JOINT VENTURE agreement, draft of which has been approved by the LLP, on behalf of the LLP with above named constituents for participating in the aforesaid bid of the DFCCIL on behalf of the LLP.
- 2. To sign and submit all the necessary papers, letters, forms, quotes, bids etc.
- 3. To do any other act and complete requisite formalities on behalf of the LLP in connection with completion of aforesaid tender work and to enter into liability against the LLP.
- 4. And generally to do all such acts, deeds or things as may be necessary or proper for the purposes mentioned above.

The LLP agrees and undertakes that in the event of any change in the constitution of the LLP, the rights and obligations of the LLP shall continue to be in full force without any effect thereof.

The LLP undertakes that it shall not cancel or amend this p written consent of DFCCIL.	power of Attorney without obtaining previous
AND the LLP hereby agrees that all acts, deeds or things la of them under the authority of this power shall be construe and the LLP hereby undertakes to confirm and ratify all an them shall lawfully do or cause to be done by virtue of the	d as acts, deeds and things done by the LLP d whatsoever the said Attorneys or either of powers hereby given.
IN WITNESS WHEREOF this deed has	been signed and sealed by
Shri(name and designation of	on), on this day
WITNESSES:	
Signature Name: Address:	Signatures of authorized representative & Seal of LLP:
	Name of authorized representative: Designation:
Signature Name: Address:	
Specimen Signatures of Attorney Holder in token of accept (1)Name	
Executed and Signed before me on At	thisday of
(place).	
1	

(Seal and signature of Notary Public)

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

Required even if tender documents are submitted by the authorized/ power of attorney holder of the LLP firm himself

ANNEXURE-XXVI

(Para 16.2.7.6 (c) of General Instructions)

SPECIMEN RESOLUTION OF EXECUTIVE COMMITTEE OF REGISTERED

SOCIETY/TRUST (To be printed on registered society/ trust's letter head) FOR ENTERING INTO JV WITH OTHER ENTITIES

Extract from the	minutes	of meetin	g of Exec	utive Cor	nmittee of Reg	istered Society/T	rust held on	1
					•	•		at
*****							,	
RESOLVED TH	AT				(Name o	of the Registered	Society/Tru	ust)
have decided								
with M/s							-	
Registered Sofirm	-					-	of the	JV
FURTHER RES authorized perso necessary documents on with work on behalf of	on of the nents for present t	e Register submissi ender on	red Socie on of ten behalf of	ety/Trust) nder docu Registere	is hereby autments, JV Ag	horized to exec reement and any	ute & sign documents	all s in
Name and Signe	d by auth	orized						
Executants/s of I	Registere	d Society/	Trust					
Note:-								
Stipulations in the	he above	specimen	Resoluti	on are fo	r guidance onl	y. Registered So	ciety/Trust	can

1.

(Para 16.2.7.6 (c) of General Instructions)

SPECIAL POWER OF ATTORNEY

(To be submitted by Registered Society/Trust participating as	s member of JV) BE
IT KNOWN to all that I	Name of Registered Society/Trust) and on behalf of the said Registered(Indicate Name of Nominee ey, whose specimen signature are ther required documents with M/s
"T.NoName of work	
We/ I have read the content of this Special Power of Attohereby agree to ratify & confirm & do hereby ratify & confirm done or caused to be done by our said Attorney.	•
In witness where of I	<i>.</i> .
For Executants/s of Registered Society/Trust)	(Name of
(Name, address and Sign. of Power of Attorney holder Shri)
(Sign& Seal) Place	
Date:	

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

Required even if tender documents are submitted by the authorized/ power of attorney holder of Registered Society/ firm himself

DFCCIL CONTRACT AGREEMENT OF WORKS (charged to EBR(IF) CONTRACT

ARTICLE OF AGREEMENT made on this day in the year Two Thousand

AGREEMENT NO.	DATED
AUKEEMENT NO.	DATED

and		between	the	President	of I	ndia,	acting	through	the	(DFCCIL)
Admi	nistrati	ion having	its of	fice at Ajn	er her	einafte	r called	the 'DFC	CIL"	of the first and part and -
		Na	ime of	Contracto	r		1	nereinafte	r calle	d the 'Contractor' of the
secon	d part	and India	n Rail	way Finan	ce Coi	rporati	on Limi	ted hereir	nafter o	called the 'IRFC' of the
third	part ha	aving its o	office	at				with GS	TIN	(GSTIN of
billing	g unit,	IRFC).								
First p	oart, se	cond part	and th	ird part col	lective	ely her	einafter	called the	'Parti	es'.
WHE	EREAS	the contr	actor l	has agreed	with the	he DF	CCIL fo	r perform	ance o	f the works
set for	rth in t	he schedu	le her	eto annexe	d upon	the St	tandard	General C	Condition	on of Contract corrected
up to	latest	correction	slips	and the Sp	ecifica	tions o	of the			DFCCIL corrected
up to	latest	correction	slips	and the S	pecific	ations	of the -		D	FCCIL, corrected up to
latest	correc	tion slips	and th	ne Special	Condit	ion an	d Specif	fications,	if any,	and in conformity with
the D	rawing	s here-int	o anno	exed AND	WHE	REAS	the per	formance	of the	said works is an act in
which	the pu	ıblic are ir	iterest	ed.						

It is agreed by and between the parties that DFCCIL shall continue to be held responsible for all obligations, risk and liabilities, whatsoever, arising out of or in connection with the Contract Agreement and this Novation Agreement, whether during the progress of the work or after its completion.

It is further agreed and understood by and between the parties that IRFC shall be the owner of assets, if any, arising out of execution of works as defined in the Contract Agreement, except the land whose ownership shall continue with DFCCIL. Accordingly, the invoices shall be issued by capturing GSTIN of contractor (as the supplier) and GSTIN of IRFC (as the bill-to party). Also, the contractor shall submit the invoice, issued in the name of IRFC, to DFCCIL for processing payment by DFCCIL to Contractor subject to applicable TDS under the Income Tax, GST or any other applicable laws.

It is further agreed by and between the parties that IRFC shall be responsible to comply with Income Tax and GST laws in relation to filling of returns.

All the communication in relation to the Contract Agreement would only be between Party hereto of first part and second part.

For and on behalf of the President of India

Witness of the Signature	
1.	
2.	
Address:	
Signature of Contractor	
Name of Authorized Signatory	
Witnesses of the Signature	
1	
2	
Address:	
	For and on behalf of the
	Indian Railway Finance Corporation
Witness of the Signature	•
1.	
2.	
Address:	

ANNEXURE-XXIX

((Para 16.2.2 (a) of General Instructions) clause 14(ii) (b)of the GCC APRIL-2022)

CERTIFICATE

(For HUF (Hindu Undivided Family / for JV having HUF as member)

I (Indicate Name of Karta) S/o (Full address of HUF)
Karta of M/s(Indicate Name of HUF) situated at(Full address
of HUF) do hereby solemnly affirm & declare as under:-
1. That I, who is submitting the tender on behalf of the HUF is in the position of Karta of th HUF, working in the name & style of
2. That, I(Indicate Name of Karta) has the authority, power and consent given by other members to act on behalf of(name of HUF)
Deponent
Signature and Seal
VERIFICATION
I, the above named deponent do hereby solemnly affirm & verify that the contents of
my above affidavit are true & correct. Nothing has been concealed and no part of it is false.
Deponent
Signature and Seal Place:-
Tacc
Date:-
Note: - The stamp duty shall be governed by the provision of the Law relating to stamp in Force in the State at the time when such AFFIDAVIT is being executed. Affidavit shall be affirmed before the Notary Public.

Annexure XXX

(Para 16.2..2 (b) of General Instructions)

(Clause14 (ii) (b) and clause 15 of the GCC APRIL-2022)

SPECIAL POWER OF ATTORNEY

(For HUF (Hindu Undivided Family)

BE IT KNOWN to all that we (1)							
(3)(4)(5)							
the HUF							
Special Attorney of the said HUF and authorize the said Shri							
whose specimen signature are appended below, to do all or any of the following acts deeds and/or things on behalf of the said firm and to represent the firm in respect for the tender							
·							
No							
1.To appear before office of DFCCIL related to the process of tendering for the above said tender.							
2.To procure/download the tender documents for the above said tender.							
3.To digitally sign the above said tender document and for uploading the offer on www.ireps.gov.inf for the said Tender. In case the offer is submitted by the person other than those who is appointed as above and there is difference between the name of the person authorized as above and the person who digitally submitted the offer then our offer shall be deemed to be summarily rejected.							
4.To attend meetings and submit clarifications including negotiations, if any, called by DFCCIL.							
5.To sign the agreement and other relevant documents & receive payment on behalf of firm,							
6.To co-ordinate measurement through contractor's authorized engineer, witness measurement, sign measurement books on behalf of firm.							
7.To compromise, settle, relinquish any claim(s) preferred by the firm, sign no claim certificate and refer all or any disputes to arbitration.							
We/ I have read the content of this Special Power of Attorney & accept the same and We/I hereby agree to ratify & confirm & do hereby ratify & confirm all acts, deeds & things lawfully done or caused to be done by our said Attorney.							
Members of the HUF (Signature of Sri) (Name & signature)							
DATE							
2							
Place 3							

4.	 	 	 	 	 	

Seal of Firm Seal of Firm

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Power of Attorney is being executed. The Power of Attorney shall duly registered with registrar or notarized.

(Not required if tender documents are uploaded by Karta himself).

Annexure XXXI

((Para 16.2.3 (c) of General Instructions)

Explanation for clause 10 – eligibility criteria, of the GCC APRIL-2022)

DECLARATION BY NEWLY FORMED PARTNERSHIP FIRM/ LLP Firm (Mandatory if tenderer is Newly Formed Partnership Firm/ LLP Firm)

(
I, the authorized signatory
of partnership firm/ LLP Firm M/s
solemnly affirm and declare as under:
1. That, we are the newly formed partnership firm/ LLP Firm in the name and style of M/s
 Registered with registrar of firm vide Registratio
No dated
2. In this newly formed Partnership Firm/ LLP Firm, we are
of
partners. The details of the previous proprietary firm or previous dissolved partnership firm/ LLI
Firm or previous splitted partnership firm (s) / LLP Firm wherein any of the partners of the presen
firm was a proprietor / Partner and proposed to use credentials obtained in such previous propriety

S.N.	Name of person in	Details of	Share in	Share in	Remarks
	the newly formed	Previous	newly formed	previous	
	partnership firm	proprietary/	partnership	partnership	
		Partnership	firm	firm/ LLP	
		Firm/ LLP Firm		Firm	
1.					
2.					

3. That, following relevant documents are Annexed with bid –

firm (s)/Partnership firm(s) / LLP Firm is as under :-

- (1) Details of previous Propriety firm / Partnership Firm/ LLP firm as per annexure I
- (2) A copy of previous partnership Firm (Notarized or duly registered with the Registrar) (3) Affidavit as per proforma given of Annexure –IX for previous Propriety firm (duly executed on stamp paper and notarized).
- (4) Copy of previous LLP agreement and certificate of incorporation.
- (5) Dissolution deed/ splitting deed of the previous partnership deed or LLP agreement (in case of dissolution of previous partnership firm/ LLP firm)
- (6) Proof of surrender of previous PAN no (in case of dissolution of previous partnership firm, LLP firm or propriety firm)
- (7) Documents for the technical, financial criteria, bid capacity as claimed w.r.t. such partner(s) joining the new/ existing partnership firm, as per para 16.1 (c), (d), (f),(g), (k) above.

Declaration by the Tenderer:-

We/I have read the content of this declaration & respective conditions of the GCC regarding assessment of the eligibility of our partnership firm/ LLP firm and have/ has enclosed all the required mandatory documents accordingly. We/I hereby declare that the information given above are true. If any of the above information is found to be wrong at any time, my tender will liable to be rejected.

Name and Signature of Tenderer along with Seal

Notes-

- 1. In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of 0.3*0.2*value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.

Annexure XXXII

(Para 16.2.3 (d) of General Instructions)

(Explanation for clause 10 – eligibility criteria, of the GCC APRIL-2022)

DECLARATION BY AN EXISTING PARTNERSHIP FIRM/ LLP FIRM

(Mandatory if tenderer is an Existing Partnership Firm/ LLP Firm)

•	the relevant para (1.1, 1.2 & rship Firm)	1.3) and strike off the	para which is not relevant under
1.0			, the authorized signatory do hereby solemnly
1.1	That, we are an existing Partners	ship Firm/ LLP Firm in th	ne name and style of
	M/s	, since	(MM/YY), having
change	2	•	There has been no s ending last day of the month previous
		OR	
1.2	That, we are an existing Partners	shin Firm/ LLP Firm in th	ne name and style of
		-	•
			MM/YY), having GST Registration
			Following of our partner(s)
	_		seven) years ending last day of the
month	previous to the one in which ten	der is invited, with details	s as under:
S.No	o. Name of quitting	ng Share of Partner(s)	who Date of quitting
	Partner(s)	has/have quitted.	(MM/YY)
		A	ND / OR
1.3	That, we are an existing Partners	ship Firm/ LLP Firm in th	ne name and style of
$M/s\dots$, sinc	e	(MM/YY), having GST
Regist	ration No	, PAN/TAN No	Following partner(s)
has/ha	ve joined our Partnership Firm/ l	LLP Firm during last 07	(seven) years ending last day of the
	previous to the one in which tend	_	
S.No.	Name of Joining Partner(s)	Share of joining Partner	r(s)
		In the present firm	In the previous firm from where
			he/they has/have quit and joined
			the present firm
1.4	In case of Para 1.2 and 1.3, foll	owing documents as app	licable are required to be submitted

along with bid:-

⁽¹⁾ Details of previous Propriety firm / Partnership Firm/ LLP firm as per annexure I.

- (2) A copy of previous partnership Firm (Notarized or duly registered with the Registrar) (3) Affidavit as per proforma given of Annexure –IX for previous Propriety firm (duly executed on stamp paper and notarized).
- (4) Copy of previous LLP agreement and certificate of incorporation.
- (5) Dissolution deed/ splitting deed of the previous partnership deed or LLP agreement (in case of dissolution of previous partnership firm/ LLP firm)
- (6) Proof of surrender of previous PAN no (in case of dissolution of previous partnership firm, LLP firm or propriety firm)
- (7) Documents for the technical, financial criteria, bid capacity as claimed w.r.t. such partner(s) joining the new/ existing partnership firm, as per para16.1 (c), (d), (f),(g), (k) above.

Declaration by the Tenderer:

We/ I have read the content of this declaration & respective conditions of the GCC regarding assessment of the eligibility of our partnership firm/ LLP firm and have/ has enclosed all the required mandatory documents accordingly. We/I hereby declare that the information given above are true. If any of the above information is found to be wrong at any time, my tender will liable to be rejected.

Name and Signature of Tenderer Alongwith seal.

- 1. 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.
- 2. In case of existing partnership firm if any other partner(s) joins 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.
- 3. 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.
- 4. 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.

- 5. 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.
- 6. 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.
- 7. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.

Annexure XXXIII

(Para 16.2.4 (e) of General Instructions)

(Explanation for clause 10 – eligibility criteria, of the GCC APRIL-2022) DECLARATION REGARDING CONSTITUTION OF EXISTING/ NEW COMPANY

(Mandatory if tenderer is an Existing / New Company)

(Fill	the	relevant	para	(1.1,	1.2	&	1.3)	and	strike	off	the	para	which	is	not	relevant	under
Partn	ershi	ip Firm)															

1.0 I	S/o Shri		., the authorize	d signatory of
the Company $M/s \dots$ under :		do hereby so	olemnly affirm	and declare as
· ·	an existing Company			•
in the constitution of	f our Company during last which tender is invited.			_

OR

1.2	That,	we	are	an	existing	Company	working	in the	name	and style of
Registration	n No				, PAN /	TAN No		Follo	wing Co	npany
(ies) merged in the Company during last 07 (seven) years ending last day of the month previous to										
the one in v	which te	nder is	sinvite	ed, wi	th details as	under:				

S.No.	Name	of	 Share of Partner(s)		of	quitting
	Partner(s)		has/have quitted.	(MM/Y	Y)	

- 1.3 In case of Para 1.2, following documents as applicable are required to be submitted along with bid:-
- (1) Details of company getting merged as per annexure I
- (2) Copy of Memorandum of Association/ Articles of Association of the Company getting merged
- (3) Copy of certificate of incorporation of previous company getting Merged.
- (4) Resolution by the Board of Directors for the Merger of the company(s) with the tenderer
- (5) Proof of surrender of previous PAN no
- (6) Documents for the technical, financial criteria, bid capacity as claimed w.r.t. such Company(s) joining the new/ existing Company, as per para 16.1 (c), (d), (f), (g), (k) above.

Declaration by the Tenderer:-

We/ I have read the content of this declaration & respective conditions of the GCC regarding assessment of the eligibility of our partnership firm/ LLP firm and have/ has enclosed all the required mandatory documents accordingly. We/I hereby declare that the information given above are true. If any of the above information is found to be wrong at any time, my tender will liable to be rejected.

Name and Signature of Tenderer

alongwith seal.

Notes- In case company A is merged with company B, then company B would get the credentials of company A also.

clause 10.1 (b) (iii) of part I and clause 7 of part II of the GCC APRIL-2022)

DFCCIL

CONTRACT AGREEMENT OF SECONDARY COMPONENT OF THE WORKS

CONTRACT AGREEMENT NODATED
ARTICLE OF AGREEMENT made on this day in the year Two Thousand and between the(the tenderer), having its office at submitting offer for the tender nofor the work
and Name of Sub Contractor hereinafter called the 'Sub
Contractor' of the second part having its office at with GSTIN
First part, second part collectively hereinafter called the 'Parties'.
WHEREAS the contractor has agreed with the DFCCIL for performance of the works
setforth in for the componentdetailed in schedule
(which shall be deemed and taken to be part of this contract as if the same have been fully set forth
herein) AND the DFCCIL 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 DFCCIL 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 Schedule hereto annexed.

All the communication in relation to the Contract Agreement would only be between Party hereto of first part and second part. No claim of Contractor, whatsoever on this account shall be entertained by the DFCCIL and this shall be deemed as 'excepted matter' (matter not arbitrable). The permitted subcontracting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the DFCCIL and shall not relieve the Contractor of any responsibility under the Contract. The Contractor shall indemnify DFCCIL against any claim of subcontractor. The Contractor shall endeavor to resolve all matters and payments amicably and speedily with the subcontractor

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

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

The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the Contract Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. Once having entered into above arrangement, Contractor shall discontinue such arrangement, if he intends to do so at his own or on the instructions of DFCCIL, with prior intimation to CPM/CGM.

For and on behalf of the Contractor

Name of Authorized Signatory

Witness of the Signature	
1.	
2.	
Address:	
Signature of Sub Contractor	
	Name of Authorized Signatory
Witnesses of the Signature	
1 2	
Address:	

(Seal and signature of Notary Public)

Note:- The stamp duty shall be governed by the provision of the Law relating to stamp in force in that State at the time when such Agreement is being executed. The Power of Attorney shall duly registered with registrar or notarized.

Annexu	<u>re-'A'</u>
Clause N	Jo. 24.2 of General Instructions to Tenderers) Request letter from Executive branch to Accounts Office
for open	ing of LC
Office of	of DFCCIL
No	
The	
•	PM/Finance
Ajmer	
-	pening of LC
Ref:-Sup	oply Order / Contract Agreement No. ****
It is re	quested to open a sight LC against the above referred order/Agreement in favour of
The det	tails of beneficiary are as under:
i) N	ame of Contractor/Supplier
	Vendor code
iii)	Address
iv)	Tender No.
v) (Contract Agreement No.
vi)	Description of Goods/Service
vii) `	Value of Contract viii) Stages of payment
	Expected payment within 6 months (LC Amount) xii) Beneficiary bank
detai	ls;
a.]	Bank name
b	Address
c.	Account No.
d.	IFSC Code
	t is certified that the supplier/contractor has exercised the option of taking payment due against the
	hrough LC arrangement in IREPS portal at the time of bidding itself and the option has been flagged in
the IREF	PS. This has the approval of xiii) Validity/period for which LC is to be opened.
	(Signature)
	Name
	Designation
	(Official Seal)

Annexure-	·B'
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(Clause No. 24.1.5(f) of General Instructions to Tenderer) LCDA No. (18 DIGIT IPAS GENERATED NO.)

				Datade				
Dated: DOCUMENT OF AUTHORIZATION								
	Works Contract/ S		No	dated				
(11) Inlar	nd Letter of Credi	t No	Dated	• • • • • • • • • • • • • • • • • • • •				
This document is i	OATED	FOR WORK	OF					
CODE)INRSSS . (FROM MASTE	(Vendor (FROM A R TABLE OF LO	Code as BSTRACT OF	per IREPS BILL PAS	S) Is en	of total L	(NAME AND VENDOR ceeive payment aggregating C amount of INR		
	OM IPAS	. for INR (FROM	M IPAS)	raised	against the	e above contract from State		
The details of pa	yment already m	ade to the benefic	ciary under	this Letter of	f Credit are	as follows:		
S.	Invoice No.	Invoice date Inv	oice Amo	ount LCDA	LCDA	Amount paid (INR)		
No.		(I)	NR)	No.	date			
Total Paid								
THIS PAVME	NT: sa	ee						
	er this payment: .							
LC balance and	er uns payment	• • • • • • • • • • • • • • • • • • • •	• • • • •					
	(Signature of auth	norized DF	CCIL authori	ity)			
		Name						
]	Designation						
		Official Sea	al					

Annexure-C

Procedure for Conduct and Reporting of R.A.

- 1. 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.
- 2. 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.
- 3. Date and time for start of e-RA shall be communicated to qualified tenderers by the convener after evaluation of the Technical Bids.
- 4. After submission of Initial Price Bid, tenderers will not be allowed to revise the taxes and other levies.
- 5. During auction period, identities of the participating tenderers will be kept hidden.
- 6. 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.
- 7. 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.
- 8. Railway users can also view the bidding history in chronological order.
- 9. Bidders not be allowed to withdraw their last offer.
- 10. L-1 will be defined as the lowest bid obtained after the closure of R.A. session for Goods Works and Services tenders.

(Authority: No. 2017/Trans/01/Policy/Pt-S Dated 28.03.2018)

ANNEXURE - D

Reference -Para 10.3 & 17.15.3 of Tender Form (Second Sheet) of Annexure I of ITT of GCC April-2022

TENDERER'S CREDENTIALS (BID CAPACITY)

For tenders having advertised value more than Rs 20 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=Existing commitments and balance amount of ongoing works with the tenderer as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender. Note: 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.

END OF DOCUMENT